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ADOLESCENT ROMANCE AND DELINQUENCY: A FURTHER EXPLORATION OF HIRSCHI'S "COLD AND BRITTLE" RELATIONSHIPS HYPOTHESIS

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Abstract

Hirschi argued that delinquent youth tend to form relatively "cold and brittle" relationships with peers, depicting these youths as deficient in their attachments to others. The current analysis explores connections between delinquency and the character of adolescent romantic ties, drawing primarily on the first wave of the Toledo Adolescent Relationships Study, and focusing on 957 teens with dating experience. We examine multiple relationship qualities/dynamics in order to explore both the "cold" and "brittle" dimensions of Hirschi's hypothesis. Regarding the "cold" assumption, results suggest that delinquency is not related to perceived importance of the romantic relationship, level of intimate self-disclosure or feelings of romantic love, and more delinquent youth actually report more frequent contact with their romantic partners. Analyses focused on two dimensions tapping the "brittle" description indicate that while durations of a focal relationship do not differ according to level of respondent delinquency, more delinquent youths report higher levels of verbal conflict.

INTRODUCTION

Theories of delinquency diverge on the importance accorded to adolescent friendships and the ways in which these are characterized. Hirschi (1969), reacting against social learning theory's emphasis on the importance of social ties in the etiology of delinquency, critiqued this view, suggesting that the bonds delinquents develop with their peers are relatively "cold and brittle." Hirschi argued further that because these relationships are not particularly intimate, it is unlikely that they are influential in the way that social learning theorists suggest. This line of theorizing is also consistent with a stable trait or deficit view of delinquents (as individuals who are incapable of strong attachments to others), and with psychological studies positing that peer-rejected youth are at higher risk for adjustment problems concurrently and later in life (Bukowski and Cillessen, 1998). Although varying in emphasis, control theory and psychological versions of attachment theory coalesce around three interrelated assumptions: a) attachment is inherently prosocial in its effects, b) delinquent youth tend to be deficient in their levels of attachment to others, and c) attachment processes are interrelated; that is, the individual who does not develop strong bonds of attachment within the family will also generally lack strong attachment to or experience deficiencies in attachments to peers, and later in the life course, will fail to develop strong bonds of attachment to romantic partners (Collins, 2003; Gottfredson and Hirschi, 1990).

A number of studies have examined the quality of family and friendship ties of delinquent youth, but research on the nature of delinquents' relationships with romantic partners is not as fully developed, particularly when we focus on such relationships during the adolescent period. Following the logic of control and attachment perspectives, we might expect such relationships to be relatively "cold and brittle," as suggested by Hirschi's initial hypothesis, and the more general notion that deficits in one arena are likely to be linked to deficits in the relationships that come later in the life course. Yet scholars such as Sullivan (1953) have argued that each form of social relationship brings new challenges and opportunities, suggesting that lack of attachment early on within the family domain need not lead inexorably to a lack of attachment within these other domains. Also complicating this depiction, studies exploring the quality of delinquents' ties to friends have not offered strong support for the "cold and brittle" hypothesis (Cairns and Cairns, 1994; Giordano et al., 1986; Kandel, 1991; Pleydon and Schnier, 2001).

The more general literature on social relationships and development supports Sullivan's notion that each form of social relationship has distinctive characteristics, qualities and functions (Collins et al., 2009; Giordano, 2003; Youniss and Smollar, 1985). Consistent with this, criminological versions of the life course perspective (Sampson and Laub, 1993) emphasize the human capacity for change, as new phases of the life course unfold. Thus, it is premature either to accept Hirschi's "cold and brittle" hypothesis as applied to adolescent romantic relationships, or to reject it based on findings derived from earlier studies of peer and friendship experiences. Historically, research on delinquency has ignored the role of romantic involvement and romantic partnerships, but this has changed as recent scholarship in the developmental tradition has highlighted the centrality of such relationships for a comprehensive understanding of the adolescent period. Recent research has begun to forge links to delinquency (Haynie et al., 2005; Lonardo et al., 2009; Rebellon and Manasse, 2004), but most studies have not examined the qualities of the ties youths form with romantic partners and how this may relate to delinquency involvement. An important exception is a recent study by McCarthy and Casey (2008), who examined links between love, sex, and delinquency, relying on data from the National Longitudinal Study of Adolescent Health (Add Health). McCarthy and Casey found that those adolescent respondents who scored higher on a "love" scale subsequently reported lower delinquency involvement. These results appear consistent with the idea of attachment as a prosocial influence, and basic tenets of the "cold and brittle" hypothesis. Yet a limitation of the Add Health is that the questions indexing love emphasize behaviors more than the subjectively experienced aspects of these social relationships. We contribute beyond this work by empirically testing the degree of empirical support for Hirschi's "cold and brittle" hypothesis as applied to the romantic realm. Rather than focus exclusively on what adolescents do with their romantic partners we examine their feelings about the partner as well as the dynamics within the relationship. The current analysis draws on interview data from the Toledo Adolescent Relationships Study (TARS), an investigation that was designed to explore adolescents' perceptions of the character and qualities of their relationships, particularly their romantic experiences.

BACKGROUND

PRIOR RESEARCH ON THE NATURE OF DELINQUENTS' FRIENDSHIP TIES

In contrast to early portraits of relatively close relationships of delinquent and gang youths sketched by scholars such as Thrasher (1927), control theories, particularly Hirschi's social bonding version, cast doubt on the importance of delinquents' friendships. In discussing the qualities of delinquents' relations with parents and peers, Hirschi notes that "the idea that delinquents have comparatively warm, intimate social relations with each other (or with anyone) is a romantic myth" (p. 159). These ideas are followed up in Gottfredson and

Hirschi's (1990) discussion of low self-control, as the researchers argue that those who have low self-control have "difficulty making and keeping friends" (p. 158), while less delinquent youths have a greater capacity to form "close friendship ties within a peer group" (p. 158).

Some psychological treatments of the peers-delinquency relationship offer generally compatible portraits. Attachment theorists focus heavily on early parent child relationships, but suggest that a lack of early warmth within the family is associated with later relational difficulties or deficits (Bartholomew and Horowitz, 1991; Feeney and Noller, 1990; Hazan and Shaver, 1987; Karen, 1998). Research on "peer rejection" does show differences in the ways delinquent youths are perceived by the larger peer network, but methodological strategies in this tradition often focused more on peer status than direct assessments of the character of delinquents' social ties (Coie, Dodge, and Kupersmidt, 1990; but see Cairns and Cairns, 1994).

With some caveats, empirical research directly exploring relationship qualities of youths varying in levels of delinquency involvement has not offered strong support for key aspects of the "cold and brittle" relationships hypothesis as applied to the peer arena. For example, Giordano et al. (1986) found that delinquents did not score lower than their less delinquent counterparts on levels of caring, trust or the intimacy of communication with friends. Pleydon and Schnier (2001) reported compatible results in an investigation of multiple dimensions of female friendships. Delinquent and nondelinquent respondents in their study were just as likely to report perceptions of trust, intimacy, conflict, and closeness. With respect to drug use, Krohn and Thornberry (1993) found differences in peer relationships between users and nonusers in the Rochester Youth Development Study, but adolescents involved in drug use on average reported higher levels of closeness to their friends (see also Kandel, 1991). In particular users confided more in each other and stated that they have greater trust with peers. However, Krohn and Thornberry also found that delinquents' relationships tended to be shorter in duration, suggesting a more complex portrait. Also adding to this complexity, Giordano et al. (1986) found that more delinquent youths score higher on perceived peer pressure (see also Pleydon and Schnier, 2001) and reported more conflict and disagreements with friends (see especially Dishion et al., 1995).

PRIOR RESEARCH ON ROMANTIC TIES AND DELINQUENCY INVOLVEMENT

Research on romantic relationships of adolescents in general and delinquent youth in particular is not as well developed as that focused on family and peers. Yet an emerging body of literature highlights that romantic relationships are important to the adolescents involved in them, play a key role in social and identity development (Collins, 2003; Florsheim, 2003; Giordano et al., 2006), and become increasingly intimate as adolescents mature (Giordano et al., 2009). Most research on romantic relationships within the developmental literature has not focused on links to behavioral outcomes such as delinquency, but attachment theory is a widely used conceptual framework that generally resonates with Hirschi's "cold and brittle" hypothesis. For example, Collins and Sroufe (1999) argue that early parental warmth and attachment effectively prepares youth for later intimate relationships, and facilitates adjustment during the adolescent period. This implies that those who experience adjustment problems during adolescence may be less capable of building and sustaining intimate relationships than their more well-adjusted, socially competent counterparts.

A number of recent criminological studies have explored the connections between romantic relationships and delinquency, but most have not directly examined the quality of ties formed by delinquent compared with less delinquent youth. For example, Rebellon and Manasse (2004) focused on the role of delinquency in attracting partners, but did not explore the character or quality of relationships formed by youths varying in their levels of

involvement in delinquent behavior. Relying on the Add Health data, Haynie et al. (2005) found that the delinquency of the romantic partner was significantly related to adolescent respondents' own delinquency, even after peer delinquency had been taken into account (see also Lonardo et al., 2009). These findings are consistent with a social learning perspective on delinquency in emphasizing that the behaviors of both friends and romantic partners are important for understanding delinquency involvement. While the authors did not directly explore the issue of relationship quality, such findings offer indirect support for the hypothesis that romantic relationships "matter" on some level to delinquent as to more conforming youth, a notion that contrasts with the basic underpinnings of the "cold and brittle" hypothesis.

McCarthy and Casey's (2008) analysis of the Add Health data offers a more direct exploration of connections between intimacy in romantic relationships and delinquency involvement. The authors developed a life course perspective on the relationship between romantic attachment and delinquency, one that draws upon Sampson and Laub's (1993) revised theory of informal social control. Sampson and Laub focused on variations in the adult life course experiences of a sample of juvenile delinquents, and the positive influence of strong bonds of attachment to a spouse (i.e., "the good marriage effect"). Thus, McCarthy and Casey do not focus on the idea that stable traits of some youth diminish their capacity to form significant bonds of attachment, but rather posit that net of initial level of delinquency, those adolescents who are involved in a romantic relationship characterized by love will later on tend to evidence lower levels of delinquency when compared with those reporting less attachment to their partners. Their longitudinal and cross-sectional findings supporting this hypothesis, are, however, generally supportive of a control (i.e., attachment is prosocial) perspective. As suggested above, however, a limitation of the Add Health data set is that the measures of love are largely behavioral, and for the most part do not tap the feelings and emotions associated with love and intimacy. In short, these items capture what adolescents have done and said within the romantic context, but do not index levels of positive regard or affect actually experienced by the respondent. In addition, some items included in the love scale (e.g., whether the respondent had met the partner's parent) may index a particular type of formal or middle class conception of dating relationships that is less common among delinquent youth, leaving relatively unexplored questions about levels of intimacy and feelings of love that characterize these relationships.

Some ethnographic accounts suggest that even if we accept the premise that delinquents' peer relations are not accurately described as "cold and brittle," nevertheless heterosexual relationships may well be characterized in such a fashion. For example, Macleod (1987), in his study of two friendship groups in a low-income neighborhood, described the same-gender relationships of these relatively delinquent youth as generally close and intimate. In marked contrast, Macleod noted that while he did not delve into detail about the gender relations of the "Hallway Hangers," "it was quite obvious that they saw the woman's role in their relationships as purely instrumental. Women were stripped of all identity except for that bound up with their sexuality, and even that was severely restricted" (p. 280). This is also consistent with Anderson's (1999) treatment of heterosexual relationships and his notion that peers are fundamentally more important than romantic partners. Such portraits of heterosexual relationships evoke aspects of Hirschi's "cold and brittle" hypothesis, suggesting the utility of further exploration of the character/quality of romantic relationships of youths varying in levels of delinquency involvement.

CONCEPTUALIZING AND MEASURING "COLD AND BRITTLE" WITHIN THE CONTEXT OF ROMANTIC RELATIONSHIPS

Hirschi's description of the "cold and brittle" friendships of delinquent youths developed as a contrast to the idea that these relationships could be characterized as warm and intimate. In

extending this hypothesis to cover the romantic realms of experience, it is useful to draw on traditional dimensions of intimacy or bonding. Yet as developmental scholars have noted, certain intimate feelings and emotions are relatively unique to the romantic context (Collins, 2003; Collins and van Dulmen, 2006; Fisher, 2006). Thus, in addition to indices of closeness derived from the friendship and personal relationships literature, we also include attention to feelings of passionate love.

A general feature of close relationships is frequent interaction and communication (Burlington et al., 2000; Youniss and Smollar, 1985). *Frequency of contact* with a romantic partner on its own does not represent a comprehensive index of intimacy, but is a relationship “basic” that is often integral to developing feelings of closeness and high regard (Berscheid et al., 1989; Homans, 1961; see also, generally Haynie, 2001). A more direct measure is the perceived *importance* of the relationship to the individual. A key premise of social bonding theory is that youths who accord significance and importance to their relationship will tend to avoid delinquency involvement because they do not wish to jeopardize such a valued relationship. Beyond this global assessment of the relationship’s salience, the literature on close relationships has highlighted that the level of *intimate self-disclosure* between individuals serves as “a barometer of the state of the relationship” (Chaikan and Derlega, 1976: 184), and the degree of intimacy that has been achieved. As Jourard (1971: 33) notes, it “appears to be an index of the closeness in the “relationship,” and of the affection, love and trust that prevails between two people.” A focus on intimate self-disclosure is also suggested by a large literature highlighting that sharing confidences and concerns is a core dimension of social support (Ainsworth, 1989; McPherson et al., 2006; Nomaguchi, 2008; Youniss and Smollar, 1985). As a final index of coldness versus warmth, we explore feelings associated with love that are relatively unique to the romantic context. As Hatfield and Sprecher (1986) note, romantic love typically includes strong feelings of attraction, frequent thoughts about the other, and a preference for being in the other’s presence.

The above dimensions of close relationships will allow us to examine the “cold” aspect of Hirschi’s hypothesis, but what of the “brittle?” Although Hirschi does not define these terms precisely, our view is that the “brittle” description evokes the idea of involvement in short-lived, conflictual relationships. Thus we will also explore levels of conflict and disagreements that characterize adolescents’ romantic relationships and the duration of their involvement with a current or most recent partner (the latter reflecting the relatively straightforward notion that that which is “brittle” is more likely to break).

HYPOTHESES

Hirschi’s “cold and brittle” hypothesis and more general assumptions of attachment theories lead to the expectation that more delinquent youths will report less frequent contact with romantic partners, accord the relationship a lower level of importance, indicate lower levels of intimate self-disclosure and fewer feelings of romantic love. In addition, this hypothesis suggests that delinquency will be positively associated with conflict and disagreements, and inversely related to relationship duration.

An alternative set of hypotheses follow from social learning theory and prior empirical investigations of delinquents’ peer relationships. Social learning theorists do not argue that most delinquent youths experience deficits in their close relationships. Indeed, Sutherland’s (1947: 6) contention that criminal learning, as the process of learning other attitudes/behaviors, occurs in “interaction with other persons in a process of communication”, and the idea of social influence itself suggests that they, like conforming individuals, are likely to be embedded in “intimate personal groups.” Furthermore, as described above, prior research on the quality of delinquents’ friendship relationships does not typically reveal deficits in the

levels of intimacy that characterize such ties. Thus, based on research in this tradition, we expect to observe few differences in the level of warmth and intimacy that characterizes delinquents' romantic relationships. Yet this prior literature does include evidence of greater conflict between delinquents and their friends (Giordano et al., 1986; Dishion et al., 1995), that, together with Krohn and Thornberry's (1993) finding of shorter duration relationships within friendships provides a basis for expecting greater support for the "brittle" than "cold" depiction Hirschi outlined.

Our objective is to determine whether self-reported delinquency is significantly associated with variations in a range of relationship qualities and dynamics suggested by the "cold and brittle" hypothesis. Our goal is to develop a descriptive portrait of youths' relationships across varying levels of delinquency. In addition to estimating zero-order associations, multivariate models include variables indexing traditional predictors of delinquency, and of the character of social attachments. A key reason we rely on cross-sectional analyses is that we are not focusing heavily on the issue of temporal changes in levels of delinquency, nor developing a causal argument. Moreover, unlike studies of marriage effects, by the time the next wave of interviews occurs (one year later), many respondents are no longer dating the focal romantic partner described at the initial wave. However, as a supplement to the analyses described above, we examine wave one reports of love and intimacy as predictors of wave two delinquency, controlling for wave one delinquency and other covariates. This provides a replication of McCarthy and Casey's (2008) approach to the love-delinquency relationship, using different indices of attachment or bonding within the romantic context. Although not a primary objective, given the key role of gender as a correlate of delinquency involvement, and as an influence on the character and meaning of romantic and other close relationships, we include controls for gender and other sociodemographic characteristics in basic models, and also examine gender and relationship quality interactions. This allows us to explore whether there are systematic variations in the nature of the association between delinquency and quality of the relationships as a function of respondent gender.

METHODS

DATA

The TARS data were obtained from a stratified, random sample of 1,321 students registered for the 7th, 9th, and 11th grades in Lucas County, Ohio, an urban, metropolitan area largely consisting of the city of Toledo. Incorporating over-samples of Black and Hispanic youths, the initial sample was devised by the National Opinion Research Center and was drawn from the enrollment records of 62 schools from seven school districts. Interview questionnaires were completed at home using laptop computers, and school attendance was not a requirement for inclusion in the sample. Refusals to participate were relatively low (81.3% of those contacted completed the survey). U.S. Census data indicate that our sample parallels the characteristics of the Toledo MSA, and the socio-demographic characteristics of the Toledo area are comparable to those of the nation in terms of education (80% in the Toledo MSA vs. 84% in the US are high school graduates), median family income (\$50,046 vs. \$50,287), marital status (73.5% vs. 75.9% married two-parent households), and race (13% vs. 12% Black). Of the full sample ($n = 1,321$), our focus is on 971 adolescents at the first wave (2001-2002) who had reported dating at the time of the interview or in the year prior. Additionally, fourteen respondents reported being of a race/ethnicity other than White, Black, or Hispanic and were not included in the analysis. This results in an analytic sample of 957 dating adolescents. The supplemental longitudinal analysis relies on the respondents who completed waves one and two, or 839 respondents. Attrition analyses indicate that those not interviewed at the second wave do not differ systematically from their interviewed counterparts in levels of delinquency, whether we focus on the full TARS sample or the subsample of daters.

MEASURES

Dependent Variables—Measures of *relationship qualities* are derived from the literature on intimacy in close relationships, the romantic relationships literature, and prior studies of delinquents' peer relationships. The indices are based on adolescents' own perspectives on their romantic relationships, and as such may be subject to bias or distortion. However, our view is that respondents themselves are in a unique position to gauge, for example, the level of importance they accord the relationship, or the degree of intimacy in their discourse with a partner. This differs from some domains/outcomes (parental monitoring, partner's delinquency, grades) where multiple or objective reports may be preferable to self-reports.

Frequency of interaction ($M = 2.17$; $SD = 0.86$) is a measure based on items from prior research on peers (Giordano et al., 1986), and is constructed from the mean of two items gauging how often during the past week (1 = "not at all" to 4 = "5 or more times") the adolescent went to his or her partner's home and met with the partner after school to hang out ($\alpha = 0.63$).

Importance of the relationship ($M = 3.75$; $SD = 1.08$) is derived from the single item: "How important is your relationship with X?" Possible responses range from 1 = "not at all important" to 5 = "very important."

Intimate self-disclosure ($M = 3.31$; $SD = 1.03$) is measured by a modified version of West and Zingle's (1969) scale. Each respondent was asked to report how often (1 = "never" to 5 = "very often") he or she communicated the following to their partner: "something really great that happened;" "something really bad that happened;" "your home life and family;" "worried about your appearance;" and "your private thoughts and feelings" ($\alpha = 0.87$).

Love ($M = 3.53$; $SD = 0.89$) is a variable composed of four items adapted from Hatfield and Sprecher's (1986) passionate love scale. The survey questions ask for level of agreement (1 = "strongly disagree" to 5 = "strongly agree") to these statements: "I would rather be with X than anyone else;" "the sight of X turns me on;" "I am very attracted by X;" and "X always seems to be on my mind" ($\alpha = 0.85$).

Verbal conflict ($M = 1.97$; $SD = 0.87$) is measured by a scale of three items drawn from the Conflict Tactics Scale (Strauss et al., 1980). Respondents were asked to respond with how often they "have disagreements or arguments" with their partner, "yell or shout at each other," or "give each other the silent treatment" ($\alpha = 0.83$). Responses range from 1 = "never" to 5 = "very often."

Duration of the relationship ($M = 4.79$; $SD = 2.07$) is measured by the question: "How long have you been together?" Responses range from 1 = "less than a week" to 8 = "a year or more."

Independent Variable—*Delinquency* ($M = 1.33$; $SD = 0.67$) is measured using a 10-item version of the 26-item delinquency scale developed by Elliot and Ageton (1980). The scale is composed of the mean values for each respondent to the following questions: "In the past 12 months, how often have you: drunk alcohol?;" "stolen (or tried to steal) things worth \$5 or less?;" "carried a hidden weapon other than a plain pocket knife?;" "damaged or destroyed property on purpose?;" "stolen (or tried to steal) something worth more than \$50?;" "attacked someone with the idea of seriously hurting him/her?;" "sold drugs?;" "been drunk in a public place?;" "broken into a building or vehicle (or tried to break in) to steal something or just to look around?;" and "used drugs to get high (not because you were sick)?" ($\alpha = 0.85$). The responses range from 1 = "never" to 9 = "more than once a day." An

identical measure of delinquency constructed from data collected at the second wave ($M = 1.45$; $SD = 0.63$) is used in the longitudinal analysis ($\alpha = 0.79$).

Controls—*Gender* is coded so that male (49%) is the reference category. *Race/ethnicity* is composed of the groups White (66%; reference), Black (23%), and Hispanic (11%), and *age* ($M = 15.49$; $SD = 1.70$) is coded in years. Socioeconomic status is controlled for using *mother's education*, which consists of categories for less than a high school education (12%), high school graduate (36%; reference), and more than a high school education (52%). A set of dummy variables is included to represent *family structure* (single parent [26%], step-parent [18%], other [7%], and married biological parents [49%] as the reference category). *Parental monitoring* ($M = 2.13$; $SD = 0.89$) is composed of a five-item scale gauging the extent to which adolescents feel their parents make decisions for them concerning their social life, friends, and dating ($\alpha = 0.88$). Academic achievement is measured by self-reported *grades* ($M = 6.17$; $SD = 2.00$) in school (ranging from “mostly A’s” to “mostly F’s”). *Self-esteem* ($M = 3.96$; $SD = 0.60$) is a six-item version of Rosenberg’s (1979) self-esteem scale ($\alpha = 0.71$). Controls for basic relationship characteristics include a dummy for whether the respondent had *sexual intercourse with the partner* (reference category is no [28%]), a dummy for *relationship status* (current [60%] or most recent [40%] as the reference), and in models other than those focused on *relationship duration*, we also include *duration* as a control.

ANALYTIC STRATEGY

Via a series of OLS regressions we estimate the zero-order association between self-reported delinquency and each relationship quality. Models which include the control variables are then estimated. Using this strategy, we will determine whether any of the controls account for the observed relationship quality–delinquency associations. In addition, each continuous independent variable is centered at the mean before it is entered into the regression equations. We explore gender by delinquency interactions to determine whether the relationship qualities–delinquency associations differ for male and female adolescents. An additional set of models examine the influence of wave one relationship quality reports on time 2 delinquency, net of wave one self-reported delinquency and other covariates. This analysis essentially focuses on changes in the respondent’s behavior as influenced by levels of romantic partner intimacy reported at wave one. Because the dating sample itself is likely to be somewhat more delinquent than the sample of non-daters, supplemental models are estimated with corrections for possible selection bias using Heckman’s (1979) sample selection procedure (see also Berk, 1983).¹ We conclude from these analyses that selection bias is not a significant concern in the current investigation, and, thus, present the OLS regression results.

¹Bushway et al. (2007) suggested that the use of this strategy in criminological research is sometimes less than ideal. The authors identify several concerns with recent reliance on the procedure: (1) employing logit instead of probit models to estimate the likelihood of inclusion; (2) choosing an inappropriate estimator; (3) failing to include exclusion restrictions, or unique independent variables in the selection equation not included in the substantive equation; and (4) using predicted probabilities of inclusion in place of the Inverse Mills Ratio (IMR). We attempted to avoid these pitfalls by estimating selection using the FIML method with robust standard errors, using a probit model to estimate the IMR, and incorporating several exclusion restrictions that in this case are factors related to whether an adolescent has begun dating. Our selection model includes measures of gender, race/ethnicity, mother’s education, parental monitoring, grades, self-esteem, weight (respondent’s perception of weight relative to others their age), belief that sex should wait until marriage, parent’s discussions with respondent about waiting until marriage to have sex, perceived popularity with the opposite sex, and delinquency involvement. DeMaris (2004) noted that selection bias is problematic if the correlations of errors for the substantive and selection equations (the rho coefficient) as well as the focal independent variable in the substantive equation (i.e., delinquency involvement) are both significant. We find that the correlations of errors are most often significant; the exceptions are for duration and importance. However, for all of our dependent variables, delinquency was not a significant predictor of inclusion in our dating subsample. More importantly, the significance levels and magnitudes of the coefficients between the corrected Heckman estimates and uncorrected OLS estimates are quite similar.

RESULTS

THE “COLD” HYPOTHESIS

Table 1 presents the models examining four dimensions of relationship intimacy, as reported by youths varying in their levels of delinquency involvement. Column 1 presents the results of the OLS regression of frequency of interaction with the romantic partner on delinquency and controls. These models indicate that self-reported delinquency is positively related to the frequency of interaction at the zero-order ($\beta = 0.21$; $p < 0.001$) and after including the control variables ($\beta = 0.09$; $p < 0.01$). Examining the impact of the covariates on the delinquency coefficient (from 0.21 to 0.09), we find that the association is attenuated primarily by the control for sexual intercourse. Those who had sexual intercourse with their partner have an average rate of delinquency of 1.62, which is an increase of 0.41 over the rate for adolescents who have not had sex. A t-test indicates that the difference in means is significant at the 0.001 level.

Table 1 also presents results focusing on importance of the relationship and intimate self-disclosure. Results indicate that both at the zero-order and within the context of multivariate models, delinquency is not significantly related to perceived importance of the romantic relationship or levels of intimate self-disclosure. Results of models examining the association between love and delinquency are compatible with this portrait, but reference the respondent's own feelings of positive emotions associated with this romantic partner. The coefficient for delinquency at the zero-order and with controls does not indicate a significant relationship between reports of love and delinquency involvement. In sum, while the “cold and brittle” hypothesis would lead us to predict that more delinquent youth would report lower levels of interaction and intimacy with romantic partners, the analyses do not support this depiction. In supplemental analyses, we also estimated models that examined longitudinal effects of the above relationship quality variables on later delinquency, and do not find a significant longitudinal association.²

THE “BRITTLE” HYPOTHESIS

We first examine the association between self-reported delinquency involvement and level of verbal conflict characterizing the focal romantic relationship. The results are presented in Table 2. At the zero-order, we find a positive association (the coefficient for delinquency equals 0.13 [$p < 0.001$]). After adding controls, the delinquency coefficient decreases by about half, but is nevertheless significant at a conventional level ($\beta = 0.06$; $p < 0.05$). Again, having had sexual intercourse partially reduces the delinquency coefficient found at the zero-order. This significant result provides some support for Hirschi's depiction of the “brittle” nature of delinquents' relationships, and is consistent with higher scores on conflict reported in prior research on delinquents' peer relations. The second set of analyses focus on reports of durations of these relationships. These results do not indicate a significant inverse association between delinquency and duration.

Although not the primary focus on the analyses, we note also that the relationship between various controls and the qualities assessed is generally in line with prior research. For example, female respondents report higher levels of self-disclosure, but scores on romantic love do not differ across gender. Black youth scored lower on frequency of interaction, importance of the relationship and intimate self-disclosure, and higher on reports of verbal conflict (see Giordano et al., 2005). Age is generally positively related to the indices of intimacy, and to the durations of romantic relationships. Having had sex with the partner and

²Cross-sectional and longitudinal results were similar when we relied on the more serious items in our self-reported delinquency scale.

relationship duration were in general positively related to intimacy but also to higher scores on verbal conflict.

As a final step in the analysis, we estimated a series of models identical to those described above that included gender by delinquency interactions, in order to determine whether the observed relationship qualities-delinquency connections differed according to respondent gender. Whether the models focused on dimensions of intimacy, verbal conflict, or duration, the interactions were not statistically significant, revealing a similar pattern of associations between delinquency and the relationship qualities regardless of gender of the respondent.

DISCUSSION

Research on delinquent youths' social relationships has focused most heavily on family factors and extensive socializing with peers; yet a comprehensive understanding of the lives of adolescents will necessarily also include attention to their dating and sexual experiences. Recent studies, generally consistent with a social learning perspective, have documented that the delinquency of adolescent romantic partners explains additional variation in youths' own self-reported involvement (Haynie et al., 2005; Lonardo et al., 2009). Yet this does not provide a window on the qualities/dynamics of the romantic ties of youths who vary in their levels of participation in delinquent acts. Early on, Hirschi (1969) depicted the peer relationships of delinquent youths as "cold and brittle," suggesting that peers were unlikely to influence one another in the ways stressed by cultural deviance and social learning theorists. Thus, by extension, we might expect such youths' romantic liaisons to be similarly lacking in warmth and intimacy. Generally consistent with this idea, McCarthy and Casey (2008) recently documented a negative association between involvement in romantic relationships characterized by love and later self-reported delinquency involvement, but a positive association between sexual intercourse and levels of participation in delinquent acts.

The current analysis adds to this emerging body of research on adolescent romantic relationships and delinquency, suggesting a somewhat more complex portrait. Similar to findings of other researchers (Aalsma et al., 2005; Armour and Haynie, 2007; Rosenbaum and Kandel, 1990), analyses of the TARS data indicate that delinquent youths are more likely than their less delinquent counterparts to report having had sex with their romantic partners. However, across several different indices of intimacy (frequency of interaction, perceived importance of the relationship, level of intimate self-disclosure and feelings of romantic love), we did not find that more delinquent youths reported lower levels of "attachment" to or intimacy with a current or most recent romantic partner, whether we examined the association cross-sectionally or longitudinally.

As suggested above, the Add Health index of love taps a range of behaviors associated with romantic involvement, rather than subjectively experienced feelings (e.g., Add Health asks respondents whether they have said "I love you," whereas the TARS protocol includes items from Hatfield and Sprecher's passionate love scale, such as "I would rather be with X than with anyone else"). We note also that in cross-sectional comparisons, more delinquent Add Health respondents (defined based on above average scores on the self-reported delinquency index) do not differ significantly from their less delinquent counterparts on a number of the individual items comprising this love scale (analyses available upon request). For example, delinquents were as likely to report "feeling like a couple," "telling others they were a couple," and saying "I love you." Differences between the subgroups were observed on the "met parents" item, and more delinquent youths were more likely to report having kissed their romantic partner.³ Thus, it appears that while McCarthy and Casey's analyses exploring changes in delinquency suggest an inverse relationship to love, the basic

descriptive data based on cross-sectional comparisons do not clearly evoke Hirschi's (1969) "cold and brittle" depiction of the relationships of delinquent youth.

Also inconsistent with the "cold and brittle" notion, the current analyses indicate that durations of romantic relationships do not differ across levels of self-reported delinquency, and more delinquent youth actually reported spending more time with romantic partners. Analyses of the larger Add Health data are generally consistent with this finding (duration of romantic relationships was not associated with self-reports of minor deviance, and was actually positively associated with scores on the major deviance scale [Haynie et al., 2005]). At the same time, more delinquent youth who participated in the TARS study reported higher levels of verbal conflict within their relationships, a finding that is generally consistent with but adds to prior research showing similar patterns with peers (Dishion et al., 1995; Giordano et al., 1986).

What are the implications of these findings, and where do they fit within the larger context of criminological theorizing and research? The portrait of delinquents' romantic relationships that emerges from our analyses does not suggest that such youths are incapable of attachments, and lack intimacy within the relationships they have forged with romantic partners. This fits well with prior research on the quality of delinquents' ties to peers, and other research showing that "loners" tend to report low levels of delinquency involvement (Demuth, 2004; Kreager, 2004). More research is needed on the network ties of delinquent youth, including their romantic relationships, but perspectives stressing either social deficits/marginality or a lack of interest in these relationships are not supported by the results obtained from the above analyses.

However, it is also important to avoid viewing these findings through rose colored glasses, as more delinquent youth do report higher levels of conflict within their relationships, and future research may well provide evidence of other problem dynamics that resonate well with the "brittle" depiction Hirschi outlined. This result is also consistent with prior research documenting that delinquency in adolescence is a predictor of later intimate partner violence perpetration and victimization (Giordano et al., 1999; Moffitt et al., 2001). Yet findings indicating greater conflict within delinquents' romantic relationships can also be viewed through the lens of social learning theory, as much prior research has shown that child abuse and parental conflict are significant predictors of delinquency (the modeling notion—see Widom, 1989). Direct socialization about romantic relationships may also occur. Indeed, a recent study of the parenting practices of a sample of respondents who had evidenced serious levels of delinquency involvement documented that direct communications to children often supported the use of "physical conflict tactics" under certain circumstances (Giordano, 2010). Peer interactions could further reinforce these normative beliefs and amplify risk that a conflictual relationship style will develop within the context of romance as well as within the domain of peer associations.

The finding that having "met the parents" was inversely related to delinquency also deserves additional research scrutiny. While delinquents' romantic relationships may well encompass positive feelings and emotions, these relationships may nevertheless lack traditional courtship elements that would tend to heighten their "conventionalizing" potential. Thus, it is useful to extend research on parenting and delinquency to cover the parent's approach to/monitoring of romantic relationships, as these dynamics have implications for the child's pattern of involvement in delinquent behavior. While the parenting literature is relatively

³While no differences were found in the percentages who reported giving the partner a gift, delinquents were less likely to indicate that they had received one from the partner. However, a majority in both subgroups answered affirmatively--75% of the less delinquent subgroup received a gift as compared with 72% of the delinquent youth.

well-developed, most studies have relied on general monitoring scales, even though movement into the adolescent period represents a unique set of challenges, including those associated with dating and sexuality (Kan et al., 2008; Leslie et al., 1986; Longmore et al., 2009; Madsen, 2008).

Demographic trends indicate increased ages at first marriage, resulting in a relatively extended period of dating and other non-marital sexual activity (Sassler, 2010). Research is thus also needed on the ways in which varied relationship experiences in adolescence and young adulthood influence life course patterns of criminal involvement, and a particularly important future goal is to capture the individual's full set of relationship experiences. Thus, aside from the limitation of interviewing youths from a single region, a second limitation of the current analysis is that we focused on a current or most recent "focal" relationship in order to provide a more in-depth treatment of relationship qualities. Yet research also shows that delinquency is associated with non-relationship sexual involvement (McCarthy and Casey, 2008; Manning et al., 2005). In accord with these findings, Seffrin (2009) recently examined relationship experiences of older TARS respondents, and found that while the more delinquent young adults in the sample did not report lower levels of attachment to their romantic partners, they were more likely to indicate that they had cheated on this partner. These dynamics across several relationships have obvious implications for relationship progressions, and for the likelihood that a given relationship will have stabilizing or "desistance" potential. And, while the current results do not show an association between delinquency and average durations of romantic relationships, it is possible that such differences will become more apparent as adolescents navigate the transition to adulthood, when longer duration relationships become increasingly normative.

Research is also needed that forges connections between romantic and sexual experiences and the broader structural (i.e., neighborhood) environments within which these take place. Thus, for example, while criminological research has suggested how poverty amplifies risk for gang involvement, disadvantaged neighborhoods may also foster different norms/expectations about dating and sexuality (Anderson, 1999; Coates, 1999; Seffrin, 2009). To the degree that differences are patterned based on one's socioeconomic position, this would also suggest limitations of an individual deficits approach to understanding social relationships-delinquency connections.

Future research on relationship dynamics such as attachment/intimacy should be examined in concert with information about the delinquency involvement of the romantic partner, permitting a more complete assessment of social networks and their effects. Although intimate ties may reduce the likelihood of criminal involvement, the social learning perspective argues that strong bonds may operate "for good or for ill," depending on the normative orientation of one's valued "others" (Cairns and Cairns, 1994). Other dynamics such as the power balance within these intimate relationships or perceived alternatives to a given relationship may also act as modifiers of the level of partner influence. Finally, it is important to supplement the current focus on perceptual indices by relying on other methodological strategies such as direct observations of relationship dynamics (see, e.g., Capaldi and Crosby, 1997), qualitative approaches, and direct reports of partner characteristics (Haynie et al., 2005). Our view is that some aspects of relationships are inherently subjective (e.g., the perceived importance of the relationship to the respondent), but other features may be more effectively assessed relying on these alternative measurement strategies and techniques.

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Table 1

OLS Standardized Regression Coefficients: The "Cold" Hypothesis (n = 957)

	Interaction		Importance		Self-Disclosure		Love	
	Zero Order	Full Model	Zero Order	Full Model	Zero Order	Full Model	Zero Order	Full Model
Delinquency ^Δ	.21***	.09**	-.01	-.04	.03	-.01	.06	.02
Gender								
(Male)	--	--	--	--	--	--	--	--
Female	-.04	-.06*	.13***	.07**	.17***	.11***	.06	.01
Race/Ethnicity								
(White)	--	--	--	--	--	--	--	--
Black	-.06	-.15***	-.02	-.09**	-.09*	-.14***	-.02	-.05
Hispanic	.03	-.03	.02	.01	.00	-.01	.02	.02
Age ^Δ	.35***	.14***	-.18***	-.02	.27***	.10**	.21***	.04
Mother's Education								
Less than H.S. graduation	.04	-.01	.05	.01	.06	.03	-.00	-.04
(H.S. graduation)	--	--	--	--	--	--	--	--
More than H.S. graduation	-.04	-.03	.02	.01	.07*	.06	-.01	-.01
Family Structure								
(Married, biological parents)	--	--	--	--	--	--	--	--
Single parent	.02	.02	-.04	-.07*	-.08*	-.06	-.06	-.06
Step parent	.01	.02	-.05	-.04	-.06	-.04	-.11**	-.10**
Other	.03	.03	-.02	-.06*	-.04	-.05	-.02	-.05
Parental Monitoring ^Δ	-.19***	-.06*	-.11***	-.07**	-.14***	-.06	-.15***	-.09**
Grades ^Δ	-.04	-.02	.03	-.05	.10**	-.01	.04	-.01
Self-Esteem ^Δ	.11**	.07*	.12***	.06*	.15***	.11***	.07*	.02
Sex with Partner								
(No)	--	--	--	--	--	--	--	--
Yes	.44***	.23***	.22***	-.01	.23***	.02	.20***	.01
R relationship Status								
(Most recent)	--	--	--	--	--	--	--	--

	Interaction			Importance			Self-Disclosure			Love		
	Zero Order	Full Model		Zero Order	Full Model		Zero Order	Full Model		Zero Order	Full Model	
Current	.20***	.10**		.35***	.26***		.35***	.26***		.31***	.25***	
R relationship Duration [^]	.39***	.24***		.51***	.47***		.42***	.33***		.35***	.29***	
Model F	--	26.85***		--	32.37***		--	27.80***		--	16.46***	
Adjusted R -squared	--	.30		--	.34		--	.31		--	.21	

*
p < .05;

**
p < .01;

p < .001;

[^] Variable is centered around its mean

Table 2

OLS Standardized Regression Coefficients: The “Brittle” Hypothesis (n = 957)

	Verbal Conflict		Duration	
	Zero Order	Full Model	Zero Order	Full Model
Delinquency [^]	.13***	.06*	.05	-.04
Gender				
(Male)	--	--	--	--
Female	.05	.05	.08*	.06
Race/Ethnicity				
(White)	--	--	--	--
Black	.26***	.18***	.12***	.06
Hispanic	.08*	.01	.03	-.01
Age [^]	.20***	.05	.32***	.17***
Mother's Education				
Less than H.S. graduation	.14***	.07*	.07*	.01
(H.S. graduation)	--	--	--	--
More than H.S. graduation	-.07*	-.05	.02	.02
Family Structure				
(Married, biological parents)	--	--	--	--
Single parent	.16***	.02	.08*	.04
Step parent	.04	-.01	-.00	-.01
Other	.13***	.05	.04	.01
Parental Monitoring [^]	-.02	.02	-.08*	.03
Grades [^]	-.13***	-.04	.03	.07*
Self-Esteem [^]	-.00	-.04	.09**	.05
Sex with Partner				
(No)	--	--	--	--
Yes	.31***	.15***	.40***	.32***
Relationship Status				
(Most recent)	--	--	--	--
Current	.06	-.07*	.18***	.07*
Relationship Duration [^]	.35***	.25***	--	--
Model F	--	17.28***	--	17.21***
Adjusted R -squared	--	.21	--	.20

*
p < .05;**
p < .01;***
p < .001;[^]
Variable is centered around its mean