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**THE INFLUENCE OF TEENS' CASUAL AND DATING SEXUAL
PARTNERSHIPS ON YOUNG ADULTS' RELATIONSHIP SATISFACTION
AND PHYSICAL CONFLICT**

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Abstract

Research on the quality of young adults' intimate relationships often has not explored ways in which adolescents' intimate experiences may shape relationship functioning. We examined whether the influence of adolescent sexual partnerships (dating and casual) carries over to affect young adults' relationship satisfaction and physical conflict through the following pathways: (a) relationship churning, which refers to breaking up and going back with partners; and (b) involvement in sexually non-exclusive relationships. Our initial analyses of longitudinal data from the Toledo Adolescent Relationships Study ($n = 240$) showed that net of control variables (delinquency, depression, family violence, relational and sociodemographic characteristics), adolescents' number of dating, but not casual, sexual partners lead to lower relationship satisfaction and greater physical conflict with partners during young adulthood. Relationship churning and sexual non-exclusivity during young adulthood mediated the influence of adolescents' dating sexual partnerships on satisfaction and physical conflict. The positive effect of dating sexual partnerships on physical conflict, and the influence of relationship churning on lower satisfaction were both stronger for women compared with men. These findings broaden our understanding of the long reach of adolescent experiences into young adulthood.

Although adolescents often view their dating and intimate relationships in a positive light (e.g., Giordano, Longmore, & Manning, 2006; Lyons, Giordano, Manning, & Longmore, 2011), many empirical studies and theoretical conceptualizations emphasize the co-occurrence of dating with problem and health compromising behaviors. Researchers, for example, have reported associations between adolescents' dating and delinquency (e.g., Cui, Ueno, Fincham, Donnellan, & Wickrama, 2012), substance use (e.g., DiClemente, Santelli, & Crosby, 2009), depressive symptoms (e.g., Joyner & Udry, 2000), unprotected sexual intercourse (e.g., Tu, Lou, Gao, Li, & Zabin, 2012), pregnancy (e.g., Kirby, Lepore, & Ryan, 2005; Scott et al., 2011), and relationship violence (e.g., Halpern, Spriggs, Martin, & Kupper, 2009). Jessor and Jessor's (1977) problem behavior theory, which underlies many studies of adolescent sexual risk behaviors, emphasizes that due to their common etiology in the social contexts in which adolescents are embedded including families, schools, peer groups, and communities, involvement in any one problem or health compromising behavior increases the odds of taking part in other risky behaviors. We build on the notion of the co-occurrence of sexual risk behaviors by considering the long reach of both dating and casual sexual partnerships during adolescence on risky lifestyle patterns including sexual non-exclusivity and relationship instability during young adulthood. We assessed whether such patterns put young men and women at risk for poorer quality relationships as evidenced by lower satisfaction and greater physical conflict with intimate partners.

We analyzed longitudinal data from a community sample, the Toledo Adolescent Relationships Study (TARS) (n = 240). We expected that adolescents' dating and casual sexual partnerships would affect relationship satisfaction and physical conflict through the following relational patterns during young adulthood: (a) engaging in sexually non-exclusive relationships; and (b) relationship churning, which refers to a pattern characterized by breaking up and going

back with partners. We controlled for other known correlates of young adults' relationship satisfaction and physical conflict including prior antisocial behavior and depressive symptoms, family violence while growing up, as well as current relationship characteristics, such as union status, relationship duration, having children, and sociodemographic background. We hypothesized that the frequency of casual and dating sexual partnerships during adolescence affects relationship satisfaction and physical conflict through young adults' patterns of sexual non-exclusivity and relationship churning; thus, we anticipated that including these patterns in our analyses would attenuate the effect of adolescents' sexual partnerships on young adults' relationship functioning. Building on research demonstrating gender differences in sexual permissiveness (e.g., Sprecher, Treger, & Sakaluk, 2013), we also examined whether the effects of teens' casual and dating sexual partnerships, as well as young adults' sexual non-exclusivity and relationship churning, differed for women and men.

BACKGROUND

Young Adults' Relationship Satisfaction and Physical Conflict

During young adulthood, a key developmental task is learning to assess partner compatibility and relationship satisfaction. Although nearly three-fourths of young adults are involved in intimate relationships (Child Trends, 2013), knowledge of how they sustain high quality enduring relationships is limited. Many prior studies have focused on the stressors that contribute to relationship break-ups (e.g., Scott et al., 2011; Sweeney & Horwitz, 2001; Walker, Barrett, Wilson, & Chang, 2010), and the consequences of break-ups for individuals' mental health and well-being (e.g., Vennum, Lindstrom, Monk, & Adams, 2014). Yet relationship satisfaction and the ability to effectively resolve conflict in a non-intimidating manner appear to

be two aspects of relationship quality that ‘hold’ people together and lead to long-term stability (Duck, 2007). Relationship satisfaction refers to appreciating, liking, and enjoying the company of an intimate partner (Rust, Bennum, Crowe, & Golombok, 1986), and individuals who report being satisfied likely have higher quality relationships. Perhaps most importantly, relationship satisfaction affects life satisfaction (Be, Whisman, & Uebelacker, 2013). As such, it is important to understand potentially ‘malleable’ correlates of young adults’ relationship satisfaction including the role of earlier sexual and romantic experiences.

In addition to relationship satisfaction, learning to get along in intimate relationships without resorting to physical violence to gain control over a partner or to get one’s way (Felson, 2002) is a critical skill set that has life long consequences. Yet in studies based on a variety of data sets including TARS and the Longitudinal Study of Adolescent Health (Add Health), young adults’ reports of physical conflict were remarkably common (e.g., Alvira-Hammond, Longmore, Manning, & Giordano, 2014; Halpern et al., 2009; Whitaker, Haileyesus, Swahn, & Saltzman, 2007). Moreover, young adulthood, as a life stage, corresponds with a peak in self-reports of intimate partner violence. Estimates from the Add Health, for example, indicated that 25% of unmarried women and men, ages 18-24, reported physical conflict with a relationship partner (Halpern et al., 2009). Similarly, Rhoades et al. (2010) found that about 35% of young adults ages 18-35 reported experiencing physical altercations with their partners. These estimates contrast sharply with a key developmental task during young adulthood, which is learning to get along with an intimate partner. As such, it is important to examine whether prior sexual partnerships influence young adults’ physical conflict with partners.

Adolescents’ Sexual Partnerships and Young Adults’ Outcomes

In contemporary American society, adolescent dating is extremely common. Examining 18-19 year olds ($n = 240$) from the fourth interview of the Toledo Adolescent Relationships Study, Manning, Longmore, Copp, and Giordano (2014) found that nearly all (95%) reported that they had dated. The average number of dating partners was four, but the range was 0-13 reflecting that although dating is virtually universal, teens differ in their number of dating partners. Additionally, estimates based on a variety of datasets indicate that the majority of teens have engaged in heterosexual sexual activity by age 18 (e.g., Abma, Martinez, & Copen, 2010; Child Trends, 2013; Finer & Philbin, 2013; Manning et al., 2014; Raley, Crissey, & Muller, 2007). Moreover, Abma et al. (2010) examining the National Survey of Family Growth (NSFG) and Manning et al. (2014) examining the TARS both found that among sexually experienced 18-19 year olds, over 70% had two or more lifetime sexual partners. In the TARS data, the average number of dating partners with whom teens had been sexually active was two (range = 0-13). Thus, although not all teens are sexually active, the majority of teens report multiple partners.

Much prior work using a problem behavior framework has focused on number of dating partners as an indicator of adolescent sexual risk behavior (e.g., Sabia & Rees, 2012). From this perspective, a greater number of dating partnerships during adolescence might represent relationship 'baggage,' which could detrimentally affect subsequent relationship quality. Some research, for example, supports the position that adolescents' greater frequency of relational experiences has negative implications for young adults. Cui et al. (2012), examining the Add Health, found that romantic involvement was associated with delinquent or antisocial behavior during adolescence, and the cumulative number of romantic relationships from adolescence to young adulthood was associated positively with antisocial behavior in young adulthood controlling for prior delinquency and sociodemographic background. Madsen and Collins

(2011) examining data from the Minnesota Longitudinal Study of Parents and Children (N = 75) hypothesized, and found support for their view that a greater number of dating partners in mid-adolescence was associated with poorer quality romantic relationships in young adulthood as evidenced by greater shared negative affect among partners and a lack of smooth relationship processes. Similarly, based on the TARS data, at the bivariate level number of prior sexual partners was associated with lower relationship satisfaction and greater relationship violence (Manning et al., 2014). Summarizing, based on this set of studies one conclusion drawn is that frequent dating or romantic relationships during adolescence affects several outcomes during young adulthood including antisocial behavior and some indicators of relationship quality. Yet, these studies did not consider mediating factors, and whether associations differed by gender.

Other researchers have emphasized that romantic relationships play a key role in adolescents' social and emotional development (Collins, Welsh, & Furman, 2009; Furman & Rose, forthcoming). Meier and Allen (2009, p. 309), for example, argued that adolescents' romantic relationships provide "developmental currency" for young adult relationship formation, and described sexual activity as reflecting greater commitment in dating relationships. Similarly, Raley et al. (2007) operationalizing adolescent developmental stages in terms of relational experiences (no relationships, one casual, multiple relationships, and one steady), suggested that greater commitment is indicative of a more advanced developmental stage. Examining the first and third waves of the Add Health, they found that having some romantic experiences in adolescence (i.e., held hands, hugged, or kissed in the last 18 months, or had a special relationship) increased young adults' likelihood of cohabitation, and steady romantic experiences in adolescence increased the odds of marriage (ages 18-25). They theorized that involvement in romantic partnerships during late adolescence positively influenced the odds of marriage because

steady, in contrast to less serious, relationships provided the context to work on interpersonal communication skills that are critical for negotiating conflict. They concluded that adolescents' relational experiences provide a "blueprint" for subsequent relationships during young adulthood. While adolescent romantic relationships influenced union formation, this study did not examine the quality of young adults' unions. Other scholars, however, have suggested that teens' romantic relationships may lead to higher relationship quality in young adulthood as these experiences represent opportunities to learn 'how to do' romance (Giordano, Manning, Longmore, & Flanigan, 2012). Based on this set of studies, it appears that dating sexual partnerships lead to positive outcomes in young adulthood. Similar to the studies that found adverse effects associated with teens' intimate relationships, however, these studies did not consider mediating factors.

Casual Sexual Partnerships

In addition to whether adolescents' dating or romantic partnerships positively or negatively influence indicators of relationship quality during young adulthood, it is important to consider that sex also occurs outside of dating relationships. In a recent review, Garcia, Reiber, Massey, and Merriwether (2012) concluded that casual sexual hookups would likely continue to be an important relational context for teens and young adults. About half of sexually active teens in the Add Health, for example, reported having had sex with individuals with whom they were not dating, with young men more often than women reporting casual sexual experiences (Manning, Longmore, & Giordano, 2005). Consistent with prior estimates based on the NSFG (e.g., Abma et al., 2010), Manning and colleagues (2014) reported that a minority of sexually active adolescents reported one casual sex partner (13%); yet over a third (35%) reported more than one casual sex partner. Additionally, many adolescents reported involvement in both casual

and dating sexual partnerships (Manning, Giordano, & Longmore, 2006). Nearly half of sexually experienced adolescents in the first year of the Add Health reported on sexual relationships that overlapped in terms of starting and ending dates (Ford, Sohn, & Lepkowski, 2001), suggesting that some dating and casual sexual partnerships occurred in tandem. Thus, many teens are involved in multiple dating and casual sexual partnerships.

Relative to sexual activity with dating partners, there appears to be greater apprehension among many scholars and parents alike regarding the prevalence of teens' casual or 'hooking up' sex, which allegedly promotes relationships with low commitment and limited obligations (e.g., Eisenberg, Ackard, Resnick, & Neumark-Sztainer, 2009; Fielder & Carey, 2010; Grello, Welsh, & Harper, 2006; Owen & Fincham, 2011). Not all casual sexual relationships reported by adolescents, however, are 'one-night stands'; often, casual sex occurs with ex-partners (Halpern-Meekin et al. 2013a), friends (Furman & Shaffer, 2011; Manning et al., 2006), or 'friends with benefits' (Eisenberg et al., 2009). Nevertheless, some researchers contend that casual sex is especially detrimental for women (e.g., Fielder, Walsh, Carey, & Carey, 2014); yet this research did not include men. Examining the TARS data, Lyons and colleagues (2013) did not find that the effects of casual sexual activity on well-being differed for young men and women. It is unclear, however, whether frequency of casual sexual partnerships is associated with subsequent relationship quality. Given gender differences in involvement in casual sexual activity, and uncertainty regarding the consequences for men and women, we considered whether the effects of teens' casual sex on relationship satisfaction and physical conflict were conditional on gender.

Young Adults' Relationship Patterns: Sexual Non-Exclusivity and Relationship Churning

There are numerous informative investigations of adolescents' sexual relationships, which focus on young adults' fertility-related outcomes (e.g., Kirby et al., 2005; Scott et al.,

2011; Tu et al., 2012). Fewer studies focus on ways in which sexual partnerships during adolescence might affect young adults' relationship patterns. Two important patterns include involvement in sexually non-exclusive relationships and relationship churning.

Sexual Non-Exclusivity

Researchers drawing on samples of adults in cohabiting or marital unions have found that most individuals are sexually exclusive (e.g., Atkins, Baucom, & Jacobson, 2001; Treas & Giesen, 2000). Treas and Giesen (2000), for example, found that only 12% of cohabiting adults between the ages of 18-59 reported that they were sexually *non*-exclusive; and among married adults, an even smaller percentage, between 8% and 11%, reported that they were sexually non-exclusive. Young adults, however, report higher levels of sexual non-exclusivity. Examining the Add Health, Joyner, Manning, and Bogle (2013) found that over one-third (35%) of young adults in dating and 28% in cohabiting relationships either were not, or their partners were not, sexually exclusive. Moreover, based on both the Add Health (Scholdenmeyer, 2014), and the TARS data (Giordano, Copp, Manning, & Longmore, 2014), young men compared with women were more likely to report that they were sexually non-exclusive.

Although evidence suggests that sexual non-exclusivity may be a somewhat common occurrence during young adulthood, these dynamics may nevertheless negatively affect relationship quality as indexed by relationship satisfaction (Duck, 2007) and physical conflict (Giordano et al., 2014). Further, researchers have found that multiple sexual partners during adolescence increased the odds of sexual non-exclusivity in current and subsequent relationships (e.g., Bogaert & Sadava, 2002; Feldman & Cauffman, 1999; Maddox Shaw, Rhoades, Allen, Stanley, & Markman, 2013; McAlister, Pachana, & Jackson, 2005; Treas & Giesen, 2000). Many studies, however, relied on cross-sectional or retrospective data. In the current study

based on longitudinal data, we expected that young adults' patterns of sexual non-exclusivity would be associated with lower satisfaction and greater physical conflict. We hypothesized that sexual non-exclusivity during young adulthood would mediate the effects of sexual partnerships during adolescence. Thus, accounting for patterns of sexual non-exclusivity during young adulthood, adolescents' number of sexual relationships, both dating and casual, would not significantly influence relationship satisfaction and physical conflict. We also explored whether the effects of sexual non-exclusivity differed for men and women.

Relationship Churning

Intimate relationships, especially during adolescence and young adulthood, are often unstable. More than 40% of young adults in the TARS sample at the time of the fourth interview experienced relationship churning - both breaking up and getting back together with their current, most recent, or ex-partner (Halpern-Meekin, Manning, Giordano, & Longmore, 2013a, 2013b). Churning, or relationship cycling, is indicative of ambivalence about the relationship and may be associated with continued bouts of churning (Vennum et al., 2014), and increased odds of experiencing physical conflict with a partner (Halpern-Meekin et al., 2013b). As such, we expected that patterns of relationship churning would result in lower relationship satisfaction and higher odds of physical conflict.

Additionally, we examined whether patterns of relationship churning during young adulthood mediated the effects of multiple sexual partners, casual and dating, during adolescence on satisfaction and physical conflict. Treas and Giesen (2000) argued that access to many ex-partners provides individuals with more sexual opportunities, which is indicative of relationship churning. We expected that with the inclusion of relationship churning, adolescents' sexual relationships would not be associated with the indicators of relationship quality. We also

examined whether the effects of churning on satisfaction and physical conflict were comparable for men and women.

Antisocial Behavior, Family Violence, and Relationship Characteristics

In addition to teens' sexual partnerships, and young adults' patterns of sexual non-exclusivity and relationship churning, we examined the following antecedent variables that influence both relationship satisfaction and physical conflict: (1) prior antisocial behavior and depression; (2) family violence; and (3) relationship characteristics. First, involvement in antisocial or delinquent activities during young adulthood and prior depressive symptoms are associated with lower quality relationships (Longmore et al., 2014) and increased odds of intimate partner aggression (Johnson, Giordano, Longmore, & Manning, 2014). Second, family violence, as indexed by witnessing parental violence and/or experiencing coercive parenting while growing up, is associated with lower relationship satisfaction (Kaura & Lohman, 2007), and increased odds that young adults' experience violence in their intimate relationships (Ehrensaft et al., 2003; Herrenkohl et al., 2006). Thus, we controlled for prior antisocial behavior, depressive symptoms, and family violence in our models.

Third, relationship characteristics including union status, relationship duration, and parenthood influence both relationship satisfaction and physical conflict. Regarding union status, Kamp Dush and Amato (2005) found that married individuals reported the highest levels of subjective well-being, followed by cohabitators, and then those in dating relationships. Researchers also found that young adults who lived together (married or cohabiting) compared with those who were dating reported greater odds of physical conflict (Brown & Bulanda, 2008; Cui, Gordon, Ueno, & Fincham, 2013). During young adulthood, relationships of longer duration may suggest higher quality as relationships of lower quality likely have ended (Zimmer-

Gembeck, Arnhold, & Connolly, 2014); yet, longer duration is associated with increased odds of intimate partner violence (Kenney & McLanahan, 2006). Parenthood is associated negatively with adults' relationship satisfaction (Levenson, Cartensen, & Gottman, 1993), and physical conflict with partners (Vest, Catlin, Chen, & Brownson, 2002). Thus, we controlled for these variables in our models predicting relationship satisfaction and physical conflict.

CURRENT INVESTIGATION

Scholars have noted that historically the associations between adolescents' and young adults' intimate relationships have received little empirical attention (Madsen & Collins, 2011). Recently, however, researchers have examined adolescents' relational experiences and young adults' outcomes including involvement in antisocial activities, union status, and some indicators of relationship quality. Some researchers concluded that too many dating partners have negative consequences, while others stressed the developmental necessity of dating for learning intimacy skills. Conversely, others emphasized that the relationship context, that is, whether sex occurs with a dating or casual sexual partner is what really matters. Our goal was to determine how the influence of adolescents' sexual experiences might carryover into young adulthood. Thus, we first assessed whether frequency of sexual partnerships, and type of sexual involvement, dating versus casual, influenced relationship satisfaction and physical conflict.

We also indicated that there might be mediating factors that influence the associations between teens' sexual partnerships and indicators of relationship quality. We examined whether the less stable and committed patterns of relationship churning and sexual non-exclusivity mediated the association between frequency of sex partners (dating and casual) during adolescence and relationship satisfaction and physical conflict, respectively. Mediation suggests

that the number of adolescents' sex partners is associated with relational patterns, which in turn predispose individuals toward lower satisfaction and increased odds of physical conflict. Thus, our second objective was to assess whether patterns of sexual non-exclusivity and relationship churning during young adulthood mediated the associations between teens' number of sex partners and subsequent relationship satisfaction and physical conflict.

Regarding gender, male compared with female adolescents reported a higher number of casual sexual partnerships. Moreover, some literature conceptualized casual, compared with dating, sex as perhaps having greater negative effects, especially for young women; yet other research has not found gender differences. Our third objective was to examine whether the effects of dating and casual sex partners on relationship satisfaction and physical conflict are comparable for men and women. Further, are the effects of patterns of sexual non-exclusivity and relationship churning similar for men and women? Multivariate models included other known correlates of young adults' relationship satisfaction and physical conflict, such as antisocial behavior, prior depressive symptoms, family violence while growing up, and relationship characteristics including union status, relationship duration, and having children.

METHOD

Data

The TARS data focus on dating and sexual relationships during the transition from adolescence to adulthood. The initial data (n=1,321) are from a stratified, random sample of adolescents who registered for the 7th, 9th, and 11th grades in Lucas County, Ohio, in the year 2000. At the time of the first interview, we also interviewed a parent (primarily mothers) or guardian separately. Because we interviewed outside of the school setting, respondents did not

need to attend classes to be in the original study. We followed the initial set of respondents over the course of five interviews for the next 10 years.

To assess whether adolescents' sexual partnerships influenced early adult relationship satisfaction and physical conflict, we focused on an analytic sample ($n = 240$) of 18-19 year old respondents from the fourth interview (2006). This allowed us to access the cumulative number of adolescent casual and dating sexual experiences from early (ages 12-13) to late adolescence (ages 18-19). Thus, the study's longitudinal design permitted an assessment of intimate experiences based on self-reports at each interview rather than relying on a single retrospective report. We measured relationship satisfaction and any physical conflict at the time of the fifth interview (2011) when respondents were ages 22-25.

Measures

Relationship satisfaction (Rust et al., 1986), assessed at the fifth interview, included likert responses to the following nine items: (1) "I really appreciate his/her sense of humor"; (2) "He/she doesn't seem to listen to me" (reverse coded); (3) "If he/she left me, life would not be worth living"; (4) "We both seem to like the same things"; (5) "I often have second thoughts about our relationship" (reverse coded); (6) "I enjoy just sitting and talking with him/her"; (7) "We become competitive when we have to make decisions" (reverse coded); (8) "I wish there was more warmth and affection between us" (reverse coded); and (9) "He/she is always correcting me" (reverse coded) ($\alpha = .76$). Responses were (5) strongly agree to (1) strongly disagree.

Physical conflict, measured at the fifth interview, included responses to twelve items from the revised Conflict Tactics Scale (CTS2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). These included how often the respondent had done the following: (1) "thrown something

at”; (2) “twisted arm or hair”; (3) “used a knife or gun”; (4) “punched or hit with something that could hurt”; (5) “choked”; (6) “slammed against a wall”; (7) “beat up”; (8) “burned or scalded on purpose”; (9) “kicked”; (10) “pushed, shoved, or grabbed”; (11) “slapped in the face or head with an open hand”; and (12) “hit” in reference to experiences with the current/most recent partner ($\alpha = .94$). Responses ranged from (1) never to (5) very often. Because responses were skewed, we dichotomized scores to measure any physical conflict.

We measured casual and dating sexual partnerships during adolescence. The initial prompt stated the following: “When we refer to sex in the next questions, we mean vaginal sex. In your lifetime, how many sex partners have you had?” *Number of casual sex partners* referred to the question: “How many different people of the opposite sex have you had vaginal sex with that you weren’t really dating or going out with?” *Number of dating sex partners* was the difference between the total number of sex partners and the number of casual sex partners.

Relationship churning was a three category variable measured at the fifth interview. Following Halpern-Meehin et al. (2013a; 2013b), we characterized respondents as relationship churners if they broke up and got back together with their current or most recent partner or had sex with their ex-dating partner. The second category, stably together, included respondents in a current relationship who never broke up with this partner. The third category, stably apart, included respondents who reported on a prior relationship in which they only broke up once and did not get back together.

Sexual non-exclusivity referred to respondents’ self-reports of their own and/or their partners’ non-exclusivity and/or involvement in sexually non-exclusive relationships measured at the fifth interview. The second category, sexually exclusive, indicated that neither partner had sex with someone else during the relationship.

Antisocial behavior was the mean of a ten-item self-report scale (Elliott & Ageton, 1980) measured at the time of the third interview. It included the following items: (1) “drunk alcohol”; (2) “stolen (or tried to steal) things worth \$5 or less”; (3) “stolen something worth more than \$50”; (4) “carried a hidden weapon other than a plain pocket knife”; (5) “damaged or destroyed property on purpose”; (6) “attacked someone with the idea of seriously hurting him/her”; (7) “sold drugs”; (8) “been drunk in a public place”; (9) “broken into a building or vehicle”; and (10) “used drugs to get high” ($\alpha = .91$). Responses ranged from (1) never to (9) more than once a day.

Depressive symptoms, measured at the time of the third interview, are from the six-item version of the Center for Epidemiological Studies Depressive Symptoms scale (CES-D) (Radloff, 1977). We asked how often each symptom occurred in the past seven days: (1) “couldn’t get going”; (2) “could not shake off the blues”; (3) “had trouble keeping your mind on what you were doing”; (4) “felt lonely”; (5) “felt sad”; and (6) “had trouble getting to sleep or staying asleep” ($\alpha = .77$). Responses ranged from (1) never to (7) six days a week.

We included two measures of prior family violence. *Witnessing parental violence* was the respondent’s retrospective response, at the fifth interview, in which we asked, “How often did either one of your parents:” “throw something at the other”; “push, shove, or grab the other”; “slap the other in the face or head with an open hand”; and “hit the other” ($\alpha = .92$). Due to the skewed nature of the responses, we dichotomized scores (1 = yes) to indicate any parental violence. *Coercive parenting*, measured at the first interview when respondents were adolescents asked the following: “When you and your parents disagree about things, how often do they push, slap, or hit you?” Responses ranged from 1 (*never*) to 6 (*two or more times a week*). Due to skewness, we dichotomized this variable to indicate any reports of coercive parenting (1 = yes).

Union status, based on relationship histories, included dating (reference group), cohabiting, and married. *Current relationship* indicated that respondents reported on their current versus most recent relationship. *Relationship duration*, measured in years, ranged from .08 (about a month) to 10 years. *Children* referred to whether the respondent had children at the time of the fourth interview.

Gender, a dichotomous variable, indicated whether the respondent was female. *Age* was the difference between date of birth and the fourth interview date. *Race/ethnicity* consisted of three self-reported categories: White (reference group), Black, and Hispanic. *Family structure during adolescence*, from the respondent's first interview asked, "During the past 12 months, who were you living with most of the time?" Respondents selected one of 25 categories, which we collapsed into four categories: two biological parents (reference group), single parent, stepparents, or 'other family' including living with other family members or foster care. *Mother's education*, a proxy for social class background was from the parent interview, and response categories included less than high school, high school graduate (reference group), some college, or college or more.

Analytic Strategy

Table 1 included descriptive statistics for all variables included in the multivariate models. We used these data to provide a descriptive portrait of the sample, and to show significant differences between male and female respondents.

We used ordinary least squares and logistic regression to model bivariate and multivariate associations with relationship satisfaction and any physical conflict, respectively. We showed results for relationship satisfaction in Table 2, and results for physical conflict in Table 3. Tables

2 and 3 included zero order models (first column) examining the bivariate associations between number of casual and dating sexual partners during adolescence, sexual non-exclusivity and relationship churning during young adulthood, and the other independent variables on the dependent variables, respectively. In the multivariate analyses, Model 1 included the association between number of casual sex partners and the dependent variable controlling for the known correlates including antisocial behavior, depression, family violence, relationship characteristics, and demographic background. In Model 2, we substituted number of dating for number of casual sex partners. Model 3 added the key mediating variables, relationship churning, and sexual non-exclusivity, to Model 1. Likewise, Model 4 added relationship churning and sexual non-exclusivity to Model 2. In separate analyses, we examined cross-product terms of (a) the two indicators of adolescent sexual partnerships, casual and dating, with gender, and (b) the two young adult relationship patterns, churning and sexual non-exclusivity, with gender to determine whether the associations between these variables and each dependent variable were conditional on gender. We presented significant interactions in Models 5 and 6, and conducted formal tests for mediation.

RESULTS

Table 1 presented descriptive statistics for the full sample ($n = 240$), and by gender, including means/percentages, standard deviations, and the range for variables in the multivariate analysis. Among young adults, the average level of relationship satisfaction was 3.51 (range = 1-5) with a standard deviation of 0.58, indicating moderate levels of satisfaction across the sample as a whole. Relationship satisfaction was not significantly different for men and women. Additionally, approximately 23% of the sample reported any physical conflict at the time of the fifth interview, which is consistent with estimates of physical conflict among young adults

employing other data sets, such as the Add Health (e.g., Halpern et al., 2009). The percentages of men and women reporting any physical conflict were not significantly different. Thus, young adults on average reported moderate relationship satisfaction, but nearly one-fourth also reported relationship violence.

Regarding adolescents' sexual partnerships, when asked in 2006, the average number of casual and dating sexual partners was 1.5 and 2.08 respectively. Although male and female teens did not report a significant difference in number of dating sexual partners, consistent with prior studies, male compared with female teens reported more casual sex partners (1.88 versus 1.17).

Among young adults, we found that nearly 37% reported experiences with relationship churning, i.e., breaking up and getting back together, or engaging in sexual activity with an ex-dating partner, and a higher percentage of male (23%) compared with female (10.8%) young adults reported being stably broken up with their past partner (that is, not engaging in relationship churning). Nearly one-third, 28%, reported that they were in sexually non-exclusive relationships; consistent with prior research, the majority, 72%, reported that their current or most relationship was sexually exclusive. Moreover, the percentage of men and women who reported being sexually exclusive was not significantly different.

Self-reports of antisocial behavior were low, with respondents reporting an average score of 0.40 (on a scale of 0-6). Men (mean = .51) compared with women (mean = .30) reported significantly higher mean scores. Depressive symptoms averaged 2.40, indicating that respondents reported an average of 1-2 depressive symptoms per week, and the average score was not significantly different for men and women. Significant minorities of young adults reported a history of family violence, with about 29% having witnessed parental violence during adolescence and 23% having experienced coercive parenting. Men and women did not

significantly differ in reports of prior family violence. Two-thirds (66%) of the sample was dating, one-fourth (26%) cohabiting, and 8% married. The average duration of young adult relationships was 1.78 years. Nearly 72% reported on a current versus recent relationship, with a greater percentage of women (79%) compared with men (63%) reporting on a current relationship. The vast majority of respondents had not yet become parents, but nearly 6% reported having at least one biological child. A significantly higher percentage of women (9.3%) compared with men (1.8%) reported having children. Regarding sociodemographic characteristics, about 54% of the sample was female, and the average age was 23. With respect to race and ethnicity, 66% of the sample identified as White, 23% Black, and 11% Hispanic. About half of respondents (50%) reported living with two biological parents during adolescence, and the modal category of mother's education was "some college."

Relationship Satisfaction

We investigated whether the number of (a) casual sexual and (b) dating sexual partners during adolescence influenced young adults' relationship satisfaction. We also assessed whether young adults' patterns of relationship churning and sexual non-exclusivity mediated the association between teens' sexual relationships and relationship satisfaction measured five years later (in 2011).

At the zero order, in Table 2, adolescent sexual experiences (i.e., number of casual sexual partners, number of dating sexual partners) were associated with lower levels of relationship satisfaction during young adulthood. Consistent with expectations, relationship churning and sexual non-exclusivity were associated with lower relationship satisfaction. Additionally, depressive symptoms and witnessing parental violence negatively influenced relationship satisfaction in young adulthood. Young adults in a current, compared with recent, romantic

relationship reported greater satisfaction. Regarding the sociodemographic correlates, Black respondents, compared with their White counterparts, reported lower levels of relationship satisfaction. Living in a stepparent family during adolescence was marginally negatively associated with relationship satisfaction.

Model 1 examined the frequency of adolescents' casual sex partnerships on relationship satisfaction in young adulthood controlling for antisocial behavior, depression, prior family violence, relationship characteristics, and sociodemographic background. Teens' number of casual sexual partners was not a significant influence on subsequent relationship satisfaction with the inclusion of the other correlates. Model 2 showed that frequency of dating sexual partners during adolescence decreased young adults' relationship satisfaction net of the control variables. Regarding our initial research questions, with the inclusion of the control variables, only dating sexual relationships, and not casual sexual partnerships, negatively influenced relationship satisfaction.

Model 3 examined associations between casual sexual partnerships, the young adult relationship patterns of churning and sexual non-exclusivity, and relationship satisfaction, net of the control variables. In Model 3, as in Model 2, number of casual sex partners during adolescence was not associated with relationship satisfaction in young adulthood. Patterns of relationship churning and sexual non-exclusivity were associated with lower satisfaction.

Model 4 showed that the number of dating sex partners in adolescence was not associated with relationship satisfaction once relationship churning and sexual non-exclusivity were included in the model. Although many approaches to testing mediation hypotheses do not simultaneously examine multiple mediators or account for the effects of other covariates, we estimated the path coefficients in a multiple mediator model adjusting all paths for the potential

influence of study covariates not proposed to be mediators in the model (Preacher & Hayes, 2008). Accounting for the effects of other covariates, the direct path between casual sex partners and relationship satisfaction was not significant (Model 3). The direct association between dating sexual partners and relationship satisfaction remained significant net of controls, and further examination of the specific indirect effects revealed that relationship churning ($z = -1.811, p < .05$) and sexual non-exclusivity ($z = -2.327, p < .05$) mediated the association between the number of dating sexual partners and relationship satisfaction. These models showed that of the covariates, only depressive symptoms influenced relationship satisfaction in the full model such that respondents with higher levels of depressive symptoms reported significantly lower relationship satisfaction. Thus, regarding the second research question, we found some support for mediation, indicating that these young adult relationship patterns (i.e., churning and sexual non-exclusivity) partially explained the association between dating sexual experience in adolescence and lower relationship satisfaction in young adulthood.

In Model 5, we included both casual and dating sexual partnerships, relationship churning, sexual non-exclusivity, the other control variables, and statistically significant interactions. The only significant interaction was between gender and relationship churning, indicating that the negative association between relationship churning and relationship satisfaction was stronger for women than men. We found that teens' frequency of dating and casual sexual partners, and young adults' patterns of sexual non-exclusivity were related similarly to relationship satisfaction for men and women (non-significant interaction not shown). Thus, with regard to our research questions about gender, dating and casual sexual partnerships, and sexual non-exclusivity had comparable effects on relationship satisfaction among young men and women. With respect to concerns that casual sex is especially detrimental for women,

greater frequency of casual sexual experiences during adolescence did not appear to have more adverse consequences for young women's compared with men's relationship satisfaction.

Physical Conflict

Table 3 presented results of logistic regressions examining the association between adolescent sexual partnerships, young adult relationship patterns, and any physical conflict. In the zero order models, the numbers of casual and dating sexual relationships in adolescence were associated with higher odds of experiencing any physical conflict with an intimate partner in young adulthood, and the effect was stronger for dating sexual partners. As expected relationship churning and sexual non-exclusivity were associated with greater odds of young adults' physical conflict. Consistent with prior work, antisocial behavior (marginally significant), depressive symptoms, witnessing parental violence and coercive parenting during adolescence were associated with higher odds of physical conflict during young adulthood. Being in cohabiting or marital relationships, and relationships of longer duration, were associated with higher odds of physical conflict in young adulthood. Black and Hispanic, compared with White respondents, reported higher odds of physical conflict. Respondents who lived in married two biological parent families during their adolescence and whose mothers were more educated reported lower odds of any physical conflict with partners during young adulthood.

Model 1 examined the influence of adolescents' casual sexual experience on the odds of physical conflict. Net of the known correlates of antisocial behavior, prior family violence, sociodemographic background and relationship characteristics, number of casual sexual experiences during adolescence was not a significant influence on the odds of physical conflict during young adulthood. Model 2, in contrast, showed that number of dating sexual partners increased the odds of physical conflict net of the control variables. Thus, with regard to our

initial research questions, only number of dating sexual partners increased the odds of physical conflict.

The next two models in Table 3 included the young adult patterns of churning and sexual non-exclusivity. In Model 3, the number of casual sexual partners during adolescence was not associated with the odds of experiencing any physical conflict during young adulthood with the inclusion of relationship churning and sexual non-exclusivity, both of which were significantly associated with physical conflict. Model 4 showed that with the inclusion of relationship churning and sexual non-exclusivity, number of dating sexual partners during adolescence was no longer associated with the odds of physical conflict during young adulthood. Thus, the patterns of relationship churning and sexual non-exclusivity developed in young adulthood explained some of the association between adolescent dating sexual experiences and physical conflict. We followed a similar procedure, as described above, to formally test relationship churning and sexual non-exclusivity as mediators of the association between adolescent sex experience and physical conflict. As in the previous analyses examining relationship satisfaction, after adjusting all paths for the influence of the control variables, the direct path between casual sex partners and physical conflict was attenuated. Net of controls, the number of dating sex partners continued to exert a positive influence on the odds of physical conflict. Supplemental analyses revealed that patterns of relationship churning and sexual non-exclusivity in young adulthood mediated the link between dating sexual partners and physical conflict (specific indirect effects = 1.762 and 2.123 ($p < .05$), respectively).

With regard to the other correlates, young adults' depressive symptoms and witnessing parental violence were associated with increased odds of any physical conflict. Additionally, married and cohabiting, compared with dating, young adults reported higher odds of physical

conflict. Changing the reference group, cohabiters and married individuals reported similar odds of physical conflict with partners. Respondents reporting on current, as compared to recent, relationships had lower odds of physical conflict. Hispanic, compared with White young adults reported higher levels of physical conflict. Respondents who reported living with single parents or 'other' family types (such as foster care or relatives) during adolescence experienced higher odds of physical conflict.

Models 4 and 5 present the significant interactions by gender. In contrast to the models predicting relationship satisfaction, the influence of relationship churning on physical conflict was similar for men and women. Gender, however, moderated the associations between adolescent sexual experiences and physical conflict. Specifically, results in Model 5 indicated that the influence of casual sexual partners on the odds of physical conflict was stronger for women. Further analyses indicated that while the association between casual sexual partners and the odds of physical conflict is significantly different for men and women, the number of casual sexual partners is not associated with physical conflict for either men or women in Model 4. A similar pattern emerged for the cross-product of number of dating sexual partners with gender. That is, controlling for other factors, the association between number of dating sexual partners and physical conflict was stronger for women. The number of dating partners is not associated with physical conflict for men ($b = -0.16, p > .10$), but among women the number of dating sexual partners is positively ($b = 0.34, p < .05$) associated with physical conflict.

DISCUSSION

Much prior theorizing and corresponding empirical studies on adolescents' sexual relationships have focused on risks associated with teens' sexual behavior. Despite the

prevalence of a risk perspective in research on adolescent sexual relationships, focusing exclusively on problematic aspects may limit researchers' understanding of whether early experiences are consequential for later well-being because the initial premise is that teens' sexual relationships are inherently risky (Manning et al., 2014). In this paper, we began by reviewing prior research on adolescents' sexual partnerships and their potential influences on young adult outcomes. The longitudinal framework of the current study enabled us to examine specific consequences of variations in the nature of these earlier sexual experiences for later young adult relationship quality as indicated by relationship satisfaction and physical conflict with intimate partners. One way that our work moved beyond prior studies was by distinguishing adolescents' sexual experiences into those that occurred in dating and casual relationships. This distinction is important because young men compared with women report more casual sexual partnerships (Manning et al. 2014), and based on prior literature it is unclear whether casual sexual partnerships have greater negative implications for women (e.g., Fielder et al., 2014) or comparable effects for men and women (e.g., Lyons et al., 2014). Additionally, there is a tendency to view dating sexual partners somewhat more positively as these experiences are thought to be associated with relationship skill-building (e.g., Raley et al., 2007) and which model adult relationship progression. Laursen and Jensen-Campbell (1999) conveyed this idea of relationship skill building in the following manner: "Brief romantic encounters provide adolescents with opportunities to practice exchange rules and refine personal resources prior to initiating relationships that entail commitment and reproduction" (p. 64). Furman and Simon (1999) also argued that romantic relationships allow adolescents to develop important skills that help them to understand partners' motivations and behavior. They contended that the development of romantic relationships during adolescence better facilitates sophisticated

reasoning, compared with a series of fleeting sexual liaisons. Yet do adolescents' relationships have implications for young adults' relational outcomes? Thus, our initial research question asked whether frequency of involvement in sexual relationships was associated with poorer quality relationships during young adulthood as evidenced by lower relationship satisfaction and physical conflict. Additionally, we asked whether the type of sexual relationship, dating versus casual, differed for subsequent relationship quality. In the multivariate models, we controlled for other known correlates of young adults' relationship satisfaction and physical conflict. Initially, at the zero order, adolescent sexual experiences (i.e., number of casual sexual partners, number of dating sexual partners) were associated with lower levels of relationship satisfaction and higher odds of any physical conflict with partners during young adulthood. We found, however, that with the inclusion of other known correlates, the number of dating sexual partners, but not the number of casual sexual partners, was associated with lower relationship satisfaction and increased odds of physical conflict. Thus, it may be starting and ending dating sexual relationships that shape future relational trajectories rather than the traditionally, negatively, viewed casual sexual relationships.

We also considered the mediating influence of young adults' relational patterns as a link between frequent sexual partnerships during adolescence and relationship functioning during young adulthood. Recognizing the complex dynamics of intimate relationships, these relational pathways included sexual non-exclusivity and relationship churning. Our findings contribute to the literature by emphasizing that while frequency of dating sexual partnerships were associated with lower relationship satisfaction and increased likelihood of experiencing physical violence in models that just included the control variables, the frequency of dating sexual partnerships were not significant in models that included sexual non-exclusivity and relationship churning.

Specifically, number of dating sexual partners influenced adult relationship quality through relationship churning and sexual non-exclusivity. The relationship context of sexual activity does not directly matter for relationship quality, but rather influences relational patterns in young adulthood. Experiences with prior dating sexual partners may be a form of “relationship baggage,” that manifests itself in patterns of sexual non-exclusivity and relationship churning during young adulthood. This also suggests, however, that in those cases where these early sexual experiences do not connect to the churning pattern or later sexual non-exclusivity, it does not appear that such experiences inevitably foster detrimental adult relationship dynamics (i.e. lower quality relationships or heightened risk for physical conflicts). In terms of gender, it appears that the number of adolescent sexual partners (dating or casual) was similarly associated with relationship satisfaction for men and women, but adolescent sexual partnerships are more strongly associated with physical conflict among women than men. Furthermore, among women it is the number of dating sexual partnerships that is associated with greater physical conflict and not number of casual sexual partners.

Prior studies of young adults emphasize that each phase of the life course represents a new set of relationship challenges. Although this depiction is accurate, this perspective can lead to the conclusion that the relationships that define them are unaffected by previous relationships and experiences. In contrast, Hartup (1986) states that adolescent relationships “serve as important templates or models that can be used in the construction of future relationships... [thus] consequences of earlier relationships can frequently be detected in later ones” (p. 2). Most studies of adolescent development have considered adolescent romantic relationships as an end-point of research, rather than constituting a set of experiences that uniquely influence and structure subsequent life course trajectories. More recent data collections that span adolescence

and young adulthood, such as TARS and the Add Health provide opportunities to assess the longer-term implications of adolescent sexual and romantic relationships. Future work that addresses the pathways through which adolescent experiences affect young adult outcomes will contribute to theoretical and empirical understandings of relationship quality.

Regarding limitations, our analyses do not provide a comprehensive explanation for why the frequency of adolescents' dating sexual relationships affects young adults' relationship satisfaction and involvement with physical conflict. Frequency of involvement captures little of the quality of dating relationships. Moreover, there may be other mediating variables that were not included in the model and that would alter our conclusions about which variables most strongly mediate adolescents' sexual activity. We also did not consider the possibility of reciprocal relationships between the two mediators. Moreover, our indicator of casual sexual activity included prior sexual partners and friends; it is unclear whether effects would differ if we focused exclusively on casual sex with strangers. Bersamin et al. (2014), for example, found that sexual activity with individuals who were known less than a week had negative implications for young adults' mental health. Additionally, researchers have begun to pay attention to the possibility that some observed differences in adolescents' sexual activity reflect pre-existing differences. Sandberg-Thoma and Kamp Dush (2014) found that prior depressive symptoms were associated with involvement in casual sexual relationships, which then influenced young adults' sexual non-exclusivity. We did not examine the extent to which prior psychological characteristics might explain why teens who were sexually active with dating partners might fare worse in young adult relationships. Finally, we created our explanatory model within a specific social and historical context; as such, the specific risks associated with dating sexual relationships perhaps would differ at a different time.

Despite these limitations to our conclusions, the results of our analyses have implications for the broader theoretical literature on the implications of adolescents' sexual risk behavior for young adulthood outcomes. The current findings are potentially useful as they suggest that some conventional wisdom about sexual and dating experiences during adolescence may not provide an accurate portrait of some consequences of these experiences for young adulthood. Moreover, the high levels of relationship churning and sexual non-exclusivity among young adults require theories and approaches that acknowledge the links between adolescents' and young adults' experiences. Our findings suggests that prevention programs directed to issues of teen sexuality and safe sex practices will need to confront that although dating experiences may be associated with positive meanings (e.g., Giordano et al., 2006), they are also associated with heightened risk later in the life course including physical conflict and (under some conditions) lower relationship satisfaction. The longer window of assessment showed that effects of casual sex were not consistent with an ominous portrait of negative sequelae of casual sexual experience. Yet some associations (the link between number of sexual partners and any physical conflict with partner) provide a more complex picture, highlighting the need for additional research that captures qualitative differences in the character and impact of these relationship experiences.

References

- Abma, J., Martinez, G., & Copen, C. (2010). Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, National Survey of Family Growth 2006-2008. *Vital Health Statistics*, 23(30), 1-47.
- Alvira-Hammond, M., Longmore, M., Manning, W., & Giordano, P. (2014). Gainful activity and intimate partner violence in emerging adulthood. *Emerging Adulthood*, 2, 116-127. doi: 10.1177/2167696813512305
- Atkins, D., Baucom, D., & Jacobson, N. (2001). Understanding infidelity: correlates in a national random sample. *Journal of Family Psychology*, 15, 735-749.
- Be, D., Whisman, M., & Uebelacker, L. (2013). Prospective associations between marital adjustment and life satisfaction. *Personal Relationships*, 20, 728-739. doi: 10.1111/pere.12011
- Bersamin, M., Zamboanga, B., Schwartz, S., Donnellan, M., Hudson, M., Weisskirch, R., Kim, S., Agocha, V., Whitbourne, S., & Caraway, S. (2014). Risky business: Is there an association between casual sex and mental health among young emerging adults? *Journal of Sex Research*, 51, 43-51. doi: 10.1080/00224499.2013.772088
- Bogaert, A., & Sadava, S. (2002). Adult attachment and sexual behavior. *Personal Relationships*, 9(2), 191-204.
- Brown, S., & Bulanda, J. (2008). Relationship violence in early adulthood: a comparison of daters, cohabitators, and marrieds. *Social Science Research*, 37, 73-87. doi: 10.1016/j.ssresearch.2007.06.002
- Child Trends. (2013). *Dating: Indicators on children and youth*. Retrieved from http://www.childtrends.org/wp-content/uploads/2012/05/73_Dating.pdf

- Collins, W. A., Welsh, D. P., & Furman, W. (2009). Adolescent romantic relationships. *Annual Review of Psychology, 60*, 631-652.
- Cui, M., Gordon, M., Ueno K., & Fincham, F. (2013). The continuation of intimate partner violence from adolescence to young adulthood. *Journal of Marriage and Family, 75*, 300-313.
- Cui, M., Ueno, K., Fincham, F., Donnellan, M., & Wickrama, K. (2012). The association between romantic relationships and delinquency in adolescence and young adulthood. *Personal Relationships, 19*, 354-366.
- Duck, S. (2007). *Human Relationships*. Thousand Oaks, CA: Sage.
- Ehrensaft, M., Cohen, P., Brown, J., Smailes, E., Chen, H., & Johnson, J. (2003). Intergenerational transmission of partner violence: A 20-year prospective study. *Journal of Consulting and Clinical Psychology, 71*, 741-753. doi: 10.1037/0022-006X.71.4.741
- Eisenberg, M., Ackard, D., Resnick, M., & Neumark-Sztainer, D. (2009). Casual sex and psychological health among young adults: Is having “friends with benefits” emotionally damaging? *Perspectives on sexual and reproductive health, 41*, 231-237.
- Elliott, D., & Ageton, S. (1980). Reconciling race and class differences in self-reported and official estimates of delinquency. *American Sociological Review, 45*(1), 95-110.
- Feldman, S., & Cauffman, E. (1999). Your cheatin’ heart: Attitudes, behaviors, and correlates of sexual betrayal in late adolescents. *Journal of Research on Adolescence, 9*(3), 227-252.
- Felson, R. B. (2002). *Violence and Gender Reexamined*. Washington, DC: American Psychological Association. doi: 10.1037/01470-000

- Fielder, R., & Carey, M. (2010). Predictors and consequences of sexual “hookups” among college students: A short-term prospective study. *Archives of Sexual Behavior, 39*, 1105-1119.
- Fielder, R., Walsh, J., Carey, K., & Carey, P. (2014). Sexual hookups and adverse health outcomes: A longitudinal study of first-year college women. *Journal of Sex Research, 1*, 131-144.
- Finer, L., & Philbin, J. (2013). Sexual initiation, contraceptive use, and pregnancy among young adolescents. *Pediatrics, 131*, 886-891.
- Ford, K., Sohn, W., & Lepkowski, J. (2001). Characteristics of adolescents’ sexual partners and their association with use of condoms and other contraceptive methods. *Family Planning Perspectives, 33*(3), 100-105.
- Furman, W., & Rose, A.J. (forthcoming). Friendships, romantic relationships, and other dyadic peer relationships in childhood and adolescence: A unified relational perspective. To appear in R. Lerner (Series Ed.) and M.E. Lamb & C.G. Coll (Volume Eds.), *The Handbook of Child Psychology and Developmental Science (Seventh Edition); Vol. 3, Social and Emotional Development*. Hoboken, NJ: John Wiley & Sons Inc.
- Furman, W., & Shaffer, L. (2011). Romantic partners, friends, friends with benefits, and casual acquaintances as sexual partners. *Journal of Sex Research, 48*, 554-564. doi: 10.1080/00224499.2010.535623
- Garcia, J., Reiber, C., Massey, S., & Merriwether, A. (2012). Sexual hookup culture: A review. *Review of General Psychology, 16*, 161-176. doi: 10.1037/a0027911
- Giordano, P.C., Copp, J.E., Longmore, M.A., & Manning, W.D. (2013). Contested Domains, verbal ‘amplifiers,’ and intimate partner violence in young adulthood. In *2013 Working*

Paper Series. Center for Family and Demographic Research: Bowling Green State University.

Giordano, P., Longmore, M., & Manning, W. (2006). Gender and the meanings of adolescent romantic relationships: A focus on boys. *American Sociological Review*, *71*, 260-287.

Giordano, P., Manning, W., Longmore, M., & Flanigan, C. (2012). Developmental shifts in the character of romantic and sexual relationships from adolescence to young adulthood. Pp. 133-164 in A. Booth, S. Brown, N. Landale, W. Manning, & S. McHale (Eds.), *National Symposium on Family Issues, Vol. 2: Early Adulthood in a Family Context*. New York: Springer. DOI: 10.1007/978-1-4614-1436-0_9

Grello, C., Welsh, D., & Harper, M. (2006). No strings attached: The nature of casual sex in college students. *The Journal of Sex Research*, *43*, 255-267.

Halpern, C., Spriggs, A., Martin, S., & Kupper, L. (2009). Patterns of intimate partner aggression victimization from adolescence to young adulthood in a nationally representative sample. *Journal of Adolescent Health*, *45*, 508-516.

Halpern-Meehin, S., Manning, W., Giordano, P., & Longmore, M. (2013a). Relationship churning in emerging adulthood: On/off relationships and sex with an ex. *Journal of Adolescent Research*, *28*, 166-188.

Halpern-Meehin, S., Manning, W.D., Giordano, P.C., Longmore, M.A. 2013b. Relationship churning, physical violence, and verbal abuse in young adult relationships. *Journal of Marriage and Family*, *75*, 2-12.

Hartup, W. (1986). On relationships and development. Pp. 1-26 in W. W. Hartup and Z. Rubin (Eds.), *Relationships and Development*. Hillsdale, NJ: Lawrence Erlbaum.

- Herrenkohl, T., Mason, W., Kostgerman, R., Legnua, K., Hawkins, J., & Abbott, R. (2004). Pathways from physical childhood abuse to partner violence in young adulthood. *Violence and Victims, 19*, 123-136. doi: 10.1891/vivi.19.2.123.64099
- Jessor, R., & Jessor, S. (1977). *Problem behavior and psychosocial development: A longitudinal study of youth*. New York, NY: Academic Press.
- Johnson, W., Giordano, P., Longmore, M., & Manning, W. (2014). The influence of intimate partner violence on trajectories of depressive symptoms from adolescence to young adulthood. *Journal of Health and Social Behavior, 55*(1), 39-55.
- Joyner, K., Manning, W., & Bogle, R. (2013). The stability and qualities of same-sex and different-sex couples in young adulthood. Working Paper 2013-002, Center for Family and Demographic Research, Bowling Green State University, Bowling Green, OH.
- Joyner, K., & Udry, J. (2000). You don't bring me anything but down: Adolescent romance and depression. *Journal of Health and Social Behavior, 41*, 369-391. doi:
- Kamp Dush, C., & Amato, P. (2005). Consequences of relationship status and quality for subjective well-being. *Journal of Social and Personal Relationships, 22*(5), 607-627.
- Kaura, S., & Lohman, B. (2007). Dating violence victimization, relationship satisfaction, mental health problems, and acceptability of violence: A comparison of men and women. *Journal of Family Violence, 22*, 367-381. doi: 10.1007/s10896-007-9092-0
- Kenney, C., & McLanahan, S. (2006). Why are cohabiting relationships more violent than marriages? *Demography, 43*, 127-140.
- Kirby, D., Lepore, G., & Ryan, J. (2005). *Sexual risk and protective factors: Factors affecting teen sexual behavior, pregnancy, childbearing, and sexually transmitted disease*.
- Longmore, M., Johnson, W., Manning, W., & Giordano, P. (2013). HIV testing among

- heterosexual young adults: The influence of individual attitudes and behaviors, partner's risk-taking and relationship dynamics. *Journal of Sex Research*, 50(5), 489-501.
- Levenson, R., Cartensen, L., & Gottman, J. (1993). Gender and satisfaction. *Psychology and Aging*, 8 (2), 301-313.
- Lyons, H., Giordano, P., Manning, W., & Longmore, M. (2011). Identity, peer relationships, and adolescent girls' sexual behavior: An exploration of the contemporary double standard. *Journal of Sex Research*, 48, 437-449. doi: 10.1080/00224499.2010.206679
- Lyons, H., Manning, W., Giordano, P. & Longmore, M. (2013). Predictors of heterosexual casual sex among young adults. *Archives of Sexual Behavior*, 42, 585-593.
- Maddox Shaw, A., Rhoades, G., Allen, E., Stanley, S., & Markman, H. (2013). Predictors of extradyadic sexual involvement in unmarried opposite-sex relationships. *The Journal of Sex Research*, 50(6), 598-610.
- Madsen, S., & Collins, W. (2011). The salience of adolescent romantic experiences for romantic relationship qualities in young adulthood. *Journal of Research on Adolescence*, 21, 789-801.
- Manning, W., Giordano, P., & Longmore, M. (2006). Hooking up: The relationship contexts of 'non-relationship' sex. *Journal of Adolescent Research*, 21, 459-483.
- Manning, W., Longmore, M., & Giordano, P. (2005). Adolescents' involvement in non-romantic sexual activity. *Social Science Research*, 34(2), 384-407.
- Manning, W.D., Longmore, M.A., Copp, J.E., & Giordano, P.C. (2014). The complexities of adolescent dating and sexual relationships: Fluidity, meaning(s), and implications for young adults' well-being. In E.S. Lefkowitz & S.A. Vasilenko (Eds.), *New Directions for*

Child & Adolescent Development: Positive and Negative Outcomes of Sexual Behaviors (pp. 53-69). San Francisco, CA: Jossey-Bass.

- McAlister, A., Pachana, N., & Jackson, C. (2005). Predictors of young dating adults' inclination to engage in extradyadic sexual activities: A multi-perspective study. *British Journal of Psychology, 96*(3), 331-350.
- Meier, A., & Allen, G. (2009). Romantic relationships from adolescence to young adulthood: Evidence from the National Longitudinal Study of Adolescent Health. *Sociological Quarterly, 50*, 308-335.
- Owen, J., & Fincham, F. (2011). Young adults' emotional reactions after hooking up encounters. *Archives of Sexual Behavior, 40*, 321-330.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879-891.
- Radloff, L. (1977). The CES-D scale: A self-reported depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401. doi:10.1177/014662167700100306
- Raley, K., Crissey, S., & Muller, C. 2007. Of sex and romance: Adolescent relationships in the transition to adulthood. *Journal of Marriage and Family, 69*, 1210-1226.
- Renner, L., & Slack, K. (2006). Intimate partner violence and child maltreatment: Understanding intra- and intergenerational connections. *Child Abuse & Neglect, 30*, 599-617. doi: 10.1016/j.chiabu.2005.12.005
- Rhoades, G., Stanley, S., Kelmer, G., & Markman, H. (2010). Physical aggression in unmarried relationships: The roles of commitment and constraints. *Journal of Family Psychology, 24*, 678-687.

- Rust J., Bennum, I., Crowe, M., & Golombok, S. (1986). The Golombok Rust Inventory of Marital State (GRIMS). *Sexual and Marital Therapy, 1*(1), 55-60.
- Sabia, J., & Rees, D. (2012). Does the number of sexual partners affect educational attainment? Evidence from female respondents to the Add Health. *Journal of Population Economics, 25*, 89-118.
- Sandberg-Thoma, S., & Kamp Dush, C. (2014). Indicators of adolescent depression and relationship progression in emerging adulthood. *Journal of Marriage and Family, 76*, 191-206. doi: 10.1111/jomf.12081
- Schondelmyer, E (2014). Changes in risk behavior: Partnerships and age.” Paper presented at the 2014 Add Health Users conference, Bethesda, MD.
- Scott, M., Wildsmith, E., Welti, K., Ryan, S., Schelar, E., & Steward-Streng, N. (2011). Risky adolescent sexual behaviors and reproductive health in young adulthood. *Perspectives on Sexual and Reproductive Health, 43*, 110-118.
- Sprecher, S., Treger, S., & Sakaluk, J. (2013). Premarital sexual standards and sociosexuality: Gender, ethnicity, and cohort differences. *Archives of Sexual Behavior, 42*, 1395-14054. doi: 10.1007/s10508-013-0145-6
- Straus, M., Hamby, S., Boney-McCoy, S., & Sugarman, D. (1996). The revised conflict tactics scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*, 283-316.
- Sweeney, M., & Horwitz, A. (2001). Infidelity, initiation, and the emotional climate of divorce: are there implications for mental health? *Journal of Health and Social Behavior, 42*(3), 295-309.

- Treas, J., & Giesen, D. (2000). Sexual infidelity among married and cohabiting Americans. *Journal of Marriage and Family, 62*(1), 48-60.
- Tu, X., Lou, C., Gao, E., Li, N., & Zabin, L. (2012). The relationship between sexual behavior and nonsexual risk behaviors among unmarried youth in three Asian cities. *Journal of Adolescent Health, 50*, S75-S82.
- Vennum, A., Lindstrom, R., Monk, K., & Adams, R. (2014). “It’s complicated”: The continuity and correlates of cycling in cohabiting and marital relationships. *Journal of Social and Personal Relationships, 31*, 410-430. doi: 10.1177/0265407513501987
- Vest, J., Catlin, T., Chen, J., & Brownson, R. (2002). Multistate analysis of factors associated with intimate partner violence. *American Journal of Preventive Medicine, 22*, 156–164. doi: 10.1016/S0749-3797(01)00431-7
- Walker, J., Barrett, H., Wilson, G., & Chang, Y. S. (2010). *Relationships Matter: Understanding the Needs of Adults (Particularly Parents) Regarding Relationship Support*. Research Report DCSF—RR233, UK: Institute of Health and Society, Newcastle University.
- Whitaker, D.J., Haileyesus, T., Swahn, M., Saltzman, L.S. (2007). Differences in Frequency of Violence and Reporting Injury Between Relationships With Reciprocal and Non-Reciprocal Intimate Partner Violence. *American Journal of Public Health, 97*, 941-947.
- Zimmer-Gembeck, M., Arnhold, V., & Connolly, J. (2014). Intercorrelations of intimacy and identity dating goals with relationship behaviors and satisfaction among heterosexual couples. *Social Science, 3*, 44-59.

Table 1. Descriptive Statistics for Young Adults' Relationship Quality, Relationship Patterns, and Adolescent Sexual Experiences (n = 240)

Dependent Variables	Full Sample (n = 240)			Males (n = 111)	Females (n = 129)
	Means/Percentages	SD	Range		
Relationship Satisfaction	3.51	0.58	1-5	3.48	3.54
Physical Conflict	23.33%		0-1	21.62%	24.81%
Independent Variables					
<i>Adolescent Sex Experience</i>					
Number of casual sexual partners (lifetime wave 4)	1.50	2.43	0-9	1.88	* 1.17
Number of dating sexual partners (lifetime wave 4)	2.08	2.34	0-13	2.31	
<i>Young Adult Relationship Patterns</i>					
Relationship churning (wave 5)	36.67%			31.53%	
Stably broken up	16.67%			23.42%	** 10.85%
(Stably together)	46.67%			45.05%	48.06%
Sexual non-exclusivity (wave 5)	27.92%			27.93%	27.91%
(Sexually exclusive)	72.08%			72.07%	72.09%
<i>Antisocial Behavior</i>					
Delinquency (wave 3)	0.40	1.08	0-6	0.51	** 0.30
<i>Prior Depression</i>					
Depressive Symptoms (wave 3)	2.40	1.19	1-8	2.27	2.52
<i>Family Violence</i>					
Witnessing parental violence	29.17%		0-1	26.13%	31.78%
Parental coercion	23.33%			20.72%	25.58%
<i>Relationship Characteristics (wave 5)</i>					
Union status					
(Dating)	65.84%			66.67%	65.12%
Cohabiting	25.83%			27.93%	24.03%
Married	8.33%			5.41%	10.85%
Current relationship ^a	71.67%			63.06%	** 79.07%
Duration	1.78	1.68	.08-10	1.63	1.92
Children (wave 4)	5.83%			1.80%	* 9.30%
<i>Sociodemographic Characteristics</i>					
Gender ^b					
Age	23.40	0.79	22-25	23.48	23.33
Race					
(White)	66.25%			69.37%	63.56%
Black	22.92%			20.72%	24.81%
Hispanic	10.83%			9.91%	11.63%
Family structure					
(Bio parents)	50.00%			57.66%	* 43.41%
Single parent	22.92%			25.23%	20.93%
Step-parent	12.50%			9.01%	15.50%
Other	14.58%			8.11%	** 20.16%
Mother's education					
Less than HS	8.75%			7.21%	10.08%
(High school)	31.25%			29.73%	32.56%
Some college	36.67%			34.23%	38.76%
College or more	23.33%			28.83%	18.60%

Note: The reference categories were as follows: ^a Dating, ^b Most recent relationship, ^c Male, ^d White, ^e Two biological parents, and ^f High school.

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

Source: Toledo Adolescent Relationships Study

Table 2. Coefficients for the OLS Regression of Adolescent Sex Experience and Young Adult Relationship Patterns on Relationship Satisfaction in Young Adulthood (n = 240)

	Zero Order	Model 1	Model 2	Model 3	Model 4	Model 5
	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>	<i>B</i>
<i>Adolescent Sex Experience</i>						
Number of casual sexual partners (lifetime wave 4)	-0.03*	-0.02		-0.01		-0.01
Number of dating sexual partners (lifetime wave 4)	-0.05**		-0.04*		-0.02	-0.01
<i>Young Adult Relationship Patterns</i>						
Relationship churning (wave 5)	-0.44***			-0.28**	-0.27**	-0.06
Stably broken up (Stably together)	-0.37***			-0.15	-0.16	-0.10
Sexual non-exclusivity (wave 5) (Sexually exclusive)	-0.47***			-0.29***	-0.29***	-0.30***
<i>Antisocial Behavior</i>						
Delinquency (wave 3)	0.00	0.04	0.06	0.05	0.06	0.06
<i>Prior Depression</i>						
Depressive Symptoms (wave 3)	-0.11***	-0.09**	-0.10**	-0.09**	-0.09**	-0.09**
<i>Family Violence</i>						
Witnessing parental violence	-0.20*	-0.11	-0.09	-0.06	-0.05	-0.03
Parental coercion	-0.01	-0.01	-0.00	0.01	0.01	0.02
<i>Relationship Characteristics (wave 5)</i>						
Union status ^a						
Cohabiting	0.06	0.01	0.01	0.00	0.00	-0.01
Married	0.09	-0.01	-0.01	-0.02	-0.02	0.00
Current relationship ^b	0.33***	0.36***	0.35***	0.18	0.17	0.22†
Duration	-0.03	-0.04†	-0.04†	-0.02	-0.02	-0.02
Children (wave 4)	-0.26	-0.08	-0.04	0.01	0.02	0.03
<i>Sociodemographic Characteristics</i>						
Gender ^c						
Age	-0.04	-0.01	0.00	-0.00	0.00	-0.00
Race ^d						
Black	-0.20*	-0.18†	-0.18†	-0.05	-0.06	-0.07
Hispanic	-0.01	0.08	0.06	0.17	0.16	0.15
Family structure ^e						
Single parent	-0.11	0.04	0.03	0.03	0.02	0.04
Step-parent	-0.20†	-0.17	-0.16	-0.18	-0.17	-0.18
Other	-0.02	0.03	0.05	0.04	0.05	0.07
Mother's education ^f						
Less than HS	-0.05	-0.03	0.02	-0.06	-0.03	-0.03
Some college	0.03	0.04	0.04	0.05	0.05	0.06
College or more	0.16	0.14	0.12	0.10	0.09	0.09
Relationship Churning						
Relationship churning x gender						-0.34*
Stably broken up x gender						0.05
<i>R</i> ²		.19	.20	.28	.28	.30

Note: The reference categories were as follows: ^aDating, ^bMost recent relationship, ^cMale, ^dWhite, ^eTwo biological parents, and ^fHigh school.

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

Source: Toledo Adolescent Relationships Study

Table 3. Odds Ratios for the Logistic Regression of Adolescent Sex Experience and Young Adult Relationship Patterns on Physical Conflict in Young Adulthood (n = 240)

	Zero Order	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	OR	OR	OR	OR	OR	OR	OR
<i>Adolescent Sex Experience</i>							
Number of casual sexual partners (lifetime wave 4)	1.159**	1.034		1.020		0.861	1.037
Number of dating sexual partners (lifetime wave 4)	1.234***		1.166†		1.079	1.119	0.852
<i>Young Adult Relationship Patterns</i>							
Relationship churning (wave 5)	6.944***			4.710**	4.629**	4.834**	3.984**
Stably broken up (Stably together)	0.926			0.337	0.343	0.326	0.281
Sexual non-exclusivity (wave 5) (Sexually exclusive)	4.584***			3.284**	3.144*	3.020*	3.087*
<i>Antisocial Behavior</i>							
Delinquency (wave 3)	1.462†	1.170	1.023	1.056	1.000	1.097	1.089
<i>Prior Depression</i>							
Depressive Symptoms (wave 3)	1.335*	1.375*	1.408*	1.577*	1.603*	1.482†	1.582*
<i>Family Violence</i>							
Witnessing parental violence	3.053***	2.347*	2.185*	2.183†	2.126†	2.303†	2.296†
Parental coercion	1.820†	1.455	1.470	1.316	1.306	1.259	1.136
<i>Relationship Characteristics (wave 5)</i>							
Union status ^a							
Cohabiting	2.643**	2.242†	2.267†	2.519†	2.505†	2.769†	2.689†
Married	2.988*	3.628*	3.400†	4.953*	4.928*	3.763†	4.932*
Current relationship ^b							
Duration	0.788	0.372*	0.378*	0.331†	0.329†	0.330†	0.309†
Children	1.191*	1.132	1.142	1.008	1.014	1.025	1.045
<i>Sociodemographic Characteristics</i>							
Gender ^c	1.196	0.936	0.994	0.717	0.724	0.420	0.235*
Age	1.188	1.016	0.982	1.044	1.025	0.994	0.925
Race ^d							
Black	1.839†	1.732	1.639	1.097	1.082	1.240	1.323
Hispanic	3.287**	3.700*	3.986*	3.684*	3.770*	3.981*	4.621*
Family structure ^e							
Single parent	2.908**	1.917	1.904	2.649†	2.672†	2.643†	3.054*
Step-parent	2.364†	1.107	1.021	1.189	1.157	1.162	1.272
Other	4.875***	5.135**	4.705**	8.096***	7.899**	6.720**	8.174**
Mother's education ^f							
Less than HS	0.964	0.719	0.584	0.536	0.476	0.462	0.384
Some college	0.755	0.950	0.945	0.745	0.748	0.805	0.711
College or more	0.344*	0.722	0.751	0.859	0.879	0.877	0.874
Number of casual sexual partners x gender						1.414*	
Number of dating sexual partners x gender							1.646*
Model χ^2		50.03***	53.67***	87.09***	87.68***	92.11***	94.15***

Note: The reference categories were as follows: ^aDating, ^bMost recent relationship, ^cMale, ^dWhite, ^eTwo biological parents, and ^fHigh school.

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

Source: Toledo Adolescent Relationships Study