

Relationship Profiles and Contraceptive Use Within Young Adult Dating Relationships

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Child Trends

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Overview of the Study

This study examines the association between characteristics of young adult dating relationships and couples' contraceptive use. We first employ latent class analysis to establish relationship profiles based on attributes including relationship duration, intimacy and emotional support, relationship commitment, and lack of conflict. We then model the associations between these relationship profiles and the contraceptive method used the last time the couple had sex, comparing condom, hormonal or a combination "dual method," to no method. We will test these associations with and without controlling for individual and background characteristics of the respondent and his or her partner. Results will contribute to 1) our understanding of characteristics of young adult dating relationships and 2) how the grouping of relationship attributes influences contraceptive use.

Conceptual Framework

We follow a life course approach for examining relationship profiles and their association with contraceptive use within young adult dating relationships. We incorporate the life course principle that individual behavior can be understood only within the context of the relationships in which a person is nested, including family relationships and romantic relationships (Elder, 1998). Our main hypothesis, therefore, is that characteristics of the relationship dyad will be associated with contraceptive use within sexual relationships. A life course perspective also highlights the role of timing, sequencing and duration of life events. Thus, we will examine the timing of first sex, the relative timing and sequencing of the beginning of a dating relationship and first sexual intercourse with each partner, and the duration of the relationship itself, and the potential influence of these factors on contraceptive use and the type of method chosen. Finally, a life course approach emphasizes that individuals bring a history of experiences into their decision making. Thus, we posit that young adults have underlying preferences for avoiding pregnancy and/or STIs that may influence their contraceptive use across relationships. Therefore, we control for individual-level characteristics in our analyses.

Prior Research

Research has identified several components of healthy marriage and relationships among adults, including relationship duration, intimacy and emotional support, relationship commitment, and lack of violence or conflict (Moore et al., 2006). Scholars have found associations between these healthy relationship dimensions and contraceptive use among teens and young adults, although there is limited research that explores how multiple dimensions may come together to influence contraceptive use.

Relationship duration

The duration of a relationship may have important implications for contraceptive use, because those in longer-term relationships may have more opportunities for both contraceptive use and non-use. A consistent body of research has found that longer relationships are linked with increased odds of ever using contraception but lower odds of consistency (Ford, Sohn, & Lepkowski, 2001; Manlove, Ryan, & Franzetta, 2007; Noar, Zimmerman, & Atwood, 2004). Time spent in a relationship is associated with decreased condom use in particular (Civic, 2000; Fortenberry, Tu, Harezlak, Katz, & Orr, 2002; Katz, Fortenberry, Zimet, Blythe, & Orr, 2000; Ku, Sonenstein, & Pleck, 1994; Noar et al., 2004).

The sawtooth hypothesis (Ku et al., 1994) suggests that patterns of condom use will be highest at the beginning of a relationship, then decline as the relationship progresses, and rise again at the start of a new relationship. Utilization of nonbarrier contraceptive methods may also influence condom use (Santelli & Davis, 1995; Weisman, Plichta, Nathanson, Ensminger, & Courtland, 1991). As relationships progress many transition from condoms to more long-acting effective methods such as hormonal contraceptives (Civic, 2000; Ku et al., 1994; Misovich, Fisher, & Fisher, 1997; Noar et al., 2004; Reisen & Poppen, 1995). Researchers postulate that this *contraceptive switch* may occur as a relationship becomes more serious and partners wish to move away from a coitus dependent method (Brindis, Pagliaro, & Davis, 2000), no longer perceive their partner as an STD risk (Noar et al., 2004), or have difficulty maintaining consistency over time. Thus we expect to see increased hormonal method use and decreased condom use among longer-term couples, however, the influence on contraceptive use overall, as measured at last sex, is less clear.

Intimacy and emotional support

Some research has linked various measures of intimacy in teen relationships to greater contraceptive use and consistency. Among teens, higher levels of intimate activities with a sexual partner are associated with greater contraceptive use and consistency (Manlove, Ryan, & Franzetta, 2004). Additionally, the length of time that a couple has known each other prior to beginning a sexual relationship may serve as a proxy for intimacy and some studies have linked the length of a pre-sexual relationship to using contraceptives consistently (Manlove, Ryan, & Franzetta, 2003). Another study, however, found no association between the length of pre-sexual relationship and condom use (Ku et al., 1994).

Research has also found that high levels of emotional closeness are associated with reduced condom use (Aalsma, Fortenberry, Sayegh, & Orr, 2006; Katz et al., 2000; Sayegh, Fortenberry, Shew, & Orr, 2006). In contrast, higher levels of distrust in relationships are associated with greater condom use (Pilkington, Kern, & Indest, 1994).

Relationship commitment

Studies suggest that higher levels of relationship commitment are linked to reduced odds of contraceptive use, particularly condom use. For example, those in relationships that eventually lead to cohabitation or marriage have a lower probability of using a condom at first sex (Ku et al., 1994). Another small study of college students found that those who reported higher levels of relationship commitment were less likely to request the use of a condom (Umphrey & Sherblom,

2007). Relationship commitment and condom use may be negatively correlated because couples in longer, more committed relationships are more likely to rely on hormonal contraception as the relationship progresses (Civic, 2000; Ku et al., 1994; Noar et al., 2004). There is limited research, however, on how relationship commitment is associated with other forms of contraception besides condoms.

Conflict/violence

There is limited research on whether and how conflict is linked to contraceptive use, as most research in this area has focused on non-voluntary sex. Those studies that have examined coercive sexual experiences and contraceptive use find that women with recent nonvoluntary or forced sexual encounters report lower levels of contraceptive use in their current relationships (Fergusson, Horwood, & Lynskey, 1997; Gleib, 1999; Kirby, Lepore, & Ryan, 2005). Condom use, however, has been linked to distrust, infidelity, and low levels of closeness (Pilkington et al., 1994) which could be associated with high levels of relationship conflict.

Although prior research has linked a number of individual relationship characteristics to contraceptive use, there is little understanding of how these characteristics may group together to influence contraceptive use and the type of method chosen. This is of particular interest because attributes that may be present within a single dating relationship may not associate similarly with contraceptive use, especially the type of method selected. This paper attempts to fill this gap in the literature by exploring underlying relationship “profiles” defined by the described characteristics and how these profiles link to contraceptive use within young adult dating relationships.

Data and Research Methods

We use data from the National Longitudinal Survey of Youth, 1997 Cohort (NLSY97) Rounds 6-11 (2002-2007) to create a relationship-level file of young adult dating relationships that were reported as “current” in one or more of the six interview rounds. The NLSY97, sponsored and directed by the Bureau of Labor Statistics, U.S. Department of Labor, is a nationally-representative sample of 8,984 youth aged 12-16 on December 31, 1996 (baseline). These data provide valuable information on characteristics of the respondents’ dating partners and dating relationships, as well as the respondents’ sexual experiences, family background, and demographic characteristics. Although youth were interviewed in every year starting in 1997, we only include data from 2002 through 2007 because respondents were not asked about their dating partner until Round 6 (2002). As a result, respondents in our sample range in age from 18 to 27.

Using this dataset, we conducted a latent class analysis to identify relationship profiles within our sample of young adult dating relationships. Latent class analysis is a statistical technique for examining relationships in data. This method identifies a set of mutually exclusive latent classes that account for the distribution of cases occurring within a cross-tabulation of discrete variables (McCutcheon, 1987). For the purposes of this study, we examine the associations between six couple-level measures representing relationship dimensions that have been linked to contraceptive use in previous research.

Duration:

- Length of the relationship, measured as the time elapsed between the reported relationship start date and date of last sex.

Intimacy and emotional support:

- Length of relationship prior to first sex (or “pre-sexual relationship”) as measured by the time elapsed between the reported relationship start date and date of first sex with that dating partner.
- A combined measure of how close the respondent feels to his or her dating partner and how much his or her partner cares about them (based on 0-10 scales).

Commitment:

- Whether the couple has discussed marriage, cohabitation, or neither.
- The likelihood the couple will be together in six months (based on a scale from 0 to 100% certainty)

Conflict:

- The level of conflict in the relationship (based on a 0-10 scale)

Preliminary Results

Our preliminary latent class analysis yielded four relationship profiles: “Long-term/serious” (35%), “Short-term/rosy outlook” (24%), “Long-term/cloudy outlook” (26%), and “Short-term/casual” (15%). The table below shows the distribution of our relationship dimensions for each of the four classes.

Almost 70% of couples in the Long-term/serious class have been together over a year. Most couples in this class demonstrate high levels of closeness and caring (86%) and low levels of conflict (58%). They also show high levels of commitment, over 91% have discussed marriage and in 95% of these relationships the respondent reported 100% certainty that the couple will be together in six months. As compared to the couples in the Long-term/serious class, a higher percentage of the couples in the Long-term/cloudy outlook class have been together over one year (86%) although these couples demonstrate lower levels of caring and commitment and higher levels of conflict. For instance, only 22% of couples in this class demonstrate high levels of closeness and caring and only 15% have low levels of conflict. Additionally, these couples appear to be less positive about the future of the relationship. While approximately two-thirds have discussed marriage, only 5% of respondents in these relationships reported being 100% certain that the couple will still be together in six months.

Most couples (65%) in the Short-term/rosy outlook class have been together for six months or less and only 6% have been together for more than one year. Despite the relative short-term nature of these relationships, most couples in this class demonstrate medium levels of caring and closeness (71%) and 61% report low levels of conflict. Couples in this class also appear to be positive about their future. Almost two-thirds have talked about either marriage or cohabitation and 94% and 24% are certain they will be together in six months (with 70% reporting 60-90% certainty). In contrast to the Short-term/rosy outlook group, the Short-term/casual class includes

a higher percentage of relationships that are six months or shorter in duration (87%). Couples in this class also demonstrate less intimacy (77% are low on the caring/closeness measure) and commitment (78% are less than 60% certain they will be together in six months and only 29% have discussed cohabitation or marriage) than their counterparts in the Short-term/rosy outlook class.

Table 1.

| | <u>Long-term</u> <u>/serious</u> | <u>Long-term</u> <u>/cloudy</u> <u>outlook</u> | <u>Short-term</u> <u>/rosy</u> <u>outlook</u> | <u>Short-term</u> <u>/casual</u> |
|--|-------------------------------------|--|---|-------------------------------------|
| N = | 1,475 | 918 | 1,178 | 598 |
| % of Sample | 35.2% | 26.3% | 23.7% | 14.9% |
| <i><u>Relationship duration</u></i> | | | | |
| <i>Length of relationship as of last sex</i> | | | | |
| <= 6 months | 14.7% | 2.1% | 64.7% | 87.1% |
| 7-12 months | 15.6% | 11.9% | 29.6% | 12.1% |
| 13+ months | 69.6% | 86.0% | 5.7% | 0.8% |
| <i><u>Intimacy and emotional support</u></i> | | | | |
| <i>Length of pre-sexual relationship</i> | | | | |
| Before or same month | 30.2% | 29.6% | 51.3% | 62.1% |
| 1-3 months | 41.4% | 38.3% | 44.3% | 35.5% |
| 4+ months | 28.4% | 32.1% | 4.5% | 2.3% |
| <i><u>Closeness /Caring (0-10 scale)</u></i> | | | | |
| Low (<=7) | 0.0% | 29.5% | 0.0% | 77.2% |
| Medium (8,9) | 13.9% | 48.8% | 70.5% | 22.6% |
| High (10) | 86.1% | 21.7% | 29.5% | 0.2% |
| <i><u>Commitment</u></i> | | | | |
| <i>Discussed cohabitation/marriage</i> | | | | |
| Talked about neither cohab/marriage | 4.9% | 19.8% | 38.7% | 71.4% |
| Talked about cohab | 3.7% | 13.4% | 21.6% | 17.7% |
| Talked about marriage | 91.4% | 66.8% | 39.7% | 10.9% |
| <i><u>Probability together in six months</u></i> | | | | |
| < 60% certain | 0.0% | 39.0% | 6.4% | 77.5% |
| 60-90% certain | 5.0% | 55.8% | 70.0% | 21.5% |
| 100% certain | 95.0% | 5.3% | 23.6% | 1.1% |
| <i><u>Conflict</u></i> | | | | |
| <i>Conflict (0-10 scale)</i> | | | | |
| Low (0-2) | 57.7% | 14.6% | 61.1% | 38.1% |

| | | | | |
|-------------|-------|-------|-------|-------|
| Med (3-5) | 22.0% | 46.1% | 17.8% | 37.0% |
| High (6-10) | 20.3% | 39.3% | 21.2% | 24.9% |

We conducted a preliminary bivariate analysis of contraceptive use at last sex by relationship class. Results are shown in Table 2 below.

We found that the Short-term/casual class is the most likely class to use a condom at last sex (33%) and the least likely to use a hormonal method (18%). In contrast, the Long-term/serious class is the least likely to use a condom (22%) and the most likely to use a hormonal method (29%). Although, the Long-term/serious and Short-term/rosy outlook classes are not significantly different in their method choice. The Short-term/casual and Long-term/cloudy outlook classes are slightly more likely than those in the Long-term/serious and Short-term/rosy outlook classes to be using no method (30% of the Short-term/casual and Long-term/cloudy outlook groups used no method as compared to 25% of the Long-term/serious and Short-term/rosy outlook groups). These two classes were also less likely than those in the Long-term/serious class to use a dual method (25% versus 20%).

Table 2.

| | <u>Long-term</u> <u>/serious</u> | <u>Long-term/</u> <u>cloudy</u> <u>outlook</u> | <u>Short-term</u> <u>/rosy</u> <u>outlook</u> | <u>Short-term/</u> <u>casual</u> | |
|---------------|-------------------------------------|--|---|-------------------------------------|---------|
| None | 24.8% | 30.2% | 24.8% | 30.1% | b,c,d,e |
| Condom Only | 21.7% | 26.2% | 25.0% | 33.0% | b,c,e,f |
| Hormonal Only | 28.5% | 23.4% | 27.2% | 17.5% | b,c,e,f |
| Dual Method | 25.0% | 20.2% | 23.0% | 19.5% | b,c |

a Long-term/serious significantly different from Short-term/rosy outlook at $p < .05$

b Long-term/serious significantly different from Long-term/cloudy outlook at $p < .05$

c Long-term/serious significantly different from Short-term/casual at $p < .05$

d Short-term/rosy Outlook significant different from Long-term/cloudy outlook at $p < .05$

e Short-term/rosy outlook significant different from Short-term/casual at $p < .05$

f Long-term/cloudy outlook significantly different from Short-term/casual at $p < .05$

Next Steps

The bivariate results suggest that our latent relationship profiles do associate with the type of contraceptive method used at last sex. Our next step is to run multivariate models to assess whether these associations are robust to the inclusion of respondent and partner characteristics and to examine the links between these characteristics and contraceptive use. For our multivariate analyses we will include dummy variables representing the classes (omitting the Long-term/serious class) in a multinomial logit model predicting the four-level dependent variable measuring birth control at last sex (none, condom only, hormonal only, and dual method). This model will be run with controls for respondent and partner characteristics such as age, education, and employment, as well measures of family background and sexual history for the respondent.

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