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Traditional versus nontraditional relationship initiation as a factor in adolescent dating and sexual behaviors

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Traditional Versus Nontraditional Relationship Initiation as a Factor in Adolescent Dating and Sexual Behaviors

BY

Jennifer Long

THESIS

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Traditional Versus Nontraditional Relationship Initiation as a Factor in Adolescent Dating and Sexual Behaviors

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Abstract

Research on adolescent dating behaviors, particularly adolescent sexual activity and contraceptive use, is very important due to the health and social costs of teenage pregnancy, childbearing, and sexually transmitted diseases among the adolescent population. The primary purpose of this paper was to address the relation between type of relationship initiation (traditional versus nontraditional) and sexual behavior. Traditional relationships were defined as those initiated by males whereas nontraditional relationships were defined as those initiated by females. Study participants were 104 (62 female, 42 male) undergraduate students attending Eastern Illinois University psychology and sociology classes. The results indicated that significantly more relationships were found to be traditionally initiated than non-traditionally initiated. There were significant correlations between first and current relationships in terms of delay of sexual onset and percentage of birth control usage. Depression was negatively correlated with both self-esteem and relationship satisfaction. Type of relationship initiation was not related to delay of sexual involvement in either first or current relationships. Type of relationship initiation was also not related to birth control usage or religious behavior, depression, self-esteem, or relationship satisfaction. In addition, none of the study factors (type of relationship initiation, religion, depression, self-esteem, and relationship satisfaction) were significantly related to safe-sex behavior.

Traditional Versus Nontraditional Relationship Initiation as a Factor in Adolescent Dating and Sexual Behaviors

Many studies suggest that the average age of first sexual intercourse is between 14.5 and 15 years old (Christ, Raszka Jr., & Dillon, 1998; Cooper, Peirce, & Huselid, 1994; Manlove, Ryan, & Franzetta, 2003; Weisman, Plichta, Nathanson, Ensminger, & Robinson, 1991), with 46% of never married 15- to 19-year old adolescents engaging in sexual intercourse (Abma, Martinez, Mosher, & Dawson, 2004). Research on adolescent dating behaviors, particularly adolescent sexual activity and contraceptive use, is important because of the health and social costs of pregnancy, childbearing, and sexually transmitted diseases among the adolescent population (Abma et al., 2004).

Specifically, early intercourse increases the risk of pregnancy (Resnick & Blum, 1994; Smith, 1997; Wellings et al., 2001) and contraction of sexually transmitted diseases (Abma et al., 2004; Smith, 1997; Wellings et al., 2001). One reason for this increased risk is that early onset of sexual behavior exposes adolescents to more years of potential exposure to sexually transmitted diseases and possible teenage pregnancy (Capaldi, Crosby, & Stoolmiller, 1996; Smith, 1997). Additionally, adolescents engaging in sexual intercourse earlier are also more likely to be involved in other risky behaviors such as not using contraception and having more sexual partners (Abma et al., 2004; Ford, Sohn, & Lepkowski, 2001; Langille & Curtis, 2002; Resnick & Blum, 1994).

The goal of the present study was to extend the research on the factors that predispose adolescents to initiate sexual intercourse. This study considered retrospective reports of adolescent behavior at the start of the relationship, specifically the gender of the individual who initiated the relationship, as a possible predictor of later sexual

activity. For example, I hypothesized that relationships initiated by females, which is not the traditional pattern of relationship initiation, may be characterized by later sexual intercourse onset than those initiated by males. To provide a background, this paper reviewed the factors that influence sexual activity, including physical maturity, mental health characteristics, religiosity, social influences, and relationship factors.

Factors Associated with Adolescent Intercourse

Adolescents who experienced early physical maturity have a heightened risk for early sexual activity. For instance, physically mature female adolescents were more likely to be involved with boys romantically than those who had not yet physically matured (Compian, Gowen, & Hayward, 2004). Other factors included age of partner; adolescents with an older first partner were significantly younger at first intercourse than those who had a peer-age partner (Miller, Clark, & Moore, 1997).

Because attitudes about sex tend to become more permissive after having sex (Meier, 2003), entering a relationship as a non-virgin also increased the likelihood of intercourse (Oliver & Hyde, 1993). Paikoff (1995) found that sixty percent of female virgins said their reason for not having sex was "not being ready" while forty percent said it was a fear of disease. Paikoff (1995) pointed out that adolescents were least likely to say that lacking a partner or the opportunity was their reason for not having sex. However, gender may mediate the relation between sexual activity and attitudes. Research by Meier (2003) suggested that females experience more of an attitudinal shift following sexual onset, becoming more positive or permissive concerning sexual behavior. In contrast, males may already hold permissive attitudes about sex and having sex does not change these attitudes (Meier, 2003).

Risky behaviors such as alcohol and drug use are associated with early intercourse in teenagers (Millstein & Moscicki, 1995). For both female and male adolescents, the strongest predictor of sexual activity was alcohol consumption (Harvey & Spigner, 1995). Non-virginal boys were six times more likely to have consumed alcohol in the past than virginal boys (Orr, Beiter, & Ingersoll, 1991). Adolescent males and females with a history of sexual activity reported more frequent use of alcohol than those who had never had sexual intercourse (Harvey & Spigner, 1995). Adolescents who either initiated sexual activity or drug use were more likely to begin the other behavior in the subsequent year (Orr et al., 1991). Smoking was also significantly associated with having initiated sexual intercourse (Lammers, Ireland, Resnick, & Blum, 2000). Non-virginal boys experienced nearly four times the risk of virginal boys for smoking cigarettes; non-virginal girls were more than seven times more likely to smoke cigarettes (Orr et al., 1991).

Additionally, adolescent females who experienced childhood sexual abuse were more likely to have initiated sexual activity before the age of 14 (Buzi, Tortolero, Roberts, Ross, Addy, & Markham, 2003). The study done by Stock, Bell, Boyer, and Connell (1997) found that adolescent females who had been sexually abused were more likely to have more sexual partners and to have not used birth control during their last intercourse. The study done by Saewyc, Magee, and Pettingell (2004) found similar results for females and also found that male adolescents who had been abused were less likely to use condoms and were at more risk for being involved in adolescent pregnancy.

Social influences also influence adolescent views about sexual intercourse. Adolescents with multiple friends engaging in risky sexual behaviors were more likely to

engage in these behaviors themselves (Millstein & Moscicki, 1995). Friends' unprotected intercourse also significantly predicted individuals' unprotected intercourse (Henry, Schoeny, Deptula, & Slavick, in press). Peers can also have a positive influence on sexual behavior; adolescents who perceived their friends as holding less favorable views concerning adolescent sexual behavior were less likely to have initiated sexual intercourse than those whose friends held more favorable attitudes towards adolescents having sex (DiIorio et al., 2001).

Cultural factors must also be considered in relation to adolescent sexual activity. The article by Ward and Taylor (1991) encouraged educators to consider the cultural differences that could influence the effectiveness of sexual education programs for minorities. For instance, Yeh (2002) found that Taiwanese students did not communicate about past sexual experiences and safe sex behaviors. These students also complained about the quality of sex education that was provided to them (Yeh, 2002). Culturally, Taiwanese males were more active in the initiation of the relationship while females were expected to be more passive (Yeh, 2002). Huerta-Franco and Malacara (1999) noted that culture, in this study participants were Mexican, and socioeconomic status influenced the family environment, such as including more extended family members living at home which, in turn, had a significant influence on the adolescents' sexuality. These cultural differences are important to take into account when studying adolescent sexuality.

There were also several factors associated with a lower probability of intercourse initiation including religiosity and certain mental health characteristics (Collins et al., 2004; Lammers et al., 2000). Research has found that virginal adolescents attended church more frequently than non-virginal adolescents (Woodroof, 1985). Factors such as

personal devotion and frequently attending religious events were positively associated with female sexual responsibility (Miller & Gur, 2002). Although higher religiosity reduced the probability of having sex for both males and females, the effect was larger for females (Meier, 2003). This connection between religion and lower probability of intercourse has been explained by the hypothesis that adolescents who frequently attended religious events were more sexually responsible and showed a greater capacity for impulse control and restraint in regards to relationships (Miller & Gur, 2002). Female adolescents' frequent attendance at religious events, indicating involvement in religious community, has also been associated with greater foresight surrounding suffering in the event of contracting HIV or becoming pregnant from unprotected intercourse and a responsible and planned use of birth control (Miller & Gur, 2002). Additionally, religiosity has also been shown to be related to sexual guilt and inversely related to sexual permissiveness (Fehring, Cheever, German, & Philpot, 1998), which may reduce risk of early sexual activity.

The specific religious beliefs held by an individual may also influence sexual behavior. Most studies have focused on the Christian religion and contrasted the sexual behavior of Protestants and Catholics (Greeley, 1973). Typically, Catholics hold more conservative beliefs regarding birth control than Protestants (Greeley, 1973). However, research has also found that Catholics priests and parishioners have become more accepting of birth control usage although they still reject premarital sex and abortion (Bord & Faulkner, 1975; Greeley, 1973; O'Connell, 1975).

For female adolescents, sexual activity also appears to be related to depression. Adolescents who dated frequently, regardless of age or gender, consistently exhibited

significantly higher levels of depressive symptoms than adolescents who did not date frequently (Quatman, Sampson, Robinson, & Watson, 2001). Similarly, sexually active young women were more depressed than their sexually inexperienced counterparts (Harvey & Spigner, 1995; Kowaleski-Jones & Mott, 1998; Lammers et al., 2000; Tubman, Windle, & Windle, 1996). Smith (1997) found that depression had an impact on girls' early sexual activity with each unit increase in depression increasing the probability of sexual activity by 0.18. In addition to depression, sexually active female adolescents reported higher levels of stress compared to those who had never had sexual intercourse (Harvey & Spigner, 1995). Conversely, sexually experienced young men were less likely than their sexually inexperienced peers to be depressed (Kowaleski-Jones & Mott, 1998; Tubman et al., 1996). Although these articles did not suggest an explanation for this difference, it is possible that society's view of the acceptability of sexual behavior for men but not women may result in differential mental health consequences.

Educational goals and achievement were related to dating and sexual activity (Schvaneveldt, Miller, Berry, & Lee, 2001). Both male and female adolescents in grades 8th, 10th, and 12th who dated frequently exhibited lower levels of academic achievement and academic motivation (Quatman et al., 2001). Academic achievement was also associated with delay in sexual intercourse (Lammers et al., 2000); virgins expressed more interest in school, rated their academic ability as superior to non-virgins, and had more educational goals in a study that used 12-18 year olds (Schvaneveldt et al., 2001). Longitudinally, adolescents who became sexually active experienced a decline in their educational goals and achievement (Schvaneveldt et al., 2001).

Predictors of Contraception Use

The use of contraception, particularly condoms, was also an important issue for teenage sexual activity in the literature because of the risks of pregnancy and the contraction of sexually transmitted diseases. Predictors of adolescent contraception use included demographic characteristics such as age and gender, relationship factors, first condom use, age of first sexual partner, risky behaviors, and social influences. In relation to gender, several studies have shown that adolescent women were more likely than adolescent men to practice unsafe sex (Cooper et al., 1994; Ford et al., 2001; Gebhardt, Kuyper, & Greunsven, 2003; Henry et al., in press). Gebhardt et al. (2003) suggested that this difference was due to the tendency of women to have intercourse within the context of a steady relationship and generally use hormonal methods of birth control instead of condoms, which is often not classified as "safe" sex in research studies.

Several studies examining the role of age in contraceptive use have found that adolescents fourteen years old and younger were less likely to use condoms (Abma et al., 2004; Ford et al., 2001; Resnick & Blum, 1994). However, age may impact the choice of contraception as Nguyet and Maheux (1994) found that condom use in adolescents peaked at the age of fourteen and then declined as the use of the birth control pill increased. Additionally, teenagers who initiated intercourse at an older age were more likely to use only birth control pills as contraception (Manlove, Ryan, & Franzetta, 2004). Older females were more likely than younger females to use hormonal contraception reliably (Luster & Small, 1994). Similarly, adolescent males who engaged in sex at a younger age were significantly less likely than later initiators to use a condom regularly (Smith, 1997).

Relationship factors such as the length of the relationship and type of relationship are also associated with adolescent contraception use. Studies have found that inconsistent condom use increased with the length of relationship (Manlove et al., 2003) and that adolescents were less careful with condom use when in a committed relationship (Manlove et al., 2004). Among adolescents with steady partners, 23% used condoms all the time; those with casual partners used condoms 48% of the time (Gebhardt et al., 2003). Instead, adolescents in steady relationships were more likely to use the birth control pill as a form of contraception instead of condoms (Gebhardt et al., 2003). However, another study suggested that adolescents in more casual relationships were less likely to use any contraception than those in committed relationships (Manning, Longmore, & Giordano, 2000). Interestingly, a study by Fortenberry, Tu, Harezlak, Katz, and Orr (2002) showed that a larger percentage of teens used condoms in newer compared to established relationships; however, they also pointed out that condom use declined to levels similar to those in established relationships over a twenty-one day period. This finding implies that the safe-sex behavior seen in new relationships may be short-lived. In addition, studies may result in different findings based on their definition of "new" relationships.

It is also important to consider adolescent condom use with their first sexual partner, as the odds of using contraception in an adolescent's current relationship were reduced if the teenagers consistently failed to use contraception in their first relationship (Manlove et al., 2004). Several studies suggested that approximately twenty-five percent of teen females and eighteen percent of teen males used no method of contraception at first intercourse (Abma et al., 2004; Manlove et al., 2003; Nguyet & Maheux, 1994). The

study done by Miller et al. (1997) examining failure to use condoms at first intercourse found that adolescent females aged 14 to 16 with partners approximately two years older than themselves were significantly less likely to have used a condom during the first intercourse than those whose first partners had been roughly their age. An adolescent's number of previous partners was also related to contraception use. Adolescent women with multiple partners were less reliable users of contraception than those with fewer partners (Luster & Small, 1994). Specifically, the odds of female adolescents always using contraception were reduced by twenty percent for each additional partner (Manlove et al., 2004).

Adolescents who drink alcohol and spend time with peers who drink were less likely to use birth control (Kowaleski-Jones & Mott, 1998). Females who participated in risk-taking behaviors like drinking alcohol and smoking indicated less intent to use condoms (Kowaleski-Jones & Mott, 1998). Although condom use generally declined with age, reductions in safe-sex behavior were not observed among adolescents who perceived that most of their friends also used condoms (Romer et al., 1994).

Gender Differences in Romantic Relationships

There were several gender differences that have been investigated with regard to adolescent relationships, including dating and sexual activity during adolescence (Harper, Gannon, Watson, Catania, & Dolcini, 2004). Woodroof (1985) found that males were significantly more sexually active than females. Specifically, male adolescents began dating at a younger age, started intercourse earlier, engaged in heavy petting and intercourse more frequently, and had more sexual partners (Woodroof, 1985). Interestingly, both female and male adolescents described the most attractive person they

could imagine to be somewhat older than themselves (Kenrick, Keefe, Gabrielidis, & Cornelius, 1996).

Adolescent males and females also perceived sexual relationships in different ways. Females placed greater importance on intimate relationships than males (Eaton & Mitchell, 1991; Manlove et al., 2004). When asked to describe sex, females included the idea of a relationship in their responses and recognized that sex occurs between two people; males focused on either receiving something or doing something to a female with no acknowledgement that the sexual activity involved two people who were engaging in a mutual activity (Harper et al., 2004). Females expressed a desire to gradually develop a romantic relationship with a male through dating (Harper et al., 2004). Females were more likely than males to define their sexual relationship as romantic (Manlove et al., 2004) and reported a higher level of affective intensity, including stronger emotional responses and judgments in their romantic relationships than adolescent boys (Shulman & Sharf, 2000). They also reported valuing attachment and care in their relationship more than adolescent males (Shulman & Sharf, 2000). In contrast, males expressed a desire to more immediately engage in sexual activity with their dating partners (Harper et al., 2004).

Power in the relationship has also been shown to have an effect on safe-sex behavior (Bruhin, 2003). Researchers have defined power in many different ways. Bruhin (2003) defined the person having more power in the relationship as the one who initiated sex and HIV protection, was financially independent, did not receive money or presents in return for sex, was less emotionally involved, and was not forced to have sex. Browning, Kessler, Hatfield, and Choo (1999) used a definition of power more related to

the ability to influence another person. The relation between relationship initiation and power is not clear. However, it is possible that the individual initiating the relationship may also be the more powerful member of the dyad.

Theoretical Perspectives

Chodorow (1978) believed that psychological gender differences are rooted in the early family experiences of boys and girls. According to Chodorow's (1978) theory, the major responsibility of child rearing is left to the mother rather than the father in a family. Based on this theory, both males and females develop an early emotional attachment with a woman (Chodorow, 1978; Oliver & Hyde, 1992). For girls, this relationship is thought to be never fully broken; therefore girls define themselves throughout life in relational terms (Chodorow, 1978; Oliver & Hyde, 1992). Although boys start with the same emotional attachment, they must break this attachment in order to develop a distinct, masculine identity, as Chodorow believes that masculinity involves denying feminine maternal attachment (Chodorow, 1978; Oliver & Hyde, 1992). As a result, boys' identity is not defined in relational terms but in terms of individuation and independence (Chodorow, 1978; Oliver & Hyde, 1992). Chodorow's theory predicted that women will be more approving of and likely to engage in sex in the context of emotionally committed relationships; they will be relatively disapproving and less likely to engage in sex in casual relationships in order to maximize economic security (Chodorow, 1978; Oliver & Hyde, 1992).

A sociobiological theory suggests that patterns of human sexual behaviors are powerfully shaped by considerations of reproductive success (Oliver & Hyde, 1992; Symons, 1979), which they claim explains the existence of a "double standard" in

society, and includes the idea that society has permissive attitudes towards male promiscuity and intolerance for female promiscuity. Because sperm are plentiful and the egg is comparatively rare, they suggest that males will be more motivated to inseminate many females but they expect that the female will be selective about the genes paired with the rare egg (Oliver & Hyde, 1992). Therefore, men should be more approving of casual sex and should have a greater number of different sexual partners, whereas women should be less approving of casual sex and should have fewer different partners (Oliver & Hyde, 1992).

Vygotsky's sociocultural theory suggests that individuals interact with one another in social situations in order to develop meaning while communicating with each other. Therefore, an individual's development cannot be understood by studying the individual alone; the external social world also has to be considered (Jaramillo, 1996). When male and female adolescents enter into social situations, they must bring with them a set of socially acceptable behaviors or risk upsetting the social structure. Persons who are unable to or unwilling to abide by these social roles often have difficulties with their peers (Rychlak & Legerski, 1967). Despite changes in permissiveness in sexual behavior over the years, the belief that it is acceptable for men to be more promiscuous and not acceptable for women to exhibit similar behaviors has persisted. According to Eagly and Wood (1999), sex differences are related to the differing restrictions and opportunities that a society holds for its men and women. Specifically, men's accommodation to roles with greater power and status produce dominant behavior, and women's accommodation to roles with less power and status produce subordinate behaviors (Eagly & Wood, 1999).

Therefore, based on this theory, men would be more likely to initiate both relationships and sexual behavior in the relationship.

The Present Study

The primary goal of the present study was to examine the implications of traditional and nontraditional relationship initiation for sexual activity and contraception use. Traditionally initiated relationships were defined as those romantic relationships in which the male primarily initiated the relationship. Nontraditionally initiated relationships were defined as those romantic relationships in which the female primarily initiated the relationship. This study is unique in that no other research has considered how the gender of the individual initiating the relationship may influence later sexual behavior.

First, I hypothesized that more relationships would be described as traditional than nontraditional. Traditional relationships were defined as relationships initiated by the male. Nontraditional relationships were defined as relationships initiated by the female. In addition, the timing of sexual activity within a relationship may vary between traditional and non-traditional relationships. Specifically, I hypothesized that sexual activity would be delayed in nontraditional relationships, in part because women in a nontraditionally initiated relationship may have more influence in the relationship. As previously stated, females, more often than males, reported valuing attachment and care in their relationships (Shulman & Scharf, 2000). Additionally, females placed greater importance on intimate relationships than males (Eaton & Mitchell, 1991; Manlove et al., 2004). Lastly, the sociobiological theory and Chodorow's theory suggested that women will be more careful when being involved in a sexual relationship and more likely to

value emotional attachment in a relationship than males. Therefore, it would follow that if a female is initiating the relationship, she is more likely to be interested in developing the relationship before having sexual intercourse. The sociocultural theory also strongly supported the hypothesis that men are more likely to take the dominant role in the relationship because of social norms.

I hypothesized that religion would play a role in the use of birth control; specifically, that individuals self-identifying as having a Catholic religion-affiliation would be less likely to use birth control than those from other religions/denominations because of their beliefs regarding birth control (Greeley, 1973). There was also research, however, that reports that these trends are changing (Bord & Faulkner, 1975; O'Connell, 1975). Therefore, it was important to determine if there are actual differences in birth control utilization currently between Protestants and Catholics.

I also hypothesized that couples in nontraditionally initiated relationships would engage in a higher rate of birth control usage because I expected that women would have more influence in this type of relationship. I also expected that women would also have more power in the choice of birth control (Gebhardt et al., 2003). The role of relationship initiation in the quality of the romantic relationship was also considered. I hypothesized that nontraditionally initiated relationships would have a higher level of relationship satisfaction than traditionally initiated relationships. Females were more likely to value attachment in their relationships (Shulman & Scharf, 2000) and would presumably work harder at developing the relationship, resulting in a higher level of relationship satisfaction. This hypothesis was also supported by Chodorow's theory as it suggested that women define themselves in more relational terms.

Finally, the role of depression, self-esteem, and religiosity in predicting safe-sex behavior was considered to determine if relationship initiation accounted for any additional variance above and beyond these factors. I hypothesized that although depression, self-esteem, and low religiosity would be associated with lower utilization rates of birth control, the type of relationship (male or female-initiated) would predict sexual protection above and beyond those factors.

Methods

Participants

Study participants were 104 (62 female, 42 male) undergraduate students ranging in age from 18 to 41 years ($M = 21.2$) attending Eastern Illinois University psychology and sociology classes. The average age of first sexual intercourse was 16.72 years. Of the 104 participants, 102 endorsed a heterosexual orientation and 2 individuals reported a homosexual orientation. Those individuals reporting a homosexual orientation were excluded from the analyses due to the study questions being related to traditional and nontraditional heterosexual relationships. Ethnicity of the sample was as follows: 75% Caucasian (non-Hispanic), 16.3% African American, 1.9% Asian/Pacific Islander, 4.8% Hispanic, and 1.9% Other. The sample primarily identified their religion as either Protestant or Catholic (Protestant: 50%; Catholic: 36.5%; Jewish: 1%; Agnostic: 4.8%; Atheist: 6.7%; Buddhist: 1%).

Materials

Demographics and Sexual History. Participants were asked demographic questions about their age, gender, religion, number of sexual partners, and relationship history. Specifically, they were asked to report on their current romantic relationship, or

most recent romantic relationship, with regard to sexual activity, sexual protection, and the gender of the individual who initiated the relationship. They were also asked similar questions about their first sexually active relationship, in addition to their behaviors in their current relationship. Eighteen participants reported that their current relationship was their first relationship.

Depression. The Goldberg Depression Scale (Goldberg, 1993; Holm, Holm, & Bech, 2001) was used to measure levels of depression. This measure is an 18-item scale assessing the level of depressive symptoms a person has experienced within the past week. Participants responded using a rating scale that ranges from "0 = Not at All" to "5 = Very much" in relation to feelings and behaviors that are related to depression. This measure provides cutoffs for severe, moderate, borderline, mild, and no depression. The Goldberg Depression scale has been found to possess acceptable levels of internal and external validity (Holm, Holm, & Bech, 2001). In the current study, the measure was found to demonstrate acceptable levels of internal reliability (*alpha* = .88).

Self-Esteem. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to measure participants' self-esteem. This measure was a 10-item scale that contained statements related to self-esteem. The participant responded by circling the degree that they agreed with the statement from "strongly disagree" to "strongly agree." Each response was given a numerical score, which was then totaled. Higher scores indicated higher levels of self-esteem. The test-retest reliability of this scale is .92 (Rosenberg, 1965). For the current sample, the Rosenberg Self-Esteem Scale was found to possess an acceptable level of reliability (*alpha* = .87).

Religiosity. The Religious Behaviors scale was used to determine the participants' level of participation in religious activities. This scale is an 11-item scale that has been adapted to fit participants of varying religious beliefs (Hunt & King, 1971; Woodroof, 1985). Higher scores on this scale indicated higher levels of involvement in religious behaviors and events. In the current sample, the measure demonstrated acceptable levels of internal reliability (*alpha* = .87).

Relationship Quality. Relationship quality was assessed using a 35-item adaptation of the Comprehensive Marital Satisfaction Scale (CMSS) (Blum & Mehrabian, 1999). Participants rated their level of agreement with statements about their significant other on a scale from "– 4 = very strong disagreement" to "+ 4 = very strong agreement." A total score was computed for each participant summing across items, some of which were reverse-coded based on content. Blum and Mehrabian (1999) reported this scale possessed excellent internal consistency (*alpha* = .94) and a test-retest reliability of .83 over a six week interval.

Procedure

The Institutional Review Board approved this study before data was collected. Participants were recruited from the undergraduate research pool at Eastern Illinois University and from upper-level psychology and sociology classes. Each participant in the study reviewed and signed an informed consent form. These forms were stored separately from the questionnaires to ensure anonymity. Individuals who agreed to participate were given a packet containing instructions regarding how to fill out the questionnaires and the measures. These scales were counter-balanced throughout the

packets. After the participants completed the packet, they were given a debriefing statement related to the hypotheses and expected findings.

Results

Preliminary Analysis

A chi-square test for independent samples was conducted on number of first relationships and current relationships to test the hypothesis that more relationships would be defined as traditional than non-traditional. As hypothesized, more relationships were classified as traditional than non-traditional for both first relationships, $X^2(1) = 27.59, p < .01$ (Traditional $N = 75$, Nontraditional $N = 23$), and current relationships, $X^2(1) = 12.37, p < .01$ (Traditional $N = 67$, Nontraditional $N = 32$).

Next, a correlational analysis was conducted on the study variables (see Table 1 for the specific correlation values). A significant correlation was found between the delay of sexual onset for first relationships and current relationships, indicating a relation between the amount of time waited before having sex in both their first and current relationships. Likewise, a significant correlation was found between percentage of birth control usage in the first relationship and the current relationship. A significant relation was also found between relationship satisfaction and length of current relationship, indicating that those in longer relationships reported being more satisfied in their relationships. Finally, depression was significantly negatively correlated with both self-esteem and relationship satisfaction; those with higher self-esteem and relationship satisfaction reported lower levels of depression.

Role of Religion

A *t*-test was conducted to determine if overall religiousness, determined by the RBS, was associated with sexual activity (virgin versus non-virgin status). There were a total of 26 participants who reported that they were virgins; 78 participants reported that they were not virgins. Virgins were significantly more religious ($M = 2.99$, $SD = .82$) than non-virgins ($M = 2.46$, $SD = .74$), $t(101) = 2.41$, $p < .05$. Additionally, a correlational analysis was used to determine if there was an association between increased religiosity and percentage use of birth control in the first relationship and the current relationship. There was a significant correlation for religious behavior and birth control in first relationships, $r(81) = .22$, $p < .05$ indicating that religious individuals were more likely to use birth control. However, there was not a significant correlation for religious behavior and current relationships, $r(81) = .62$, $p > .05$.

A chi-square test for independent samples was conducted to determine if level of religiosity and type of religion (religious Protestants = 19, non-religious Protestants = 12, religious Catholics = 13, non-religious Catholics = 11) was a factor in sexual activity status. The analysis was not significant indicating that level of religiosity did not result in difference in sexual activity status, $X^2(3) = 7.60$, $p > .05$. However, the analysis did approach significance ($p = .05$) and examination of the results showed that five out of the six virgins in this analysis were religious Protestants.

A one-way analysis of variance was conducted to determine if level of religiosity and type of religion was a factor in percentage of birth control usage, and specifically hormonal birth control usage, in first and current relationships and also specifically hormonal birth control in first and current relationships. A significant result was found

for hormonal birth control usage in current relationships, $F(3, 44) = 2.86, p < .05$. However, post hoc tests were unable to determine where the specific groups that varied in birth control usage. Results were not significant for current relationship birth control, $F(3, 45) = 1.82, p > .05$, first relationship birth control, $F(3, 44) = .99, p > .05$, and hormonal birth control in first relationships, $F(3, 45) = 1.23, p > .05$.

Two chi-square tests for independent samples were conducted to determine if religion was a factor in either birth control usage or sexual activity. As the sample was predominately Catholic or Protestant, the analysis was conducted on just these two groups. There were no significant differences in sexual activity status associated with religion, $X^2(1) = 1.15, p > .05$. Those reporting a virgin status were left out of subsequent analyses. There was also no significant difference associated with percentage use of birth control in their current relationship, $X^2(1) = 0.77, p > .05$, indicating that Catholics were just as likely to use birth control as Protestant individuals.

Finally, *t*-tests were used to test for possible differences in number of sexual partners or type of birth control usage. Protestants ($M = 7.42$, $SD = 8.37$) and Catholics ($M = 6.22$, $SD = 5.58$) did not vary in their number of sexual partners they had, $t(82) = 0.74, p > .05$. Additionally, there were no significant differences between religious groups and the type of birth control (hormonal birth control, male/female condom, diaphragm, spermicide, or other option) used for either first or current relationships.

Differences due to Traditional versus Non-Traditional Relationship Satisfaction

Two *t*-tests (first relationship, current relationship) for independent means were conducted to determine if individuals in traditional relationships initiated intercourse earlier in the relationship than those in non-traditional relationships. Individuals who

reported never having sex were excluded from the analysis. Neither analysis revealed significant differences. Specifically for first relationships, the amount of time before sexual intercourse in traditional relationships (M = 207.26 days, SD = 245.38) was not significantly different than in nontraditional relationships (M = 203.38 days, SD = 215.11), $t(84) = 0.07$, $p > .05$. For current relationships, the time before sexual intercourse in traditional relationships (M = 130.93 days, SD = 207.39) was also not significantly different than in nontraditional relationships (M = 108.64 days, SD = 155.73), $t(80) = 0.50$, $p > .05$.

Next, two t-tests (first relationship, current relationship) were used to examine group differences in use of birth control, defined as percentage of time utilizing any protection. Again, individuals who reported never engaging in sexual activity were excluded from the analysis. For first relationship, the usage of birth control in traditional relationships (M = 87.8, SD = 22.82) was not significantly different than in nontraditional relationships (M = 80, SD = 35.75), $t(77) = 1.12$, $p > .05$. Similarly, for current relationships, the usage of birth control in traditional relationships (M = 84.60, SD = 29.36) was not significantly different than in nontraditional relationships (M = 75.97, SD = 38.92), $t(79) = 1.13$, $p > .05$.

Four t-tests for independent means were conducted on current relationships. None of the analyses revealed significant differences. Specifically, reports of relationship satisfaction for individuals in traditional relationships (M = 1.68, SD = 1.30) were not significantly different than reported by individuals in nontraditional relationships (M = 1.48, SD = 1.21), $t(93) = 0.73$, $p > .05$. Individuals in traditional relationships (M = 0.95, SD = 0.71) reported no significant differences in depression than those in nontraditional

relationships ($M = 1.04$, $SD = 0.51$), $t(93) = -0.68$, $p > .05$. Religious behavior for individuals in traditional relationships ($M = 2.53$, $SD = 0.81$) was not significantly different from those in nontraditional relationships ($M = 2.52$, $SD = 0.67$), $t(93) = 0.04$, $p > .05$. Lastly, self-esteem of individuals in traditional relationships ($M = 3.18$, $SD = 0.49$) was not significantly different from those in nontraditional relationships ($M = 3.18$, $SD = 0.44$), $t(93) = 0.22$, $p > .05$.

Factors Associated with Safe Sex Behavior

Despite the lack of significant findings, a linear regression was conducted for seven independent (predictor) variables to determine which factors predicted safe sex behavior in adolescents. The independent factors included gender, age, religious behavior, self-esteem, relationship satisfaction, depression, and whether or not it was a traditional relationship. The dependent factor was safe sex behavior, measured by the use of birth control in the current relationship. The regression was computed using the stepwise model. For all analyses, the effects of gender and age were controlled by entering the two factors into the first step of the regression; gender and traditional status variables were dummy coded. The four predictive variables were then entered into the second step of the regression. The type of relationship was entered into the third step. See Table 2 for the regression values. For total prediction, the overall multiple regression was not significant, $F(7, 71) = 0.80$, $p > .05$. In addition, *none* of the variables were significantly associated with safe sex behavior. However, there was a trend found for relationship satisfaction ($\beta = .25$, $p = .054$) indicating that those with a higher relationship satisfaction were more likely to practice safe sex.

Discussion

The goal of this study was to extend the research on the factors that predispose adolescents to initiate sexual intercourse. Research on adolescent sexual behaviors has shown that many factors are associated with sexual activity, including physical maturity, mental health characteristics, religiosity, social influences, risky behaviors, and relationship factors. Additionally, research has shown that age, specific relationship factors, first sexual experience, and alcohol use have an effect on contraceptive use in adolescents. The literature also suggested that gender differences play a role in adolescent relationships. Based on this foundation, the primary goal of the current study was to examine the implications of traditional (male-initiated) and nontraditional (female-initiated) relationship initiation for sexual activity and contraception use in adolescents. Additional factors, including depression, religiosity, self-esteem, and relationship satisfaction, were also included in this study to determine their relation to adolescent sexual activity and contraceptive use.

As hypothesized, more relationships were perceived to be initiated in a traditional manner (i.e., by the male) than non-traditional (i.e., by the female). These results were not surprising; gender roles are very evident in today's society. Sociocultural theory suggested that men assume more dominant roles in relationships than women (Eagly & Wood, 1999) and these results appeared to support the theory.

Despite the tendency for relationships to be initiated by the male, the results of the current study indicated that relationship initiation was not associated with sexual behavior. Specifically, there was no difference in sexual delay onset associated with

relationship initiation. These results do conflict with past findings. For instance, Bruhin (2003) found that in relationships with male power, men most frequently initiated sex. In relationships with equal or female power, the communication in the relationship indicated condom usage (Bruhin, 2003). However, the results of this study raise an important suggestion that will be repeated throughout the discussion. The initiator of the relationship may not necessarily hold the power in the relationship. It would be of interest to further examine the specific relation between initiator and power-holder in the relationship. As females have been shown to value emotional attachment while men value physical intimacy (Shulman & Scharf, 2000), it would hold that if women held power in the relationship, there may be a resulting delay in the sexual behavior in the relationships while they were developing the emotional attachment in the relationship. This explanation may also help to address the contradiction between the current findings and suggestions of theory. Both the sociobiological theory and Chodorow's theory suggested that women would be more careful when being involved in intimate relationships (Chodorow, 1978; Oliver & Hyde, 1992; Symons, 1979). However, these theories may be more applicable to the identity of the partner rather than a delay in the timing of sex meaning that women may be more careful in partner selection as opposed to deciding to delay sexual behavior.

Additionally, type of relationship initiation was not related to birth control usage. Sociobiological theory suggests that women would protect their eggs (Oliver & Hyde, 1992) and thus would engage in higher levels of birth control usage. Again, it is possible that relationship initiation does not translate to power within the relationship. Interestingly, research has found that male power was associated with condom use;

female or balance power was associated with condom use only when the individuals involved had spoken about protection measures in advance (Bruhin, 2003).

Significant findings were revealed for the role of relationship satisfaction. Specifically, relationship satisfaction was positively associated with having a longer lasting relationship, lower levels of depression, and approached significance in analyses examining its association with higher levels of contraceptive use. Although not tested in this study, communication is an important factor in relationship satisfaction and is also related to contraception use. This factor may be related to more effective use of birth control because of the ability of the individuals to communicate their concerns with one another without feeling embarrassed or shameful. Falbo and Peplau (1980) found that individuals who were satisfied with their relationships were likely to use direct communication with their significant other. Since communication has an important relation to condom use (Bruhin, 2003), direct communication is important for couples to discuss using protection effectively (Catania et al., 1989). Other research has confirmed this finding: among adolescents who are already having sex, those who report being able to discuss sex are more likely to have safer sex (Halpern-Felshner, Kropp, Boyer, Tschann, & Ellen, 2004). The relationship satisfaction survey used in the current study contained questions that relate to couples with higher relationship satisfaction having congruent beliefs, such as having similar beliefs about philosophy of life, finances, and ambitions and goals. Further research could investigate the relation between safer sex behaviors and holding congruent beliefs in general.

It is important to note that based on the number of *t*-tests used in the current study, a correction would be typically needed to adjust for the inflation in alpha. However, even

without the correction, only one of the *t*-test analyses revealed significant results. One explanation for the lack of significant findings is the possibility that the sample is not representative; the majority of the current sample were female (60%) compared to 50.9% in the 2000 Census (U.S. Census Bureau, 2000). However, the sample generally matched the United States in the regard to ethnic representation: with the exception of Hispanic participants (current study: 4.8%; U.S. = 12.5%). The current study matched the U.S. population within 4 percentage points per category (U.S. Census Bureau, 2000). Therefore, it is not clear that sample differences led to a lack of significant results.

Interestingly, there were no significant differences with regard to either birth control usage or sexual activity based on religion, specifically Catholic versus Protestant beliefs. Although research has suggested that Catholics generally hold more conservative views regarding sexual behavior (Greeley, 1973), research has also shown that some views regarding sexual behavior (except premarital sex and abortion) have become more accepted (Bord & Faulkner, 1975; Greeley, 1973; O'Connell, 1975). The current study provided evidence that Catholic adolescents reported using birth control just as frequently as Protestants, despite the condemnation of their church. Analyses considering both level of religiosity and type of religion did reveal a significant difference for hormonal birth control in current relationships. However, more statistical power would be needed to potentially identify the differences between groups. Overall religiosity, regardless of denomination, was significantly associated with sexual activity status. This finding was congruent with past research by Meier (2003) that found that higher religiosity reduced the probability of having sex for both males and females. Additionally, higher religiosity was positively correlated with a higher percentage of birth control usage, providing

additional support to the research by Miller and Gur (2002) that found that frequent attendance at religious events was associated with adolescents' responsible and planned use of birth control. A statistical trend suggested a tendency for virgins to be religious Protestants. These findings suggest that religion may be an important factor in adolescent sexual behavior and must be considered when developing educational programs for adolescents.

The results did indicate behavioral similarity between current and first relationship. Specifically, there was an association between the amount of time individuals waited before having sex in both their first and their current relationships. Additionally, a significant correlation was found between percentage of birth control usage in the first relationship and the current relationship. This finding concurred with past research that also found that adolescent condom use with the first partner was correlated with condom use with future partners (Manlove et al., 2004).

Clinical Implications

In the current study, relationship satisfaction was the only factor related to safer sex behavior. Educational programs can be further developed if more information is gathered about the role of relationship satisfaction in adolescent sexual activity and contraceptive use. For instance, future research should determine which specific features of the relationship affect sexual activity. Relationship satisfaction components, such as communication, are also related to safe sex behavior and may have more direct effects on sexual behaviors (Halpern-Felshner et al., 2004). Isolating other components, like similar attitudes and beliefs regarding life philosophy, finances, and life goals, related to relationship satisfaction could also give information related to what specific component is

related to safer sex behavior. By determining what specific aspects of relationships affect safe-sex behavior, programs could be designed to specifically address these features of relationship satisfaction and target higher risk groups of adolescents as well as those adolescents who may become involved in risky behaviors in the future.

Research has shown that abstinence-only programs have not had a significant effect on reduction of sexual initiation in adolescents (Borawski, Trapi, Lovegreen, Colabianchi, & Block, 2005). However, these programs have been related to having fewer sexual partners and a reduction in the frequency of casual sex (Borawski et al., 2005). Therefore, educating students about the risks of unprotected sex is still very important. Based on the findings of the current study, students who learn and utilize safe sex behaviors in early relationships may be more likely to use those behaviors within their future relationships. Additionally, there was an association between the amount of time waited before having sex in both their first and their current relationships. If education can be used to increase the amount of time before initiation of sexual activity in an adolescent's first relationship, they may also wait a longer period of time before initiating sexual activity in subsequent relationships. Overall, this pattern may reduce unplanned pregnancy and the contraction of sexually transmitted diseases. Therefore, the current study adds to the literature base, which supports early intervention.

Limitations and Future Research

Limitations of this study include sample size, using retrospective data, and the definition of initiator of relationships. First, a larger sample size may have provided more power, possibly resulting in a statistically significant finding for relationship satisfaction as opposed to a trend. As most of the relationships were traditional, the unequal sample

sizes of the groups resulted in a reduction of power and only large effects would be detected using a sample of this size. Future research should include more subjects or over-sample among female-initiated relationships to possibly detect smaller differences between the groups.

In addition, the current study would have been improved if information were directly collected from high school adolescents as opposed to collecting retrospective data that relied on the memory of college-aged individuals. Research has been mixed on the accuracy of retrospective studies. A study done by Rosenthal (1963) found that while males' retrospective responses of relationships with parents and their social and emotional characteristics as adolescents were fairly accurate, females' retrospective responses were not as accurate. A study done by Rivers (2001) regarding school bullying of homosexual students concluded that overall, retrospective studies are useful in applied research. However, while general memories were found to remain stable, the amount of detail recalled decreased with the passage of time (Hardt and Rutter, 2004; Rivers, 2001). The study by Rivers (2001) concluded that memories of events that impacted the individual personally were less likely to be contaminated over time than those where the individual was an observer. Therefore, while using a retrospective study for the current study was likely useful, using current information may have resulted in more accurate results.

As previously mentioned, further research should consider how relationship satisfaction is related to safe sex behaviors in adolescents. It would also be interesting to determine if other factors related to relationship satisfaction, besides communication, are also related to safer sex behaviors. As previously stated, isolating specific components

related to relationship satisfaction (e.g., similar attitudes and common goals) may determine which aspects are related to safer sex behaviors.

Focusing on gender differences and gender roles may also provide more information for predicting safe-sex behaviors. Research has found many different gender differences with regards to dating and sexual activity during adolescence (Harper et al., 2004; Woodroof, 1985). For example, Woodroof (1985) found that males began dating at a younger age, engaged in intercourse earlier, engaged in heavy petting and intercourse more frequently, and had more sexual partners. Males and females have also been shown to view relationships in different ways. Specifically, females tend to view relationships in emotional terms; whereas, males view relationships in physical terms (Harper et al., 2004; Manlove et al., 2004; Shulman & Sharf, 2000). However, this research does not seem to focus on the effect of social roles, which may provide interesting information regarding safe-sex behaviors. Power has also been shown to have effects on initiation of sex and birth control utilization (Bruhin, 2003; Falbo & Peplau, 1980; Halpern-Felshner, 2004). However, it is unclear how one person gains power in the relationship and whether or not it is related to the role of the initiator of the relationship. A more promising avenue of research would be to examine the overlap between relationship initiation and power; it is possible that holding "power" in the relationship may be related to sexual activity as opposed to initiation. Future research could focus on this relation to determine the connection and its importance in the realm of adolescent sexual activity.

Additional future research could also include a more ethnically representative sample and focus on cultural differences related to adolescent sexual activity and initiation. Personality factors that influence adolescent sexual initiation may also show

interesting and important results and should be considered in future research. Additionally, research could also consider the role of religious upbringing as a factor in attitudes about sexual intercourse and birth control choice.

Adolescent sexual behavior has many associated risks including sexually transmitted disease and teenage pregnancy. Therefore, it is important to determine what factors are associated with lowering the incidence of sexual intercourse and increasing the use of safe-sex behaviors in adolescents. This study added to the research regarding factors associated with safe sex behaviors and adolescent sexual intercourse initiation. Further research needs to be completed to determine what additional factors may be related to adolescent sexual relationships to help lower the incidence of teenage pregnancy and sexually transmitted diseases.

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Table 1

Correlations Among Study Variables

Measure	1	2	3	4	5	6	7	8
1. Delay of Sexual Activity-First	--							
2. First Relationship Birth Control Use	.09	--						
3. Delay of Sexual Activity-Current	.48**	-.01	--					
4. Current Relationship Birth Control Use	.08	.36**	.09	--				
5. Self-Esteem	.08	.17	.06	-.07	--			
6. Religious Behavior	.19	.15	.21	-.05	.06	--		
7. Relationship Satisfaction	.18	.05	.29**	.20	.16	.12	--	
8. Depression	-.13	-.02	-.13	-.02	-.51**	-.12	-.21*	--

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 2

Summary of Regression Analysis for Study Variables

	Step 1			Step 2			Step 3		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Age	-.58	1.04	-.06	-.36	1.04	-.04	-.42	1.05	-.05
Gender	1.41	7.42	.02	6.49	8.16	.10	5.61	8.29	.09
Depression				-1.16	7.49	-.02	-.55	7.57	-.01
Religious Behavior				-2.11	5.24	-.05	-2.10	5.26	-.05
Relationship Satisfaction				6.40	3.25	.25	6.39	3.26	.25
Self-Esteem				-8.42	9.34	-.13	-8.10	9.39	-.12
Traditional Current Relationship							-5.43	7.86	-.08
R^2		.01			.07			.07	
F Change		.17			1.17			.48	

* $p < .05$ ** $p < .01$