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THE EFFECTS OF PREMARITAL SEXUAL PROMISCUITY
ON SUBSEQUENT MARITAL SEXUAL SATISFACTION

by

Sherie Adams Christensen

A thesis submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Masters of Science

Marriage and Family Therapy Program

School of Family Life

Brigham Young University

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BRIGHAM YOUNG UNIVERSITY
GRADUATE COMMITTEE APPROVAL

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ABSTRACT

THE EFFECTS OF PREMARITAL SEXUAL PROMISCUITY ON SUBSEQUENT MARITAL SEXUAL SATISFACTION

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Masters of Science

A satisfying sexual relationship is an important aspect of general marital satisfaction. Considering that most people will marry, understanding the factors influencing marital sexual satisfaction becomes important in understanding what makes happy, satisfied relationships and individuals in our society. This study builds on previous research, which has indicated that there are a number of “risky factors” associated with having numerous premarital sexual partners, by demonstrating that there are risks associated with the future marital relationship. Using exchange theory concepts, this study empirically examines the relationship between premarital sexual promiscuity and marital sexual satisfaction. The sample included 313 married males and females between the ages of 18-40 using data from the NHLS survey, a United States national

random sample. The dichotomous dependent variable combined measures of emotional and physical sexual satisfaction. Premarital sexual promiscuity was measured continuously.

Implications for clinicians are discussed.

Of males, 87.7% reported being extremely satisfied with their marital sexual relationship and 12.3% reported being moderately satisfied. Of females, 84.6% of reported extreme satisfaction and 15.4% reported moderate satisfaction with their marital sexual relationship. The range of partners including the marital partner was 1-191 for men and 1-66 for women. The mean number of partners was 11.35 (SD 19.77) for men and 4.25 (SD 6.3) for women.

Results indicate that for every additional premarital sexual partner an individual has, not including the marital sexual partner, the likelihood that they will say their current marital sexual relationship is extremely satisfying versus only being moderately satisfying goes down 3.9%. Additionally, when running models separately for males and females, the male model was more significant at 5.3%. The female model approached significance. Control variables for the models were not significant except that males who were not White, Black, or Hispanic, were 8.9% less likely than White males to report being extremely satisfied with their marital sexual relationship as compared to only being moderately satisfied. This model does not account for individuals who had sex with their spouse before marriage and the results should not be interpreted to include such.

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Chapter 1. Introduction

According to the U.S. Bureau of Census (2002), 73% of the population over 15 years old have been married. Reports from 1990 indicate that 95% of the population will marry at some point in their life (see U.S. Bureau of Census, 1990). Approximately 2.4 million people marry each year in the United States (Krelder & Fields, 2002). Marriage, therefore, is one of the most common places for sexual expression in adulthood.

Currently, in the United States, sexual intimacy does not usually begin after the altar. By the time most people marry, they have had at least one sexual partner. Many have had two or more sexual partners (Laumann, Gagnon, Michael, & Michaels, 1994). The average age of first sexual unions is 15.6 for males and 17.4 for females, on the average seven years for women and ten years for men before the first marital union (as cited in Hyde & DeLamater, 2000; see also Smith, 1994). Despite the growing numbers of non-virgins and single individuals with a history of multiple partners, casual sex is not commonplace. The majority of sexual unions occur within the context of a committed relationship, though the relationship may not last very long (Miller, Christopherson, & King, 1993; Roche & Ramsby, 1993). This described difference in age at first intercourse and first marriage leaves several years for what has been termed “serial monogamy,” a premarital sexual pattern of faithful intimacy in a series of committed relationships over time (Hyde & DeLamater, 2000; Sorensen, 1973).

Associated with multiple partners are a number of “risky” factors, including contracting sexually transmitted diseases, AIDS, and becoming pregnant (Boyer, Shafer, Wibbelsman, Seeberg, Teitle, & Lovell, 2000; Li, Stanton, Cottrell, Burnes, Pack, &

Kaljee, 2000). There may be other risky consequences to premarital sexual promiscuity, such as consequences for future marriage that have not been addressed in the literature.

A satisfying sexual relationship is an important part of a marital relationship (McCarthy, 1999). Sexual satisfaction is a strong correlate of marital satisfaction (Christopher & Sprecher, 2000; Cupah & Comstock, 1990; Greeley, 1991; Lawrance & Byers, 1995). Henderson-King and Veroff stated, “The relationship between sex and affection, in particular, would seem so reciprocal that the question of causation appears futile” (1994, p.521). This correlation enhances the importance of understanding predictors of sexual satisfaction in marriage.

While much research has been conducted on the predictors of sexual satisfaction after the marital union has begun, or with couples not yet married, little research has examined premarital predictors of marital sexual satisfaction (Larson, Anderson, Holman, & Niemann, 1998). Furthermore, there is little research that examines the effects of premarital sex on future marital relationships (see Larson & Holman, 1994; Kahn & London, 1991). This is an important area of study whose results may be included in adolescent sexual education programs dedicated to helping adolescents gain a greater understanding of the long-term repercussions of sexual promiscuity.

This study examines the relationship between premarital sexual promiscuity and marital sexual satisfaction and the potential differences between males and females. This relationship is studied using a random national sample of married young adult individuals.

Chapter 2. Literature Review

Marital Sexual Satisfaction

Research has consistently indicated that marital sex is more satisfying than sex in any other context (Christopher & Sprecher, 2000; Blumstein & Schwartz, 1983; Waite & Joyner, 2001). Laumann and colleagues (1994) found that married couples report having sex an average of 6.7 times a month. In contrast, divorced individuals in their sample reported having sex 5.25 times a month, and single individuals reported having sex 5.45 times a month. The Janus Report (1993) found a similar trend. Waite and Joyner (2001) found that most married individuals are satisfied with their sexual relationship (see also Blumstein & Schwartz, 1983; Greeley, 1991; Oggins, Leber & Veroff, 1993).

Marital sexual satisfaction may be described as comprising two components: satisfaction with the sexual activity and emotional satisfaction (Hyde & DeLamarter, 2000). Using this definition, in addition to the wide scope of research on the topic, predictors of sexual satisfaction in marriage may be categorized into three groups. The first is relationship variables, which include the emotional satisfaction component of sexual satisfaction. The second is physiological characteristics of the sexual relationship, including indicators of satisfaction with the sexual activity, such as frequency of orgasm. The third category of predictors of sexual satisfaction encompasses general demographics and individual characteristics.

Relationship Variables. Many studies have found that relationship variables are important in understanding marital sexual satisfaction (Byers & Demons, 1999; Oggins, et al., 1993; Young & Luquis, 1998). Communication and self-disclosure related to the sexual relationship have been associated with sexual satisfaction in marriage (Byers &

Demmons, 1999; Cupach & Comstock, 1990). Byers and Demmons (1999) found that individuals who self-disclose about sexual likes and dislikes report higher levels of sexual satisfaction, even after controlling for non-sexual communication. Their findings also indicate that sexual self-disclosure occurs in a general context of self-disclosure, especially if both partners are perceived by each other to be sexually self-disclosing.

In addition to communication about sexual topics, more generalized forms of communication are also predictive of sexual satisfaction (Byers & Demons, 1999; Sprecher, Metts, Burlison, Hatfield, & Thompson, 1995). One study measured supportive communication by examining whether partners listen to each other, have commonalities during serious discussion, desire to communicate, understand each other's point of view, have a lot to talk about, help clarify the other's view, do not feel put-down, and are non-defensive. Results indicate that supportive communication was highly positively correlated with sexual satisfaction (Sprecher et al., 1995).

Finally, other relationship measures, such as intimacy, physical affection, emotional satisfaction, and love, have been implicated in studies of sexual satisfaction (Hurlbert, Apt, & Rabehl, 1993; Lawrance & Byers, 1995; Oggins et al., 1993). General relationship satisfaction, highly correlated with sexual satisfaction, will be discussed later.

Physiological Variables. Physiological predictors of sexual satisfaction, such as frequency of orgasm, (Young & Luquis, 1998) have been found. Darling, Davidson and Cox (1991) found that timing of orgasms is important for female sexual satisfaction. Females who generally experience orgasm before or with their partner were more satisfied than females who generally experience orgasm after their partner. Additionally,

in a study that did not include non-orgasmic women, Darling, Davidson and Jennings (1991) found that multi-orgasmic women were more physiologically sexually satisfied than singly-orgasmic women, though sexual satisfaction was not tremendously affected by number of orgasms.

Hulbert and colleagues (1993) did not find that number of orgasms predicted female sexual satisfaction, but that for females, orgasmic consistency was a significant, albeit small factor in sexual satisfaction (see also Waterman and Chiauzzi, 1982). Young & Luquis (1998) also found frequency of orgasm in both self and spouse to be a significant predictor of sexual satisfaction for both men and women. Due to the correlation between orgasm and sexual satisfaction, Renaud, Byers, and Pan (1997) note that some studies have even used frequency of orgasm to predict sexual satisfaction, though there is a distinct difference between the two measures.

Finally, another physiological predictor is the frequency of sex. The more frequently couples have sex, the more satisfied they tend to be (Christopher & Sprecher, 2000; Greeley, 1991; Young & Luquis, 1998). Blumstein & Schwartz (1983) found a strong direct correlation in the amount of sex couples had and their sexual satisfaction. Eighty-nine percent of married individuals who had sex three or more times a week reported high satisfaction. Of married individuals participating in sexual intercourse between once a week and once a month, 53% reported sexual satisfaction, and of those having sex once a month or less, only 32% reported sexual satisfaction. Only one-third of individuals reporting sex less than once a month reported sexual satisfaction.

Individual and Demographic Variables. In the third category of predictors are variables associated with individual factors, such as personality characteristics, race,

religiosity, and work (Christopher & Sprecher, 2000). Religiosity has been found to be predictive of many aspects of sexuality before marriage, yet has not seemed to have as much predictive influence after marriage (Crandall, 1992; Haerich, 1992; Young & Luquis, 1998). Haerich (1992) found that intrinsic religiosity was negatively associated with sexually permissive attitudes. Crandall (1992) found similar results. Young & Luquis (1998) found that the degree of religious commitment, God's perception of sex, and an interaction variable (religiosity x God's perception) were all nonsignificant in predicting sexual satisfaction in married couples. Research on race has been inconsistent (Christopher & Sprecher, 2000). A few studies have reported African-American spouses as enjoying more sexual satisfaction than Caucasian spouses, after controlling for other demographic variables (Oggins et al., 1993). Others show no variability (Laumann, et al., 1994).

Oggins and colleagues (1993) found that higher income correlated with lower sexual satisfaction. They hypothesized that the effect may be due to greater number of hours spent at work, which could lower sexual frequency. Hyde, DeLamater, and Hewitt (1998) studied the effects of women's employment on the sexual satisfaction of both spouses. They found that neither wives' nor husbands' number of hours at work were related to sexual satisfaction. However, wife and husband dissatisfaction with their work environment was predictive of decreased sexual satisfaction, as was higher levels of wife fatigue. Greeley (1991) also found that women's working outside of the home was not predictive of lower sexual satisfaction. Finally, White and Keith (1990) found that spouses who work different shifts had lower sexual satisfaction.

Marital Satisfaction and Sexual Satisfaction

The strong correlation between sexual satisfaction and general marital satisfaction has been extensively documented (Byers & Demmons, 1999; Call, Sprecher, & Schwartz, 1995; Christopher & Sprecher, 2000). That sexual satisfaction is an important predictor of marital satisfaction is also widely acknowledged (Cupah & Comstock, 1990; Greeley, 1991; Henderson-King & Veroff, 1994; Lawrance & Byers, 1995; Oggins et al., 1993). McCarthy (1999) made some postulations about the relationship between marital satisfaction and sexual satisfaction. He stated that when sex goes well, it is about 15%-20% of the relationship. On the other hand, when sex does not go well, it accounts for about 50%-75% of the relationship, gaining power as sexual problems increase and robbing the marriage of intimacy and vitality.

Lawrance and Byers (1995) proposed a theoretical model of sexual satisfaction. Their Interpersonal Exchange Model of Sexual Satisfaction examines the interpersonal context of sexual relationships and sexual satisfaction using exchange theory. In their model, greater relationship satisfaction, predicts greater sexual satisfaction. Sprecher (1998) also used the exchange theory in examining sexual satisfaction. She indicated that since the general exchange framework can really be a measure of relationship satisfaction, it is a highly important consideration in the study of sexual satisfaction.

Sexual Promiscuity

Many studies have examined the various aspects of premarital sexuality (Boyer, et al., 2000; Dankoski, Payer, and Steinberg, 1996; Ellis, 1998). Studies from decades ago looked at premarital sexuality by examining attitudes toward or behaviors of sexuality,

either using scales moving from pre-intercourse variables to having intercourse or a dichotomy of abstinence/virginity and intercourse (Hornick, 1978; Reiss, 1964).

In the past few decades, the rates of premarital sex have increased dramatically (as cited in Miller, et al., 1993). Currently, upon high school graduation, 60% of female adolescents and 61% of male adolescents will have engaged in premarital sex (Centers for Disease Control and Prevention, 2002). This percentage continues to increase as individuals age. Despite the dramatic changes in premarital sexual experience, many studies are still utilizing the measures of premarital sexuality that end with engaging in intercourse (Cullari & Minkus, 1990; Grunseit, Kippax, Aggleton, Baldo, & Slutkin, 1997; Paradise, Cote, Minsky, Lourenco, & Howland, 2001; Roche & Ramsby, 1993).

Considering the current sexually active population beginning in adolescence, a clear definition of sexual promiscuity is needed. Further, definitions of permissive attitudes or the absence of virginity may not incorporate the range of sexuality, or potential problems individuals may face if a broader definition is employed. Dishion's (2000) definition of sexual promiscuity is such a broad definition. In his study of at-risk adolescents, he constructed sexual promiscuity as a continuous measure of the number of reported partners in the past year. Simón (1989) also defined sexual promiscuity as number of lifetime sexual partners in his study of college-age men and women.

Using these definitions, the term sexual promiscuity can be synonymous with multiple partners. The term multiple partners has also been defined in several ways. Some have defined multiple partners as two or more partners (Li, et al., 2000; Tapert, Aarons, Sedlar, & Brown, 2001), while other studies have lower and higher categories of sexual partners. For example, an international study of men separated multiple partners

into two categories: 2-4, and 5+ (White, Cleland, & Carael, 2000). A study of adolescents separated multiple partners into three categories: 2-3, 4-5, and 6+ (Boyer, et al., 2000). Based on the definitions in the literature and the parameters of this study, sexual promiscuity will be defined as two or more sexual partners measured on a continuous scale.

Adolescent Sexuality

Since the 1950's, premarital sexuality has risen considerably (as cited in Miller, et al., 1993). From 1970 to 1988, premarital sexual intercourse in female adolescents aged 15-19 showed a 55% increase ("HIV-Related Knowledge," 1990). Of adolescent males aged 15-19 in 1988, 60% were sexually active (Sonenstein, Pleck, & Ku, 1991). While sexual experience has decreased in the last ten years, the numbers are still high (Centers for Disease Control and Prevention, 2002). The Centers for Disease Control and Prevention (2002) reported that in the year 2001, 45.6% of high school students reported having had sexual intercourse. High school freshman reported the lowest percentage of non-virginal students with 34.4%, while seniors reported the highest percentage with 60.5%.

Adolescents reporting sexual activity with multiple partners have become increasingly more common as well. Female adolescents reporting more than one partner moved from 39% in 1971 to 51% in 1979, and to 62% in 1988 (as cited in Smith, 1994; see also Miller, et al., 1993). Sexually active male adolescents in one study had an average of 5.1 lifetime partners (Sonenstein, Pleck, & Ku, 1991).

The number of sexual partners is strongly correlated with age at first intercourse. In a 1988 study of individuals between the ages of 15 and 24 years, 75% of those who

had sexual intercourse before age 18 reported two or more partners, and 45% reported four or more partners (“HIV-Related Knowledge,” 1990).

Adolescent Risky Sexual Behavior. The literature on risky sexual behaviors provides important information about promiscuity. Risky behavior in adolescence has generally been defined as behavior that puts adolescents at risk for acquiring sexually transmitted diseases, AIDS, or becoming pregnant (Boyer, et al., 2000; Romer, Black, Ricardo, Feigelman, Kaljee, Galbraith, et al., 1994; Tapert, et al., 2001). A study by Boyer and colleagues (2000) looked at 303 racially diverse, sexually active adolescents seeking care at a teen clinic. Participants’ mean age was 16.7 years, and they had been sexually active for a mean of 2.2 years. Of the sample, 43.8% had four or more partners, and 62% did not use condoms consistently.

Risky sexual behaviors are also closely associated to other risky behaviors, such as drug or alcohol use (Bailey, Pollock, Martin, & Lynch, 1999; Heffernan, Chiasson, & Sackoff, 1996; Shrier, Emans, Woods, & DuRant, 1997; Tapert, et al., 2001). One study compared risky sexual behavior of regular drinkers to those with an alcohol use disorder (Bailey, et al., 1999). They found that individuals with an alcohol use disorder were four times more likely to be sexually active, their age at first intercourse was an average of six months earlier, and they had 50% more partners than regular drinkers.

A longitudinal study compared a sample of youth in substance abuse treatment programs with a sample of similar community youth. The mean age of participants at the 2-year follow-up was 17.8 years. Seventy-two percent of participants in treatment at the 2-year follow-up had multiple sexual partners in the last year, while only 50% of the

community based sample had multiple sexual partners in the last year (Tapert, et al., 2001).

Another study examined the correlation between cigarette, tobacco, marijuana, cocaine, and alcohol use on two risky sexual behaviors: number of lifetime partners, and number of partners in the past 3 months. Significant correlations were found for the frequency and age of onset of all substance use on number of lifetime partners. Only age at first alcohol use, age at first sexual intercourse, and frequency of chewing tobacco/snuff use in the past 30 days were not significant when correlated with number of partners in the past 3 months (Shrier, et al., 1997). Heffernan and colleagues found that personal use of crack was also associated with more lifetime partners for women (1996).

Young Adult Sexuality

While the adolescent sexually active population has risen over the past few decades, and recently dropped slightly, the trend for young adults has not seen the recent decrease in sexual experience. It has continued to rise. A 20-year study was conducted on the attitudes and behaviors of college students. Students were interviewed every 5 years between 1965 and 1985. The study found that non-marital sexual intercourse increased 14.2% for men and 34.3% for women over the 20-year period. Men increased from 65.1% being sexually active in 1965 to 79.3% in 1985, while women increased from 28.7% to 63.0% (Robinson, Ziss, Ganza, Katz, & Robinson, 1991). Currently, studies show that 88% of never married men aged 20-39, and 81% of never married women aged 20-29 are sexually experienced (Billy, Tanfer, Grady, & Klepinger, 1993; Tanfer & Cubbins 1992).

The issue of multiple partners, or sexual promiscuity, is becoming more of a topic in the young adult research as sexual activity and permissive attitudes have increased (Smith, 1994). One study showed that 18.3% of never married men aged 20-39 had four or more partners in the past 1.5 years (Billy, et al., 1993). Of never married women aged 15-44, 7.9% reported two or more partners over a 3-month period (Seidman, Mosher, & Aral, 1992). Some of the predictors of high numbers of multiple partners for men include age, hypermasculinity, sensation seeking, and testosterone levels (Bogaert & Fisher, 1995). For women, predictors of multiple partners include earlier sexual experiences, low levels of religiosity, and for Caucasian women only, central city residence (Seidman, et al., 1992).

Correlates to sexual satisfaction in dating relationships mirror those found in marital sexual satisfaction in many ways. Sexual satisfaction is highly correlated with relationship satisfaction and emotional satisfaction in the relationship (Christopher & Sprecher, 2000; Sprecher, 2002; Waite & Joyner, 2001). One study's data indicated that the correlation between sexual satisfaction and relationship satisfaction in dating relationships was stronger for men than women (Sprecher, 2002).

Additionally, as has been implicated in studies with marital couples (Blumstein & Schwartz, 1983; Edwards & Booth, 1994), unmarried couples with lower sexual satisfaction are more likely to break up (Sprecher, 2002). In a longitudinal study of 101 dating couples in college, couples were asked about their sexual relationship each year for five years. Couples whose relationship ended between the first year and the second year were more likely to have had lower sexual satisfaction at baseline than those couples

whose relationships did not end. Sexual satisfaction was a stronger indicator of relationship dissolution for women than for men (Sprecher, 2002).

Cohabiting Sex

While premarital sexual activity has been increasing over the years in all age categories, and attitudes have become more permissive, casual sex is still not held to be as acceptable as sex in a committed relationship (Roche & Ramsby, 1993; see also Jacoby & Williams, 1985; Williams & Jacoby, 1989). Among adolescents and young adults, sexual activity tends to remain a part of romantic relationships, though these relationships may not be long-lasting. This is termed serial monogamy (Hyde & DeLamater, 2000; Williams & Jacoby, 1989).

One environment for committed premarital sexual activity is cohabitation. Cohabitation has been viewed as a preparation for marriage, a commitment viewed by society as “virtual marriage” (Martin, Martin, & Martin, 2001). Even so, Forste & Tanfer (1996) found that cohabitation is more similar to dating than to marriage. While cohabiting can be a committed relationship, the literature seems to indicate that it is not as committed as marriage and can, indeed, become another partner in the process of serial monogamy (Martin, et al., 2001). On average, cohabiting relationships only last approximately one year (Martin, et al., 2001).

As an environment for premarital sexual activity, the cohabitation literature consistently indicates that individuals who cohabit before marriage have slightly more sex, but less satisfying sex, than individuals in marriage (Blumstein & Schwartz, 1983; Christopher & Sprecher, 2000; Laumann, et al., 1994).

Furthermore, those who cohabit have lower levels of relationship satisfaction than married individuals (Nock, 1995; see also Brown & Booth, 1996). Interestingly, the literature shows that partners in current cohabiting relationships who plan to marry are not significantly different in their relationship satisfaction than married couples (Brown & Booth, 1996; Waite & Joyner, 2001). However, once married, couples who cohabited with each other previous to marriage tend to show lower levels of relationship satisfaction than couples who did not (Booth & Johnson, 1988; Cohan & Kleinbaum, 2002; DeMaris & Leslie 1984; Thomson & Colella, 1992; Watson, 1983).

Gender

In examining differences in sexuality both in adult populations, as well as adolescent populations, gender is almost always found to be a significant variable (Fisher, 1989; Halpern, Joyner, Udry, & Suchindran, 2000; Martin, et al., 2001; Meschke, Bartholomae, & Zentall, 2002; Paul, Fitzjohn, Herbison, & Dickson, 2000; Simón, 1989; Williams & Jacoby, 1989). Males and females are often significantly different on a variety of sexual matters, including attitudes, age at first intercourse, and risk of sexually transmitted disease (Boyer, et al., 2002; Crandall, 1992; Li, et al., 2000).

A 10-year-old meta-analysis examined the gender differences in sexuality (Oliver & Hyde, 1993). According to the review, males reported more permissive sexual attitudes and behaviors than women did, in most areas. While differences in sexual behaviors before engaging in intercourse were small, yet significant, there were moderately significant differences in sexual behaviors regarding intercourse. Effect sizes for these differences ranged between .20 and .49. Men reported a lower age at first intercourse, as well as higher frequencies of sexual intercourse and number of sexual

partners. When controlling for age, the significance of the gender differences decreased for younger samples, yet the differences remained moderately significant. This gender difference has been termed the “double standard” (Dankoski, et al., 1996; Istvan & Griffitt, 1980; Jacoby & Williams, 1985)

In addition to the 1993 meta-analysis, more recent studies have also documented the gender differences in number of partners, an especially significant finding for the current study. These studies have documented the differences between males and females in the number of sexual partners in adolescence, as well as adulthood, specifically that males tend to have a higher number of lifetime sexual partners than females (Boyer et al., 2000; Kann, Kinchen, Williams, Ross, Lowry, Hill, et al., 1997; Laumann, et al., 1994; Simón, 1989; Tapert, et al., 2001).

Premarital Sexual Promiscuity and Marital Sexual Satisfaction

While multiple partners, or sexual promiscuity, may increase the risk of acquiring sexually transmitted diseases, AIDS, or becoming pregnant, there may be an additional “risk” associated with future marriage that has not been considered by the literature. That risk is the potential negative effects on subsequent marital sexual satisfaction, which is the focus of this study.

As previously discussed, the sexual relationship is an important component in marriage and it has been postulated that it can constitute between 15%-75% of the marital relationship, with higher percentages correlated with increases in sexual problems and dissatisfaction (McCarthy, 1999). Additionally, sexual satisfaction is highly correlated with marital satisfaction (Christopher & Sprecher, 2000). Since 95% of the population

will marry at some time in their lives (Bureau of the Census, 1990), sexual satisfaction is an important concept to understand in order to sustain a satisfied life during marriage.

Exchange Theory. Research has shown that sexual satisfaction is comprised of two parts, emotional and physical satisfaction with the sexual relationship (Hyde & DeLamater, 2000; Lauman et al., 1994; Waite & Joyner, 2001). These components of satisfaction are based on individual expectations of aspects of the relationship and the amount of exchange between individuals in the relationship (Lawrance & Byers, 1995; Sprecher, 1998). This is the basis of Exchange Theory (Lawrance & Byers, 1995; Sprecher, 1998). Therefore, the framework set forth in this theory is particularly suited and may soon become a major theoretical basis for the study of sexual relationships, in general, and marital sexual satisfaction, specifically (Sprecher, 1998).

Exchange Theory as applied to sexual relationships is based on social exchange theories used by social scientists for decades (Sprecher, 1998). These theories refer to the exchange of resources, whether material or symbolic, between people and include the concepts of rewards, costs, equality, and comparison levels (Sprecher, 1998).

The specific model of exchange theory for sexual satisfaction, Lawrance and Byers' (1995) Interpersonal Model of Sexual Satisfaction, applies the basic exchange theory concepts to sexual satisfaction. The model has been found to be predictive of sexual satisfaction using longitudinal data (Lawrance & Byers, 1995). This model defines sexual satisfaction using the following formula summed over time:

$$\text{Sexual Satisfaction} = \sum \{(\text{Rewards} - \text{Costs}) + (\text{Comparison Level Rewards} - \text{Comparison Level Costs}) + (\text{Equality Rewards} - \text{Equality Costs})\}.$$

This model proposes that sexual satisfaction increases as the level of rewards in the sexual relationship are cumulatively higher than the costs of the sexual relationship. Lawrence and Byers define rewards as “exchanges that are pleasurable and gratifying” and costs as “exchanges requiring physical or mental effort or those producing pain, embarrassment, or anxiety” (1995, p. 268). For example, Mary complies with Tom’s sexual requests 90% of the time but does so in the evening, rather than his ideal morning time. If having his sexual requests met is more important to Tom than the time of day, his sexual satisfaction will increase.

Secondly, sexual satisfaction increases as current rewards are comparatively higher and current costs are comparatively lower than the level of rewards and costs expected. For example, Mary enters the sexual relationship expecting to orgasm in about half of her sexual encounters with Tom. If Mary experiences multiple orgasms at nearly every encounter, her sexual satisfaction will increase. If Mary also enters the sexual relationship expecting sex daily and only receives it three times a week, her sexual satisfaction will decrease unless the amount of weekly sex is not as important because of the reward of multiple orgasms.

Finally, sexual satisfaction increases as the reward levels and cost levels of each partner are perceived to come closer to being equal. For example, if Mary believes that she meets Tom’s sexual requests 50% of the time and that Tom meets her sexual requests 50% of the time, Mary’s sexual satisfaction will be higher than if she believes that she meets Tom’s requests 75% of the time and he meets her requests 25% of the time.

Using this model, sexual promiscuity before marriage can influence sexual satisfaction through rewards and costs, comparison level rewards and costs, and

perceived equality. Some of the rewards of being in a marital sexual relationship that may be compromised for individuals with repeated premarital sexual experience include growing together in sexual knowledge generally and of each other, and having less risk to invest emotionally in the sexual relationship, one of the main measures of sexual satisfaction (Laumann, et al., 1994). This is because premaritally promiscuous individuals will be less sensitive to their partner's needs and more focused on themselves and conquering their partner. For example, if Tom has been premaritally promiscuous, his sexual knowledge has already increased dramatically and he may feel less interested in discovering Mary's sexual likes and needs. A cost that could be negatively impacted is the necessity of compromising on sexual desires. If Mary has never previously had to compromise on her sexual desires, this need may become a much stronger cost than if she did not have the sexual experience.

The expectations of comparison level rewards and costs are based on personal and others' previous experiences (Sprecher, McKinney, & Orbuch, 1991). Having premarital sexual partners can change comparison level costs and benefits as expectations for the current relationship change due to personal experience and a greater knowledge, through that personal experience, of others' experiences. For example, if Mary has had several premarital partners, she will expect something different, out of her sexual encounters with Tom due to her previous sexual experiences and the experiences of her partners. Tom may not be willing to comply with requests other partners of Mary's have fulfilled. Further, if Mary believes she knows a lot about sex from previous sexual encounters she may be less likely to acknowledge and acquiesce to those of Tom's requests that are different from the knowledge she has gained from those encounters because they do not

fit with what she knows to be part of sex, or what her partner would enjoy. This can also affect Mary's satisfaction because Tom will be less satisfied with their relationship and may be less likely to respond to Mary's requests.

Being premaritally promiscuous may skew one's view of equality as sex in less committed relationships could foster a self-centered approach to sexual encounters rather than one of mutual pleasure since promiscuous people are more likely to see their partners as sex objects. For example, if Tom has had several premarital partners, he may focus more on achieving his own orgasm than on bringing his partner to orgasm.

In addition to the basic concepts of exchange theory, both as they specifically apply to sexual satisfaction and as they apply to a general understanding of sexual relationships, the concept of commitment in exchange theory is an important one (Rusbult, 1983). Commitment is increased as the outcome of rewards and costs is more positive than comparison levels for rewards and costs, which are based on expectations. If Tom wants sex several times a week but only expects sex once a week, when he and Mary have sex four times a week, he will be more committed to the relationship than if they have sex once a month. Commitment also increases as the outcomes from the current relationship are better than what the individual expects to receive from the best alternative(s), also called the comparison levels for alternatives. If newly-married Tom and Mary live in a retirement community, the options outside of the relationship are much lower than if they lived in an area of single adults. Therefore, the current relationship outcomes outweigh the expectations of the comparison levels for alternatives.

Finally, commitment increases as investment increases. Investments are either intrinsic or extrinsic. Intrinsic investments are those put directly into the relationship such as time and money. Extrinsic investments are external to the relationship but are connected to it such as mutual friends or shared possessions (Rusbult, 1983).

Using exchange theory, it can be argued that sexual promiscuity establishes different expectations of the emotional and physical components of the relationship around commitment. In premarital serially monogamous relationships, while sexual monogamy is counted upon, the commitment to the relationship expected in marriage is not (Hyde & DeLamater, 2000). Commitment to the relationship enhances emotional and physical satisfaction by providing a reason to invest in the relationship. As investments increase, commitment increases and so do the rewards of continuing in the relationship.

If either partner becomes less committed, the investment wanes. At some point, the investment of time and energy to find and enter into a new relationship becomes less costly than continuing investment in the current relationship (Waite & Joyner, 2001). For non-married couples, this point is reached more quickly than for married couples due to the social constraints and expectations of commitment in marriage (Hyde & DeLamater, 2000).

Elaborating on commitment and comparison levels of expectation, a study by Waite and Joyner (2001) found that the expectation of the longevity of pre-marital relationships was correlated with sexual satisfaction. Non-married individuals in relationships that were not expected to be life-long were less sexually satisfied than non-married individuals who were in relationships that were expected to be life-long. These correlations were true of both the emotional and physical aspects of sexual satisfaction.

In other words, expectations of the level of commitment involved in the relationship were a key correlate of the level of sexual satisfaction.

Lower commitment, as found often in premarital sexually monogamous relationships, lowers the rewards of continuing in the relationship. Lower commitment is influenced by lower investments, higher comparison levels for alternatives, and higher comparison level expectations. Comparison levels for expectations are based on what one feels they deserve, which is determined from prior experience and what is understood of others' experiences (Sprecher, et al., 1991). It can thus be inferred that these high comparison levels' influence on commitment may be taken into marriage.

Premarital Promiscuity and Marital Commitment. While no studies have examined the direct relationship between premarital promiscuity and marital commitment, commitment is a key argument in the explanation of the differences between cohabiting and marital couples (Booth & Johnson, 1988; Thomson & Colella, 1992). Thomson and Colella (1992) studied individuals in their first marriage who had not previously cohabited with another partner and whose spouse had not previously cohabited with another partner. Those who cohabited with their partner before marriage demonstrated lower levels of commitment to the institution of marriage than those who did not cohabit with their partner before marriage. Using a national two-wave sample of married persons, Booth and Johnson (1988) also found that cohabiting with one's spouse before marriage was negatively correlated with commitment to marriage.

Several studies suggest that sexually promiscuous individuals have acquired different expectations of the general exchange process in relationships, become less capable of functioning within the framework of exchange, and therefore are less likely to

remain in it once personal expectations are no longer being met. One proposition in exchange theory, especially applicable to the sexual relationship, is that inequitable relationship partners will become distressed and will attempt to eliminate the distress by increasing the equity, which may include leaving the relationship sexually, or altogether if equity cannot be restored (Sprecher et al., 1991).

Premarital Promiscuity and Marital Quality. The current literature has few studies that examine the effects premarital promiscuity on marital quality (Kelly & Conley, 1987; Larson & Holman, 1994; Lewis & Spanier, 1979; Tavris & Sadd, 1977). One study examined the effects of premarital sexual activity on marital satisfaction longitudinally in a 3-wave sample. They found that sexual activity with the future marital partner decreased marital satisfaction for both men and women. Other premarital partners also decreased marital satisfaction for men (Kelly & Conley, 1987). In Lewis and Spanier's (1976) theoretical article, they also stated that there was a negative relationship between premarital sexual activity and marital satisfaction. In contrast, the Redbook Report found that for women premarital sex did not affect marital satisfaction directly but may affect marital satisfaction through women's attitudes about sex (Tavris & Sadd, 1977).

The cohabitation literature also suggests that premarital partners are negatively correlated with relationship satisfaction (DeMaris & Leslie, 1984; Nock, 1995; Stets, 1993; Thomson & Colella, 1992; Watson, 1983). Using the exchange theory it can be hypothesized that premarital partners may begin a pattern of lower commitment, lowering equity, and raising the comparison level of expectations. A study comparing cohabiters

to married individuals found that cohabiters were significantly less satisfied in their relationships than married individuals (Nock, 1995).

Thomson & Colella's study (1992) showed that premarital cohabitation significantly lowered subsequent marital quality, as measured by happiness, conflict, and communication. A study of couples in their first years of marriage indicated that cohabitation is negatively correlated with marital satisfaction for both spouses (DeMaris & Leslie, 1984). Using the Dyadic Adjustment Scale, Watson (1983) found that individuals who cohabited before marriage had lower levels of marital satisfaction than those who did not. Stets (1993) found that prior cohabitation resulted in lower relationship quality for both men and women.

Other indicators of marital quality and the ability to function within an exchange framework are also negatively correlated with cohabitation prior to marriage (Booth & Johnson, 1988; Cohan & Kleinbaum, 2002; Stets, 1993). Booth and Johnson (1988) found that cohabitation is negatively correlated with marital interaction and positively correlated with marital disagreement. Stets (1993) found that previous cohabitation was significantly correlated with higher levels of disagreement. In a study of couples in the first two years of marriage, pre-marital cohabiters had significantly lower levels of problem solving and support behaviors than those who had not cohabited previous to marriage (Cohan & Kleinbaum, 2002).

Premarital Promiscuity and Marital Stability. Premarital sex has been shown to be negatively correlated with marital stability (Janus & Janus, 1993; Kahn & London, 1991; Larson & Holman, 1994; Teachman, 2003). In their study of women, Kahn and London found that premaritally sexually active women "faced a considerably higher risk

of marital disruption than women who were virgin brides” (1991, p. 845). Teachman (2003) found that having more than one premarital partner, or having partners besides the future spouse, was indicative of marital instability for women. The risk of divorce for women engaging in premarital sex with someone other than their husband increased 114%, compared to those who only had premarital sex with their husband.

The cohabitation literature also suggests that premarital partners are positively correlated with divorce-proneness (Balakrishnan, Rao, Lapierre-Adamcyk, & Krotki, 1987; Bennett, Blanc & Bloom, 1988; Booth & Johnson, 1988; DeMaris & Rao, 1992; Stets, 1993; Thomson & Colella, 1992). Thomson and Colella (1992) found that those who cohabited with their spouse before marriage had a greater likelihood of divorce than those who did not cohabit before marriage. Stets (1993) found that prior cohabitation resulted in lower marital stability. Booth and Johnson (1988) found cohabitation to be positively correlated with proneness to divorce and probability of divorce.

Another study found that Swedish women who cohabit before marriage with their spouse, regardless of length of cohabitation, have divorce rates an average of almost 80% higher than women who do not cohabit with their spouse before marriage (Bennett, et al., 1988). A study on marital dissolution for the first marriages of Canadian women showed that women who cohabited before their first marriage were much more likely to divorce than women who had not. The probability of divorce before 15 years of marriage was 35% for women who had cohabited compared to 19% for women who had not cohabited before their first marriage (Balakrishnan, et al., 1987).

DeMaris and Rao (1992) found that any cohabitation before marriage increases the risk of divorce by around 46%. The hypothesis of unconventional attitudes being the

main contributing factor in this finding was not supported. DeMaris and MacDonald (1993), after controlling for unconventional attitudes, found that serial cohabitation was significantly associated with higher rates of divorce, while one instance of cohabitation was not. More recently, a study of premarital sex and cohabitation found that for women, premarital sexual activity or cohabitation that is limited to the future husband does not increase the risk of divorce. Women who have more than one sexual or cohabitation partner before marriage, however, do have an increased risk of divorce. This risk was highest for serial cohabiters (Teachman, 2003).

It has been postulated that cohabitation experience causes later relationship instability by changing attitudes and perspectives of cohabiters, as well as changing views of marriage (Axinn & Thornton, 1992; McGinnis, 2003; Thornton, Axinn, & Hill, 1992). Using exchange theory, it can be stated that cohabitation changes the expectations or comparison levels of expectations and commitment because cohabitation involves less interdependence than marriage. There are a few studies that have demonstrated the validity of this explanation by examining attitudes of respondents pre-cohabitation and during cohabitation. These studies indicate that cohabiters were more accepting of divorce than they were previous to cohabitation and that “the effect of cohabitation on acceptance of divorce is not spurious” (Axinn & Thornton, 1992, p. 372; see also Thornton, et al., 1992). A more recent study found that cohabitation lowers the perceptions of benefits in marriage, but also found that cohabitation lowers cost perceptions, indicating that cohabitation’s effects may not be entirely negative, though benefit perceptions were reduced much more than cost perceptions (McGinnis, 2003).

Premarital Promiscuity and Extramarital Affairs. Studies further indicate that having premarital partners is negatively correlated with being monogamous after marriage (Forste & Tanfer, 1996; Treas & Giesen, 2000; White, Cleland & Carael, 2000). Treas and Giesen (2000) found that for both men and women, having sexual experiences previous to marriage or cohabitation was positively correlated with infidelity in the current relationship, for both cohabiting and marital relationships. The authors attributed this finding to the “learned advantage” sexually experienced individuals have with regards to seeing sexual opportunities and maintaining partners. An international study of men examined factors of extramarital sex. The number of premarital partners was significantly correlated with extramarital intercourse in the past year (White, Cleland & Carael, 2000).

From the cohabitation literature, Forste and Tanfer (1996) examined the sexual exclusivity of dating, cohabiting, and married women using a national survey. They found that cohabitation was predictive of characteristics influencing lower sexual exclusivity, and that those who cohabit before marriage were less likely to be sexually exclusive after marriage.

Premarital Sexual Experience and Marriage Desirability. Studies have found that those with less sexual experience are considered more desirable as dating and marital partners (Istvan & Griffitt, 1980; Jacoby & Williams, 1985; Williams & Jacoby, 1989). This observation may be due to the fact that certain characteristics that “serve as cues to marital survival and satisfaction are preferred more than are characteristics that are unrelated or negatively correlated with relationship survival” (Howard, Blumstein & Schwartz, 1987, p. 200). Therefore, through the process of finding long-term

relationships, the expectation of commitment, and the capacity to function well within the framework of exchange is desired. Those who are less sexually experienced are anticipated to fill these expectations better, that is they are anticipated to be more committed and have lower comparison levels, than those who have had more sexual experience and are therefore more desired as marital partners (Sprecher, et al., 1991).

For example, Jacoby and Williams (1985) studied a group of college students and found that both males and females showed preference for partners who had not engaged in sexual intercourse. This preference remained even when controlling for the sexual experience of the respondent. Further, individuals having large numbers of sexual partners were rated by respondents as less desirable dating and marriage candidates than individuals having few numbers of sexual partners.

Williams and Jacoby (1989) found that both men and women have highly significant preferences for virginity. Again, their findings were significant regardless of the amount of sexual experience of the respondent, further suggesting that both those who had no sexual experience and those who had sexual experience were aware of the importance of commitment indicators.

Finally, Sprecher and colleagues (1991) found that for marriage desirability, individuals with no petting or intercourse experience were most preferred, followed by individuals with various petting experience but no intercourse experience, and then by those with intercourse experience.

Summary

Through application of exchange theory, it follows that premarital sexual promiscuity can negatively affect marital sexual satisfaction through reduced

commitment to, and differing expectations of the emotional and physical aspects of the sexual relationship. This is an important concept of study as premarital sexual promiscuity continues to become more prevalent (as cited in Miller et al., 1993; Robinson et al., 1991). There is a need for long-term consequences of premarital sexual promiscuity to be examined in more detail. Thus, premarital sexual promiscuity must be considered among other documented ‘risks’ that negatively affect marital and sexual satisfaction.

Hypotheses

Two hypotheses have emerged out of the reviewed literature and theory. Using exchange theory, it has been demonstrated that the potential for a negative correlation between premarital sexual promiscuity and marital sexual satisfaction exists. Thus, the first hypothesis is that sexual promiscuity before marriage will be negatively correlated with sexual satisfaction in marriage.

The second hypothesis stems from the long-standing “double standard” which allows men to be more sexually promiscuous than women and therefore, to associate less guilt with sexual promiscuity. In addition, male promiscuity has been more socially acceptable for much longer and some adaptation may have occurred to compartmentalize sexual experiences. This “double standard,” while waning, is still impacting gender differences, as males are still more likely to have more sexually permissive attitudes and sexually promiscuous behavior (Oliver & Hyde, 1993). Therefore, the second hypothesis is that the negative correlation between premarital sexual promiscuity and marital sexual satisfaction will be stronger for women than for men.

Chapter 3. Methods

Procedure

This study used data from the National Health and Social Life Survey conducted by Laumann, Gagnon, Michael, and Michaels (1992). Data were collected from January to November of 1992 through a national multistage area probability sample, which was a sample of household addresses. A hand-addressed letter explaining the purpose of the study was sent a week prior to the arrival of an interviewer. Interviewers used a variety of methods to improve response rates, including carrying letters of endorsement from notable local and national leaders, letters from the study headquarters encouraging participation, and letters from local professors addressing specific concerns raised by other respondents. In addition, respondents were supplied with a hotline number to the study headquarters where any concerns could be addressed. Incentive fees were also included in varying amounts for reluctant respondents. Analysis indicated that those who required larger incentives were not statistically different in the quality of information provided than those who did not initially receive incentives (Laumann, et al., 1994).

Information was obtained through a mixed-mode strategy, which was designed to maximize reporting of sensitive information. The main method was face-to-face interviews. During the interviews, four short self-administered forms, totaling nine pages, were administered. When completed, they were placed in a sealed “privacy envelope” so the interviewer would not see the answers. The first form concerned income and the second asked general questions about sexual activity. Questions about sex in the previous year included number of partners, relationship to partners, gender of partners, and frequency. Questions about partners in the previous 5 years included

number of partners and gender of partners. Finally, questions about sex since age 18 included number of partners of each gender, sex for money, and a question about extramarital affairs. The third form assessed masturbation practices, and the fourth form, administered at the end of the interview, asked twenty questions about the most sensitive sexual behaviors across the life-span, such as forced sex, homosexuality, paid sex, AIDS, and combining sex with drug use. Some of these questions had previously been asked in the interview.

The original sample is representative of the non-institutionalized, English speaking national population aged 18 to 59. Of the 4,369 eligible respondents selected for inclusion in the study, the overall response rate was 78.6%, or 3,432 responses. Two samples were included, the main sample of 3,159 individuals, and an oversample of 273 individuals, which was gathered to increase the number of Blacks and Hispanics in the survey. While the size of this sample is inadequate for in-depth analyses of smaller subpopulations, it is more than adequate for obtaining national estimates for the analysis of many population parameters (Laumann, et al., 1994).

In order to focus on the effect of premarital sexual activity on subsequent marital sexual satisfaction, middle-aged members of the sample were excluded from the subsample used in the analysis of the present study. This was done to minimize the confounding effect of life experiences, such as divorce, remarriage, and menopause, on the association between premarital and marital sexual factors. Consequently, members of the subsample were limited to those who were currently in their first marriage and were less than 40 years old. These exclusions reduced the sample to 729 respondents. The sample was further reduced by missing data, with nearly half (390) of the eligible sample

failing to respond to the questions regarding premarital sexual activity and 33 participants missing data about marital sexual satisfaction. After excluding these cases with missing values, the final sample for this study was 313 males and females.

Sample Characteristics

Descriptive statistics for the variables are shown in Table 1. Respondents were between age 18 and 40, with a mean age of 31.1 and a standard deviation of 5.56. Nearly thirty-eight percent of respondents were male and 62.3% were female. Caucasians made up 72.7% of the sample, with Blacks representing 10%, Hispanics comprising 12.2% and other ethnicities totaling 5.1%. Respondents were categorized into 5 income categories, with 18.7% of respondents in the \$0-15,000 income category, 22.3% in the \$15,001-30,000 category, 29.4% in the \$30,001-50,000 category, 19.8% in the \$50,001-75,000 category, and 9.8% more than \$75,001.

Table 1 Here

Respondent differed in their religious denominations. Of respondents 7.7% professed no religious denomination, 50.9% were Protestant, 30.7% were Catholic, 1.2% were Jewish, 2.1% belonged to an Eastern religion, and 7.4% belonged to other religious denominations. Respondents ranged in their level of religiosity from 9.8% never attending religious services, 4.5% attending less than 1 time a year, 13.6% attending 1 to 2 times a year, 13.5% attending several times a year, 8% attending about once a month,

11.3% attending 2 to 3 times a month, 6.1% attending nearly every week, 23.2% attending every week, to 10% attending several times a week.

Measures

The dependent variable was sexual satisfaction in marriage. This variable combined a measure of the emotional element of sexual satisfaction and a measure of the physical element of sexual satisfaction into one overall measure of sexual satisfaction. “Was sex with your spouse emotionally pleasing?” and “Was sex with spouse physically pleasing?” are questions used in determining the emotional and physical component of sexual satisfaction but combined together they have not been measured for validity and reliability (Waite & Joyner, 2001). Both of these questions had 5 response options: extremely, very, moderately, slightly, or not at all pleasurable (or satisfying). These two items were combined to create a composite measure of sexual satisfaction. Psychometric testing suggested that the scale is reliable. The two items had a correlation of .780, and the Chronbach’s alpha, used to assess internal reliability was .89.

The independent variable was premarital sexual promiscuity. This variable was constructed by combining a variable that measured how many partners the respondent had before age 18 with a variable measuring the number of partners since age 18 including the marital partner. The later variable included the number of partners during age 18 only if the respondent was over age 18. Therefore, respondents under age 18 and over age 18 had accurate partner data, but respondents who were age 18 and had sex for the first time at age 18, did not have accurate data. Fortunately, only one respondent in the sample was currently 18 and had sex for the first time at age 18, so one partner was manually added to that respondent’s premarital sexual promiscuity variable. The data did

not differentiate between individuals who had sex with their marital partner before marriage and those who did not. Due to this discrepancy, the marital partner is included in this measure as a reference. The variable was constructed as a continuous, interval variable, which is consistent with other studies (Dishion, 2000; Simon, 1989).

Control variables included in the analysis were race, socioeconomic status, and religiosity. Race and socioeconomic status were included because of the possible cultural differences due to race and social class regarding sexual attitudes and behaviors (Christopher & Sprecher, 2000). Religiosity was included as a control variable because the effect of sexual promiscuity on sexual satisfaction may vary between religious and non-religious individuals (Reiss, 1967). Birth of a child was used as a control because sexual satisfaction after the birth of a child may change due to life circumstances involving child rearing (Lewis & Spanier, 1976).

Race was measured by two questions, “What is your race?” and “Do you consider yourself Hispanic?” These two questions were asked to be sensitive to the portion of the White population who also consider themselves Hispanic. The first question had 5 response options: White, Black, Alaskan Native/Native American, Asian/Pacific Islander, and Other. The second question was coded yes or no. These responses were combined into four variables, Black, White, Hispanic, and other, due to the low numbers of Alaskan Native/Native American and Asian/Pacific Islander respondents. This variable was used in the regression as a categorical covariate with a simple contrast, signifying that the variable was contrasted against itself using White as the reference category.

Socio-economic status was measured using a variable that cumulated the total of “your own wage-earnings,” “your spouse’s wage-earnings,” “additional household

member's wage-earnings," "other income from investments to any household member," "other income from government programs to any household member," and "gifts, fellowships, all other sources." Participants were instructed to write their best estimate of their previous yearly household income for each section before taxes. The variable was then categorized into five total household income variables: \$1-\$15,000, \$15,001-\$30,000, \$30,001-\$50,000, and \$50,001-75,000, and greater than \$75,000.

Religiosity was measured by the question, "How often do you attend religious services." There were 9 response options: never, once a year, 1-2 times a year, several times a year, about once a month, 2-3 times a month, nearly every week, every week, and several times a week.

The presence of children was measured by a variable comprising the total number of live births reported. This variable was then categorized into a dichotomous variable where 1 indicated persons who had not reported any live births, and 0 indicated persons who had reported any number of live births. This variable was used in the regression as a categorical covariate with an indicator contrast, signifying that the variable would be contrasted against itself and the presence or absence of falling in the category.

Analysis

Skewness and kurtosis tests for a normal distribution of the dependent variable, marital sexual satisfaction indicated that the variable was very skewed toward higher satisfaction. The skewness measure was 1.55, more than two times the standard error of skewness, which was .22. Further, the kurtosis measure showed that the dependent variable was very clustered around a central point and not normally distributed. The kurtosis measure was 3.67, with a standard error of .44.

Because the dependent variable was not normally distributed, the variable was collapsed into a dichotomous variable, with not at all, slightly, and moderately representing modestly satisfied, and very and extremely indicating extremely satisfied. Binary logistical regression, which is an appropriate statistical multivariate test for a dichotomous dependent variable, was used to test the hypotheses.

The second hypothesis was tested using the same model as the first hypothesis. Separate models were run for males and females in order to examine gender differences in the effect of premarital sexual promiscuity on marital sexual satisfaction. Gender differences were determined by comparing regression weights between the male and female models.

Chapter 4. Results

Frequencies of Sexual Satisfaction and Sexual Promiscuity

As indicated in Table 2, most respondents reported being very satisfied with the physical and emotional aspects of their sexual satisfaction with their husband or wife. Originally responses were measured on a Likert scale where 1 indicated extremely satisfied, and 5 indicated not at all satisfied. Respondents marking 1 as their sexual satisfaction was 37.5%, 15.7% of respondents marked 1.5, 31.9% of respondents marked 2, 2.5 was 7.3%, 5% marked 3, 3.5 was .6%, 4 was .4%, 4.5 was .6%, and 5 was .3%. The mean response was 1.73 and the standard deviation was .96. Due to the highly skewed nature of the data, the variable was recoded into extremely satisfied with 85.5% of respondents, and modestly satisfied with 14.2% of respondents.

Table 2 Here

Respondents' number of partners, which included the marital partner, ranged from 1 to 191, with a mean of 9.7 partners, a median of 4 partners, and a standard deviation of 11.7. Twenty-four percent of respondents reported 1 partner, 39.5% reported between 2 and 5 partners, 19.5% reported between 6 and 10 partners, 10.6% reported between 11 and 20 partners, 3.2% reported between 21 and 30 partners, and 2.1% reported between 31 and 60 partners.

Association between Sexual Satisfaction and Premarital Promiscuity

Results indicate that marital sexual satisfaction differs significantly between respondents with more or less sexual promiscuity. As indicated in Table 3, the coefficient for sexual promiscuity was $-.039$ and was significant at the $.003$ level. This indicates that for every additional premarital sexual partner a respondent has, the likelihood that he or she will categorize him/herself as being extremely satisfied with his/her marital sexual relationship goes down 3.9%. There were no significant effects by race/ethnicity, socio-economic status, religion, or number of births.

The model chi-square was 18.413 and there were 8 degrees of freedom, which gives the amount of explained variation in the model. The $-2 \log$ likelihood was 263.101, which gives the amount of unexplained variation in the model, indicating that there was a lower level of explained variation than unexplained in the entire model.

Table 3 Here

Gender Differences

Frequency Gender Differences in Sexual Satisfaction and Sexual Promiscuity.

Although males and females both reported high levels of marital sexual satisfaction, there were slight differences between the two. Of males, 87.7% reported being extremely satisfied with their marital sexual relationship and 12.3% reported being moderately satisfied. Females were less likely to report high levels of marital sexual satisfaction than males. Of females, 84.6% reported extreme satisfaction while 15.4% reported only moderate satisfaction with their marital sexual relationship. Using independent t-tests of

the mean scores using a 95% confidence interval male sexual satisfaction was not significantly different than females' sexual satisfaction.

The independent variable, premarital sexual promiscuity, also showed differences between males and females. Men were more likely to have more partners and to cover the range of partners than women. The range of partners was 1-191 for men and 1-66 for women. The median number of partners was 11.35 for men and 4.25 for women with a mean of 6 (SD 19.77) and 3 (SD 6.3) partners respectively. For males, 11.6% reported only one sexual partner, while 33% of females reported only one sexual partner. Thirty-four percent of males reported between 2 and 5 partners, while 44% of women reported between 2 and 5 partners. Of males, 23.8% reported between 6 and 10 partners, while 16.2% of females reported between 6 and 10 partners. The percentage of males reporting between 11 and 20 partners was 17.7% and females was 5.2%. The percentage of males reporting between 21 and 30 partners was 7.5% and females was 0%. Finally, 3.4% of men reported having between 31 and 60 partners, while 1.1% of females reported having between 31 and 60 partners.

Using independent t-tests with a 95% confidence interval male premarital promiscuity was significantly different than females' premarital promiscuity. The confidence interval was between 4.12 and 10.09 and the t-test was 4.681, significant at the .001 level.

Gender Regression Differences. The male model explained much more of the variation of marital sexual satisfaction than did the female model. The model chi-square for the males was 24.737, while for the females the model chi-square was only 3.809 with both models reporting 7 degrees of freedom. The male -2 log likelihood was 88.843 and

the female model's -2 log likelihood was 153.488. Further, the male model had significant variables including premarital sexual promiscuity, while the female model did not have any significant variables.

The coefficient for premarital sexual promiscuity in the male model was -.053 and was significant at the .006 level. This indicates that for every additional premarital sexual partner a man has, the likelihood that he will categorize himself as being extremely satisfied with his first marital sexual relationship as compared to only being moderately satisfied decreases by 5.3%. Additionally, males in the "other" race/ethnicity category, those not White, Black, or Hispanic, but which included Asians, Native Americans, Pacific Islanders and others, are 8.9% less likely than White males to report being extremely satisfied with their first marital sexual relationship as compared to only being moderately satisfied.

The coefficient for premarital sexual promiscuity in the female model was -.046 and approaches significance but does not reach significance. The standard error for this variable was .029, .01 higher than the male model and .016 higher than the complete model. No other variables in the model were significant.

Chapter 5. Discussion

Premarital Sexual Promiscuity and Marital Sexual Satisfaction

The results of this study support the first hypothesis, indicating that premarital sexual promiscuity may be a significant predictor of subsequent marital sexual satisfaction. The association between promiscuity and sexual satisfaction remained significant even when the contextual variables of race/ethnicity, socio-economic status, religiosity, and presence of children were included in the statistical model. Again, this model does not account for individuals who had premarital sex with their future marital partner.

Though this hypothesis was based on studies which used social exchange theories, this study does not specifically test concepts of social exchange such as rewards, costs, or commitment levels. Therefore, while social exchange theory concepts were used as a theoretical basis for the study, there may be alternative explanations for the findings.

This hypothesis is consistent with previous research, which indicates that sexual satisfaction is positively correlated with level of sexual rewards, relative reward level, and equality, but negatively correlated with level of costs and relative costs (Lawrance and Byers, 1995). As premarital sexual promiscuity increases, different expectations of the emotional and physical components of sexual relationships are developed, especially around commitment. Rusbult (1983) indicates that commitment increases as comparison levels for expectations and alternatives decrease, and as investment increases.

Commitment provides a reason to continue investment in the relationship, which reciprocally enhances commitment and therefore enhances emotional and physical satisfaction. Premarital sexual relationships have been demonstrated to require, and

therefore, receive less commitment from its members than marriage (Hyde & DeLamater, 2000). A long-standing pattern of less committed relationships can change the expectations of commitment each has for him/herself and the expectations each anticipates the other partner has regarding commitment. Differing expectations of commitment, which gradually change as the number of sexual partners increase, invite partners to withhold investing in the sexual relationship in ways they may otherwise invest if their commitment expectations were higher. As explained above, the consequence then, of lowering investment in the relationship is lower commitment.

Premarital sexual promiscuity not only invites different commitment expectations than marriage (Hyde & DeLamater, 2000), it also changes the comparison levels for expectations and alternatives. The more partners an individual has, the higher their comparison levels of expectations, which originate from what an individual feels they deserve based on prior experience and what is understood of others' experiences (Sprecher, et al., 1991). In other words, having had more experience, their expectations of what they believe sex should be like changes and when a partner, or sexual encounter with a partner does not measure up, assuming the impossibility of a partner "always" measuring up, expectations are not met. Additionally, the more partners an individual has previously had, the more their comparison levels for alternatives increases. That is, the more sexual experiences they have had with others, the more comparing to other potential partners occurs, which often decreases the attractiveness of the current choice as expectations for another relationship have yet to be explored and therefore are often exaggerated.

Further, less sexual experience is desired in marital partners (Istvan & Griffitt, 1980; Jacoby & Williams, 1985; Williams & Jacoby, 1989) because certain characteristics that “serve as cues to marital survival and satisfaction are preferred more than are characteristics that are unrelated or negatively correlated with relationship survival” (Howard, et al., 1987 p.200). The results from this data suggests that a major cue imbedded in those with less sexual experience is a different level of commitment both to marriage and to the marital sexual relationship, which is also substantiated by previous research (Booth & Johnson, 1988; Forste & Tanfer, 1996; Thomson & Colella, 1992; White, et al., 2000).

Finally, levels of rewards and costs and relative rewards and relative costs can also change as levels of premarital sexual promiscuity increase. Rewards and costs change based upon the level of investment and commitment an individual feels toward the marital and sexual relationship. As previously discussed, lower commitment and investment levels are reciprocally connected and individuals with lower commitment expectations will be less likely to be rewarding toward their partner, which invites less rewarding behavior from their partner. Relative rewards as compared to one’s expectations decrease and relative costs as compared to one’s expectations increase, as more sexual partners and experiences have been explored in a more self-centered environment where fewer investments are expected or required.

Therefore, as levels of premarital sexual promiscuity increase, the commitment and levels of sexual satisfaction decrease by decreasing rewards, comparison level costs, and investment, and increasing costs and comparison level rewards, and comparison levels for alternatives (Lawrance & Byers, 1995; Rusbult, 1983).

Additionally, premarital sexual promiscuity has been shown to be correlated with marital satisfaction (Kelly & Conley, 1987; Larson & Holman, 1994; Lewis & Spanier 1979). Marital satisfaction and sexual satisfaction are highly correlated (Byers & Demmons, 1999; Call, Sprecher, & Schwartz, 1995; Christopher & Sprecher, 2000). This study provides an important link between marital satisfaction and sexual satisfaction and strengthens the literature in both areas.

Gender Differences

The second hypothesis, that there would be gender differences, was correct but in the opposite direction hypothesized. There were significant gender differences between men and women but the significant effects were much stronger for males, not females. The gender variable in the full model was not significant but in running different models for males and females, the male model was significant while female model only approached significance. Therefore, while males' marital sexual satisfaction is affected by premarital sexual promiscuity, these results indicate that the relationship is not significant among females.

While men report a lower age at first intercourse, higher number of sexual partners, a higher frequency of intercourse, and tend to report more permissive sexual attitudes (Oliver & Hyde, 1993), it appears that their marital sexual satisfaction is still affected more by premarital sexual partners than females' marital sexual satisfaction. This may be due to the evolutionary biological theory that males tend to be more invested in or notice more the physical aspects of the sexual relationship, while women tend to be more invested in or notice more the emotional aspects of the sexual relationship (Buunk, Angleitner, & Buss, 1996). Due to this difference, premarital sexual promiscuity may not

influence females as much because the past emotional connections are no longer salient and the focus is on meeting the needs of the current relationship. Further, women tend to be aroused more and are more likely than men to report attraction increasing in long-term relationships, indicating that having previous sexual experiences may in fact lower the overall comparison levels and comparison level for alternatives for women in a marital sexual relationship (Knoth, Boyd, & Singer, 1988).

Another explanation might include the intricate nature of the sexual aspects of the female body. Clinicians and physicians report that while the average time for male orgasm during sexual intercourse is around 2.5 minutes, the average time for female orgasm is closer to 15-20 minutes (Stahmann, Young, & Grover, 2004). Many women do not orgasm during every sexual encounter; in fact, only 29% of women consistently experience orgasms during sex (Laumann, et al., 1994). Clinicians indicate that women often need time and opportunities to experience their body's reactions during sexual intercourse in order to "learn" how to orgasm and what is required from a partner to be pleased (Stahmann, et al., 2004). Therefore, having had the opportunity to, in essence, practice, may bring benefits to the marital sexual relationship that may help to cancel out any negative repercussions premarital sexual relationships may have on marital sexual satisfaction.

A third explanation addresses the longstanding societal differences on what is sexually acceptable for men and women. It has been much more acceptable in the past for men to be sexually promiscuous; therefore men's attitudes about sex have been and continue to be more promiscuous than women's attitudes, though the difference has decreased over time as societal norms have shifted (Oliver & Hyde, 1993). When

attitudes and actions are not consistent, the inconsistency generally drives a shift in one to accommodate the other; actions may be subdued or attitudes may change. Women who have been premaritally promiscuous may have developed more positive attitudes about sex, either because attitudes and actions were not consistent, or because they were not constrained by past societal norms indicating that good women do not like, or participate in sex. The more positive attitudes about sex before marriage may help them have higher levels of marital sexual satisfaction. Therefore, attitudes about sex may be an intervening variable in explaining the relationship between marital sexual satisfaction and premarital sexual promiscuity for females.

Implications for Clinicians

It is important for clinicians to recognize that the number of partners a husband has before marriage may adversely affect his marital sexual satisfaction. It has been suggested that when working with married clients, it is useful to ask specific questions regarding their sexual history to better understand their current sexual problems (Hammond, 1984). In light of the results of this study, information about sexual history, though perhaps brief, can lead clinicians to important information about their current sexual situation and, as studies have previously shown, general marital satisfaction as well (Kelly & Conley, 1987; Larson & Holman, 1994; Lewis & Spanier, 1979). Due to the differences that are found by sexual attitudes and values, including partners' beliefs about sex before and after marriage is also important.

Once information has been assessed for, a clinician should be sensitive to how attitudes and values interact with the premarital sexual behavior. Special sensitivity

should be paid to feelings of guilt or other symptoms such as depression, anxiety, or sexual dysfunction that may result from having attitudes differing from previous action.

Furthermore, this information is important for all clients, whether single or married, adolescent or adult, because the implications of premarital sexual activity are much farther reaching than merely an in-the-moment decision. Premarital sexual promiscuity has been increasing over the past few decades and has become a more normal and socially accepted behavior (Miller, et al., 1993). Previous research indicates that the average age of first sexual unions is 15.6 for males and 17.4 for females (Hyde & DeLamater, 2000). This research indicates that by the time individuals marry, the mean number of sexual partners is 11 for men and 4 for women.

One may describe the effects of premarital promiscuity using social exchange concepts to clients using examples as follows: If Tom and Mary were sleeping around a lot before they got married, once they are married they will not be as happy with each other sexually. There are several reasons why, which may vary between people. One reason is because they may think they are a know-it-all when it comes to sex and will not be as likely to listen to what their partner wants. Another reason is because they can become more selfish, wanting to be satisfied themselves more than wanting to satisfy their partner even to the point where they may view their partner as a sex object. A third reason is that they will not be as committed to each other because they have more experience to be able to think about how past relationships, or future relationships, could fulfill them better sexually than the one they are in. Finally, if they are not as committed to each other they will not want to invest as much time and energy into the relationship.

While previous research has limited their focus of potential effects of premarital promiscuity to physical diseases such as STDs or AIDS, this research indicates that the risks might include the ability of men to have a satisfying committed sexual relationship after marriage (Boyer, et al., 2000; Romer, et al., 1994; Tapert, et al., 2001). Educating clients about the potential risks associated with premarital sexual activity is an important ethical consideration that includes education beyond physical effects. Clients and individuals in the community need to be aware of the heightened risks on future relationships. Encouraging all premarital individuals to consciously examine the potential risks of sexual promiscuity is essential in assisting clients to make wise, educated decisions about their future sexual satisfaction if they ever plan to marry.

Additionally, sexual satisfaction and marital satisfaction are highly correlated and these aspects of the marital relationship have much influence on each other (Byers & Demmons, 1999; Christopher & Sprecher, 2000). Considering that 95% of the population will marry (Bureau of the Census, 1990), sexual satisfaction is important to understand and maintain in order to sustain a satisfied life during marriage. Due to the high correlation between sexual satisfaction and marital satisfaction, there may be a further relationship between number of premarital sexual partners and marital satisfaction itself, if not solely an indirect one through marital sexual satisfaction. The implications for marital and future marital couples' relationships could then, be even more encompassing and is a topic for further research.

Therefore, all clinicians who work with couples, whether premarital or marital, on general marital satisfaction or specific sexual problems, should consider briefly exploring the sexual history of each client including behaviors and beliefs in order to better

understand couples' current struggles. This exploration must be sensitively conducted and may be most beneficial if partners are interviewed separately.

It is finally important for clinicians to note that this study indicates there may not be differences in marital sexual satisfaction for individuals in different socio-economic circumstances, individuals who attend religious services with varying frequencies, persons who have children versus persons who do not, and differences in race/ethnicity with the exception of males who are not Black, White, or Hispanic. Therefore, clinicians should be careful not to attribute marital sexual satisfaction differences based solely on these criteria.

Limitations and Directions for Further Study

Limitations of this study include the retrospective nature of the data collected. Respondents were required to remember the number of partners, which may have resulted in over reporting errors, as possibly seen by the outliers in number of sexual partners in this study. Longitudinal research is needed to fully address this issue and to limit reporting errors. A second limitation is that the dependent variable is only measured by two separate questions. This does not allow for as detailed and comprehensive a study of the effects of premarital sexual promiscuity on marital sexual satisfaction as is desirable. Especially considering the high sexual satisfaction most respondents indicated, a broader range of questioning may bring out other dynamics. A third limitation is the inability to distinguish between individuals who had sex with their spouse before marriage and those who did not. It would be important to know whether the same results are present for those who have premarital sex with their future spouse.

Future research should examine the effects of premarital sexual promiscuity on marital sexual satisfaction using different samples that will compensate for the limitations of this study. For example, research is needed to further examine the relationship found here between race and marital sexual satisfaction. Ethnic minority groups should be studied individually in more detail to determine which groups are less satisfied and the reasons why.

Studying the effects of sexual promiscuity on marital sexual satisfaction for females is also an important area for further study and development. There may be other contextual variables that can help explain the relationship between marital sexual satisfaction and premarital sexual promiscuity for females. For example, attitudes about sex may be an intervening variable that explains this relationship. Additionally, further research should also include general marital satisfaction as a predicted variable in order to examine the strength of both indirect effects through sexual satisfaction and direct effects of premarital sexual promiscuity on marital sexual satisfaction.

Further research should examine the relationship between sexual promiscuity and marital sexual satisfaction and general marital satisfaction. This should be conducted using a longitudinal design that incorporates the social exchange concept of commitment and those concepts in Lawrance and Byer's Interpersonal Model of Sexual Satisfaction (1995). Additionally, attitudes and beliefs about sex should also be examined for their potential effects on both sexual satisfaction and marital satisfaction.

References

- Axinn, W. G., & Thornton, A. (1992). The relationship between cohabitation and divorce: selectivity or causal influence? *Demography*, *29*, 357-374.
- Bailey, S. L., Pollock, N. K., Martin, C. S., & Lynch, K. G. (1999). Risky sexual behaviors among adolescents with alcohol use disorders. *Journal of Adolescent Health*, *255*, 179-181.
- Balakrishnan, T. R., Rao, K. V., Lapierre-Adamcyk, E., & Krotki, K. J. (1987). A hazard model analysis of covariates of marriage dissolution in Canada. *Demography*, *24*, 395-406.
- Bennett, N. G., Blanc, A. K., & Bloom, D. E. (1988). Commitment and the modern union: Assessing the link between premarital cohabitation and subsequent marital stability. *American Sociological Review*, *53*, 127-138.
- Berry, W. D., & Feldman, S. (1985). *Multiple Regression in Practice*. London: Sage Publications.
- Billy, J. O. G., Tanfer, K., Grady, W. R., & Klepinger, D. H. (1993). The sexual behavior of men in the united states. *Family Planning Perspectives*, *255*, 52-60.
- Blumstein, P., & Schwartz, P. (1983). *American Couples*. New York: William Morrow.
- Bogaert, A. F., & Fisher, W. A. (1995). Predictors of university men's number of sexual partners. *The Journal of Sex Research*, *32*, 119-130.
- Booth, A., & Johnson, D. (1988). Premarital cohabitation and marital success. *Journal of Family Issues*, *9*, 255-272.
- Boyer, C. B., Shafer, M., Wibbelsman, C. J., Seeberg, D., Teitle, E., & Lovell, N. (2000). Associations of sociodemographic, psychosocial, and behavioral factors

- with sexual risk and sexually transmitted diseases in teen clinic patients. *Journal of Adolescent Health*, 27, 102-111.
- Brown, S. L., & Booth, A. (1996). Cohabitation versus marriage: A comparison of relationship quality. *Journal of Marriage and the Family*, 58, 668-678.
- Bureau of the Census. (1990). Marital status and living arrangements: March 1990. *Current Population Reports*, Series P-20, No. 450.
- Bureau of the Census. (2002). Profile of general demographic characteristics: 2000. Retrieved November 20, 2003, from <http://censtats.census.gov/data/US/01000.pdf>
- Buunk, B. P., Angleitner, O., & Buss, D. M. (1996). Sexual differences in jealousy in evolutionary and cultural perspective. *Psychological Science*, 7, 359-363.
- Byers, E. S., & Demmons, S. (1999). Sexual satisfaction and sexual self-disclosure within dating relationships. *The Journal of Sex Research*, 36, 180-189.
- Call, V., Sprecher, S., & Schwartz, P. (1995). The incidence and frequency of marital sex in a national sample. *Journal of Marriage and the Family*, 57, 639-650.
- Centers for Disease Control and Prevention. (2002). Youth risk behavior surveillance—United States, 2001. *Morbidity and Weekly Reports (No. SS-4)*, 51. Retrieved November 20, 2003, from <http://www.cdc.gov/mmwr/PDF/SS/SS5104.pdf>
- Christopher, F. S., & Sprecher, S. (2000). Sexuality in marriage, dating, and other relationships: A decade review. *Journal of Marriage and the Family*, 62, 999-1017.
- Cohan, C. L., & Kleinbaum, S. (2002). Toward a greater understanding of the cohabitation effect: Premarital cohabitation and marital communication. *Journal of Marriage and the Family*, 64, 180-192.
- Crandall, B. (1992). *Predicting sexual permissiveness among male and female*

- adolescents*. Unpublished master's thesis, Brigham Young University, Provo, Utah.
- Cullari, S., & Minkus, R. (1990). Correlates of adolescent sexual behavior. *Psychological Reports, 66*, 1179-1184.
- Cupach, W. R., & Comstock, J. (1990). Satisfaction with sexual communication in marriage: Links to sexual satisfaction and dyadic adjustment. *Journal of Social and Personal Relationships, 7*, 179-186.
- Dankoski, M. E., Payer, R., & Steinberg, M. (1996). Broadening the concept of adolescent promiscuity: Male accountability made visible and the implications for family therapists. *The American Journal of Family Therapy, 24*, 367-381.
- Darling, C. A., Davidson, J. K., & Cox, R. P. (1991). Female sexual response and the timing of partner orgasm. *Journal of Sex & Marital Therapy, 17*, 3-21.
- Darling, C. A., Davidson, J. K., & Jennings, D. A. (1991). The female sexual response revisited: Understanding the multi-orgasmic experience in women. *Archives of Sexual Behavior, 20*, 527-540.
- DeMaris, A., & Leslie, G. R. (1984). Cohabitation with the future spouse: Its influence upon marital satisfaction and communication. *Journal of Marriage and the Family, 46*, 77-84.
- DeMaris, A., & MacDonald, W. (1993). Premarital cohabitation and marital instability: A test of the unconventionality hypothesis. *Journal of Marriage and the Family, 55*, 399-407.
- DeMaris, A., & Rao, V. (1992). Premarital cohabitation and subsequent marital stability in the United States: A reassessment. *Journal of Marriage and the Family, 54*, 178-190.

- Dishion, T. J. (2000). Cross-setting consistency in early adolescent psychopathology: Deviant friendships and problem behavior sequelae. *Journal of Personality, 68*, 1109-1126.
- Edwards, J. N., & Booth, A. (1994). Sexuality, marriage, and well-being: The middle years. In A.S. Rossi (Ed.), *Sexuality across the life course*, pp. 233-259. Chicago: University of Chicago Press.
- Ellis, R. A. (1998). Filling the prevention gap: Multi-factor, multi-system, multi-level intervention. *Journal of Primary Prevention, 19*, 57-71.
- Fisher, T. D. (1989). An extension of the findings of Moore, Peterson, and Furstenberg (1986) regarding family sexual communication and adolescent sexual behavior. *Journal of Marriage and the Family, 51*, 637-639.
- Forste, R., & Tanfer, K. (1996). Sexual exclusivity among dating, cohabiting and married women. *Journal of Marriage and the Family, 58*, 33-47.
- Greeley, A. M. (1991). *Faithful attraction: Discovering intimacy, love, and fidelity in American marriage*. New York: Doherty.
- Grunseit, A., Kippax, S., Aggleton, P., Baldo, M., & Slutkin, G. (1997). Sexuality education and young people's sexual behavior. *Journal of Adolescent Research, 12*, 421-453.
- Haerich, P. (1992). Premarital sexual permissiveness and religious orientation: A preliminary investigation. *Journal for the Scientific Study of Religion, 31*, 361-365.
- Halpern, C. T., Joyner, K., Udry, J. R., & Suchindran, C. (2000). Smart teens don't have sex (or kiss much either). *Journal of Adolescent Health, 26*, 213-225.
- Hammond, D.C. (1984). Assessment and therapy of sexual dysfunctions. In R. F.

- Stahmann & W. J. Hiebert (Eds.), *Counseling in marital and sexual problems: A clinician's handbook* (pp. 217-235). Lexington, MA: Lexington Books.
- Heffernan, R., Chiasson, M. A., & Sackoff, J. E. (1996). HIV risk behaviors among adolescents at a sexually transmitted disease clinic in New York City. *Journal of Adolescent Health, 18*, 429-434.
- Henderson-King, D. H., & Veroff, J. (1994). Sexual satisfaction and marital well-being in the first years of marriage. *Journal of Social and Personal Relationships, 11*, 509-534.
- HIV-related knowledge and behaviors among high school students—Selected U.S. sites, 1989. (1990). *Morbidity and Mortality Weekly Report, 39*, 384-397.
- Hornick, J. P. (1978). Premarital sexual attitudes and behaviors. *Sociological Quarterly, 19*, 534-544.
- Howard, J. A., Blumstein, P., & Schwartz, P. (1987). Social or evolutionary theories? Some observations on preferences in human mate selection. *Journal of Personality and Social Psychology, 53*, 194-2000.
- Hurlbert, D. F., Apt, C., & Rabehl, S. M. (1993). Key variables to understanding female sexual satisfaction: An examination of women in nondistressed marriages. *Journal of Sex and Marital Therapy, 19*, 154-165.
- Hyde, J. S., DeLamater, J. D., & Hewitt, E. (1998). Sexuality and the dual-earner couple: Multiple rules and sexual functioning. *Journal of Family Psychology, 12*, 354-368.
- Hyde, J. S., & DeLamater, J. D. (2000). *Understanding human sexuality*. Boston: McGraw Hill.
- Istvan, J., & Griffitt, W. (1980). Effects of sexual experience on dating desirability and

- marriage desirability. *Journal of marriage and the Family*, 42, 377-385.
- Jacoby, A. P., & Williams, J. D. (1985). Effects of premarital sexual standards and behavior on dating and marriage desirability. *Journal of Marriage and the Family*, 47, 1059-1065.
- Janus, S. S. & Janus, C. L. (1993). *The Janus report on sexual behavior*. New York: Wiley.
- Kahn, J. R., & London, K. A. (1991). Premarital sex and the risk of divorce. *Journal of Marriage and the Family*, 53, 845-855.
- Kann, L., Kinchen, S. A., Williams, B. I., Ross, J. G., Lowry, R., Hill, C.V., et al. (1998). Youth risk behavior surveillance—United States, 1997. In *Centers for Disease Control Surveillance Summaries, Morbidity and Mortality Weekly Report*, 47, 1-89.
- Kelly, E. L. & Conley, J. J. (1987). Personality and compatibility: A prospective analysis of marital stability and marital satisfaction. *Journal of Personality and Social Psychology*, 52, 27-40.
- Knoth, R., Boyd, K., & Singer, B. (1988). Empirical tests of sexual selection theory. *Journal of Sex Research*, 24, 73-89.
- Krelder, R. M., & Fields, J. M. (2002). *Number, timing, and duration of marriages and divorces: 1996*. Current Population Reports, P70-80. U.S. Census Bureau, Washington D.C.
- Larson, J. H., Anderson, S. M., Holman, T. B., & Niemann, B. K. (1998). A longitudinal study of the effects of premarital communication, relationship stability, and self-esteem on sexual satisfaction in the first year of marriage. *Journal of Sex and Marital Therapy*, 24, 193-206.

- Larson, J. H., & Holman, T. B. (1994). Premarital predictors of marital quality and stability. *Family Relations*, 43, 228-237.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. *National Health and Social Life Survey, 1992: [United States] [Computer file].* ICPSR version. Chicago, IL: University of Chicago and National Opinion Research Center [producer], 1995. Ann Arbor, Inter-university Consortium for Political and Social Research [distributor], 1995.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States.* Chicago: University of Chicago Press.
- Lawrance, K., & Byers, E. S. (1995). Sexual satisfaction in long-term heterosexual relationships: The interpersonal exchange model of sexual satisfaction. *Personal Relationships*, 2, 267-285.
- Lewis, R. A., & Spanier, E. B. (1979). Theorizing about the quality and stability of marriage. In W. R. Burr R. Hill, F. I. Nye, & I. L. Reiss (Eds.), *Contemporary theories about the family* (Vol. 1, pp. 268-294). New York: Free Press.
- Li, X., Stanton, B., Cottrell, L., Burnes, J., Pack, R., & Kaljee, L. (2000). Patterns of initiation of sex and drug-related activities among urban low-income African-American adolescents. *Journal of Adolescent Health*, 28, 46-54.
- Martin, P. D., Martin, D., & Martin, M. (2001). Adolescent premarital sexual activity, cohabitation, and attitudes toward marriage. *Adolescence*, 36, 601-609.
- McCarthy, B. (1999). Marital style and its effects on sexual desire and functioning. *Journal of Family Psychotherapy*, 10, 1-12.

- McGinnis, S. L. (2003). Cohabiting, dating, and perceived costs of marriage: A model of marriage entry. *Journal of Marriage and the Family*, *65*, 105-116.
- Meschke, L. L., Bartholomae, S., & Zentall, S., R. (2002). Adolescent sexuality and parent-adolescent processes: Promoting healthy teen choices. *Journal of Adolescent Health*, *31*, 264-279.
- Miller, B. C., Christopherson, C. R., & King, P. K. (1993). Sexual behavior in adolescence. In T.P. Gullotta, G. R. Adams, & R. Montemayor (Eds.), *Adolescent Sexuality*, pp. 57-76. Newbury Park, CA: Sage.
- Moore, K. A., Peterson, J. L., & Furstenberg, F. F. (1986). Parental attitudes and the occurrence of early sexual activity. *Journal of Marriage and the Family*, *48*, 777-782.
- Nock, S. L. (1995). A comparison of marriages and cohabiting relationships. *Journal of Family Issues*, *16*, 53-76.
- Oggins, J., Leber, D., & Veroff, J. (1993). Race and gender differences in Black and White newlyweds' perceptions of sexual and marital relationships. *The Journal of Sex Research*, *30*, 152-160.
- Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, *114*, 29-51.
- Paradise, J. E., Cote, J., Minsky, S., Lourenco, A., & Howland, J. (2001). Personal values and sexual decision-making among virginal and sexually experienced urban adolescent girls. *Journal of Adolescent Health*, *28*, 404-409.
- Paul, C., Fitzjohn, J., Herbison, P., & Dickson, N. (2000). The determinants of sexual intercourse before age 16. *Journal of Adolescent Health*, *27*, 136-147.
- Reiss, I. L. (1964). The scaling of premarital sexual permissiveness. *Journal of Marriage*

and the Family, 26, 188-198.

Reiss, I. L. (1967). *The social context of premarital sexual permissiveness*. New York:

Holt, Rinehart and Winston.

Renaud, C., Byers, E. S., & Pan, S. (1997). Sexual and relationship satisfaction in

mainland China. *Journal of Sex Research*, 34, 399-410.

Robinson, I. E., Ziss, K., Ganza, B., Katz, S., & Robinson, E. (1991). Twenty years of

the sexual revolution, 1965-1985: An update. *Journal of Marriage and the Family*, 53, 216-220.

Roche, J. P., & Ramsby, T. W. (1993). Premarital sexuality: A five-year follow-up study

of attitudes and behavior by dating stage. *Adolescence*, 28, 67-80.

Romer, D., Black, M., Ricardo, I., Feigelman, S., Kaljee, L., Galbraith, J., et al. (1994).

Social influences on the behavior of youth at risk for HIV exposure. *American Journal of Public Health*, 84, 977-985.

Rusbult, C. E. (1983). A longitudinal test of the investment model: The development

(and deterioration) of satisfaction and commitment in heterosexual involvements.

Journal of Personality and Social Psychology, 43, 101-117.

Seidman, S. N., Mosher, W. D., & Aral, S. O. (1992). Women with multiple sexual

partners: United States, 1988. *American Journal of Public Health*, 82, 1388-1394.

Shrier, L. A., Emans, S. J., Woods, E. R., & DuRant, R. H. (1997). The association of

sexual risk behaviors and problem drug behaviors in high school students. *Journal of Adolescent Health*, 20, 377-383.

Simón, A. (1989). Promiscuity as sex difference. *Psychological Reports*, 64, 802.

Smith, T. W. (1994). *The demography of sexual behavior*. Menlo Park, CA: Kaiser

Family Foundation.

Sonenstein, F. L., Pleck, J. H., & Ku, L. C. (1991). Levels of sexual activity among adolescent males in the United States. *Family Planning Perspectives, 23*, 162-167.

Sorensen, R. C. (1973). *Adolescent sexuality in contemporary America*. New York: World.

Sprecher, S. (1998). Social exchange theories and sexuality. *Journal of Sex Research, 35*, 32-43.

Sprecher, S. (2002). Sexual satisfaction in premarital relationships: Associations with satisfaction, love, commitment, and stability. *Journal of Sex Research, 39*, 190-196.

Sprecher, S., McKinney, K. & Orbuch, T. L. (1991). The effect of current sexual behavior on friendship, dating, and marriage desirability. *Journal of Sex Research, 28*, 387-408.

Sprecher, S., Metts, S., Burleson, B., Hatfield, E., & Thompson, A. (1995). Domains of expressive interaction in intimate relationships: Associations with satisfaction and commitment. *Family Relations, 44*, 203-210.

Stahmann, R. F., Young, W. R., & Grover, J. G. (2004). *Becoming one: Intimacy in marriage*. American Fork, UT: Covenant Communications

Stets, J. E. (1993). The link between past and present intimate relationships. *Journal of Family Issues, 14*, 236-260.

Tanfer, K., & Cubbins, L. A. (1992). Coital frequency among single women: Normative constraints and situational opportunities. *The Journal of Sex Research, 19*, 221-250.

Tavris, C., & Sadd, S. (1977). *The Redbook report on female sexuality*. New York: Delacorte Press.

- Tapert, S. F., Aarons, G. A., Sedlar, G., R., & Brown, S. A. (2001). Adolescent substance use and sexual risk-taking behavior. *Journal of Adolescent Health, 28*, 181-189.
- Teachman, J. (2003). Premarital sex, premarital cohabitation, and the risk of subsequent marital dissolution among women. *Journal of Marriage and the Family, 65*, 444-455.
- Thomson, E., & Colella, U. (1992). Cohabitation and marital stability: Quality or commitment? *Journal of Marriage and the Family, 54*, 259-267.
- Thornton A., Axinn, W. G., & Hill, D. H. (1992). Reciprocal effects of religiosity, cohabitation, and marriage. *American Journal of Sociology, 98*, 628-651.
- Treas, J. & Giesen, D. (2000). Sexual infidelity among married and cohabiting Americans. *Journal of Marriage and the Family, 62*, 48-60.
- Waite, L. J., & Joyner, K. (2001). Emotional satisfaction and physical pleasure in sexual unions: Time horizon, sexual behavior, and sexual exclusivity. *Journal of Marriage and the Family, 63*, 247-264.
- Waterman, C. K., & Chiauzzi, E. J. (1982). The role of orgasm in male and female sexual enjoyment. *Journal of Sex Research, 18*, 146-159.
- Watson, R. E. L. (1983). Premarital cohabitation vs. traditional courtship: Their effects on subsequent marital adjustment. *Family Relations, 32*, 139-147.
- White, L., & Keith, B. (1990). The effect of shift work on the quality and stability of marital relations. *Journal of Marriage and the Family, 52*, 453-462.
- White, R., Cleland, J., & Carael, M. (2000). Links between premarital sexual behaviour and extramarital intercourse: A multi-site analysis. *AIDS, 14*, 2323-2331.
- Williams, J. D., & Jacoby, A. P. (1989). The effects of premarital heterosexual and homosexual experience on dating and marriage desirability. *Journal of Marriage*

and the Family, 51, 489-497.

Young, M., & Luquis, R. (1998). Correlates of sexual satisfaction in marriage. *Canadian Journal of Human Sexuality*, 7, 115-127.

Table 1: Descriptive Statistics

Variable	All	Males	Females
<u>Religiosity</u>			
Never	9.8%	9.9%	9.7%
< 1x a year	4.5%	7.0%	3.1%
1-2x a year	13.6%	18.3%	10.8%
Several times a year	13.5%	13.6%	13.4%
About 1x a month	8%	7.3%	8.4%
2-3x a month	11.3%	9.5%	12.3%
Nearly every week	6.1%	6.2%	5.9%
Every week	23.2%	19.8%	25.3%
Several times a week	10%	8.4%	11.0%
<u>Race/Ethnicity</u>			
White	72.7%	76.7%	70.3%
Black	10%	8.4%	11.0%
Hispanic	12.2%	9.8%	13.7%
Other	5.1%	5.1%	5.1%
<u>Income</u>			
\$0-15K	18.7%	20.2%	17.8%
\$15,001-30K	22.3%	22.5%	22.2%
\$30,001-50K	29.4%	31.8%	28.0%
\$50,001-75K	19.8%	16.3%	22.0%
\$75,001 +	9.8%	9.3%	10.0%
<u>Births</u>			
No births	19.4%	22.2%	17.7%
Any births	80.6%	77.8%	82.3%
<u>Gender</u>			
Male	37.7%	100.0%	
Female	62.3%		100.0%
<u>Age</u>			
20 or less	2.6%	1.5%	3.3%
25 or less	18%	16.7%	18.7%
30 or less	44.3%	41.5%	46.0%
35 or less	73.9%	70.9%	75.8%
Mean	31.1	31.6	30.9
Standard Deviation	5.56	5.58	5.54

Note. Source of data is the 1992 National Health and Social Life Survey.

Table 2: Dependent and Independent Variable Descriptive Statistics

Variable	All	Males	Females
<u>Marital Sexual Satisfaction</u>			
Extremely Satisfied	85.8%	87.7%	84.6%
Moderately Satisfied	14.2%	12.3%	15.4%
<u>Sexual Promiscuity</u>			
1 partner	23.9%	11.6%	33.0%
5 or less partners	63.4%	45.6%	77.0%
10 or less partners	82.9%	69.4%	93.2%
20 or less partners	93.5%	87.1%	98.4%
30 or less partners	96.7%	94.6%	98.4%
60 or less partners	98.8%	98.0%	99.5%
Minimum	1	1	1
Maximum	191	191	66
Median	4	6	3
Mean	7.33	11.35	4.25
Standard deviation	14.27	19.77	6.30

Note. Source of data is the 1992 National Health and Social Life Survey.

Table 3: Summary of Logistic Regression Analysis Predicting Marital Sexual Satisfaction

Variable	<u>All respondents</u>			<u>Males</u>			<u>Females</u>		
	Coefficient	SE	Odds	Coefficient	SE	Odds	Coefficient	SE	Odds
Premarital Promiscuity	-0.039**	0.013	0.962	-.053**	0.019	0.949	-.046	0.029	0.955
Births (No births)	-.021	0.478	0.98	0.450	0.695	1.568	-.530	0.795	0.588
Religion	-0.058	0.064	0.943	-.102	0.112	0.903	-.026	0.080	0.975
S.E.S.	0.196	0.139	1.216	0.380	0.250	1.463	0.122	0.177	1.130
Race (White omitted)			1.000			1.000			1.000
Black	-.258	0.432	0.773	-1.015	0.680	0.362	0.083	0.569	1.087
Hispanic	.088	0.545	1.092	7.581	26.716	1961.26	-.423	0.601	0.655
Other	-1.493	0.808	0.225	-3.089*	1.303	0.046	-.311	1.204	0.733
Gender (Male)	-0.495	0.347	0.610						
- 2 log likelihood (df)	263.101	(313)		88.843	(136)		153.488	(177)	
Model chi-square (df)	18.413	(8)		24.737	(7)		3.809	(7)	

Note. Source of data is the 1992 National Health and Social Life Survey.

*p <.05. **p<.01. ***p<.001.