

College Virgins: How Men and Women Perceive Their Sexual Status

Susan Sprecher
Illinois State University

Pamela C. Regan
Albion College

Whereas the sexual lives of college students have been the focus of many research studies, there is very little research on those young adults who have chosen to remain virgins. In this study, 97 virgin men and 192 virgin women from a Midwestern U.S. university were surveyed about the reasons they were virgins, their affective reactions to their virginity status, and other aspects of their virginity (e.g., the social pressure they received to remain a virgin vs. to become sexually active). As hypothesized, women rated more reasons for virginity (particularly interpersonal ones) as important and had more positive reactions (were more proud and happy and less embarrassed and guilty) about being a virgin than did men. Women reported more social pressure than did men to remain a virgin, and men were more likely than women to expect to become a nonvirgin in the near future. Associations among the reasons, affective reactions, and other aspects of virginity were examined for men versus women. Because data were collected from cohorts of virgin students over six years (1990-1995), differences in perceptions of virginity over time were also examined. More recent cohorts of virgins felt more pride about their virginity status and were more likely to report that fear of AIDS and STDs were reasons they remained chaste.

A lot of kids are putting off sex, and not because they can't get a date. They've decided to wait, and they're proud of their chastity, not embarrassed by it. Suddenly, virgin geek is giving way to virgin chic. (Newsweek, October 17, 1994, p. 59)

After the sexual revolution of the 1960s and the resulting freedom from sexual mores that promoted and glorified abstinence until marriage, it became somewhat socially gauche (and probably more difficult) for young adults to maintain their virginal status during college or the period immediately after high school (e.g., Rubin, 1990). Indeed, during the 1980s, a large majority of both males and females had made the transition to nonvirginity by the age of 19 (e.g., Miller & Moore, 1990; Sonenstein, Pleck, & Ku, 1989). However, according to the popular media, we are in the midst of a sexual "retrorevolution" in which virginity is perceived as (and actually may be becoming) a more acceptable and popular choice among older adolescents and young adults; consequently, far from being embarrassed by their sexual status, some young adults who have remained virginal are proudly proclaiming their abstinence (see, for

example, Fleming, 1995; Ingrassia, 1994; Newman, 1994). Interestingly, there have been few empirical attempts to examine systematically this anecdotal evidence about the feelings and reactions that adult virgins have about their sexual status.

Researchers have accumulated an extensive body of knowledge about the sexuality of adolescents, including the correlates of virginal/nonvirginal status and the factors that are associated with the loss of virginity (for reviews, see Brooks-Gunn & Furstenberg, 1989; Christopher & Roosa, 1991; Gullotta, Adams, & Montemayor, 1993; Miller & Moore, 1990). We know much less about the virginity of adult men and women, perhaps because adult virgins still represent a relatively small proportion of the larger population (e.g., Billy, Tanfer, Grady, & Klepinger, 1993; Reinisch, Sanders, Hill, & Ziemba-Davis, 1992; Smith, 1991). Several researchers have included virginity as one variable among many in their studies of adult sexuality (e.g., Leite, Buoncompagno, Leite, Mergulhao, & Battistoni, 1994; Murstein & Mercy, 1994; Salts, Seismore, Lindholm, & Smith, 1994). Those few who have focused specifi-

cally upon adult virgins, like those who study adolescent virgins, have explored the correlates or predictors of virginity status (e.g., Herold & Goodwin, 1981; Peretti, Brown, & Richards, 1978, 1979; Schechterman & Hutchinson, 1991; Walsh, 1991; Young, 1986). In addition, many have used samples composed solely of women (e.g., D'Augelli & Cross, 1975; Herold & Goodwin, 1981; Peretti et al., 1978, 1979). Perhaps this is not surprising; after all, literary history is replete with the tales of sexually innocent young women who seek to preserve their premarital virginity and sexually knowledgeable men who seek to take it from them (see, for example, Fielding, 1749/1979; Richardson, 1740/1971). Furthermore, modern literature and popular culture also have presented adult virginity as a female characteristic (e.g.,

We thank Rodney Cate for his comments on an earlier draft of this article. For correspondence about this article, write to either Susan Sprecher, Ph.D., Department of Sociology and Anthropology, Illinois State University, Normal, IL 61790-4660 (E-mail: SPRECHER@ILSTU.BITNET) or Pamela Regan, Ph.D., Albion College, Department of Psychology, 312 Olin Hall, Albion, MI 49224. E-mail: PREGAN@ALPHA.ALBION.EDU.

the virgin protagonists on the prime-time television shows *Beverly Hills 90210*, *Blossom*, and *L.A. Law* are women; Newman, 1994). However, although the majority of men (and women) are sexually active by the time they reach college age (e.g., Billy et al., 1993; Reinisch et al., 1992; Smith, 1991), adult virgins are found among both genders (e.g., Laumann, Gagnon, Michael, & Michaels, 1994).

Thus, the current research endeavor was designed to focus exclusively on the experiences of a rather unique group of individuals, specifically, on those young, unmarried adults who have not yet engaged in sexual intercourse. In particular, we wished to include both men and women in our investigation of virginity and to explore if and how virgin men differ from virgin women in their reasons for choosing to remain virginal, their affective reactions to their virginity status, and such other experiences as their perceived likelihood of becoming a nonvirgin and social pressure from others to maintain or lose their virginity.

Reasons for Virginity

By the time they are in college or engaged in a post-high school vocation, most young adults either have had opportunities for sexual intercourse or have considered whether they want the opportunity. Although the first intercourse experience itself is usually unplanned (e.g., Zelnik & Shah, 1983), the decision to make the transition from virgin to nonvirgin is rarely spontaneous (e.g., DeLamater, 1989; Gagnon & Simon, 1973). Young adults weigh several factors while making this important decision about their sexual status, and some decide to postpone the transition (i.e., to remain a virgin). What are the reasons virginal men and women give for their virginity, and do they have the same reasons?

One major factor related to sexual behaviors (e.g., to have sex for the first time) is sexual standards or ideology (DeLamater & MacCorqu-

dale, 1979). Considerable research conducted over the past few decades demonstrates that men hold more permissive attitudes toward casual (i.e., uncommitted) sexual activity than do women, whereas women are more likely than are men to view romantic love, emotional intimacy, and commitment as prerequisites for sexual activity (e.g., Oliver & Hyde, 1993; Sprecher, 1989). This gender difference has been explained from a number of theoretical perspectives. For example, evolutionary psychologists posit that men, whose reproductive success requires maximizing the number of genes passed on to the next generation, seek to engage in intercourse with many fertile partners, whereas women, whose reproductive success requires maximizing an offspring's chances of survival, confine their sexual activity to long-term relationships with partners who control many resources (e.g., Buss & Barnes, 1986). Social learning theorists suggest that men have received more reinforcement than have women for seeking sexual activity (e.g., Mischel, 1966), and script theorists point to societal norms that dictate that sexuality is tied more to the quality of the relationship for women than for men (e.g., Gagnon & Simon, 1973; Reiss, 1981). To the extent that women are more likely than men to associate sexual activity with such interpersonal phenomena as romantic love and emotional intimacy, women should place greater importance than men on lack of love and/or an appropriate relationship partner as reasons for remaining a virgin (i.e., abstaining from initial coitus).

Indeed, there is evidence to suggest that lack of a loving or committed relationship is a major reason why abstaining women choose not to have sex. In one of the few studies that focused on virgins and their decision-making processes, Herold and Goodwin (1981) asked Canadian college and high school women to indicate the most important rea-

son why they had not engaged in sexual intercourse. A large number of the participants gave the reason that they had not yet met the "right" person. Also rated as important reasons by women were moral or religious beliefs, not being ready to have sexual intercourse, and fear of pregnancy. However, because Herold and Goodwin (1981) did not survey men, we do not know if virgin men have similar reasons.

A study conducted by Christopher and Cate (1985) suggests that young adult men may have different reasons than young adult women for remaining virginal. For part of a larger study (e.g., Christopher & Cate, 1984) these researchers asked college age, virgin men and women to indicate how important several factors would be in their decision to have sexual intercourse with an ideal partner for the first time. Women were more likely than men to rate relationship factors (e.g., love for partner) as a salient issue, which suggests that they would be more likely than men to abstain from sex in the absence of a loving relationship.

Other researchers have looked at reasons that people (who may or may not be virgins) have for not having sex with a particular partner. For example, in a study of dating couples, Peplau, Rubin, and Hill (1977) asked members of 42 abstaining couples (18% of the total sample) to rate the importance of four reasons for not having engaged in sex. More women (22%) than men (14%) said that it was too early in the relationship, and more women (31%) than men (11%) rated moral or religious reasons as important. Almost half of both men and women rated fear of pregnancy as a major reason. A much larger proportion of men (64%) than of women (11%) said their partner did not want to have sexual intercourse at the present time. Similarly, Carroll, Volk, and Hyde (1985) found that when men and women were asked, "What would be your primary reason for

refusing to have sexual intercourse with someone?," more women than men claimed "not enough love/commitment," and significantly more women than men felt that emotional involvement was "always" a prerequisite for engaging in sexual intercourse.

The first goal for this investigation, then, was to examine the reasons young adults have for maintaining their virginity status and to examine whether virgin men and women have the same reasons. As reviewed previously, research on sexual standards (e.g., Sprecher, 1989), various theoretical explanations for gender differences in sexual attitudes and behaviors (for review, see Oliver & Hyde, 1993), and research on sexual decision making (e.g., Christopher & Cate, 1985) all suggest that men and women should have different reasons for choosing to remain virgins. However, no previous investigation has documented whether such gender differences exist. In our investigation, we considered the reasons that were identified in the previous literature (moral or religious beliefs, fear of pregnancy, not being ready, not being in love enough, not having a willing partner). We also considered two other general categories of reasons that we believed might be relevant: fear of contracting AIDS and other sexually transmitted diseases (STDs) and perception of self-deficiency (i.e., the belief that one is not desirable, that one lacks desire for sex, or that one is too shy to initiate sex).

Affective Reactions to Virginity

Various emotions can be experienced as a consequence of engaging in sexual activity. DeLamater (1991) discussed four: sexual satisfaction/dissatisfaction, embarrassment, anxiety/fear, and frustration. Another negative emotion associated with sexual activity is guilt (e.g., Mosher & Cross, 1971). These emotions and others (e.g., pride), however, may also occur as a result of *not* having engaged in sexual activity.

Despite the recent media focus on the positive emotions ostensibly associated with virginity (e.g., Ingrassia, 1994; Newman, 1994), very few researchers have focused on how virgin men and women actually feel about their virginity. In an early study on adolescent sexuality, Sorensen (1973) concluded that the sexually inexperienced teenagers were satisfied with their status. He wrote: "They are, in the main, neither defensive nor ashamed of themselves, nor are they frustrated or preoccupied with the fact they do not have sex" (p. 154). Although Sorensen (1973) did not report whether there were gender differences in affective reactions, in a recent study of adolescent males and females, Langer, Zimmerman, and Katz (1995) found that male virgins were more likely than female virgins to report that they would feel better about themselves if they started having sex. In a study of college virgins, Young (1986) found that of 139 female virgins, 96% described themselves as "satisfied," whereas only 4% described themselves as "frustrated" by their virginity. Among the 114 male virgins studied by Young, 76% were satisfied, and 24% were frustrated by their sexual status. Thus, more virgins of both genders were satisfied than frustrated, but a greater proportion of virgin men than of virgin women was frustrated. Furthermore, Walsh (1991) presented indirect evidence that men are more likely than women to experience a negative reaction to their virginity status. He examined the relationship between self-esteem and virginal status among a group of male and female virgin and nonvirgin college students. Virgin and nonvirgin women did not differ with respect to scores on a self-esteem scale; however, virgin men had significantly lower self-esteem scores than nonvirgin men. Although these studies suggest that gender differences in emotions associated with virginity in young adulthood exist, investiga-

tors have not studied how adult virgins react to their virginity status on a variety of both positive and negative emotions (including pride and embarrassment).

Thus, our second major goal was to examine the affective reactions virgins have in response to their virginity status and to examine gender differences in these affective reactions. In our investigation of this issue, we considered a number of emotional reactions—both positive (happiness and pride) and negative (anxiety, embarrassment, and guilt)—and we hypothesized, based on previous research (i.e., Walsh, 1991; Young, 1986), that men would experience less positive and more negative affective reactions to their virginity than would women.

Associations Among Reasons, Affective Reactions, and Other Aspects of Virginity

The reasons young adults have for remaining virgins are likely to be related to their feelings about their virginity status. For example, people who choose to remain virginal because they have not found the right partner may be less likely to feel "good" about their virginity than people who refrain from sexual intercourse because of moral or religious reasons. Although this and related issues have not been empirically examined to date, one study does suggest that satisfaction with one's virginity is related to religiosity. Young (1986) found that both male and female virgins who were satisfied with their sexual status reported greater religious commitment than did virgins who were frustrated by their sexual status. Perhaps reasons for remaining a virgin that reflect moral and religious beliefs are associated with positive affective reactions to virginity (e.g., pride, happiness), whereas reasons that reflect one's inability to initiate sexual intercourse with a partner or the partner's unwillingness to engage in sexual intercourse are associated with negative affective

reactions to virginity (e.g., anxiety, embarrassment).

Furthermore, reasons for virginity and affective reactions to virginity may be related to the perceived likelihood of becoming a nonvirgin in the near future and the amount of support received from others for being a virgin. Virginity generally has been viewed as a discrete variable (i.e., one is either a virgin or not), but some researchers have further classified virgins by their perceived likelihood of becoming a nonvirgin before marriage. D'Augelli and her colleagues (D'Augelli & Cross, 1975; D'Augelli & D'Augelli, 1977), for example, distinguished between "adamant virgins" and "potential nonvirgins." Adamant virgins have decided that they will not engage in premarital sexual intercourse, whereas potential nonvirgins are willing to consider premarital sex should they find themselves in the "right" situation with the "right" partner. These types of virgins are likely to have different reasons for remaining virgins. For example, Herold and Goodwin (1981) classified their sample of high school and college women into adamant virgins and potential nonvirgins and asked them to select from an array of reasons the single most important reason why they had not engaged in intercourse. Half (50%) of the adamant virgins but only 2% of the potential nonvirgins endorsed the category encompassing moral and religious reasons (i.e., against religion, parental disapproval, premarital intercourse is wrong), whereas 54% of the potential nonvirgins but only 16% of the adamant virgins endorsed not having met the "right" person as the most important reason for abstaining from sexual intercourse.

Herold and Goodwin (1981) did not examine whether the adamant and potential nonvirgins in their sample differed in how they felt about their sexual status. However, the perceived likelihood of remaining a virgin before marriage may be associated with emotional reactions

to virginity. Specifically, adamant virgins may have a more positive overall affective reaction to their virginity than do potential nonvirgins and in particular may feel prouder of their sexual status than do potential nonvirgins. Conversely, potential nonvirgins may feel more guilt, anxiety, and embarrassment than do adamant virgins. In fact, the negative emotional reactions some virgins have to their status may be what motivates them to make the transition to nonvirginity.

Another factor that may push virgins toward having sexual intercourse is external; specifically, social pressure from others to become sexually active. Young adults who receive social pressure from others to become sexually active should be more likely than young adults who do not receive such pressure to perceive that they are likely to have sexual intercourse in the near future (i.e., to be potential nonvirgins). Furthermore, virgins who receive social pressure to remain a virgin should be less likely than virgins who do not receive this pressure to say that they are likely to begin having premarital sex.

Thus, our third goal was to examine the associations between reasons for virginity and affective reactions to virginity and to examine how both are related to other aspects of virginity, including the likelihood of becoming a nonvirgin and social pressure to become sexually active vs. to remain a virgin. Because our focus was on gender differences, we explored whether these associations were the same for men and women.

Changes Over Time in Virginity

As societal attitudes about sexuality change, so too should the experiences of young adults who are virginal when most of their cohort has had sexual intercourse. If, as suggested by the popular media, we are in the midst of a sexual "retrorevolution," then feelings and perceptions that adult virgins have about their sexual status should

have changed over recent years. More specifically, fear of AIDS as a reason for being a virgin and positive reactions to virginity status have probably increased over time. Thus, our final goal was to explore the possibility that perceptions of virginity have changed over a six-year period (1990-1995).

In sum, scientists have collected very little data from adult virgins about their virginity. The purpose of this study was to examine reasons for virginity, affective reactions to virginity, and other perceptions of virginity with a sample of college age, virgin men and women obtained over a six-year period. We were particularly interested in how virgin men and women may differ.

Method

Participants

The 289 participants in this study were selected from a nonprobability sample of undergraduate students enrolled at a Midwestern U.S. university who participated in a survey study of sexual attitudes and behaviors. From a larger sample of students who completed the questionnaire between 1990 and 1995 and had valid data on relevant questions (e.g., indicated their gender), we selected a sample of virgins for analysis. To be classified as a virgin, the participant had to respond to two separate questions that he or she had not had sexual intercourse. One question preceded the questions on reasons for and reactions to virginity and was "Have you ever had sexual intercourse?", and the other question, which appeared in a later section of the questionnaire, asked whether they had ever had penile-vaginal sexual intercourse. We further selected those who indicated that they were heterosexual to a question asking about sexual orientation. There were not enough self-identified homosexual and bisexual virgins in the sample to examine the association between sexual orientation and reasons for

and affective reactions to virginity. The final sample of 97 men and 192 women represented 11% and 13%, respectively, of the larger sample of men and women participants who were self-reported heterosexuals and had their gender identified (896 men and 1,455 women).

The median age of the virgin participants was approximately 19.5; 93% were between 18 and 21. A majority (89%) identified themselves as White. On a question about religious preference, 44% identified themselves as Catholic, 19% were Protestants, 21% chose "other," 12% chose "none," and 4% described themselves as Jewish. This demographic profile of the virgin students is very similar to that of the sexually experienced respondents from the larger sample (see Sprecher, Barbee, & Schwartz, 1995).

Measures

Those participants who reported that they had *not* had sexual intercourse were asked to respond to several questions about their virginity. (Participants who reported that they had had sexual intercourse completed a set of questions that focused on first intercourse; these data were described in Sprecher et al., 1995.)

Reasons for virginity. The virgin participants were presented with a list of 13 reasons "that people may have for not having premarital sexual intercourse." The list of reasons was based on items used in earlier research by Herold and Goodwin (1981); however, additional items were included, including fear of contracting AIDS (although it is HIV that is contracted, we believed that a greater number of students would understand the item if it referred to AIDS, particularly at the time the questionnaire was designed). Participants responded to each item on a 1 = *not at all important* to 4 = *very important* response scale.

A principal components factor analysis conducted on the 13 items revealed 4 factors that collectively

accounted for 63% of the total variance. The first factor was labeled *Personal Beliefs* and included the following four items (factor loadings in parentheses): "I believe that intercourse before marriage is wrong" (.87), "It is against my religious beliefs" (.83), "Fear of parental disapproval" (.73), and "I do not feel ready to have premarital intercourse" (.59). The second factor, labeled *Fear*, included three items: "I worry about contracting AIDS" (.90), "I worry about contracting another STD" (.88), and "Fear of pregnancy" (.68). *Inadequacy/Insecurity* was the name we gave the third factor, which included four items: "I have been too shy or embarrassed to initiate sex with a partner" (.77), "I don't feel physically attractive or desirable" (.66), "I lack desire for sex" (.56), and "My current (or last) partner is (was) not willing" (.52). The final factor, labeled *Not Enough Love*, contained two items: "I have not been in a relationship long enough or been in love enough" (.84) and "I have not met a person I wanted to have intercourse with" (.78). Four scale scores were created based on the mean of the items loading on each particular factor. The higher the score, the more important the factor (coefficient alphas were .80 for Fear, .78 for Personal Beliefs, .65 for Not Enough Love, and .50 for Inadequacy/Insecurity).

Feelings about virginity. Participants were asked how *proud*, *guilty*, *anxious*, *embarrassed*, and *happy* they felt about their virginity status on scales that ranged from 1 = *not at all* to 5 = *a lot*. These emotions were selected as representative of emotions that are likely to be experienced in response to sexual decision making (e.g., DeLamater, 1991).

Because a factor analysis of the five emotions yielded one bipolar factor (with positive and negative emotions negatively correlated), we also created a summary measure, an index of *hedonic emotional tone*. The hedonic emotional tone index

was represented by the difference between the mean of the positive emotions and the mean of the negative emotions. A positive score on this index means that positive emotions were experienced to a greater intensity than were negative emotions; a negative score means that negative emotions were experienced to a greater intensity than were positive emotions (for a description of how this measure has been used in previous studies of emotion, see Berscheid, Snyder, & Omoto, 1989; or Sprecher & Sedikides, 1993).

Other questions about virginity. Participants were also asked questions assessing the likelihood that they would remain a virgin and the social pressure they received to remain a virgin versus to become sexually active. *Likelihood of becoming a nonvirgin* was measured by the following three questions: "If you were in a close relationship with a partner who desired sexual intercourse and the opportunity were available, would you engage in premarital sexual intercourse?"; "How likely are you to engage in sexual intercourse before you get married?"; and "How likely are you to engage in sexual intercourse during the next year?" (scale response options ranged from 1 = *absolutely would not* to 6 = *absolutely would*). These items were highly intercorrelated ($r = .74$ to $.84$) and therefore were summed into an overall index (coefficient alpha = $.91$). *Social pressure* was measured by the following two questions: "How much pressure have you received from others (e.g., dating partners, peers) to have sexual intercourse?" (1 = *a lot* to 4 = *none*) and "How much pressure have you received from others (e.g., parents, peers) to remain a virgin?" (1 = *a lot* to 4 = *none*). We recoded both items so that the higher number indicated greater social pressure. Although it might be expected that social pressure to become sexually active would be inversely related to social pressure to remain a virgin, the two items were not correlated

Table 1

Mean Importance of Reasons for Being a Virgin for Total Sample and for Men versus Women

Reason	Total Sample (N = 289)	Virgin Men (n = 97)	Virgin Women (n = 192)	t
I have not been in a relationship long enough or been in love enough.	3.21 (1)	2.78 (1)	3.43 (1)	-4.80*
Fear of pregnancy	3.00 (2)	2.66 (2)	3.16 (2)	-3.75*
I worry about contracting AIDS.	2.84 (3)	2.59 (3)	2.96 (3)	-2.56
I worry about contracting another STD.	2.73 (4)	2.53 (4)	2.83 (6)	-2.04
I have not met a person I wanted to have intercourse with.	2.61 (5)	2.00 (9)	2.91 (4)	-5.85*
I do not feel ready to have premarital intercourse.	2.60 (6)	2.12 (7)	2.84 (5)	-5.16*
It is against my religious beliefs.	2.13 (7)	2.02 (10)	2.18 (8)	-1.07
I believe that intercourse before marriage is wrong.	2.09 (8)	1.91 (11)	2.18 (7)	-1.85
I have been too shy or embarrassed to initiate sex with a partner.	2.06 (9)	2.39 (5)	1.89 (11)	3.58*
Fear of parental disapproval	2.02 (10)	1.73 (12)	2.17 (9)	-3.22*
I don't feel physically attractive or desirable.	1.96 (11)	1.98 (8)	1.96 (10)	.15
My current (or last) partner is (was) not willing.	1.85 (12)	2.24 (6)	1.65 (12)	3.88*
I lack desire for sex.	1.33 (13)	1.31 (13)	1.35 (13)	-.43

Note: Each item was rated on a 1 (not at all important) to 4 (very important) response scale. The numbers in parentheses represent the rank order of the reasons based on a comparison of the means within the column. The exact N size in this table and in the remainder of the tables varies somewhat as a function of missing data and, therefore, the degrees of freedom also vary. For the gender contrasts in the table, the degrees of freedom range from 282 to 286.

* $p \leq .004$ (significance level based on Bonferroni-protected comparisons using a familywise alpha of .05)

($r = .11$ for men and $r = .10$ for women) and thus were not combined.

Procedure

Beginning in Fall 1990, during each semester the first author has administered a questionnaire on sexual attitudes and behaviors to students in a large human sexuality class. The questionnaire has both instructional and research uses (see Sprecher et al., 1995) and assesses many sexual attitudes and behaviors. It is administered early in the semester (typically the second week), in part to avoid contamination from course information. Students are told that completion of the questionnaire is anonymous and voluntary. The number of students who choose not to complete the questionnaire is estimated to be fewer than 2%.

Participants placed their responses to the questionnaire items on op-scan sheets. This procedure was used for two reasons: to reduce

the likelihood that students would be able to look at how others sitting near them were responding to sensitive items and to make it possible for the data to be presented in tabular form to the class within a week or two. The data for this article are based on the virgin students obtained from 10 semesters of data collection (Fall 1990 to Spring 1995).

Results

Reasons for Remaining a Virgin

Not all reasons for being a virgin were rated as equally important. For the total sample of virgins, the mean importance of the 4 factor scores derived from the 13 reasons were: *Not Enough Love* ($M = 2.91$), *Fear* ($M = 2.86$), *Personal Beliefs* ($M = 2.21$), and *Inadequacy/Insecurity* ($M = 1.79$). A series of paired *t*-test contrasts indicated that the first two factor scores were not significantly different from each other, but all other pairs of factor scores were sig-

nificantly different ($p < .001$). The first column of Table 1 presents the mean importance rating for each of the 13 reasons, based on the total sample.

We expected to find that men and women would differ in how they responded to many of the reasons. Overall, women rated more of the listed reasons as important than did men. For example, the mean importance rating across the 13 items was 2.16 for men and 2.43 for women, $t[273] = -3.98$, $p < .001$. A series of *t*-tests (using the Bonferroni procedure to guard against inflating Type I error rate and setting a familywise alpha of .05) on the 4 factor scores derived from the 13 reasons revealed that there were gender differences on all 4 types of reasons. Hence, we also conducted follow-up gender comparisons on the individual items, again using the Bonferroni procedure. The scores for men versus women on the individual items can be found in columns two and three of Table 1.

Women scored higher than men on *Not Enough Love* ($M = 3.17$ for women vs. 2.39 for men), $t[284] = -6.32$, $p < .001$. Follow-up comparisons done on the individual items indicated that women placed more importance than men on both items included in this factor (not been in a relationship long enough or been in love enough and not met the right person). Women also scored higher than men on the *Personal Beliefs* factor ($M = 2.35$ for women vs. 1.92 for men), $t[281] = -3.87$, $p < .001$. In particular, virgin women, to a greater degree than virgin men, expressed fear of parental disapproval and stated that they were not ready. On the third factor, *Fear*, women also scored higher ($M = 2.98$ for women vs. 2.60 for men), $t[282] = -3.19$, $p = .002$. However, women scored significantly higher than men on only one item included in this factor--fear of pregnancy. The only factor score having a higher mean for men than for women was *Inadequacy/Insecurity* ($M = 1.95$ for

men and 1.71 for women), $t[278] = 2.86, p = .005$. Of the four items included in this factor, men scored significantly higher than women on two: too shy or embarrassed to initiate sex and partner not willing.

Affective Reactions to Being a Virgin

Participants reported experiencing a variety of emotional reactions to their virginity status. Table 2 presents the mean responses to each of five emotions, for the total sample and for virgin men and women. In the total sample of virgins, participants reported being both proud and anxious about their virginity status. They also reported some happiness and embarrassment, but little guilt. The hedonic emotional tone index was positive, which indicates that positive emotions were experienced by the participants to a greater degree than were negative emotions.

As hypothesized, however, men and women differed in their emotional reactions to their virginity status. With Bonferroni-corrected t -test comparisons (using a familywise error rate of .05) of men's and women's emotion scores, four significant gender differences were found. Women to a greater degree than men were proud and happy, and men to a greater degree than women were embarrassed and guilty. No significant gender difference was found on anxiety, although this emotion was experienced by men more than any other emotion (pride was the primary emotion women experienced). The hedonic emotional tone index was negative for men and positive for women, this difference was significant.

Associations Among Reasons for Virginity, Affective Reactions, and Other Perceptions about Virginity

Next we examined how men's and women's reasons for virginity were related to their emotional reactions and also other perceptions our participants had about their virginity status.

Table 2

Mean Affective Reactions to Being a Virgin for Total Sample and for Men versus Women

<i>Affective Reaction</i>	Total Sample	Virgin Men	Virgin Women	<i>t</i>
Proud	3.55 (1)	2.89 (2)	3.88 (1)	-6.21*
Anxious	3.31 (2)	3.49 (1)	3.21 (3)	1.66
Happy	3.16 (3)	2.44 (4)	3.52 (2)	-7.12*
Embarrassed	2.41 (4)	2.70 (3)	2.27 (4)	2.58*
Guilty	1.65 (5)	2.00 (5)	1.48 (5)	3.66*
Hedonic Emotional Tone Index	+ .89	-.06	+ 1.37	-5.93*

Note: The response scale for each emotion ranged from 1 (not at all) to 5 (a lot). The numbers in parentheses represent the rank order of the affective reactions based on a comparison of the means within the column. The Total Hedonic Tone is the difference between the mean of the positive emotions and the mean of the negative emotions. The degrees of freedom for the comparisons between men and women ranged from 284 to 286.

* $p \leq .01$ (significance level based on Bonferroni-protected comparisons using a familywise alpha of .05)

Reasons and affective reactions to virginity. People with different reasons for being a virgin may have different emotional reactions to their status. To examine this possibility, we correlated each of the four factor scores (representing the four types of reasons) with the hedonic emotional tone index (degree to which positive emotions were experienced more than negative emotions), for men and women separately. These results are presented in Table 3.

As hypothesized, personal beliefs (e.g., religious reasons) for virginity were strongly associated with a positive affective reaction for both men and women. No other type of reason was associated with emotional reactions for women. For men, interpersonal reasons (i.e., not enough love) were associated with a positive reaction, whereas reasons reflecting inadequacy and/or insecurity were associated with a negative reaction. The fear factor was not associated with emotional reactions.

Reasons, affective reactions, and likelihood of becoming a nonvirgin. As noted by previous researchers (D'Augelli & Cross, 1975; Herold & Goodwin, 1981), there are different subgroups of virgins. For example, Herold and Goodwin (1981) distinguished between adamant virgins and potential nonvirgins based on participants' agreement or disagreement with the item, "I am not likely to engage in premarital intercourse."

We argue, however, that *likelihood of becoming a nonvirgin* should be operationalized as a continuous variable, ranging from zero or almost no likelihood to extreme likelihood. Thus, each participant in this study received a score on *likelihood of becoming a nonvirgin* based on summed responses to the three six-point items described earlier. The scores on this index could (and did) range from 3 (absolutely would not) to 18 (absolutely would). The means were 12.24 for men and 10.94 for women, $t[284] = 2.38, p < .05$; thus, men were more likely than women to believe that they would become a nonvirgin in the near future. To examine how likelihood of becoming a nonvirgin was related to reasons for virginity and emotional reactions, we correlated the "likelihood of

Table 3

Correlations Between Reasons for Virginity and Affective Reactions (Total Hedonic Tone) for Men and Women

<i>Factor Scores for Reasons</i>	Virgin Men	Virgin Women
Personal Beliefs	.55***	.43***
Fear	.16	.08
Inadequacy/ Insecurity	-.40***	-.04
Not Enough Love	.27**	-.06

Note: A positive correlation means that the more important the particular group of reasons was rated, the more positive and less negative the affective reaction to virginity status.

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Table 4

Correlations of Reasons for Virginity and Affective Reactions with Likelihood of Becoming a Nonvirgin

	Virgin Men	Virgin Women
<i>Factor Scores for Reasons</i>		
Personal Beliefs	-.68***	-.77***
Fear	-.08	-.10
Inadequacy/Insecurity	.31***	-.10
Not Enough Love	-.02	.09
<i>Emotional Reactions</i>		
<i>Hedonic Emotional</i>		
Tone Index	-.50***	.57***
Proud	-.49***	.45***
Anxious	.38***	.44***
Happy	-.45***	.56***
Embarrassed	.15	.40***
Guilty	.26**	.24***

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

becoming a nonvirgin" score with the four factor scores and the hedonic emotional tone index. These results are presented in Table 4.

There was a very strong correlation between the importance of personal beliefs as a reason for virginity and the perceived likelihood of becoming a nonvirgin. More specifically, the more important men and women rated personal beliefs (e.g., religious reasons) for their virginity, the more adamant they were about their virginity (the less likely they were to perceive that they would become a nonvirgin). In addition, for men only, higher scores on the Inadequacy/Insecurity factor were positively associated with the perceived likelihood of becoming a nonvirgin in the near future. Scores on the Fear and Not Enough Love factors were unrelated to the perceived likelihood of becoming a nonvirgin, for both men and women.

Emotional reactions to virginity were also related to the perceived likelihood of becoming a nonvirgin. The men and women who believed it was likely that they would become a nonvirgin in the near future had the most negative and the least positive reaction to their virginity status. Furthermore, each specific emotion was significantly associated with the perceived likelihood of losing one's

virginity, with the exception of embarrassment for men (see Table 4).

Social pressure. Virgin men and women reported equal degrees of social pressure to begin to have sexual intercourse ($M = 2.63$ for men and 2.51 for women on a 1 = none to 4 = a lot response scale), $t[285] = 1.08$, *n.s.* However, virgin women reported more pressure to remain a virgin than did virgin men ($M = 2.37$ vs. 2.05), $t[282] = 2.50$, $p = .01$.

We also considered the possibility that social pressure to remain a virgin versus to become sexually active was related to emotional reactions to virginity. Social pressure to become sexually active was negatively associated with women's hedonic emotional tone index, $r = -.12$, $p < .05$; that is, social pressure to become sexually active was associated with a negative reaction to virginity. Conversely, social pressure to remain a virgin was associated with a positive reaction for women, as indicated by their hedonic emotional tone index, $r = .15$, $p < .05$. For men, a strong association was found between social pressure to remain a virgin and their positive reaction as indicated by hedonic emotional tone, $r = .48$, $p < .001$; however, social pressure to become sexually active was unrelated to men's emotional reactions to virginity, $r = -.07$, *n.s.*

Changes in Virginity Over Time

Because our data were collected over a six-year period, we explored the possibility that there were changes over time in the reasons for and affective reactions to virginity. We examined this in two ways: correlational analyses and cohort comparisons.

Correlational analyses. For both men and women, time (which ranged from 1 = Fall semester 1990 to 10 = Spring semester 1995) was positively correlated with the factor containing fear reasons, $r = .23$, $p < .05$ for men and $r = .25$, $p < .001$ for women. More specifically, over time both genders rated worry about contracting AIDS, $r = .22$, $p < .05$ for men and $r = .26$,

$p < .001$ for women and other STDs, $r = .26$, $p < .01$ for men and $r = .18$, $p < .01$ for women, as increasingly important reasons for virginity. The importance rating of fear of pregnancy also became more important for women over time, $r = .18$, $p < .01$. In addition, the Inadequacy/Insecurity factor became more important over time for women, $r = .15$, $p < .05$. The specific item within this factor that grew in importance for women was current partner is not willing $r = .20$, $p < .01$. However, scores on this factor and the other two global factors did not change significantly over time for men.

Some emotional reactions were also found to change significantly over time. For men, time was positively correlated with the hedonic emotional tone index $r = .18$, $p < .05$. More specifically, over time men experienced greater pride, $r = .23$, $p = .01$, and happiness $r = .20$, $p < .05$. Women's scores on the hedonic emotional tone index did not change significantly over time, $r = .06$, *n.s.* However, over time women reported feeling significantly greater pride, $r = .14$, $p < .05$, and anxiety, $r = .15$, $p < .05$, about their virginity. Time was not significantly correlated with the two types of social pressure and the perceived likelihood of becoming a nonvirgin.

Comparisons between cohorts. We also examined changes over time in the experience of virginity by comparing the virgins from the first three semesters of data collection (Fall 1990, Spring 1991, Fall 1991) with the virgins from the most recent three semesters of data collection (Spring 1994, Fall 1994, Spring 1995). We believed that this comparison might better illustrate the changes between early and mid-1990s in reactions to and perceptions of virginity. Table 5 presents the results only for the items that were significantly different between the two cohorts.

In general, the results from these cohort comparisons were quite similar to those of the correlational

analyses. For both men and women, the recent cohort of virgins scored significantly higher on the Fear factor than the earlier cohort. More specifically, for both men and women, worry about contracting AIDS, worry about contracting other STDs, and fear of pregnancy were more important reasons for virginity for the recent cohort than for the earlier cohort. For women, the Inadequacy/Insecurity factor was also rated as significantly more important by the recent cohort than by the earlier cohort; as before, the specific reason that grew in importance was partner not willing.

No significant difference was found between the two cohorts of students (for either men or women) on the hedonic emotional tone index. However, similar to the correlational results, the more recent cohort of virgins experienced greater pride than the earlier cohort [the difference was significant for men and near significant ($p = .06$) for women], and the recent cohort of virgin women experienced more anxiety than the virgin women from the early 1990s.

Discussion

Perhaps because the majority of young men and women are sexually experienced (i.e., nonvirginal) by the

time they reach college age (e.g., Smith, 1991), the topic of adult virginity has received relatively little systematic empirical attention. The purpose of this study was to explore and compare the experiences of those young adult men and women who do in fact choose to maintain their virginity.

Reasons for Virginity

College virgins do not abstain from sexual intercourse because of lack of sexual desire. The least important reason for virginity for both men and women was "I lack desire for sex." This finding belies the stereotype of the "frigid" virgin and certainly can be used to argue against the common beliefs that sexual desire is an inherent aspect of the male but not the female experience (e.g., Regan & Berscheid, 1995) and that men have stronger and more frequent desires than do women (for discussion, see Richgels, 1992; Tolman, 1991). Apparently, both men and women in our sample desired sex but abstained from it because they required an "appropriate" reason to become sexually active (e.g., the "right" person); sought to avoid some real, potentially negative consequences of sexual intercourse (e.g., unplanned

pregnancy, disease); and were attempting to act in service of their personal beliefs. The reasons both men and women rated as most important had to do with not enough love or having not met the right partner. Overall, then, the relative ratings of the reasons were very similar for men and women.

However, gender differences were found in the importance ratings given to many reasons. As expected, our virgin women participants were more concerned than their male counterparts with interpersonal reasons for virginity (i.e., not enough love or not having met the right person). These results are in accord with previous research that suggests that both sexually experienced and inexperienced women are more likely than men to associate sexual activity with love and/or committed relationships (for review, see Oliver & Hyde, 1993). Virgin women also placed greater importance than virgin men on such personal beliefs as not feeling ready to engage in sexual intercourse and on parental disapproval of premarital sex. The fact that during adolescence girls are more likely than boys to have discussed abstinence and other sexual topics with their parents (e.g., Leland & Barth, 1992) may explain

Table 5

Differences in Reactions to and Perceptions of Virginity Between the Early Cohort of Students (Fall 1990, Spring 1991, and Fall 1991) and the Most Recent Cohort of Students (Spring 1994, Fall 1994, and Spring 1995)

	Men			Women		
	Early Cohort (<i>n</i> = 25)	Recent Cohort (<i>n</i> = 35)	<i>t</i>	Early Cohort (<i>n</i> = 64)	Recent Cohort (<i>n</i> = 56)	<i>t</i>
<i>Reasons</i>						
Fear Factor	2.17	2.75	(-2.37*)	2.69	3.21	(-3.15**)
I worry about contracting AIDS.	2.08	2.74	(-2.26*)	2.57	3.29	(-3.54***)
I worry about contracting another STD.	2.08	2.86	(-2.74**)	2.58	3.04	(-2.19*)
Fear of pregnancy				2.95	3.32	(-2.06*)
Inadequacy/Insecurity Factor				1.60	1.85	(-2.18*)
My current (or last) partner is (was) not willing.				1.33	1.93	(-2.93***)
<i>Affective Reactions</i>						
Proud	2.20	3.03	(-2.25*)	3.56	3.98	(-1.88+)
Anxiety				2.98	3.46	(-1.94*)

Note: Each reason was rated on a 1 (not at all important) to 4 (very important) response scale. Each emotion was rated on a 1 (not at all) to 5 (a lot) response scale. Only items having a significant difference between cohorts for at least one gender are listed above. No cohort differences were found on likelihood of becoming a nonvirgin or on either measure of social pressure. Degrees of freedom were 58 for the cohort comparisons for men and ranged from 116 to 118 for the cohort comparisons for women.

+ $p = .06$ * $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

why young adult women are more concerned with parental attitudes toward sexual activity (i.e., they may simply be more aware of their parents' views). Not surprisingly, the women in our sample were also more concerned than the men with the potential negative consequences of sexual intercourse (i.e., pregnancy).

However, men rated reasons having to do with inadequacy and insecurity as more important than did women. More specifically, men viewed their feelings of shyness or embarrassment about initiating sexual activity with a partner as a more important reason for their virginity than did women, and men were also more likely to point to their partners' unwillingness to engage in intercourse. A possible explanation for these gender differences is that the virgin men in our sample may have attempted to initiate sexual intercourse with a potential partner more often than did the virgin women; consequently, they may have experienced rejection more often than have women and may feel less inclined to (and more embarrassed about) making further initiation attempts. That is, this finding may stem from differential experiences of virgin men and virgin women. If virgin men and women perceive the male role in sexual interactions as primarily proactive and the female role as primarily reactive (e.g., Gagnon & Simon, 1973; Reiss, 1981), it makes sense that men would be more concerned than women with reasons associated with the initiation of sexual activity (e.g., partner's unwillingness, personal feelings of shyness).

Our results also indicate that the reasons young adult virgins maintain their sexual status have changed over time. Specifically, recent cohorts of virgins placed more importance than earlier cohorts on their fears of contracting AIDS and other STDs. Whether young adult virgins consciously decide not to have sex based upon this reason or simply provide it as an explanation for their

current sexual status is not clear; however, sexually active individuals also have grown more aware of AIDS over time and appear to have altered their sexual behaviors as a consequence (e.g., are more likely to use condoms; Mosher & Pratt, 1993; Sonenstein et al., 1989). Another reason that became more important over time, at least for women, was "My current (or last) partner is (was) not willing." Although heterosexual partners largely continue to adhere to the traditional script of male initiation of sexual activity (e.g., O'Sullivan & Byers, 1992), recent cohorts of women may be more comfortable with the role of sexual initiator and thus more likely to have experienced a partner's refusal to have intercourse. These changes found over a six-year period may indicate that the type of person who remains a virgin is changing and/or may indicate broader changes in societal attitudes about sexuality.

Affective Reactions to Virginity

Male and female virgins reported a variety of both positive and negative emotional responses to their sexual status; however, women's experiences were more positive than negative, whereas men's were more negative than positive. With respect to specific emotional reactions, women felt greater pride and happiness than did men, and men felt greater embarrassment and guilt than did women. These gender differences may be explained by cultural mandates regarding sexual intercourse that teach that sexual experience is an important aspect of masculinity (for discussion, see Lewis & Casto, 1978; Tiefer, 1995). Virginity—defined here as not yet having engaged in sexual intercourse—therefore may represent a greater stigma for men than for women. Indeed, some people appear to believe that men are born sexually experienced; more than half the respondents in a survey conducted by Berger and Wenger (1973) argued that it made no sense to

speak of "male virginity," and those who felt that such a concept did exist disagreed over the activities that constituted the loss of male virginity. It is not surprising, given these sociocultural expectations and beliefs, that virgin men demonstrate a negative response to their virginity. We might also then expect men to feel positively about the first occurrence of sexual intercourse; after all, it removes an undesired stigma. In fact, the feelings that men and women have about their virginity are to some extent the opposite of the reactions that men and women report to the *loss* of their virginity; that is, men tend to have a more positive emotional reaction to their first intercourse experience than do women (e.g., Darling, Davidson, & Passarello, 1992; Sprecher et al., 1995).

However, affective reactions to virginity, for both men and women, do appear to be changing over time. In particular, although virgin men continue to feel more negatively about their sexual status than do virgin women, more recent cohorts report greater pride and happiness than earlier cohorts. We also found that more recent cohorts of women reported more pride. These changes may reflect the fact that young adults—especially young men—have a greater number of publicly visible, virginal role models to emulate (for example, the group Athletes for Abstinence includes a number of well-known male athletes; Newman, 1994).

Associations Between Reasons and Affective Reactions

Men and women had a more positive overall reaction to their virginity if they viewed their sexual status as the result of their personal beliefs or values (i.e., against religious beliefs, believe that premarital sex is wrong, fear parental disapproval, not ready for intercourse). To the extent that virginity represents tangible evidence that one is living according to one's

personal convictions, such positive feelings are understandable. Although we expected to find that men and women who choose to remain virgins because they have not found the right partner or been in love enough would feel *less* positive about their virginity status, no such association was found for women, and for men, such reasons were associated with a *more* positive overall affective response. Perhaps men who feel “good” about their virginity—and who are violating the stereotype of the unhappy male virgin—are also those men who violate other stereotypes (who, for example, associate sex and love, which is not a stereotypically “male” response; e.g., Carroll et al., 1985). In addition, for men, but not women, reasons related to inadequacy/insecurity—a partner’s unwillingness to have sex and the perception that one is unable to attract or initiate intercourse with a potential partner—were associated with a negative emotional reaction. To the extent that a man’s virginity is not due to personal choice, but rather reflects an inability to overcome various individual (e.g., undesirability) and interpersonal (e.g., partner’s refusal) barriers to sexual experience, it appears to engender negative affect.

Adamancy versus Perceived

Likelihood of Losing One’s Virginity

Several researchers have suggested that virginity is not a discrete variable such that one is virginal or one is not virginal, but rather that there may be additional types of virgins. For example, D’Augelli and D’Augelli (1977; also see Herold & Goodwin, 1981) distinguished between “adamant virgins” (who believe that they will wait until marriage to have intercourse) and “potential nonvirgins” (who believe that they will have premarital sex under the “right” circumstances). We argue that it may be even more meaningful to conceptualize virginity along a continuum ranging from fully adamant about

one’s virginity to fully open to the possibility of losing one’s virginity (becoming a nonvirgin).

Although the virgin women in our sample were more adamant than the virgin men about their sexual status, the more adamant that *both* genders were, the more importance they placed on personal beliefs for their virginity and the more positive their overall emotional reaction. Specifically, men and women who were more adamant about their virginity were more likely to experience pride and happiness and less likely to feel anxiety and guilt than were men and women who believed that they were likely to become sexually active in the near future. These results suggest that sexual decision making and affective reactions to virginity are inextricably interwoven. However, we do not know from these data whether individuals first make a sexual decision (i.e., to have sex) and then experience emotional reactions based on that decision or whether they have certain emotional reactions to their current situation (i.e., virginity) and then make a decision as a result of those reactions (e.g., a person realizes that he or she is unhappy about his or her sexual status, and this realization contributes to the decision to become a nonvirgin).

Social Pressure

This study represents an important preliminary step toward delineating the role that social pressure may play in informing the sexual attitudes and decisions of young adult virgins. First, we found several gender differences. Virgin men and women reported receiving equal amounts of pressure (presumably from dating partners and peers) to engage in sexual intercourse, but only women reported greater negative affect toward their virginity as the social pressure to have sex increased. Women also experienced greater pressure (presumably from parents) to abstain from intercourse than men, but both men and women

felt more positive about their virginity as this type of social pressure increased.

In addition, the amount of social pressure respondents received to remain a virgin was unrelated to the amount of social pressure they received to lose their virginity, which suggests that young adult virgins may get conflicting messages from different network sectors (e.g., parents vs. friends). However, because we did not explicitly examine the different types of external pressure that virgins may experience (i.e., we asked our participants to indicate the amount of pressure they received from others in general rather than from specific subgroups of others), we do not know, for example, whether virgins received more pressure to have sex from their peers than from their parents, or whether gender differences exist such that virgin women received significantly more pressure to become sexually active from their (male) dating partners than virgin men received from their (female) dating partners. We also did not distinguish between overt pressure (e.g., a parent explicitly communicates his or her negative feelings about premarital sex to a child; a person verbally informs his or her dating partner that it is “time” to have sex) and indirect pressure (e.g., a virgin perceives that all of his or her friends are engaging in sex, regardless of their actual behavior) or how the type or quantity of pressure that a person receives from a particular element of his or her social network may change over time and/or with the interpersonal context.

Future Research Directions

The current study was designed to explore young adult virginity. Specifically, we examined whether virgin men and women differed in their reasons for, affective reactions to, adamancy toward, and perceived pressure to lose their virginity, and whether these aspects of virginity have changed over the six-year

period spanning 1990 to 1995. Future researchers might consider other group differences (e.g., race/ethnicity, sexual orientation, age), use additional sampling techniques, and explore continued changes over time in adult virginity (ideally with longitudinal data sets).

In addition, we believe that it is important to include other subclassifications of virginity in research on adult virgins; for example, some virgins have engaged in "everything but" sexual intercourse (Rubin, 1990), whereas others have abstained from all intimate sexual activities. It is likely that sexually active but "technical" virgins will have different reasons for and emotional reactions to their sexual status than will virgins with very little sexual experience. A related issue worth examining is the phenomenon of "second virginity." This concept, currently espoused by several social groups, refers to the notion that a sexually experienced man or woman can renew or reclaim virgin status by making the decision to discontinue further sexual activity until marriage (Ingrassia, 1994). Some researchers have in fact distinguished between "regretful nonvirgins" (those who had been sexually active but who planned to abstain from sex for a while) and other types of virgins (e.g., Schechterman & Hutchinson, 1991).

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