

Working Paper Series WP-09-09

July 2009

Sex through a Sacred Lens: The Longitudinal Effects of the Sanctification of Marital Sexuality

Annette Mahoney, Ph.D. Bowling Green State University

Krystal M. Hernandez, M.A. Bowling Green State University

Running head: MARITAL SEXUALITY

National Center for Family & Marriage Research Working Paper Series

# **Sex through a Sacred Lens:** The Longitudinal Effects of the Sanctification of Marital Sexuality

Annette Mahoney, Ph.D., and Krystal M. Hernandez, M.A.

**Bowling Green State University** 

Department of Psychology

National Center for Family & Marriage Research

An earlier version of this paper was presented by Hernandez at the American Psychological Association's Division 36 (Psychology of Religion and Spirituality) Mid-Year Conference at Loyola College in Baltimore, MD on April 3, 2009. A poster of this study will also be presented at the Association for Behavioral and Cognitive Therapies Annual Convention in New York City, NY in November 2009.

The research for this paper was supported by the National Center for Family & Marriage Research, funded by a cooperative agreement between the U.S. Department of Health and Human Services and Bowling Green State University, grant # 5 UOI AEOOOOOI-02. Any opinions and conclusions expressed herein are solely those of the authors and should not be construed as representing the opinions or policy of any agency of the Federal government or the National Center for Family & Marriage Research.

## Abstract

Research on the role of religion in enhancing sexuality in marriage is virtually absent. In response to this scarcity, this longitudinal study examined sanctification of marital sexuality among newly married individuals (N = 67; married 4-18 months at Time 1). Greater sanctification early in the marriage predicted better sexual functioning (i.e., frequency of intercourse, sexual and marital satisfaction) one year later, after controlling for demographics and initial levels of global religiousness and marital satisfaction.

Participants with higher initial levels of sanctification, relative to those with lower levels, tended to experience smaller declines in sexual functioning across one year. Findings are consistent with theory and research on sanctification, particularly that greater sanctification facilitates greater personal and relational benefits over time.

Sex through a Sacred Lens: The Longitudinal Effects of the Sanctification of Marital

Sexuality

Marital sexuality is among the most neglected topics in overall sex research (Apt, Hurlbert, & Clark, 1994). This is a striking paradox considering two realities, specifically that marriage remains the only universally sanctioned context for sexual activity (Christopher & Kisler, 2004; Greenblat, 1983), and problems of a sexual nature are among the most common and damaging to marital functioning, particularly for newlyweds (McCarthy, 1998; Risch, Riley, & Lawler, 2003; Whisman, Dixon, & Johnson, 1997). Yet another paradox is that social scientists have similarly neglected studying the role of religion in marital sexuality. With one exception (Young, Luquis, Denny, & Young, 1998 examined perceptions of God's view of sex among married persons<sup>1</sup>), published research has focused on how religiousness shapes sexual attitudes and behavior outside of the marriage, including adolescent and premarital sexuality and the risk of extramarital affairs (Cochran & Beeghley, 1991; DeLamater, 1981; Donahue & Nielsen, 2005). In this study, we examine whether specific religious beliefs about one's marital sexuality may promote marital sexuality and satisfaction over time. Considering spousal dynamics within the early years of marriage largely foreshadowing subsequent marital functioning (Ruvolo, 1998), we direct this question to newlyweds.

Empirical studies consistently find that religiousness links to general aspects of married life. A 2001 meta-analysis (Mahoney, Pargament, Tarakeshwar, & Swank, 2001) reveals that markers of individual religiousness (e.g., frequency of religious service attendance) correlate significantly, though modestly, with marital satisfaction (average r = .15 and .07, respectively). In addition, positive associations have been found between

couples' religious homogamy and joint religious activities and the quality of their marriage (Myers, 2006). Married couples also report believing their marriage is sacred correlates with greater global marital adjustment (Mahoney et al., 1999); however, we have yet to deduce what it is about religion that may facilitate positive *sexual* dynamics – as a key dimension to marriage – over time. Although more frequent attendance of religious services seems to help deter engagement in extramarital affairs (Previti & Amato, 2004), research is needed that goes beyond reinforcing the theory that religion's influence on sexuality is solely restrictive (Murray, Ciarrocchi, & Murray-Swank, 2007).

This study, therefore, addresses the potentially adaptive role religion may play in facilitating sexual dynamics within marriage. Specifically, we extend prior correlational links (Time 1, hereafter T1; Hernandez, Mahoney, & Pargament, 2009) and examine longitudinally (Time 2, hereafter T2) the role of one specific set of religiously based perceptions about sexuality, the sanctification of marital sexuality. We propose sanctification of marital sexuality will predict enhanced sexual and marital functioning across one year for newly married individuals.

Conceptual Underpinnings of the Sanctification of Marital Sexuality

Emerging theory and research on the construct of sanctification provide the conceptual framework for this study. In general, sanctification is defined as the psychological process of perceiving an otherwise secular aspect of life as having divine character and significance (Pargament & Mahoney, 2005). Described as distinct from, but related to, global markers of religiousness (e.g., frequencies of prayer and attendance, self-ratings of religiousness/spirituality), sanctification taps explicitly into religious and spiritual beliefs about personal relationships, roles, and life transitions (Mahoney et al.,

1999). Stated differently, the study of sanctification implements social scientific methods and measures a process of subjective cognitions about the spiritual meaning of an aspect of life (Mahoney, Pargament, Murray-Swank, & Murray-Swank, 2003; Pargament & Mahoney, 2005).

One index of sanctification, Manifestation of God, refers to perceiving God to be present and influential in a particular life domain. While "God" is often used in describing this theistic dimension to sanctification, items in the subscale are not limited to a particular type or kind of deity; respondents may apply their preferred name (e.g., Higher Power, Allah; Mahoney et al., 2003). A second index, Sacred Qualities, does not refer to a specific deity, but rather reflects how aspects of life are understood as holy and blessed. In essence, sanctification can be achieved by people of varying degrees of religiousness and spirituality, and belief in the divine.

Pargament and Mahoney (2005) have integrated findings from prior studies on sanctification and hypothesize that viewing an aspect of life as sanctified should lead conceptually to *personal and relational benefits*<sup>2</sup> in that arena. In the context of intimate relationships, possible benefits include better relational dynamics and positive affective experiences, such as satisfaction and intimacy.

To elaborate, as applied to sexuality, sanctification refers to perceiving God is experienced during moments of sexual intimacy with one's partner and/or that such a bond is sacred and spiritual. The expectation that sanctification of marital sexuality would enhance marital sexuality is consistent theoretically with diverse religious and spiritual teachings about the meaning and reverence given to marital sexuality (Hernandez et al., 2009). For example, the Judeo-Christian tradition refers to sex within

marriage as an authentic experience of the divine. Christian theology promotes sexuality as created by God as a pathway to understand God and God's love. The Islamic tradition characterizes sexuality as a life force that is spiritually enhancing (Duddle, 1988; Murray-Swank, Pargament, & Mahoney, 2005). In addition, both Hindus and Buddhists recognize sexuality as a path toward spiritual transcendence and truth (Murray-Swank et al., 2005).

Although research sheds some light on this seemingly more enhancing side of religion in sexuality for couples, such studies are cross-sectional in nature. For instance, using a sample of 85 college students in a serious, dating relationship, sanctification of sexual intercourse was found to be associated with greater frequency of sex and sexual satisfaction after controlling for global religiousness and attitudes toward premarital sex (Murray-Swank et al., 2005). Among 182 married individuals, two alternative measures of the sanctification of marital sexuality each predicted 5% of the variance in sexual satisfaction over and above general religiousness and spirituality, personality factors, and shame, guilt, and pride (Murray-Swank & Brelsford, 2009).

The most relevant findings are cross-sectional results from the current sample (Hernandez et al., 2009). Greater sanctification among 83 individuals married between 4 and 18 months predicted between 9% and 14% of the variance in marital sexual functioning after controlling for demographics (i.e., age, gender, income, number of times married, number of children residing) and global religiousness (i.e., frequencies of attendance and prayer, biblical conservatism). Criteria included greater sexual and marital satisfaction and sexual intimacy. Further, after controlling for marital satisfaction as well, sanctification of marital sexuality continued to predict a notable 6% of the variance in sexual intimacy. Descriptively, close to 80% of these newlyweds agreed- to strongly-

agreed their sexual bond with their spouse is sacred, while 51% felt that being in a sexual relationship with one's spouse is a reflection of God's will. This initial effort highlights a set of religiously based beliefs about sexuality in marriage can relate to adaptive sexual criteria, thus may serve as a resource in establishing a healthy marital sex life.

Longitudinal evidence would help bolster how such perceptions are protective over time, rather than merely a side effect, of better marital sexual functioning.

## Longitudinal Research on Marriage

Published longitudinal research on marriage reveals little about the interplay of sexuality and religion. Although multiple longitudinal studies have been conducted on marriage (Booth, Johnson, Branaman, & Sica, 1995; Brown, Orbuch, & Bauermeister, 2008; Carrere, Buehlman, Gottman, Coan, & Ruckstuhl, 2000; Cohan & Bradbury, 1994; Halford, Lizzio, Wilson, & Occhipinti, 2007; Huston, Caughlin, Houts, Smith, & George, 2001; Kurdek, 1991; Miller, Nichuis, & Huston, 2006; Myers, 2006; Neff & Karney, 2007; Ruvolo, 1998; Sullivan, 2001), primarily on newlywed marriage, both sexuality and religion tend to be ignored entirely or treated more globally (e.g., single-item measures). More prevalent topics include predictors of divorce and conflict resolution processes (e.g., McCarthy, 1998; Risch et al., 2003). In essence, investigators have emphasized the detrimental paths which marriage can take, perhaps in response to findings that about 21% of marriages end within their first year (Quinn & Odell, 1998).

Despite limited focus on marital sexuality in this literature, conflict over sex is among the top three problems couples encounter in the first 2 years of marriage, in addition to conflict over finances and children (Center for Marriage and Family, 2000). Risch et al. (2003) maintains the frequency of sexual relations is similarly among the top

three concerns in a national sample of couples married five years or less. In fact, sexual problems are often a primary cause of divorce (McCarthy, 1998; 2002). Still, virtually no attention has been directed to factors that preserve a healthy and satisfying sexuality. What is known is that newlyweds experience declines in the frequency of sexual intercourse (i.e., decreases with age and after the first 2 years of marriage, known as the honeymoon effect, in which the novelty of sex with a partner lessens over time), and a strong positive association exists between sexual and marital satisfaction (Christopher & Sprecher, 2000; Greenblat, 1983; James, 1981; Kumar & Makwana, 1991).

In this study, we examine, in part, whether sanctification of marital sexuality early in the marriage predicts sexual satisfaction and frequency over time. While we did not find links between sanctification and frequency of sex at T1, it may be that sanctification helps protect spouses from experiencing dramatic decreases in frequency over time or from experiencing such common decreases as particularly distressing. Moreover, we extend past research on religion and sexuality by adopting a positive psychological approach, thus exploring how marital sexuality may be sustained or enhanced by initially perceiving it as sacred.

Goals and Hypotheses of the Study

We seek to fulfill notable gaps in research with this longitudinal study of the sanctification of marital sexuality. Specifically, studies on marital sexuality are scarce, including how marital sex may be viewed through a sacred lens and predictive of enhanced relational quality in the long-term. Although we focus specifically on sanctification, we do not discount the potential role of global religiousness in marital sexuality nor polarize it with sanctification. In fact, we suggest that notions about

sanctification of marital sexuality often come precisely from more general involvement in religion, such as attending religious services and reading religiously based literature, which emphasize the divine and transcendent meanings of sexuality in marriage. We, therefore, included three commonly used indices of global religiousness in this study: frequency of attendance, often referred to as "public religiousness;" frequency of prayer, often referred to as "private religiousness;" and an index of biblical conservatism (i.e., literalism, which may relate to a more constraining view of sex).

The purposes of the study were to 1) test whether global religiousness within the first 18 months of marriage impacts marital sexual functioning one year later, including average monthly frequency of sexual intercourse, sexual and marital satisfaction, and sexual intimacy; 2) test the hypothesis that higher initial levels of sanctification of marital sexuality predict such greater relational benefits one year later, after controlling for global religiousness; and 3) examine patterns of change over time in criteria that were associated significantly with initial sanctification scores. We did not make directional hypotheses about global religiousness, as such indicators may encompass potentially enhancing and/or restrictive views and experiences about sexuality. In contrast, we anticipated sanctification should promote enhancing dyadic experiences, thus that T1 total sanctification would predict relational criteria beyond global religiousness; sanctification assesses more directly religious beliefs about marital sexuality, thus helps explain what it is about religion that is relevant to marital sexual quality over time. Regarding the third objective, we assess changes in outcomes as a function of participants' "low" versus "high" initial sanctification scores.

## Method

Eighty-three participants completed T1, and 67 of these completed the one-year follow-up at T2 (67% female: M age of 31 years. SD = 9 with range from 19 to 56 years). Participants resided primarily in Northwest Ohio, however represented nine additional states. Individuals were primarily Caucasian (79.1%), as well as 7.5% African American, 7.5% Hispanic, 3% Asian American, and a combined 3% multi-ethnic or other. In terms of the highest level of education completed, 7.5% completed partial high-school, 17.9% graduated high school, 29.9% completed partial college or post-high school training, 32.8% graduated college, and 11.9% earned a graduate or professional degree. The majority of participants were employed full-time (56.7%), with others being employed part-time (19.4%), unemployed (11.9%), a full-time homemaker (6%), a student (1.5%), retired (1.5%), or other (3%). Regarding their annual household income, 22.4% reported less than \$25,000, 31.3% between \$25,001 and \$50,000, 23.9% between \$50,001 and \$75,000, and a combined 22.4% between \$75,001 and \$130,000. Participants were predominately Christian (total 71.7%, including 25.4% Catholic, 23.9% Nondenominational, and 22.4% Protestant); 1.5% were Buddhist, 1.5% Hindu, 1.5% Moslem, 7.5% other, and 16.4% reported no affiliation.

At T2, participants were married an average of 27 months (SD = 5), with a range of approximately 19 to 33 months. Less than half of the sample (43.3%) reported having children living with them (M = 2 children; range from 1 to 5). Further, 16.4% indicated they or their spouse were currently pregnant, and 19.4% revealed having a child since T1. About 40% reported currently using contraception, primarily birth control and condoms. We also assessed sexual infidelity over the past year and found a very low base rate (n = 1).

3; 4.3%; adopted from 2004 General Social Survey [GSS]; Davis, Smith, & Marsden, 2009). Participants reported minimal consideration of or proneness to divorce (Marital Instability Index [MII]; Booth, Johnson, & Edwards, 1983). Overall, this sample was sexually faithful and martially stable.

Independent samples t-tests and chi-square tests were conducted to determine whether those who did not participate at T2 (n = 16) were significantly different from those who participated at both time points (n = 67). Participants did not differ on global religiousness (p's > .05). When compared to individuals who participated at both time waves, those who only participated at T1 were significantly more likely to have considered divorce (t = 2.10, p < .05), and less satisfied with both their marriage (t = -3.42, p = .001) and sexual relationship with their spouse (t = -2.27, t < .05); it cannot be determined whether these individuals were separated or divorced from their spouse. *Procedure* 

At T1, participants were identified through public marriage license records in Northwest Ohio between January, 2006 and April, 2007. From these records, which included individuals' addresses, postcards recruiting for the study were mailed to one spouse from each couple identified (*N* = 1,111 postcards). Participant eligibility included: (1) aged 18 years or older; (2) currently living with spouse; and (3) able to read and speak English. Beginning in August, 2008, the 83 individuals who participated at T1 received another postcard inviting them to participate in this study. Of those who had not participated approximately one month following receipt of the postcard, up to three total attempts were made to contact them directly (e.g., telephone, email, phone number of relative or friend, all of which were provided at T1). In order to participate at T2,

individuals must have remained married to their spouse. A total of 67 from the original 83 participated at T2, with 21 completing paper surveys and 46 completing online surveys<sup>3</sup>. Participants were awarded \$40 as compensation. All necessary applications for the Bowling Green State University Human Subjects Review Board were completed<sup>4</sup>. *Measures* 

Global religiousness. Three global religiousness variables (Mahoney et al., 1999) were included and entered separately in analyses to assess unique effects. Frequency of attendance at religious services was rated on a 9-point scale ranging from 0 (never) to 8 (more than once a week). Frequency of prayer was rated on a 6-point scale ranging from 0 (never) to 5 (several times a day). An assessment of the degree of Biblical conservatism was included using a 5-point Likert scale on two items (e.g., "The Bible is God's word and everything will happen exactly as it says"), ranging from 0 (strongly disagree) to 5 (strongly agree); items were summed for a total score (Murray-Swank et al., 2005).

Sanctification of marital sexuality. Two subscales, non-theistic Sacred Qualities and theistic Manifestation of God, were adapted from past research (Mahoney et al., 1999). On a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), participants first rated the extent to which they agreed with 10 statements reflecting how their marital sexual bond has transcendent qualities (e.g., "The sexual bond I have with my spouse is sacred to me;" Sacred Qualities subscale  $\alpha$  = .95 at T1,  $\alpha$  = .97 at T2). Using the same Likert scale, they also rated 10 statements reflecting how their bond is an expression or sign of God's influence (e.g., "God played a role in my decision to have a sexual relationship with my spouse;" Manifestation of God subscale  $\alpha$  = .97 at T1,  $\alpha$  = .98 at T2). The ten items from each subscale were summed, and then the two subscale

scores were summed for a total score of the sanctification of marital sexuality. A total score (20 to 140 possible range) was used for analyses given a strong intercorrelation at T1 and T2 (r = .82, p = .001), suggesting some overlap.

Average monthly frequency of sexual intercourse. Participants provided an estimate of the average monthly frequency of sexual intercourse with their spouse, specifically choosing among 4-point options (from 1-4, etc., up to 30 or more times and including *not at all*; used by Greenblat, 1983).

Sexual satisfaction. Nine items adapted from a scale used by Young et al. (1998) assessed sexual satisfaction. Participants reported on their degree of agreement with nine statements, such as "I am satisfied with the sexual relationship I have with my spouse," using a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). These items were summed for a total score ( $\alpha = .95$  at T2; possible range from 9 to 45).

Safety Questionnaire (ISQ; J. Cordova, personal communication, October 25, 2006) was included as a measure of sexual intimacy. Sample items included "I feel comfortable initiating sex with my partner." A 5-point Likert scale was applied (0 = never to 4 = always), and three items were reverse-scored such that higher scores represented a higher degree of sexual intimacy (possible range of scores from 0 to 24). Items were summed to create a total score of sexual intimacy ( $\alpha = .85$ ).

*Marital satisfaction*. Global marital satisfaction was measured using the Kansas Marital Satisfaction Scale (KMS; Schumm et al., 1986). A 3-item, 7-point Likert scale was used (1 = extremely dissatisfied to 7 = extremely satisfied), and items were summed with higher scores signifying greater marital satisfaction ( $\alpha = .97$ ).

Open-ended comments. Participants were given the option of answering openended questions intended to assess changes in the roles religion and spirituality played in their marital sexuality over the past year. They were asked to describe their view of marriage and sexuality and how religion and spirituality may have informed their views.

## Results

## Preliminary Data Analyses

Descriptive findings on global religiousness. Participants reported a wide range of public and private religious involvement. The breakdown in frequency of religious service attendance include the following: 16.4% never, 7.5% less than once a year, 7.5% once a year, 34.3% several times a year, 6.0% once a month, 4.5% two to three times a month, 4.5% nearly every week, 7.5% every week, and 11.9% more than once a week. The breakdown of frequency of prayer includes the following: 13.4% never, 19.4% less than once a week, 7.5% once a week, 17.9% several times a week, 13.4% once a day, and 28.4% several times a day. On average, participants reported a moderate level of Biblical conservatism (M = 6.15, SD = 2.54; range of scores from 2 to 10).

In order to better understand how the sample's general religiousness compared to a nationally representative sample, we utilized data from a subsection of the 2008 GSS (Davis et al., 2009) of married persons aged between 19 and 56 on rates of religious service attendance (n = 644) and prayer (n = 638). The samples displayed roughly similar rates of attendance; the largest discrepancy was rate of attending several times a year, with about 34% of the current sample compared to only 12% of the national sample reporting this frequency (and generally higher rates of more frequent attendance). Further, the current sample engaged more in *less* frequent prayer. The present sample

was, thereby, not religiously biased, and reported less global religiousness than national norms.

Descriptive findings on the sanctification of marital sexuality. When rating the degree to which their sexual bond with their spouse is sacred (Sacred Qualities of Marital Sexuality), participants reported a mean of 39.24 (SD = 17.83), suggesting moderate levels of endorsement. The sample utilized close to the full range of the subscale (possible range of scores from 10 to 70, with actual range from 10 to 68), and scores were normally distributed. About 76% agreed- to strongly-agreed "the sexual bond I have with my spouse is sacred to me." In addition, close to half of the sample (47.7%) highly endorsed that "our sexual relationship connects us to something greater than ourselves" (see Table 1).

Considering the extent to which individuals perceived their marital sexual relationship as reflective of God's presence or will (Manifestation of God in Marital Sexuality), participants reported a slightly lower mean score of 32.34 (SD = 18.27) when compared to Sacred Qualities. The sample utilized the full range of this subscale (possible and actual range of scores from 10 to 70), though the distribution of scores were slightly right skewed. To highlight the range of responses, 40.2% agreed- to strongly-agreed, "God played a role in my decision to have a sexual relationship with my spouse," whereas 67.1% disagreed- to strongly-disagreed, "there are moments when I feel a strong connection with God when I am sexually intimate with my spouse" (see Table 1).

When items from the two subscales were combined into a total sanctification score (range 20 to 140), participants reported a mean score of 71.73 (SD = 34.63;  $\alpha = .98$ ). Sacred Qualities and Manifestation of God were again highly correlated (r = .82, p = .98).

.001), supporting the more one perceives the marital sexual bond to be sacred, and the greater God was also believed to be present. Alpha coefficients were slightly higher than prior research on the sanctification of premarital sex (Murray-Swank et al., 2005). There were no significant gender differences on the measure (p > .05). In addition, there were no significant differences on either sanctification subscale based on religious affiliation (i.e., Christian versus other, then Catholic versus other given the larger percentage of Catholic participants; p's > .05). Significant cross-sectional, bivariate correlations were found among total sanctification of marital sexuality and global religiousness (range of r's from .27 to .43, p's  $\leq$  .05), suggesting moderately strong links, that the sanctification measure was distinct from such markers of more general religiousness.

Descriptive findings on positive aspects of marital sexuality. On average, participants reported engaging in sexual intercourse between 9 and 12 times per month. They indicated the following monthly frequencies: 3% not at all, 26.9% 1-4 times, 22.4% 5-8 times, 25.4% 9-12 times, 10.4% 13-16 times, 4.5% 17-20 times, and a combined 7.5% 21 or more times.

Overall, satisfaction and intimacy scores were moderately high. Total sexual satisfaction scores were slightly, positively skewed (M = 36.03, SD = 8.51), with an actual range from 16 to 45 despite a possible range from 9 to 45. Total sexual intimacy scores were also positively skewed (M = 20.25, SD = 4.04), with scores ranging from 8 to 24 despite a possible range from 0 to 24. Yet a similar picture emerged with marital satisfaction, with a mean total score of 17.21 (SD = 3.75; range from 5 to 21), suggesting notably satisfied married individuals.

Bivariate correlations were conducted among these T2 criteria. All associations were significant and positive, with a range of correlations from .32 (average frequency of sex and marital satisfaction, p < .01) to .67 (sexual satisfaction and intimacy, p < .001). Moreover, T2 bivariate correlations among sanctification of marital sexuality and criteria were all significant and positive (range of r's from .27 to .47, p's  $\leq$  .01). Bivariate correlations were also conducted among T1 total sanctification and T2 criteria, and the only significant link emerged with sexual satisfaction (r = .36, p < .01).

The Unique Contributions of Global Religiousness to Relational Criteria

Bivariate correlations were conducted among T1 demographics and other descriptive variables<sup>5</sup> and T2 criteria. Results indicated we needed only control for age in analyses. Separate hierarchical regression analyses were conducted to examine whether global religiousness indicators uniquely predict T2 marital sexual functioning one year later. In Step 1 of each regression equation, age and the initial (T1) score on the given outcome were entered separately. In Step 2, the three global religiousness variables at T1 were entered separately. Table 2 summarizes results.

Aspects of global religiousness, specifically frequency of attendance and prayer, and biblical conservatism did not predict unique variance in average monthly frequency of sex, or sexual or marital satisfaction after controlling for age and T1 levels of respective outcomes. Sexual intimacy is the only case in which global religiousness was relevant. Higher frequencies of attendance ( $\beta$  = .43, p < .01), whereas lower frequencies of prayer at T1 ( $\beta$  = -.35, p < .05) uniquely predicted sexual intimacy one year later ( $R^2\Delta$  = .10, F for  $R^2\Delta$  = 8.70, p < .05).

The Unique Contributions of Sanctification of Marital Sexuality to Relational Criteria

We expected individuals' initial reports of sanctification of marital sexuality would predict relational criteria one year later over and above global religiousness. To test this, a third step was added to the above regression equations in which the total sanctification of marital sexuality at T1 was entered (see Table 2). The perception of the marital sexual relationship as sanctified accounted for unique variance in three of the four outcomes after controlling for age, T1 levels of outcomes, and global religiousness. First, the sanctification of marital sexuality at T1 accounted for a unique 5% of the variance in average monthly frequency of sexual intercourse at T2 ( $\beta$  = .28, p < .05). A total of 41% of the variance was accounted for by the model, with T1 average monthly frequency of sex exerting the only additional, unique influence after controlling for other variables ( $\beta$  at Step 3 = .55, p < .001).

Second, T1 sanctification significantly predicted sexual satisfaction one year later after controlling for age, T1 sexual satisfaction, and global religiousness ( $\beta$  = .44, p < .001). Specifically, initial sanctification of marital sexuality explained a unique 10% of the variance in T2 sexual satisfaction; the model accounted for 54% of the total variance. At the third and final step, in addition to sanctification, higher T1 sexual satisfaction ( $\beta$  = .51, p < .001) and less frequent prayer ( $\beta$  = -.35, p < .01) significantly predicted future sexual satisfaction. In this case, private religious involvement exerted a significant and opposite effect compared to sanctification, with greater frequencies of prayer predicting less satisfaction with the sexual relationship.

Third, initial perceptions of the marital sexual bond as sanctified uniquely predicted marital satisfaction one year later, specifically accounting for 6% of the

variance after controlling for age, T1 marital satisfaction, and global religiousness; 47% of the total variance was explained by the model. At the final step of the regression, age had a negative effect ( $\beta$  = -.31, p < .01), and both T1 marital satisfaction ( $\beta$  = .48, p < .001) and sanctification had positive effects ( $\beta$  = .34, p < .01).

Finally, initial scores on the sanctification of marital sexuality did not predict unique variance in sexual intimacy after controlling for other variables. Rather, aspects of global religiousness played an important, though somewhat contrasting, role. T1 levels of sexual intimacy ( $\beta = .52$ , p < .001), frequency of religious service attendance ( $\beta = .41$ , p < .01), and frequency of prayer ( $\beta = -.36$ , p < .05) each had a significant influence on sexual intimacy one year later. While greater frequency of attendance within the first 18 months of marriage predicted greater, subsequent sexual intimacy, greater frequency of prayer at T1 predicted less sexual intimacy at T2.

Does Controlling for Marital Satisfaction Change the Role of Sanctification in Criteria?

A number of studies support strong links between marital satisfaction and sexual functioning, primarily operationalized as sexual satisfaction (Apt, Hurlbert, Pierce, & White, 1996; Christopher & Sprecher, 2000; Litzinger & Gordon, 2005; Young et al., 1998). Results at T1 also supported that sanctification continued to predict sexual criteria after controlling for marital satisfaction. In order to test the longitudinal power of sanctification of marital sexuality, we conducted hierarchical regressions on T2 average monthly frequency of sex and sexual satisfaction. Steps 1 and 2 remained the same as noted above. Step 3 included T1 marital satisfaction. Step 4 included T1 sanctification.

Initial sanctification of marital sexuality *continued* to predict the same variance in T2 average monthly frequency of sex (5%) and sexual satisfaction (10%) after controlling

for marital satisfaction in addition to age, T1 respective outcome scores, and global religiousness. In both cases, T1 marital satisfaction did not predict unique variance at either the third or fourth step of the regression equation. At the final step, with respect to average monthly frequency of sex one year later, the initial frequency of sex ( $\beta$  = .57, p < .001), frequency of prayer ( $\beta$  = -.34, p < .05), and sanctification predicted unique effects ( $\beta$  = .31, p < .05; F for  $R^2\Delta$  = 6.02, Significant  $F\Delta$  = .02). These variables had similar effects on T2 sexual satisfaction in the final step (T1 sexual satisfaction  $\beta$  = .53, p < .001; frequency of prayer  $\beta$  = -.37, p < .05; sanctification  $\beta$  = .44, p < .001; F for  $R^2\Delta$  = 10.19, Significant  $F\Delta$  = .001). These models accounted for 42% and 54% of the total variance in frequency of sex and sexual satisfaction, respectively.

Predicting Change over Time in Criteria: The Role of High vs. Low Sanctification at T1

For exploratory purposes, we sought to examine changes in relational criteria over time as a function of initial levels of the sanctification of marital sexuality. Given documented declines in sexual functioning, in particular across the early years of marriage (Christopher & Sprecher, 2000), we assessed whether viewing marital sexuality through a sacred lens would help prevent or at least lessen such declines. Based on the observed mean score for total sanctification at T1 (M =77.43), we divided participants into low (scores 20 to 77; n =29) and high scorers (scores 78 to 140; n = 38). We then obtained adjusted mean scores on criteria at T1 and T2 using analyses of covariance (ANCOVA), controlling for age and global religiousness.

Figures 1-4 illustrate the change in outcomes from T1 to T2 based on low versus high sanctification scores at T1. These figures show that high scorers on the measure of sanctification of marital sexuality reported generally higher adjusted means on all

outcomes – frequency of sex, sexual and marital satisfaction, and sexual intimacy – across the span of approximately one year. While both low and high scorers on sanctification experienced decreases in average monthly frequency of sex over time, the high scorers experienced slightly less of a decline ( $\Delta$  of -.58 points from T1 to T2) than low scorers ( $\Delta$  of -1). In terms of sexual satisfaction, low sanctification scorers experienced a notable decline ( $\Delta$  of -4.88) compared to high scorers ( $\Delta$  of -.85). Further, high sanctification scorers did decline across one year in mean sexual intimacy ( $\Delta$  of -1), although their slopes suggest higher scores in sexual intimacy compared to low sanctification scorers ( $\Delta$  of -.38). Finally, high scorers on sanctification experienced a slight decrease in marital satisfaction, though maintained slopes, suggesting higher mean scores on marital satisfaction compared to low sanctification scorers. Those with low sanctification scores declined more over time in marital satisfaction ( $\Delta$  of -1.51), in contrast to those with high sanctification scores ( $\Delta$  of -.49).

In the Words of Participants: Open-Ended Comments on Marital Sexuality and Religion

At T2, over 40 participants provided open-ended comments at the end of the survey. Some highlighted themes consistent with prior assumptions about religion and sex, specifically the separation of these domains and that shame often accompanies being religious and sexual. One participant, who scored low on total sanctification, wrote, "[I] never really associated God or spirituality with sex other than we believe sex is a gift from God." Likewise, another commented, "[e]ven though I know sexuality is Godgiven, I don't usually connect sex with God even though I accept God as my savior" (also scored low on sanctification). Moreover, one participant who scored moderately on sanctification wrote,

I wish I would have been a virgin getting married because I think I would place a higher value on my sexual relationship .... Religion influences my marital sexuality by making me feel guilty.... I just haven't gotten past the stigma.

In contrast, participants noted a clear and positive role of the sacred and how those views have progressed since marriage. Listen to the words of the following participants, both of whom scored well above the observed mean for total sanctification:

I guess I've always felt God had a strong role when it comes to sexuality. I think I gained a greater appreciation for God's place in and the sacredness of the marriage bed after we were married.

[I] ... view sex as a great picture of God's selfless love – His desire to fulfill, please, and satisfy. I think this is what God does – longs for us to surrender so that he can fill us, be tender with us. But we must be naked, pure when we come before [God].

Because close to 40% of the sample either gave birth recently or were currently pregnant, many wrote about how conceiving and caring for a child inspired change in their religious perceptions of sexuality. One person wrote, "After giving birth to my son ... I see works of God in our sexuality after having our son, who is a work of God himself" (scored below the mean on total sanctification). Additional reflections were embedded in the overall process of growth and change as spouses settled into marriage.

#### Discussion

To date, published research on marital sexuality has overlooked the role of religion in enhancing dyadic functioning, including global indicators of religiousness and specific religious beliefs about sexuality in marriage. In order to begin to fill such gaps, as well as expand the conceptual framework of sanctification (Pargament & Mahoney, 2005), this study examines longitudinally the sanctification of marital sexuality. In terms of global religiousness, initial levels account for unique variance in only one of four

outcomes – sexual intimacy at T2. This study provides stronger support for sanctification of marital sexuality above and beyond global religiousness and other controls, in particular that initial levels predict a unique 5% to 10% of the variance in average frequency of sex and sexual and marital satisfaction one year later. The strength of sanctification as a predictor remains intact for frequency of sex and sexual satisfaction after also controlling for T1 marital satisfaction. Moreover, participants who score above the observed mean on sanctification at T1, compared to those who score below the mean, report experiencing smaller declines in relational functioning over time. Stated simply, sanctification of marital sexual relationship matters for these individuals in the early years of marriage.

Understanding Findings in Light of Sample Characteristics

To begin to understand what it is about sanctification that matters for relational criteria, we must first integrate results within the context of the overall profile of the sample. Namely, significant findings emerge despite having a small sample (N = 67). In spite of reportedly lower monthly frequencies of sexual intercourse from T1, participants indicate being generally very happy in their marriage and monogamous. Participants also tend to report less frequent involvement in religion compared to national norms (GSS; Davis et al., 2009). While some may assume that religion, including religiously informed beliefs about marital sexuality, is not salient for such individuals, these results suggest otherwise. In fact, items on the sanctification of the marital sexual bond appear to resonate with the majority of participants (see Table 1). In addition, the power of internalized beliefs about the sanctity of marital sexuality in predicting future functioning held even after controlling for variables that might be expected to fully mediate their

effect (e.g., marital satisfaction, global religiousness, which correlated strongly with sanctification). However, the above profile of the sample did not act as a hindrance to obtaining significant results, but reinforces the notion that perceiving marital sexuality as having divine significance is important and beneficial. The relevance of findings is further strengthened by the longitudinal nature of the study, thus accounting for participants' initial scores on criteria.

The Role of Global Religiousness in Marital Sexuality

Because past research on global marital adjustment reports positive associations with global religiousness indicators (see Mahoney et al., 1999), we do not disregard their potential importance. For example, T1 global religiousness is uniquely predictive of sexual intimacy. In addition, both T1 sanctification of marital sexuality and frequency of prayer are significant predictors of sexual satisfaction one year later. Such results help advocate there is a place in research for both global religiousness as well as more specific, in-depth religious measures, such as sanctification.

We speculate that frequency of attendance may be a proxy for joint religious activities (Mahoney et al., 1999). Attending services together may spark additional feelings of closeness, which in turn may influence feelings of sexual intimacy, hence the positive effect. However, the negative effect of prayer on sexual satisfaction and intimacy may signal other, unmeasured variables. For instance, people often turn to prayer as a coping mechanism in the presence of stress and negative life events (Pargament, 1997). Considering several participants reported having a child recently, and the transition to parenthood has historically impacted the marriage in often-negative ways (Doss, Rhoades, Stanley, & Markman, 2009), higher rates of prayer may signal stress related to

parenthood, or to other distress internal or external to the marriage. Global religiousness may therefore encapsulate both "the good and bad" when it comes to marital sexuality, and link to enhanced functioning *as well as* constrained or troubled functioning.

Expanding the Conceptual Framework of Sanctification of Marital Sexuality

Researchers have recently called for a theoretical framework for understanding the meaning of sex within intimate relationships (see Lawrence et al., 2008). With its longitudinal design and exploration of marital sexuality, this study responded to such a general call and aimed particularly to enrich and expand the conceptual foundation of sanctification (Mahoney, 2009; Mahoney et al., 2003; Pargament & Mahoney, 2005). To highlight, findings specify a time when sanctification of marital sexuality is especially critical and enhancing, namely within the first year or so of marriage. Strongly viewing marital sexuality through a sacred lens serves to sustain benefits such as positive sexuality across one year, and thereby helps protect individuals from experiencing otherwise sharper declines in sexual functioning. Though we know the honeymoon period must wane for newlyweds at some point, and that declines in sexual frequency are common across the beginning years of marriage (Christopher & Sprecher, 2000), we now know at least one possible mechanism which may protect some spouses from otherwise abrupt shifts in sexual functioning; this mechanism involves stronger beliefs that one's marital sexual union is sacred and points to God's presence and love. Certainly, sanctification is not a panacea for the typical declines in sexual activity and satisfaction across the early years of marriage; those who highly endorsed marital sexuality as sanctified were not invulnerable to decreases. Yet, the take home message declines for high sanctification scorers were not as sharp as those of low scorers.

Accordingly, greater sanctification of marital sexuality may protect relational benefits over time. Still, what is truly unique about sanctification? For spouses, that which is understood as transcendent or divine becomes a third partner in their marriage, and helps elevate their most intimate and vulnerable moments together as they express and share their sexuality. The initial process of sanctification may be advantageous especially in the long-term, as spouses settle more into their marriage, define and balance their roles, and begin to bear and raise children. All such experiences typically act against the more overwhelmingly positive sexual experiences encountered in the beginning year or so of marriage. However, if their union is believed to point to something greater than themselves, such stronger beliefs in the sanctity of sexuality can help preserve benefits – frequency of sexual behavior as well as perceived satisfaction and intimacy – at least for another year. These longitudinal results help solidify the conceptual framework that sanctification not only co-occurs with, but also predicts and helps sustain adaptive marital sexuality over time. The sanctification of marital sexuality, which is consistent with theological and spiritually based literature on sex in marriage, begins to offer a map on what it is about religion that matters for maintaining a quality marriage. In other words, one must consider where newlyweds stand in terms of the perceived sacredness of their sexual bond as they begin their marital journey.

Potential Implications for Researchers and Mental Health Professionals

These results begin to offer researchers, mental health professionals of multiple disciplines (e.g., therapists, pastoral counselors), and the broader American culture a new set of lenses through which to explore marriage and sexuality. In essence, we support the importance of studying adaptive marital sexuality over time, and doing so with a spiritual

framework. Researchers have called recently for enriched scholarly focus on marital relationships (Amato, Booth, Johnson, & Rogers, 2007). However, marriage seems to be on the edges of the empirical radar as more non-marital relationships (e.g., premarital, same-sex, extramarital) have peaked interest and social concern (Donahue & Nielsen, 2005). When marriage is studied, topics tend to be more conflict-laden (Risch et al., 2003). This study helps initiate a needed shift to also attend to 1) marital outcomes, 2) healthy marital sexuality, and 3) factors which may enhance positive felt experiences in marriage, such as sanctification (and more broadly religion/spirituality). In particular, results challenge the pervading notion that religion acts only to constrain sexuality. Sanctification is but one adaptive, psychospiritual process, which helps sustain, and potentially transform, positive behavioral and affective dimensions of marital sexuality.

Based on results, we continue to encourage mental health professionals to broaden their assessment of religion and sexuality when working with married individuals and couples. Religion can serve both helpful and harmful roles in relationships (Mahoney et al., 2003), and religious beliefs may serve to not solely inhibit sexual expression and activity, but also enhance it for married persons in the long-term. Future research is needed, however, to explain the role of sanctification during explicit sexual or other marital distress, and thus whether sanctification may be a resource or spark additional struggle. For example, one direction to explore empirically is the role of sanctification of marital sexuality during the discovery of infidelity or other serious sexual wrongdoings (i.e., possible desecrations; Pargament, Magyar, Benore, & Mahoney, 2005), and potential links with personal and relational distress.

Results may also help expand the scope of marital education programs. For example, Hawley and Olson (1995) describe such programs for newlyweds, but these tend *not* to address the roles of religion or sexuality (i.e., with some exceptions, such as PREP/ENRICH). Topics such as the sanctification of marital sexuality could be incorporated and discussed under themes of sexuality, religious and spiritual issues in relationships, communication, and intimacy. This study's findings are similarly relevant for premarital and other prevention work with engaged and newly married couples. If professionals assess sanctification of marital sexuality, they should attend especially to perceptions in the early months of couples' marriages, given that initial sanctification predicts subsequent relational functioning and may avert sharper declines in functioning. *Limitations and Directions for Future Research* 

Interpretation of findings must be qualified by several factors. External validity is limited, as the sample was small and based on heterosexual, primarily Caucasian and Christian participants. It is likely that diverse ethnicities, cultures, and religious faiths espouse different levels of sanctification of the marital sexual relationship not represented here. In addition, conclusions are based solely on individual self-reports, thus the need exists for couple-level data. Of great benefit would be to assess implications of (dis)similarity of sanctification of marital sexuality between spouses. Further, surveys often fail to capture the many intimate aspects of heterosexual marital functioning, including discussions of spirituality and sexual vulnerabilities and concerns.

Observational study of such dyadic discussions may also be enriching.

Although the study's longitudinal nature is an advantage, approximately only one year elapsed between time points. Multiple self-reports over the course of several years

and across several aspects of the family life cycle (e.g., transition to parenthood, empty nest) would help 1) portray other changes in sanctification of marital sexuality and relational criteria over time and 2) further enrich the conceptual foundation of sanctification (see Footnote 2). Future research may explore links among other types of sanctification, including that of marriage, conceiving and having children, and parenthood. Other dimensions of marital sexuality may be investigated, including whether sanctification of the marital sexual union influences family planning (i.e., birth control, Natural Family Planning) and the use of contraception.

## Conclusions

Social science research on the intricacies of marital sexuality and religion is scare. As the first longitudinal project of its kind, this study provides unique evidence that researchers and mental health professionals alike would do well to attend to how religious beliefs about sexuality may promote healthy marital sexual functioning over time. To this extent, this study supports a refocus on marital research and a novel, spiritually oriented spotlight on marital sexuality. Furthermore, results emphasize that initial levels of sanctification of marital sexuality predict sexual frequency and sexual and marital satisfaction across one year. These findings may be organized in a conceptual framework of the effects of sanctification, specifying how sanctifying the marital sexual bond facilitates greater personal and relational benefits, which in turn, help lessen the declines in sexual functioning commonly experienced in newlywed marriages. This research, therefore, begins to fill important gaps in 1) empirical literature on sanctification, which previously examined independently the sanctification of marriage and premarital sex and 2) more generally on research integrating sexuality, marriage, and

religion. Results accentuate the power of viewing sexual unions as having sacred and divine significance and character, and therefore reveal how such perceptions help transform some of the most intimate experiences in marriage.

## References

- Amato, P. R., Booth, A., Johnson, D. R., & Rogers, S. F. (2007). *Alone together: How marriage in America is changing*. Cambridge, MA: Harvard University Press.
- Apt, C., Hurlbert, D. F., & Clark, K. J. (1994). Neglected subjects in survey research:

  A survey of sexologists. *Journal of Sex & Marital Therapy*, 20, 237–243.
- Apt, C., Hurlbert, D. F., Pierce, A. P., & White, L. C. (1996). Relationship satisfaction, sexual characteristics, and the psychosocial well being of women. *The Canadian Journal of Human Sexuality, 5*, 195–210.
- Booth, A., Johnson, D. R., Branaman, A., & Sica, A. (1995). Belief and behavior: Does religion matter in today's marriage? *Journal of Marriage & the Family*, *57*, 661-671.
- Booth, A., Johnson, D., & Edwards, J. N. (1983). Measuring marital instability. *Journal of Marriage and the Family*, 45, 387-394.
- Brown, E., Orbuch, T. L., & Bauermeister, J. A. (2008). Religiosity and marital stability among Black American and White American couples. *Family Relations*, *57*, 186-197.
- Carrere, S., Buehlman, K. T., Gottman, J. M., Coan, J. A., & Ruckstuhl, L. (2000).

  Predicting marital stability and divorce in newlywed couples. *Journal of Family Psychology*, *14*, 42-58.
- Center for Marriage and Family. (2000). *Time, sex, and money: The first five years of marriage*. Creighton University, Omaha, NE: Center for Marriage and Family.

- Christopher, F. S., & Kisler, T. S. (2004). Exploring marital sexuality: Peeking inside the bedroom and discovering what we don't know but should! In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 371-384). Mahwah, NJ: Lawrence Erlbaum Associates.
- 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.
- Cochran, J. K., & Beeghley, L. (1991). The influence of religion on attitudes toward nonmarital sexuality: A preliminary assessment of reference group theory. *Journal for the Scientific Study of Religion*, 30, 45-62.
- Cohan, C. L., & Bradbury, T. N. (1994). Assessing responses to recurring problems in marriage: Evaluation of the marital coping inventory. *Psychological Assessment*, 6, 191-200.
- Davis, J. A., Smith, T. W., & Marsden, P. V. (2009). *General social surveys, 1972-2008:*cumulative codebook. University of Chicago, National Opinion Research Center (NOPC).
- DeLamater, J. (1981). The social control of sexuality. *Annual Review of Sociology*, 7, 263-290.
- Donahue, M. J., & Nielsen, M. E. (2005). Religion, attitudes, and social behavior. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 274-291). New York: Guilford Press.
- Doss, B. D., Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2009). The effect of the transition to parenthood on relationship quality: An 8-year prospective study.

  \*\*Journal of Personality and Social Psychology, 96, 601-619.

- Duddle, M. (1988). Attitudes to the study of human sexuality. *Sexual and Marital Therapy*, *3*, 37-44.
- Greenblat, C. S. (1983). The salience of sexuality in the early years of marriage. *Journal of Marriage and the Family*, 45, 289-299.
- Halford, W. K., Lizzio, A., Wilson, K. L., & Occhipinti, S. (2007). Does working at your marriage help? Couple relationship self-regulation and satisfaction in the first 4 years of marriage. *Journal of Family Psychology*, *21*, 185-194.
- Hawley, D. R., & Olson, D. H. (1995). Enriching newlyweds: An evaluation of three enrichment programs. *The American Journal of Family Therapy*, 23, 129-147.
- Hernandez, K. M., Mahoney, A., & Pargament, K. I. (2009). Sanctification of marital sexuality in newlyweds: Cross-sectional implications of sacred sexual unions. Manuscript in preparation.
- Huston, T. L., Caughlin, J. P., Houts, R. M., Smith, S. E., & George, L. J. (2001). The connubial crucible: Newlywed years as predictors of marital delight, distress, and divorce.
  Interpersonal Relations and Group Processes, 80, 237-252.
- James, W. H. (1981). The honeymoon effect on marital coitus. *The Journal of Sex Research*, *17*, 114-123.
- Kumar, P., & Makwana, S. M. (1991). Factors affecting sexual satisfaction in married life. *Journal of the Indian Academy of Applied Psychology, 17*, 31-34.
- Kurdek, L. A. (1991). Predictors of increases in marital distress in newlywed couples: A 3-year prospective longitudinal study. *Developmental Psychology*, 27, 627-636.

- Lawrence, E., Pederson, A., Bunde, M., Barry, R. A., Brock, R. L., Fazio, E., et al. (2008). Objective ratings of relationship skills across multiple domains as predictors of marital satisfaction trajectories. *Journal of Social and Personal Relationships*, 25, 445-466.
- Litzinger, S., & Gordon, K. C. (2005). Exploring relationships among communication, sexual satisfaction, and marital satisfaction. *Journal of Sex & Marital Therapy*, *31*, 409-424.
- Mahoney, A. (2009). Religion in the home from 1999-2010: A decade review from a relational spirituality perspective. Manuscript in preparation.
- Mahoney, A., Pargament, K. I., Jewell, T., Swank, A. B., Scott, E., Emery, E., et al. (1999).

  Marriage and the spiritual realm: The role of proximal and distal religious constructs in marital functioning. *Journal of Family Psychology*, *13*, 321-338.
- Mahoney, A., Pargament, K. I., Murray-Swank, A., & Murray-Swank, N. (2003). Religion and the sanctification of family relationships. *Review of Religious Research*, 44, 220-236.
- Mahoney, A., Pargament, K. I., Tarakeshwar, N., & Swank, A. B. (2001). Religion in the home in the 1980s and 1990s: A meta-analytic review and conceptual analysis of links between religion, marriage, and parenting. *Journal of Family Psychology*, 15, 559-596.
- McCarthy, B. (1998). Sex in the first two years of marriage. *Journal of Family Psychotherapy*, 9, 1-11.
- McCarthy, B. W. (2002). Sexuality, sexual dysfunction, and couple therapy. In A. S Gurman and N. S. Jacobson (Eds.), *Clinical handbook of couple therapy* (3<sup>rd</sup> ed.), pp. 629-652. NY: Guilford Press.

- Miller, P. J. E., Niehuis, S., & Huston, T. L. (2006). Positive illusions in marital relationships: A 13-year longitudinal study. *Personality and Social Psychology Bulletin*, 32, 1579-1594.
- Murray, K. M., Ciarrocchi, J. W., & Murray-Swank, N. A. (2007). Spirituality, religiosity, shame and guilt as predictors of sexual attitudes and experiences. *Journal of Psychology and Theology*, 35, 222-234.
- Murray-Swank, N. A., & Brelsford, G. (2009). Sex and soul: The sanctification of sexuality in married individuals. Manuscript in preparation.
- Murray-Swank, N. A., Pargament, K. I., & Mahoney, A. M. (2005). At the crossroads of sexuality and spirituality: The sanctification of sex by college students. *The International Journal for the Psychology of Religion*, *15*, 199-219.
- Myers, S. M. (2006). Religious homogamy and marital quality: Historical and generational patterns, 1980-1997. *Journal of Marriage and Family*, 68, 292-304.
- Neff, L. A., & Karney, B. R. (2007). Stress crossover in newlywed marriage: A longitudinal and dyadic perspective. *Journal of Marriage and Family*, 69, 594-607.
- Pargament, K. (1997). *The psychology of religion and coping: Theory, research, practice*. New York, NY: Guilford.
- Pargament, K. I., Magyar, G. M., Benore, E., & Mahoney, A. (2005). Sacrilege: A study of sacred loss and desecration and their implications for health and well-being in a community sample. *Journal for the Scientific Study of Religion*, 44, 59-78.

- Pargament, K. I., & Mahoney, A. (2005). Sacred matters: Sanctification as a vital topic for the psychology of religion. *International Journal for the Psychology of Religion, 15*, 179-198.
- Previti, D., & Amato, P. R. (2004). Is infidelity a cause or a consequence of poor marital quality?

  \*\*Journal of Social and Personal Relationships, 21, 217-230.
- Quinn, W. H., & Odell, M. (1998). Predictors of marital adjustment during the first two years. *Marriage & Family Review*, 27, 113-130.
- Risch, G. S., Riley, L. A., & Lawler, M. G. (2003). Problematic issues in the early years of marriage: Content for premarital education. *Journal of Psychology and Theology, 31*, 253-269.
- Ruvolo, A. P. (1998). Marital well-being and general happiness of newlywed couples:Relationships across time. *Journal of Social and Personal Relationships*, 15, 470-489.
- Schumm, W. R., Paff-Bergen, L. A., Hatch, R. C., Obiorah, F. C., Copeland, J. M., Meens, L. D., et al. (1986). Concurrent and discriminant validity of the Kansas Marital Satisfaction Scale. *Journal of Marriage and the Family*, 48, 381-387.
- Sullivan, K. T. (2001). Understanding the relationship between religiosity and marriage:

  An investigation of the immediate and longitudinal effects of religiosity on newlywed couples. *Journal of Family Psychology*, *15*, 610-626.
- Whisman, M. A., Dixon, A. E., & Johnson, B. (1997). Therapists' perspectives of couple problems and treatment issues in couple therapy. *Journal of Family Psychology*, *11*, 361-366.

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

## Footnotes

<sup>1</sup>Young et al. (1998) recruited a married, U.S. sample and found religious variables (e.g., religious commitment, perception of God's view of sex) did not significantly contribute to variance in sexual satisfaction. However, the perception that God has a favorable view of sex associated with higher levels of uninhibited sexual activities (i.e., oral and anal sex, frequency and enjoyment of masturbation).

<sup>2</sup>The full conceptual model for sanctification includes the additional effects: *investing in* and committing to relationships which are perceived as sanctified, *protecting and preserving* such bonds perceived to be sacred, utilizing such bonds as *sacred resources* to cope during times of distress, and experiencing *spiritual emotions* within that relationship (Pargament & Mahoney, 2005).

<sup>3</sup>A total of 69 individuals completed a T2 survey. One participant indicated being divorced, and a second was the spouse of the participant and had not participated at T1; both were excluded from analyses.

<sup>4</sup>This study was part of a larger project conducted by Hernandez and included additional measures not mentioned here. Questions regarding additional details of the study should be directed to Krystal M. Hernandez (Department of Psychology, Bowling Green State University, Bowling Green, OH 43403; hernank@bgsu.edu).

<sup>5</sup>Demographic and descriptive variables included age, gender, education, household income, number of times married, age of first sexual intercourse, premarital sex with current spouse, length of current marriage, total number of children, and number of children currently residing in home.

Table 1  $Sanctification \ of \ Marital \ Sexuality: \ Items \ and \ Percentages \ of \ Three \ Points \ in \ the \ Scale \ (N=67)$ 

	Percentages at T1 (T2)					
Item	Below Neutral	Neutral	Above Neutral			
Sacred Qualities of Marital Sexuality Subscale						
1. Being sexually intimate with my spouse feels like a deeply spiritual experience.	32.9% (34.4%)	25.4% (26.9%)	41.7% (38.7%)			
2. Our sexual relationship seems like a miracle to me.	40.3% (40.3%)	17.9% (22.4%)	41.8% (37.3%)			
3. Our sexual connection is part of a larger spiritual plan.	31.4% (35.8%)	26.9% (20.9%)	41.8% (43.2%)			
4. Our sexual relationship is holy.	37.4% (48.9%)	26.9% (20.9%)	35.8% (40.3%)			
5. The sexual bond I have with my spouse is sacred to me.	13.5% (12.0%)	7.5% (11.9%)	79.1% (76.1%)			
6. Our sexual relationship connects us to something greater than ourselves.	32.9% (32.9%)	22.4% (19.4%)	44.7% (47.7%)			
7. My sexual relationship with my spouse reveals the deepest truths of life to me.	41.8% (46.3%)	28.4% (29.9%)	29.9% (24%)			
8. There are moments when we are sexually intimate that time stands still and I	,		,			
feel like I am part of something eternal.	38.8% (49.2%)	14.9% (16.4%)	46.3% (34.3%)			
9. Our sexual relationship puts me in touch with the deepest mysteries of life.	40.3% (52.2%)	25.4% (20.9%)	34.3% (26.9%)			
10. At moments, being sexually intimate with my spouse makes me very aware	, ,	, , ,	. ,			
of a creative power beyond us.	44.8% (50.8%)	16.4% (17.9%)	38.9% (31.3%)			
Manifestation of God in Marital Sexuality Subscale						
11. God played a role in my decision to have a sexual relationship with my spouse.	43.4% (40.3%)	14.9% (19.4%)	41.8% (40.2%)			
12. Our sexual relationship speaks to the presence of God.	47.9% (49.3%)	31.3% (23.9%)	20.9% (27%)			
13. I experience God through the sexual bond I have with my spouse.	53.7% (59.6%)	23.9% (22.4%)	22.4% (18%)			
14. God's essence is expressed in our sexual relationship.	53.7% (56.6%)	23.9% (25.4%)	22.4% (18%)			
15. Being in a sexual relationship with each other is a reflection of God's will.	34.4% (41.8%)	14.9% (17.9%)	50.8% (30.2%)			
16. God has been a guiding force in our sexual relationship.	46.3% (53.6%)	26.9% (19.4%)	26.9% (26.8%)			
7. In mysterious ways, God deepens the sexual intimacy I have with my spouse.	40.4% (55.1%)	31.3% (17.9%)	28.3% (26.9%)			
18. I feel God at work when we express ourselves sexually with each other.	46.3% (61.1%)	26.9% (20.9%)	26.9% (18%)			
19. There are moments when I feel a strong connection with God when I am						
sexually intimate with my spouse.	53.7% (67.1%)	26.9% (17.9%)	19.4% (15%)			
20. I see God's influence in our sexual relationship.	44.8% (59.6%)	22.4% (14.9%)	32.8% (25%)			

*Note.* Cronbach  $\alpha$  = .98 for total scale at both time waves.

Table 2 Hierarchical Regressions on T1 Sanctification of Marital Sexuality and T2 Criteria

Variable	Criteria at T2											
	Avg monthly FS			Sexual satisfaction		Sexual intimacy			Marital satisfaction			
	β	$R^2\Delta$	F for $R^2 \Delta$	β	$R^2\Delta$	F for $R^2 \Delta$	β	$R^2\Delta$	F for $R^2 \Delta$	β	$R^2\Delta$	F for $R^2 \Delta$
Step 1		.32	14.79***		.39	20.56***		.32	14.89***		.38	19.90***
Demographic variables (T1)												
Age	02			08			12			26*	*	
Time 1 outcome	.56*	**		.63**	**		.53*	***		.56*	**	
Step 2		.04	6.81		.05	9.78		.10	8.70*		.03	8.45
Age	.02			03			06			24*		
Time 1 outcome	.54*	**		.62*	**		.55**	*		.53**	**	
Global religiousness (T1)												
Freq. attendance	.12			.25			.43*	*		.20		
Freq. prayer	23			28			35*			13		
Biblical conservatism	.22			09			04			12		
Step 3		.05	6.76*		.10	12.05***		.01	7.27		.06	8.93**
Age	05			11			09			31**		
Time 1 outcome	.55*	**		.51*	**		.52*	**		.48**	*	
Freq. attendance	.06			.18			.41*	*		.15		
Freq. prayer	27			35*	*		36*			21		
Biblical conservatism	.13			23			08			22		
Sanctification of MS (T1)	.28*			.44*	**		.10			.34**		

Note. \* $p \le .05$ , \*\* $p \le .01$  and \*\*\* $p \le .001$ .

Avg monthly FS = average monthly frequency of sexual intercourse. Freq. = frequency. MS = marital sexuality.

Standardized beta coefficient reported. Degrees of freedom (df) for each model: Model 1 (2, 64), Model 2 (5, 61), and Model 3 (6, 60).

# **Figure Captions**

Figure 1. Change over time in average monthly frequency of sexual intercourse according to low (n = 29;  $\Delta = -1$ ) vs. high (n = 38;  $\Delta = -.58$ ) scorers on the Sanctification of Marital Sexuality scale (i.e., "sanctification of ms") at T1. Adjusted means for average frequency are reported, controlling for the influence of demographics (i.e., age) and global religiousness (i.e., frequencies of religious service attendance and prayer, biblical conservatism; N = 67).

Figure 2. Change over time in sexual satisfaction according to low  $(n = 29; \Delta = -4.88)$  vs. high  $(n = 38; \Delta = -.85)$  scorers on the Sanctification of Marital Sexuality scale (i.e., "sanctification of ms") at T1. Adjusted means for average frequency are reported. controlling for the influence of demographics (i.e., age) and global religiousness (i.e., frequencies of religious service attendance and prayer, biblical conservatism; N = 67). Figure 3. Change over time in sexual intimacy according to low  $(n = 29; \Delta = -.38)$  vs. high  $(n = 38; \Delta = -1)$  scorers on the Sanctification of Marital Sexuality scale (i.e., "sanctification of ms") at T1. Adjusted means for average frequency are reported, controlling for the influence of demographics (i.e., age) and global religiousness (i.e., frequencies of religious service attendance and prayer, biblical conservatism; N = 67). Figure 4. Change over time in marital satisfaction according to low  $(n = 29; \Delta = -1.51)$  vs. high  $(n = 38; \Delta = -.49)$  scorers on the Sanctification of Marital Sexuality scale (i.e., "sanctification of ms") at T1. Adjusted means for average frequency are reported, controlling for the influence of demographics (i.e., age) and global religiousness (i.e., frequencies of religious service attendance and prayer, biblical conservatism; N = 67).

Figure 1.

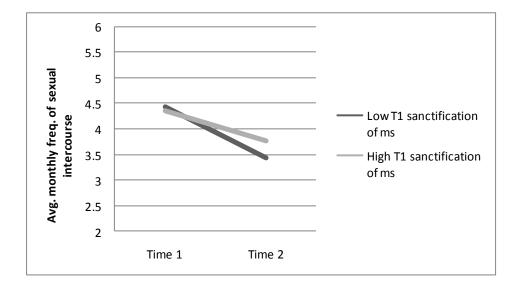


Figure 2.

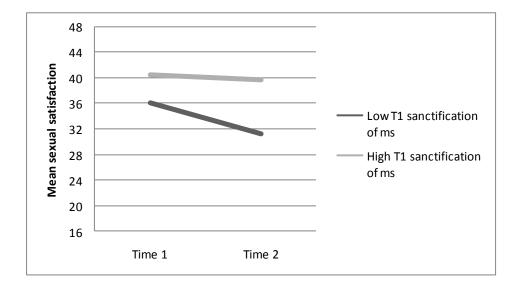


Figure 3.

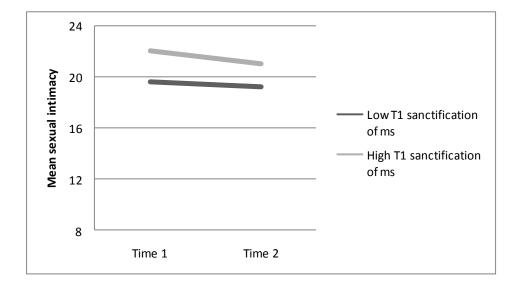


Figure 4.

