

Associations Between Religious Orientation and Varieties of Sexual Experience

WADE C. ROWATT
DAVID P. SCHMITT

This study examined associations between religious orientation, newly discovered sexual dimensions of personality, and other sexual desires. All participants (n = 161) completed measures of religious orientation, sociosexuality, seven sexual personality dimensions, short-term and long-term mating desires, and mate-poaching behavior. Participants also completed scales assessing social desirability and the Big Five personality factors. Intrinsic religious orientation was positively associated with more restricted sexuality and desire (i.e., decreased sociosexuality, less desire for a large number of sex partners across time). Extrinsic religious orientation was positively associated with more unrestricted sexuality description and desire (i.e., increased sociosexuality and mate poaching; decreased sexual restraint and relationship exclusivity). Both religious orientations accounted for unique variation in sexual dimensions of the self when gender, socially desirable responding, and the Big Five personality factors were statistically controlled. As such, multidimensional measures of religiosity could be theoretically important to include in future scientific research on sexuality and personal relationships.

The primary purpose of this study was to determine how intrinsic and extrinsic religious orientation correlate with recently identified sexual dimensions of personality (Schmitt and Buss 2000), short-term and long-term sexual desires (Buss and Schmitt 1993), and experiences of mate poaching—attracting a person who is already in a relationship (Schmitt and Buss 2001). We also investigated whether intrinsic and extrinsic religious orientation account for unique variation in these sexuality dimensions when controlling for gender (cf. Oliver and Hyde 1993), the “Big Five” personality traits (McCrae and John 1992), and social desirability (Paulhus 1988).

DIMENSIONS OF RELIGIOSITY AND THEIR RELATION TO SEXUALITY

Most mainstream religions discourage premarital sexual permissiveness and adultery (e.g., see Deut. 5:18; Matt. 5:27–28) so it is not surprising to find reciprocal associations between general religiosity and a variety of sexual processes in most cultures. For example, across 52 cultures, Schmitt (2002) found self-reported religiosity correlated positively with self-described sexual restraint among men ($n = 6,982$; $r = 0.22$) and women ($n = 9,763$; $r = 0.25$). In the United States, people who reported their religious affiliation as “none” had more sex partners than people who specified a religious affiliation (Laumann et al. 1994). Cochran and Beeghley (1991:59) reported “increasingly stronger religiosity effects on attitudes toward premarital sex as denominational proscriptiveness increased.” Likewise, as religious intensity increased, the frequency of many sexual behaviors (i.e., sexual petting, oral sex, coitus) and the extensiveness of those sexual experiences decreased (Mahoney 1980).

Some noteworthy associations between heritable religious orientations (e.g., intrinsic, extrinsic, and quest; Allport and Ross 1967; Batson and Schoenrade 1991; Bouchard, McGue, and Tellegen 1999) and several sexual attitudes and behaviors have also been documented. Among evangelical Christian singles, intrinsic religious orientation (i.e., religion as an end) was negatively correlated with seven sexual attitudes (sexual fantasy, nongenital petting, masturbation, premarital

Wade C. Rowatt is an Assistant Professor of Psychology in the Department of Psychology and Neuroscience, Baylor University, Waco, TX 76798-7334. E-mail: Wade.Rowatt@baylor.edu

David P. Schmitt is an Associate Professor of Psychology in the Department of Psychology, Bradley University, Peoria, IL 61625. E-mail: dps@bradley.edu

intercourse, homosexuality, oral sex, mutual masturbation, and sexual liberalism) and the frequency of five sexual behaviors (nongenital petting, premarital intercourse, oral sex, mutual masturbation, and sexual liberalism; Wulf et al. 1984). Intrinsic religious orientation also correlated negatively with egocentric need for sexual gratification (McClain 1978), attitude toward premarital sexual permissiveness (Haerich 1992; Leak 1993), erotophilic personality (Bassett et al. 1999), and attitudes toward other sexual behaviors (Bassett et al. 2002; Reed and Meyers 1991).

Extrinsic religious orientation (i.e., religion as a means to another personal or social end), on the other hand, correlated *positively* with attitudes toward sexual fantasy, nongenital petting, masturbation, premarital intercourse, homosexuality, oral sex, mutual masturbation, and sexual liberalism (Wulf et al. 1984). Extrinsic religious orientation also correlated positively with premarital sexual permissiveness (Haerich 1992; Leak 1993), frequency of adultery (Leak 1993), liberal sexual attitude (Reed and Meyers 1991), and the frequency of the five sexual behaviors (nongenital petting, premarital intercourse, oral sex, mutual masturbation, and sexual liberalism; Wulf et al. 1984). Consistent with these patterns, extrinsically religious individuals reported more sexual activity than those with intrinsic religious orientation (Woodroof 1985). We posit that religious orientations will account for unique variation in some newly discovered sexual components of personality as well.

SEXUALITY AS A COMPONENT OF PERSONALITY

According to lexical approaches to personality, important personal dispositions (e.g., outgoing, kind, messy) are encoded in the languages of the world (Goldberg 1993). Factor analyses of trait terms people use to describe themselves and others often reveal five universal personality dimensions (i.e., extraversion, agreeableness, conscientiousness, neuroticism, and openness; McCrae and John 1992). However, in most trait perspectives on personality, sexuality (like religiosity) is usually not considered a primary component of personality, even though sexual trait terms (e.g., sexy, unfaithful, romantic) can be very useful for describing the self or others (Garcia and Carrigan 1998).

Using a lexical approach, Schmitt and Buss (2000) identified seven sexual dimensions of person description: *sexual attractiveness* (e.g., sexy, attractive), *relationship exclusivity* (e.g., faithful, monogamous), *gender orientation* (e.g., feminine, womanly), *sexual restraint* (e.g., virginal, celibate), *erotophilic disposition* (e.g., obscene, vulgar), *emotional investment* (e.g., loving, romantic), and *sexual orientation* (e.g., heterosexual, homosexual, bisexual). Within a hierarchical model of personality (see Figure 1 in Schmitt and Buss 2000), these seven dimensions are a result of specific behavioral responses (Level 1) that form personal habits (Level 2), which in turn represent unique facets (Level 3) of the seven sexuality dimensions (Level 4). It is probable that religious orientations will correlate with some sexual dimensions, but not others. Although religious orientations might not affect descriptions of sexual attractiveness or gender orientation, religious orientations could account for unique variability in sexual personal traits that pertain to relationship exclusivity and sexual restraint. Because intrinsically religious persons usually internalize religious values, including sexually restrictive standards (Bassett et al. 2002), intrinsics should describe the self to be more sexually exclusive, sexually restricted, and possibly less erotophilic and more emotionally investing. Given extrinsics' relatively permissive sexual attitudes and behaviors, it is probable that extrinsic religiosity will correlate negatively with sexual restraint and relationship exclusivity.

RELIGIOUS ORIENTATION AND SHORT-TERM VERSUS LONG-TERM SEXUAL DESIRES

In this study, we also examine how religious orientations correlate with short-term and long-term sexual desires. Individuals with a short-term mating orientation prefer one-night stands or brief affairs to extended, committed relationships, whereas individuals with a long-term mating orientation seek a partner for an exclusive, long-lasting relationship. Short-term maters are also

more likely than long-term-oriented individuals to attract a person for sex who is already in a committed relationship (i.e., mate poaching; Schmitt and Buss 2001). We expected intrinsic religiosity to be positively correlated with long-term-mating orientation and less mate poaching. We expected extrinsic religiosity to be positively correlated with short-term mating and increased mate poaching.

POSSIBLE MEDIATORS OF THE ASSOCIATION BETWEEN RELIGIOUS ORIENTATION AND SEXUAL EXPERIENCES

To isolate unique variation in sexual personality and desire due to religious orientation, it is important to control for possible mediators (e.g., gender, social desirability, and general personality). Gender is important to control because women, compared to men, are less sexually permissive (Oliver and Hyde 1993) and more religiously committed (Stark 2002). As such, negative correlations between general religiosity and sexuality could be due to gender, not religiosity. Social desirability is important to control because some people report being less sexual and more religious to create a desired impression. Big Five personality dimensions are important to control because religious orientation and sexual personality might overlap with the same general personality factor (see Saroglou 2002; Schmitt and Buss 2000; Shafer 2001).

HYPOTHESES AND PREDICTIONS

Two broad hypotheses were formulated and tested. Because intrinsics typically internalize religious teachings, virtues, and spiritual values, it was hypothesized that intrinsics' sexual personality description and desires would conform more to religious standards for restricted sexuality. We refer to this as the *intrinsic religious orientation/restricted sexuality hypothesis*. That is, intrinsic religious orientation was predicted to correlate positively with relationship exclusivity and sexual restraint dimensions of sexual personality. Intrinsic religious orientation was predicted to correlate negatively with sociosexuality, the desires to have sex with a large number of people and after having known a desirable person for only a brief amount of time, and mate poaching. Because extrinsically religious individuals use religion for more self-serving purposes (see Donahue 1985), and have more sexually permissive attitudes, it was hypothesized that their sexual personality and desire would be less restricted. We refer to this idea as the *extrinsic religious orientation/unrestricted sexuality hypothesis*. That is, extrinsic religious orientation was predicted to correlate negatively with relationship exclusivity and sexual restraint dimensions of sexual personality. Extrinsic religious orientation was predicted to correlate positively with sociosexuality, the desires to have sex with a large number of people and after having known a person for only a brief amount of time, and mate poaching. The quest religious orientation was not predicted to correlate with sexual personality dimensions or desires.

METHOD

Participants

Participants were heterosexuals (96 women, 65 men) over 18 years of age ($M_{\text{age}} = 19.30$, $SD = 1.33$) from undergraduate psychology courses at a private southwestern university. The sample was ethnically diverse (58 percent European American/non-Hispanic; 12 percent Hispanic American; 11 percent African American; 9 percent Asian American; 8.8 percent other; 1.2 percent Native American), fairly religious ($M = 5.14$, $SD = 1.32$; 1 = not at all religious; 7 = extremely religious), and politically moderate ($M = 3.89$, $SD = 1.24$; 1 = extremely conservative; 7 = extremely liberal). A high percentage of the participants were Protestant (48 percent; 28.4 percent

other religious affiliation; 20 percent Catholic; 3 percent none; 0.6 percent Jewish). Several respondents indicated being raised in a metropolitan area for most of their life (62.5 percent; 19.5 percent rural; 18 percent urban). Most of the participants were not currently involved in a romantic relationship (46 percent; 40 percent dating one person exclusively, 8 percent dating multiple persons, 2 percent married, 0.6 percent engaged, 1.2 percent living with someone, 2.2 percent did not specify).

Procedure and Materials

Individuals who consented to participate completed the following measures.

1. To assess religious orientations, we administered Allport and Ross's (1967) nine-item *Intrinsic Religious Orientation Scale* ($\alpha = 0.78$) and 11-item *Extrinsic Religious Orientation Scale* ($\alpha = 0.78$) along with Batson and Schoenrade's (1991) 12-item *Quest Religious Orientation Scale* ($\alpha = 0.76$). Items on these three measures were rated on a scale from 1 (*strongly disagree*) to 9 (*strongly agree*). Extrinsic-social ($\alpha = 0.55$) and extrinsic-personal ($\alpha = 0.64$) subscales (see Kirkpatrick 1989) were not used in further analyses because of relatively low internal consistency in this sample.
2. To assess general personality, we used Benet-Martínez and John's (1998) 44-item adjective rating measure of the Big Five (i.e., openness ($\alpha = 0.78$), conscientiousness ($\alpha = 0.79$), extraversion ($\alpha = 0.87$), agreeableness ($\alpha = 0.76$), and neuroticism ($\alpha = 0.84$); 1 = *disagree strongly*; 5 = *agree strongly*).
3. To measure dimensions of sexual personality, participants completed the 67-item *Sexual Adjective Measure* (Schmitt and Buss 2000; 1 = *extremely inaccurate*; 9 = *extremely accurate*). Six dimensions were internally consistent: sexual attractiveness ($\alpha = 0.86$), relationship exclusivity ($\alpha = 0.82$), gender orientation ($\alpha = 0.95$), sexual restraint ($\alpha = 0.78$), erotophilic disposition ($\alpha = 0.86$), and emotional investment ($\alpha = 0.85$). The sexual orientation dimension, comprised of the items bisexual, heterosexual, and homosexual (reverse-keyed), was not internally consistent ($\alpha = 0.33$). Deleting the item "bisexual" increased the reliability coefficient to 0.60; however, due to poor internal consistency, results involving this factor should be interpreted with caution.
4. To assess general sociosexual orientation, participants completed the seven-item *Sociosexual Orientation Inventory* (Simpson and Gangestad 1991, $\alpha = 0.83$; *example items*: Sex without love is OK; With how many partners have you had sex on one and only one occasion?).
5. Several items were used to measure short-term and long-term sexual desires. Participants were asked to rate the degree to which they were currently (a) *seeking a long-term mating partner* (i.e., a marriage partner) and (b) *seeking short-term partners* (i.e., for one-night stands, brief affairs, etc.) using a seven-point scale (1 = *currently not at all seeking*; 4 = *currently moderately seeking*; 7 = *currently strongly seeking*). Participants were also asked to indicate how many sex partners they desired across time, whether they would consider having sex with a person known for different amounts of time, and whether they had attempted to attract a person for sex who was already in a committed relationship. The specific questions asked were: (c) "Ideally, how many different sex partners would you like to have" across time (i.e., in the next day, week, month, six months, year, 2 yrs., 3 yrs., 4 yrs., 5 yrs., 10 yrs., 20 yrs., 30 yrs., and remaining lifetime?); (d) "If the conditions were right, would you consider having sexual intercourse with someone you viewed as desirable if you had known that person for" the following 12 times (10 yrs., 5 yrs., 2 yrs., 1 yr., 6 mos., 3 mos., 1 mo., 1 week, 1 day, 1 evening, 1 hour, 1 minute)? The following rating scale for the "time known" items was provided: +3 = *definitely yes*; +2 = *probably yes*; +1 = *somewhat yes*; -1 = *somewhat not*; -2 = *probably not*; -3 = *definitely not*. Aggregate variables were created to reduce these data (*short-term*

number = (day + week + month + 6 mos.)/4; *long-term number* = (1 yr. + 2 yrs. + 3 yrs. + 4 yrs. + 5 yrs. + 10 yrs. + 20 yrs. + 30 yrs. + remaining lifetime)/9; *known shorter-time* = (minute + hour + evening + day + week + month + 3 mos. + 6 mos.)/8; *known longer-time* = (1 yr. + 2 yrs. + 5 yrs. + 10 yrs.)/4.)

6. To assess *mate poaching* (Schmitt and Buss 2001), participants were asked, "Have you ever attempted to attract someone who was already in a romantic relationship with someone else for a short-term sexual relationship with you?" (1 = *never*; 4 = *sometimes*; 7 = *always*).
7. Socially desirability was assessed with the *Balanced Inventory of Desirable Responding* (BIDR; Paulhus 1988). The BIDR is composed of two 20-item subscales measuring impression management ($\alpha = 0.77$) and self-deception ($\alpha = 0.67$). We used the impression management subscale scores to statistically control for social desirability.

Participants were also asked to report their sex, age, sexual orientation, current romantic relationship status, if they have ever had a sexual relationship, type of area reared (e.g., rural, urban, or suburban), religious affiliation, religiosity (1 = *not at all religious*; 7 = *extremely religious*), ethnicity, and political ideology (1 = *extremely conservative*; 7 = *extremely liberal*). After returning the survey, participants were debriefed and given credit for participating.

RESULTS

Sex Differences and Social Desirability Correlates

Before testing the aforementioned hypotheses, we examined whether sex differences existed on religious orientation, Big Five, and sexuality variables. We also examined whether religious orientation, general personality, and sexuality description were associated with socially desirable responding. For the remaining analyses we adopted a more conservative criterion for rejecting null hypotheses ($p < 0.01$).

Several sex differences were found (see Table 1). Women in this sample had slightly higher scores than men on measures of intrinsic religious orientation, conscientiousness, and neuroticism. Men had higher scores than women on measures of quest religious orientation and openness to experience. Consistent with Schmitt and Buss (2000), women rated themselves higher than men on three sexual dimensions of personality: gender orientation (femininity), relationship exclusivity, and emotional investment; whereas men rated themselves higher than women on the erotophilic disposition dimension of sexual personality. Women also desired a long-term mate more than men. Men, more so than women, were sociosexually unrestricted, desired a short-term mate, desired more sex partners across time, were more open to having sex with a desirable person, had attempted to initiate a short-term sexual relationship, and had attempted to attract a person who was in a romantic relationship for a short-term sexual relationship (i.e., mate poached). A higher percentage of men (80 percent) than women (72 percent) in this sample have ever had a sexual relationship.

Social desirability correlated negatively with extrinsic religious orientation ($r = -0.44$, $p < 0.001$), willingness to consider having sex with a desirable person known for a longer time ($r = -0.31$, $p < 0.001$), number of sex partners desired in the short term ($r = -0.29$, $p < 0.001$), erotophilic disposition ($r = -0.27$, $p < 0.001$), sociosexuality ($r = -0.24$, $p < 0.01$), and neuroticism ($r = -0.24$, $p < 0.01$). Positive correlations were found between social desirability and agreeableness ($r = 0.34$, $p < 0.001$), conscientiousness ($r = 0.32$, $p < 0.001$), intrinsic religious orientation ($r = 0.29$, $p < 0.001$), and sexual restraint ($r = 0.22$, $p < 0.01$).

Religious Orientation and Varieties of Sexual Experience

Considerable support was found for each of the hypotheses. That is, intrinsically religious persons were more sexually restricted; whereas extrinsically religious individuals were less sexually

TABLE 1
DESCRIPTIVE STATISTICS FOR MEASURES OF RELIGIOUS ORIENTATION,
GENERAL PERSONALITY, AND SEXUALITY

Measure	Men		Women		F
	M	SD	M	SD	
<i>Religious Orientation</i>					
Intrinsic	3.50	0.69	3.72	0.68	3.74*
Extrinsic	2.28	0.64	2.13	0.64	2.12
Quest	3.10	0.63	2.82	0.60	7.83**
<i>General Dimensions of Personality</i>					
Openness to experience	3.96	0.55	3.69	0.62	8.05**
Conscientiousness	3.50	0.62	3.77	0.58	8.59**
Extraversion	3.30	0.75	3.49	0.91	1.93
Agreeableness	3.91	0.52	3.84	0.65	<1
Neuroticism	2.49	0.71	3.03	0.83	18.55***
<i>Sexual Dimensions of Personality</i>					
Emotional investment	7.42	0.88	7.76	0.92	5.26*
Relationship exclusivity	6.95	1.47	8.10	0.96	35.07***
Sexual attractiveness	5.72	1.06	5.71	1.14	<1
Sexual restraint	4.76	1.75	5.31	2.23	2.58
Femininity	2.26	0.66	7.58	0.78	1172.07***
Erotophilic disposition	4.11	1.31	3.11	1.16	23.52***
Homosexual orientation	1.13	0.43	1.14	0.52	<1
Sociosexual orientation	7.48	4.59	3.91	3.04	34.19***
<i>Sexual Desires</i>					
Seeking short-term mate	3.41	2.20	2.10	1.71	17.53***
Seeking long-term mate	3.90	1.85	4.76	1.85	8.28**
<i>Number of Sexual Partners Desired in the . . .</i>					
Short term	0.68	0.95	0.26	0.42	14.41***
Long term	3.61	8.58	0.89	0.74	8.80**
<i>Would Consider Having Sex with Desirable Person Known for . . .</i>					
Shorter time	-1.17	1.60	-2.40	0.88	39.09***
Longer time	1.66	1.64	0.65	1.88	12.19**
<i>Mate-Poaching Frequency</i>	2.48	1.49	1.73	1.24	11.92***
<i>Ever Had Sexual Relationship</i>	80%	72%	$\chi^2(160) = 1.37$		

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

restricted. For example, 94 percent of low intrinsically religious men (those below the intrinsic median) had ever had a sexual relationship, compared to 80 percent of high intrinsic men, $\chi^2(1) = 10.52$, $p < 0.01$; whereas a higher percentage of high extrinsically religious men (91 percent) than low extrinsic men (67 percent) had ever had a sexual relationship, $\chi^2(1) = 6.19$, $p < 0.01$. The same pattern was found among women above and below the respective medians. A lower percentage of high intrinsically religious women (60 percent) than low intrinsic women (86 percent) had ever had a sexual relationship, $\chi^2(1) = 7.73$, $p < 0.01$; whereas 67 percent of high extrinsically religious had ever had a sexual relationship, compared to 60 percent of low extrinsic women, $\chi^2(1) = 7.28$, $p < 0.01$.

TABLE 2
CORRELATIONS BETWEEN RELIGIOUS ORIENTATIONS, THE BIG FIVE
PERSONALITY DIMENSIONS, SEXUAL DIMENSIONS OF PERSONALITY, AND
OTHER SEXUAL DESIRES (CONTROLLING FOR SOCIAL DESIRABILITY)

Sexual Measure	Men			Women		
	I	E	Q	I	E	Q
<i>Big Five Personality</i>						
Openness to experience	0.09	-0.15	0.09	0.02	-0.13	0.05
Conscientiousness	-0.05	0.09	-0.31*	0.10	0.00	0.12
Extraversion	0.26*	-0.11	0.16	0.22*	-0.02	-0.18
Agreeableness	0.04	-0.24	-0.10	0.10	-0.06	-0.03
Neuroticism	0.02	0.03	0.00	-0.19	0.12	-0.06
<i>Sexual Dimensions of Personality</i>						
Sexual attractiveness	-0.26*	0.24	0.20	0.08	0.01	-0.13
Relationship exclusivity	0.26*	-0.30*	-0.16	0.01	-0.21*	0.02
Femininity	0.11	-0.08	0.22	0.16	-0.08	-0.12
Sexual restraint	0.49***	-0.50***	-0.13	0.14	-0.35***	0.02
Emotional investment	0.01	0.08	-0.12	0.15	-0.13	-0.15
Homosexual orientation	0.15	-0.21	0.01	-0.31**	0.04	-0.02
Erotophilic disposition	-0.09	0.13	0.32*	-0.03	0.15	0.03
Sociosexual orientation	-0.41***	0.35**	0.17	-0.18	0.38***	0.01
<i>Sexual Desires</i>						
Seeking short-term mate	-0.13	-0.04	0.13	-0.04	0.02	-0.02
Seeking long-term mate	0.12	-0.04	-0.17	0.09	0.27**	-0.02
<i>Number of Sexual Partners Desired</i> <i>in the . . .</i>						
Short term	-0.41***	0.26*	0.06	-0.30**	0.19	0.00
Long term	-0.25*	0.09	0.00	-0.27**	0.05	0.00
<i>Would Consider Having Sex with</i> <i>Desirable Person Known for . . .</i>						
Shorter time	-0.57***	0.38***	0.26*	-0.27**	0.17	0.02
Longer time	-0.39***	0.32*	0.09	-0.08	0.11	-0.12
<i>Mate-Poaching Frequency</i>	-0.08	0.26*	0.06	-0.10	0.27**	-0.03

Note: I = Intrinsic; E = Extrinsic; Q = Quest.
 * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; $n_{men} = 65$; $n_{women} = 95$.

Because sex differences in sexuality description were observed and social desirability was correlated with several variables, subsequent partial correlations were computed separately for men and women (statistically controlling for social desirability). As shown in Table 2, among both men and women, extrinsic religious orientation correlated negatively with the relationship exclusivity and sexual restraint dimensions of sexual description and positively with sociosexuality, attempted short-term sexual relationship initiation, and attempted mate poaching (when social desirability was statistically controlled). Among men and women, intrinsic religious orientation was negatively correlated with the number of sex partners desired across time and with willingness to consider having sex with a desirable person known for a shorter amount of time. Few partial correlations between quest religious orientation and sexual personality and desires were

found, controlling for social desirability. Among men, but not women, quest correlated positively with erotophilic disposition and with men’s increased willingness to consider having sex with a desirable person known for a shorter time. Some other partial correlations between religious orientation and sexuality appeared only for men. For example, among men (but not women), intrinsic religiousness correlated positively with sexual restraint and relationship exclusivity, and negatively with sociosexuality and considering having sex with a desirable person know for a longer time. Among women (but not men) intrinsic religiousness correlated negatively with homosexual description and considering having sex with a desirable person known for a shorter time.

Multiple regression analyses were used to determine whether intrinsic and extrinsic religious orientations accounted for unique variability in sexual personality dimensions and other sexual desires when gender and social desirability were simultaneously controlled. As shown in Table 3, intrinsic religious orientation was negatively associated with homosexual personality description, sociosexuality, the number of sex partners desired in the short term and long term, and with willingness to have sex with a desirable person known for a shorter or longer time (when gender, social desirability, and extrinsic religious orientation were statistically controlled). Extrinsic religious orientation was negatively associated with sexual restraint and relationship exclusivity personality description, and positively associated with sociosexuality and mate poaching (when gender, intrinsic religious orientation, and social desirability were controlled). Extrinsic religious orientation did not appear to account for unique variation in number of sex partners desired or

TABLE 3
STANDARDIZED REGRESSION COEFFICIENTS FOR GENDER, RELIGIOUS
ORIENTATION, AND SOCIAL DESIRABILITY ON SEXUAL PERSONALITY
DIMENSIONS AND DESIRES

Sexuality Dimensions	Gender	I	E	SD	Model Statistics		
					F	p	R ²
<i>Sexual Personality Dimensions</i>							
Femininity	0.95***	0.04	-0.01	-0.01	438.62	0.0001	0.93
Relationship exclusivity	0.39***	0.03	-0.23*	0.06	12.82	0.001	0.26
Sexual restraint	0.05	0.11	-0.36***	0.04	9.28	0.0001	0.21
Erotophilic disposition	-0.34***	-0.02	0.11	-0.20*	9.06	0.0001	0.21
Emotional investment	0.17*	0.08	-0.01	0.11	2.43	0.05	0.06
Homosexual orientation	0.03	-0.22*	-0.18*	-0.07	1.57	ns	0.04
Sexual attractiveness	0.02	-0.02	0.10	-0.02	<1	ns	0.01
Sociosexual orientation	-0.36***	-0.16*	0.26**	-0.06	19.16	0.0001	0.34
<i>Sexual Desires</i>							
Seeking short-term mate	-0.31***	-0.11	-0.07	-0.14	5.79	0.001	0.13
Seeking long-term mate	0.21**	0.23*	0.24*	0.13	4.53	0.002	0.11
<i>Number of Sex Partners</i>							
Short-term number	-0.22**	-0.32***	0.07	-0.06	10.60	0.0001	0.47
Long-term number	-0.21**	-0.19	-0.02	-0.02	3.54	0.01	0.31
<i>Time Known Until Having Sex</i>							
Shorter time known	-0.37***	-0.37***	0.08	0.02	020.67	0.0001	0.36
Longer time known	-0.22**	-0.16	0.12	-0.08	6.71	0.001	0.39
<i>Mate-Poaching Frequency</i>	-0.23**	0.04	0.29**	-0.04	6.63	0.001	0.15

Note: For gender, men were coded 0, women 1. I = Intrinsic; E = Extrinsic; SD = Social Desirability.

*p < 0.05; **p < 0.01; ***p < 0.001.

time known until having sex (when gender, intrinsic religious orientation, and social desirability were statistically controlled). However, both intrinsic and extrinsic religious orientation were associated with desire for a long-term mate when gender and social desirability were controlled. Quest accounted for significant variation in erotophilic disposition ($\beta = 0.17$, $p < 0.05$), controlling for gender ($\beta = -0.30$, $p < 0.001$), intrinsic ($\beta = -0.02$), extrinsic ($\beta = 0.08$), and social desirability ($\beta = -0.19$, $p < 0.05$).

General Personality Dimensions Do Not Mediate Associations Between Religious Orientations and Sexuality

To explore the possibility that Big Five personality dimensions mediate the association between religious orientations and various sexuality dimensions, several exploratory multiple regression analyses were conducted. To facilitate interpretability and comparison with results shown in Table 3, we included one Big Five dimension at a time in multiple regression equations in which gender, intrinsic, extrinsic, and social desirability were also used to predict a sexuality dimension. For example, theoretically relevant independent variables (e.g., gender, intrinsic religious orientation, extrinsic religious orientation, social desirability, and extraversion) were simultaneously regressed on sexual restraint. Then, gender, intrinsic religious orientation, extrinsic religious orientation, social desirability, and agreeableness were regressed on sexual restraint, and so forth.

All significant standardized regression coefficients for intrinsic and extrinsic religiosity in Table 3 remained significant when Big Five personality dimensions were statistically controlled. That is, Big Five personality dimensions did not mediate the associations between religious orientations and sexuality constructs. Big Five personality dimensions did account for some unique variation in sexual personality dimensions, sociosexuality, and mate poaching, above and beyond the unique variation accounted for by religious orientation and gender. For example, unique variation in *sexual restraint* description was attributable to both conscientiousness ($\beta = -0.18$, $p < 0.03$) and extrinsic religiosity ($\beta = -0.35$, $p < 0.001$) when gender ($\beta = 0.06$, *ns*), intrinsic religiosity ($\beta = 0.15$, *ns*), and social desirability ($\beta = 0.03$, *ns*) were simultaneously controlled. Both intrinsic religiosity ($\beta = -0.21$, $p < 0.03$) and openness to experience ($\beta = 0.25$, $p < 0.004$) accounted for unique variation in *homosexual-bisexual personality* description when gender ($\beta = 0.09$, *ns*), extrinsic religiosity ($\beta = -0.14$, *ns*), and social desirability ($\beta = -0.07$, *ns*) were controlled. Unique variation in *mate poaching* was accounted for by extrinsic religiosity ($\beta = 0.27$, $p < 0.001$), extraversion ($\beta = 0.20$, $p < 0.005$), and gender ($\beta = -0.37$, $p < 0.001$) when intrinsic religiosity ($\beta = -0.12$, *ns*), and social desirability ($\beta = -0.04$, *ns*) were simultaneously controlled. When gender, social desirability, and religiosity were controlled, no other Big Five personality variable accounted for variation in sexual restraint, relationship exclusivity, homosexual personality, sociosexuality, number of partners desired in the short term, or shorter time known to sex.

DISCUSSION

Previous research indicates that religiosity accounts for unique variation in two processes critical for the continuation of our species—survival (see McCullough et al. 2000) and sexual reproduction (Wulf et al. 1984). In this study we sought to determine whether and how intrinsic and extrinsic religious orientation correlate with a variety of sexual experiences after statistically controlling for reliable gender differences in sexuality and socially desirable responding. We theorize that intrinsically religious people internalize religious teachings and standards about sexuality more than extrinsically religious persons. As such, we hypothesize that intrinsics' sexual desires are more restricted (conforming to religious values and standards) and that aspects of extrinsics' sexuality are somewhat less restricted (possibly to fulfill personal or social needs).

On a descriptive level, a higher percentage of low intrinsically religious men and women had ever had sex, compared with high intrinsically religious men and women. A higher percentage of high extrinsically religious men and women had ever had sex than low extrinsically religious men and women. Consistent with the *intrinsic religious orientation/restricted sexuality hypothesis*, intrinsic religious orientation correlates negatively with a variety of sexual dimensions of the self. For example, intrinsic religious orientation correlates negatively with the number of sex partners desired, openness to having sex with a desirable person known for a shorter time, and mate poaching. Consistent with the *extrinsic religious orientation/unrestricted sexuality hypothesis*, extrinsic religious orientation correlates negatively with a variety of sexual dimensions of the self. People who use religion as a means to personal or social ends report less sexual restraint, more relationship exclusivity, unrestricted sociosexuality, and more mate poaching (after statistically controlling for gender and socially desirable responding).

Taken together, these results are evidence that intrinsically religious persons have less desire for sexual variety; whereas extrinsically religious persons view themselves as less sexually restricted. It is important to emphasize that both religious orientations account for unique variance in sexual dimensions of the self above and beyond variation due to gender, socially desirable responding, and Big Five personality traits. In other words, the patterns in this study are probably not due to women's higher religious commitment than men's, a social desirability bias, or some shared variation with a general personality trait like agreeableness or openness to experience. Rather, some unique variation in a variety of sexual personality dimensions and desires is attributable to religious orientation. However, it is too simple to say that increases in religiosity are associated with decreases in sexuality (because, as extrinsic religious orientation increases, sexual restraint decreases, and sociosexuality and mate poaching increase). Likewise, it is probable that sexual experiences also influence religiosity. For example, some people who have premarital sex become less religiously involved (Thornton and Camburn 1989). It is also possible that people who mate poach or commit acts of sexual infidelity also decrease religious involvement. Due to the correlational design of this study, however, the direction of causality between religious orientation and sexuality cannot be determined. Nevertheless, religious orientation appears to account for unique variation in some aspects of sexuality, above and beyond the variation accounted for by gender, social desirability, and other aspects of personality. As such, multidimensional measures of religiosity are theoretically important to include in future scientific research on sexuality and personal relationships.

ACKNOWLEDGMENTS

The authors express appreciation to Shelley Gibson and Taylor Heaton for assistance with data collection.

REFERENCES

- Allport, G. W. and J. M. Ross. 1967. Personal religious orientation and prejudice. *Journal of Personality and Social Psychology* 5:432–43.
- Bassett, R. L., G. Mowat, T. Ferriter, M. Perry, E. Hutchinson, J. Campbell, and P. Santiago. 2002. Why do Christian college students abstain from premarital sexual intercourse? *Journal of Psychology and Christianity* 21:121–32.
- Bassett, R. L., H. L. Smith, R. J. Newell, and A. H. Richards. 1999. Thou shalt not like sex: Taking another look at religiousness and sexual attitudes. *Journal of Psychology and Christianity* 18:205–16.
- Batson, C. D. and P. A. Schoenrade. 1991. Measuring religion as quest: 2. Reliability concerns. *Journal for the Scientific Study of Religion* 30:430–47.
- Benet-Martínez, V. and O. P. John. 1998. Los cinco grandes across cultures and ethnic groups: Multitrait multimethod analysis of the Big Five in Spanish and English. *Journal of Personality and Social Psychology* 75:729–50.
- Bouchard Jr., T. J., M. McGue, and A. Tellegen. 1999. Intrinsic and extrinsic religiousness: Genetic and environmental influences and personality correlates. *Twin Research* 2:88–98.
- Buss, D. M. and D. P. Schmitt. 1993. Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review* 100:204–32.

- Cochran, J. K. and L. Beeghly. 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.
- Donahue, M. J. 1985. Intrinsic and extrinsic religiousness: Review and meta-analysis. *Journal of Personality and Social Psychology* 48:400–19.
- Garcia, L. T. and D. Carrigan. 1998. Individual and gender differences in sexual self-perceptions. *Journal of Psychology and Human Sexuality* 10:59–70.
- Goldberg, L. R. 1993. The structure of phenotypic personality traits. *American Psychologist* 48:26–34.
- Haerich, P. 1992. Premarital sexual permissiveness and religious orientation: A preliminary investigation. *Journal for the Scientific Study of Religion* 31:361–65.
- Kirkpatrick, L. A. 1989. A psychometric analysis of the Allport-Ross and Feagin measures of intrinsic-extrinsic religious orientation. *Research in the Social Scientific Study of Religion* 1:1–31.
- Laumann, E. O., J. H. Gagnon, R. T. Michael, and S. Michaels. 1994. *The social organization of sexuality: Sexual practices in the United States*. Chicago, IL: University of Chicago Press.
- Leak, G. K. 1993. Relationship between religious orientation, love styles, sexual attitudes, and sexual behaviors. *Journal of Psychology and Theology* 21:315–18.
- Mahoney, E. R. 1980. Religiosity and sexual behavior among heterosexual college students. *Journal of Sex Research* 16:97–113.
- McClain, E. W. 1978. Personality differences between intrinsically religious and nonreligious students: A factor analytic study. *Journal of Personality Assessment* 42:159–66.
- McCrae, R. R. and O. P. John. 1992. An introduction to the five-factor model and its applications. *Journal of Personality* 60:175–215.
- McCullough, M. E., W. T. Hoyt, D. B. Larson, and H. G. Koenig. 2000. Religious involvement and mortality: A meta-analytic review. *Health Psychology* 19:211–22.
- Oliver, M. B. and J. S. Hyde. 1993. Gender differences in sexuality: A meta-analysis. *Psychological Bulletin* 114:29–51.
- Paulhus, D. L. 1988. Assessing self-deception and impression management in self-reports: The balanced inventory of desirable responding. Unpublished manual. Vancouver, Canada: University of British Columbia.
- Reed, L. A. and L. S. Meyers. 1991. A structural analysis of religious orientation and its relation to sexual attitudes. *Educational and Psychological Measurement* 51:943–52.
- Saroglou, V. 2002. Religion and the five factors of personality: A meta-analytic review. *Personality and Individual Difference* 32:15–25.
- Schmitt, D.P. 2002. Religious extremity and sexual restraint across 52 cultures. Unpublished raw data.
- Schmitt, D. P. and D. Buss. 2000. Sexual dimensions of person description: Beyond or subsumed by the Big Five? *Journal of Research in Personality* 34:141–77.
- . 2001. Human mate poaching: Tactics and temptations for infiltrating existing mateships. *Journal of Personality and Social Psychology* 80:894–917.
- Shafer, A. B. 2001. The big five and sexuality trait terms as predictors of relationship and sex. *Journal of Research in Personality* 35:313–38.
- Simpson, J. A. and S. W. Gangestad. 1991. Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology* 60:870–83.
- Stark, R. 2002. Physiology and faith: Addressing the “universal” gender difference in religious commitment. *Journal for the Scientific Study of Religion* 41:495–507.
- Thornton, A. and D. Camburn. 1989. Religious participation and adolescent sexual behavior and attitudes. *Journal of Marriage and the Family* 51:641–53.
- Woodroof, J. T. 1985. Premarital sexual behavior and religious adolescents. *Journal for the Scientific Study of Religion* 24:343–66.
- Wulf, J., D. Prentice, D. Hansum, A. Ferrar, and B. Spilka. 1984. Religiosity and sexual attitudes and behaviors among evangelical Christian singles. *Review of Religious Research* 26:119–31.

