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## Religiosity, Internalized Homonegativity, and Outness in Christian Men Who Have Sex with Men

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### Abstract

When exposed to their congregations' negative views of homosexuality, Christian men who have sex with men frequently struggle to reconcile their religious and sexual identities, possibly contributing to negative emotional states and behaviors associated with HIV/STI infection. To examine the influence of religiosity on internalized homonegativity and outness among Christian men who have sex with men, we used survey data from 1,165 men who answered questions about their religious beliefs and sexual behavior. We stratified participants based on religious affiliation groupings: Catholic, Mainline Protestant, and Evangelical Protestant. After using confirmatory factor analysis to verify that the selected measures of religiosity were equivalent between groups, we used structural equation modeling to examine the relationship between religiosity, internalized homonegativity, and outness. Among Catholics and Mainline Protestants, religiosity was not associated with internalized homonegativity or outness. However, among Evangelical Protestants—a group more likely to ascribe to religious fundamentalism—increased religiosity was associated with increased internalized homonegativity, which contributed to decreased outness. Our findings suggest that mental health providers and sexuality educators should be more concerned about the influence of religiosity on internalized homonegativity and outness when clients have a history of affiliation with Evangelical Protestant faiths more so than Catholic or Mainline Protestant faiths.

### Keywords

religion; male homosexuality; sexual orientation; psychosexual behavior; homophobia

### Introduction

It has been suggested that the religious and the sexual should not be viewed in opposition to each other; rather, Christian individuals should seek to understand what their faith says about living as sexual beings while simultaneously seeking to understand how sexual experiences can inform faith (Nelson, 1978). However, for many Christian men who have sex with men (MSM), religious and sexual identity integration is illusive (Dahl & Galliher, 2009; Kubicek et al., 2009; Ream & Savin-Williams, 2005), which can have implications for both mental and behavioral health. The aim of this study is to examine the association between religiosity and selected mental health outcomes that have been identified as potential risk factors for HIV/STI infection.

A discussion of the influence of religion on the health of MSM cannot occur without first acknowledging that for many Christians, homosexuality is incompatible with their belief

system. Over time, Christian views towards homosexuality have become more accepting (Peterson & Donnenwerth, 1998). Still, several studies have found religiosity to be the strongest predictor of Christians' negative attitudes toward gay, lesbian, and bisexual persons (Bauermeister, Morales, Seda, & Gonzalez-Rivera, 2007; Herek, 2002; Wilkinson & Roys, 2005). The extent to which these negative attitudes exist depends on religious fundamentalism (Herek, 1994; Higgins, 2002, 2004, 2006), and are manifested more in certain religious affiliation groups. Of the 78.4% of U.S. adults who identify as Christian, 23.9% can be classified as Catholic and 51.3% as Protestant (18.1% as Mainline Protestants, 26.3% as Evangelical Protestants, and 6.9% as historically Black churches); the remainder of Christians can be classified as Mormon (1.7%), Jehovah's Witness (0.7%), Orthodox (0.6%), or another Christian faith tradition (0.3%) (Pew Research Center's Forum on Religion & Public Life, 2008). The Pew Forum found that when Christians are treated as one group, 50% say homosexuality is a way of life that should be accepted and 40% say it should be discouraged. However, the response pattern is more varied when stratified by religious affiliation. While the majority of Catholics and Mainline Protestants find homosexuality acceptable, the majority of Evangelical Protestants do not. Specifically, 58% of Catholics say homosexuality is acceptable and 30% say it should be discouraged, 56% of Mainline Protestants say it is acceptable and 34% say it should be discouraged, and 26% of Evangelical Protestants say it is acceptable and 64% say it should be discouraged. Other studies of Evangelical Protestants support Pew's results, finding religious fundamentalism to be the largest predictor of negative attitudes towards homosexual persons (Finlay & Walther, 2003; Hinrichs & Rosenberg, 2002; Rosik, Griffith, & Cruz, 2007; Rowatt et al., 2006).

Exposed to their congregations' views of homosexuality, Christian MSM frequently struggle to reconcile their religious and sexual identities, possibly contributing to negative emotional states and behaviors associated with HIV/STI infection. MSM affiliated with a religious organization not accepting of homosexuality frequently experience higher levels of internalized homonegativity (Harris, Cook, & Kashubeck-West, 2008; Higgins, 2002; Ream & Savin-Williams, 2005; Roseborough, 2006; Ross, Rosser, & Neumaier, 2008; Rosser, 1992; Szymanski, Kashubeck-West, & Meyer, 2008), defined as the "internalization of societal antihomosexual attitudes" that are integrated into self-perceptions (Meyer & Dean, 1998, p. 163). Higher levels of internalized homonegativity have been associated with drug use and unsafe sexual activity, making it a potential target of HIV prevention (Kubicek, McDavitt, Carpineto, Weiss, Iverson, & Kipke, 2009; Ross, Rosser, Bauer, Bockting, Robinson, Rugg, et al., 2001; Rostosky, Danner, & Riggle, 2007). Higher levels of internalized homonegativity also have been associated with decreased outness (Rosser, Bockting, Ross, Miner, & Coleman, 2008), which is defined as "the process of openly acknowledging one's same-sex attractions" (Rhoads, 1994, p. 7). MSM who are less out because they have high levels of internalized homonegativity are more likely to engage in sexual risk (Ross, et al., 2008; Ross, et al., 2001). While a meta-analysis of the influence of internalized homonegativity on risk suggested that the strength of the association between the two decreases as one ages (Newcomb & Mustanski, 2009), the intervening period of time is of concern to mental health providers, sexuality educators, and researchers attempting to improve the emotional and sexual health of MSM. The literature suggests that exposure to religious teachings that condemn homosexuality could contribute to increased internalized homonegativity and decreased outness. The literature also suggests that the influence of religiosity on internalized homonegativity should also influence outness. The purpose of this study was to integrate literatures on religious affiliation (Catholic, Mainline Protestant, and Evangelical Protestant), religiosity, internalized homonegativity, and outness among MSM. We hypothesized that MSM affiliated with Evangelical Protestant faiths would experience higher levels of internalized homonegativity and be less out to family and friends than Catholic or Mainline Protestant MSM.

## Methods

### Study Design

Internet-using MSM ( $N=2,716$ ) completed an online survey about their sexual behavior with partners met in online or offline environments and several potential determinants of sexual behavior. Participants were recruited during three months in 2005 through banner advertisements placed on two websites frequented by US MSM. Eligibility criteria included being male, 18 years of age or older, a resident of the US, and acknowledging having had sex with another man at least once during one's lifetime. Men of ethnic/racial minority background were deliberately over-sampled to provide approximately equivalent groups of Asian, Latino, Black, and White men. For this analysis, we were only interested in a subsample of Christian MSM ( $N=1,165$ ).

Study procedures are described in greater detail elsewhere (Rosser, Gurak, Horvath, Oakes, Konstan, & Danilenko, 2009; Rosser, Oakes, Horvath, Konstan, Danilenko, & Peterson, 2009). Briefly, by clicking on a study banner advertisement, prospective participants were directed to the study website. After completing a screening and consent process, participants answered 170 survey questions. A refuse to answer option was provided for each question. The mean survey completion time was 45 minutes. Participants were initially compensated \$10, which in the third month was raised to \$20 in order to speed recruitment. This study was conducted under the oversight of the institutional review board of the researchers' home institution.

### Measures

**Current religious affiliation**—One question asked participants to identify their current primary religious affiliation. Christian response options included Catholic; Lutheran, Presbyterian, or other Protestant (Mainline Protestant); and Evangelical/Born again Christian (Evangelical Protestant).

**Religiosity**—The religiosity measure assessed current religiosity and consisted of four 5-point Likert-type items taken from the National Survey of American Life (Jackson, et al., 2004) and the National Survey of Black Americans (Jackson & Tucker, 1997): “How religious are you?” (not religious at all – very religious), “How important is religion in your life today?” (not at all important – very important), “How spiritual would you say you are?” (not at all spiritual – very spiritual), and “How often do you pray?” (never – very often) ( $\alpha=0.88$ ).

**Internalized homonegativity**—We measured internalized homonegativity using Smolenski, Diamond, Ross, and Rosser's (2010) Revised Reactions to Homosexuality Scale. Responses to the seven 7-point Likert-type questions ranged from strongly disagree to strongly agree and included three constructs: personal comfort with being gay (two items), public identification as gay (three items), and social comfort with gay men (two items). The Cronbach alpha for the entire scale was 0.74.

**Outness**—Participants were asked to respond to one 5-point Likert-type item: “I would say that I am open (out) as a gay, bisexual, or a man attracted to other men.” Responses ranged from not at all open (out) to open (out) to all or almost all people I know.

**Demographic measures**—Certain demographic variables were identified a priori as possible confounders that should be included as covariates in all regression models. Measures of age, education, and race/ethnicity were asked as in the 2000 US Census (US

Census Bureau, 2008). Participants were also asked if they were HIV positive (yes, no, do not know).

## Data Analysis

**Confirmatory factor analysis**—We developed a training and validation split-half of the Catholic participants for calibration of the four-item measure of religiosity. After examining the model fit in each group, we tested for configural measurement invariance (equivalence of factor model structure) and metric measurement invariance (equivalence of factor loadings; Meredith, 1993; Meredith & Teresi, 2006; Wu, Li, & Zumbo, 2007) of religiosity between the two split halves to validate any modifications to the measure in the training split half. Fit was assessed using the likelihood ratio test, the comparative fit index (CFI; Bentler, 1990), the Tucker-Lewis index (TLI; Tucker & Lewis, 1973), and the root mean square error of approximation (RMSEA; Steiger, 1990). A value of 0.95 or above on the CFI and TLI, and a value of 0.08 or below on the RMSEA (90% confidence interval, the standard for RMSEA estimation; Loehlin, 2004) were considered indicators of good fit (Hu & Bentler, 1999). We accounted for potential non-normality of the multivariate distribution indicated by the four items by using the robust maximum likelihood estimator (Muthén & Muthén, 1998–2007). The final religiosity measure was subjected to a second multi-group analysis between the three religious affiliation groups to examine comparability of measurement using the aforementioned steps and criteria.

**Structural equation modeling**—Within religious affiliation group, we tested a structural equation model based on an a priori hypothesis that religiosity had a direct effect on outness and an indirect effect mediated by internalized homonegativity (Figure 1). Models were adjusted for age, education, race/ethnicity, and HIV status based on the possibility that they could confound the associations of interest. The final model involved multi-group estimation of the path model with equality constraints placed on the scale measures to simultaneously compare the path coefficients between religious affiliation groups.

## Results

Demographic differences between participants when grouped according to religious affiliation were significant. A greater proportion of Latinos were Catholics, Whites were Mainline Protestants, and Blacks were Evangelical Protestants. Catholics and Mainline Protestants were of similar age and education, and they had similar levels of religiosity and internalized homonegativity. Compared to Catholics and Mainline Protestants, Evangelical Protestants were younger and less educated, and they had higher levels of religiosity and internalized homonegativity. Mainline Protestants were more likely to be out than either Catholics or Evangelical Protestants.

The religiosity construct performed similarly across groups (Table 2). Within the training group of Catholic participants, the measurement model had better fit when we allowed for covariance between the item asking about the importance of religion in a participant's life and the item asking how religious a participant was. We replicated the measurement model within the validation group and verified it was metric invariant across religious affiliation groups.

An examination of within-group correlations indicated that the influence of religiosity on internalized homonegativity and outness differed by religious affiliation. Bivariate correlations between religiosity and the variables of interest produced moderately significant correlations among Evangelical Protestants. Specifically, increased religiosity was correlated with increased internalized homonegativity and decreased outness (Table 2).

Figure 2 includes illustrations of structural equation models of the variables of interest with covariate adjustment for each religious affiliation group. Each illustration includes the standardized path coefficients with their corresponding standard errors (statistically significant values at  $p < 0.05$  are bolded). Among Catholics and Mainline Protestants, religiosity was not significantly associated with internalized homonegativity or outness. Though both groups showed evidence of decreased outness as internalized homonegativity increased, the reason for this association cannot be attributed to religiosity. However, among Evangelical Protestants, increased religiosity was associated with increased internalized homonegativity and decreased outness.

## Discussion

While participants in all three religious affiliation groups were less likely to be out when experiencing higher internalized homonegativity, religiosity was associated with these outcomes among Evangelical Protestants only. The association among Evangelical Protestants supports previous research suggesting MSM accepting of fundamentalist religious beliefs that condemn homosexuality experience more internalized homonegativity (Higgins, 2002, 2004, 2006). Our findings suggest that mental health providers and sexuality educators should be more concerned about the influence of fundamentalist religious beliefs on internalized homonegativity and outness when their clients have a history of affiliation with Evangelical Protestant faiths more so than Catholic or Mainline Protestant faiths.

A challenge for mental health providers and sexuality educators is to develop interventions that provide religious MSM with a means to integrate their religious and sexual identities without having to abandon either. Religiosity when not punitive can be a source of emotional support and potentially encourage health-promoting behaviors (Koenig, 1998; Koenig, Mccullough, & Larson, 2001). When assisting men with the reconciliation of their religious and sexual identities, we recommend that providers and educators direct therapeutic and educational efforts towards reducing internalized homonegativity. For example, a cognitive-behavioral approach to internalized homonegativity reduction could encourage men to separate negative thoughts and feelings about same-sex attraction from the negative behaviors that result from lack of identity integration. Men could then be encouraged to challenge thoughts that lead to shame and related risk behaviors. In addition, providers and educators can connect men with religious and spiritual LGBT organizations that will model acceptance of one's attraction to men and offer social support within a faith context.

There are at least four limitations to this study. First, because we relied on cross-sectional data to test our hypothesized model, causality cannot be assumed. To establish causality, we need prospective studies of religiosity in a sample of MSM. Second, while the literature suggests MSM affiliated with a religious organization not accepting of homosexuality have higher levels of internalized homonegativity (Harris, et al., 2008; Ream & Savin-Williams, 2005; Roseborough, 2006; Ross, et al., 2008; Szymanski, et al., 2008), we did not specifically ask participants about their religion of origin and current religious organizations' teachings on homosexuality. Also, our measure of religious affiliation did not allow us to assess differences between evangelicals who do or do not identify as Protestant. Future researchers should collect these data when undertaking an analysis of the associations between religiosity and health outcomes in MSM. Third, since data were collected from MSM frequenting two gay-oriented websites in the US, it is likely that Christian MSM who frequent these websites are more out than Christian men who do not frequent these websites or live in countries where identifying as an out gay man is either less acceptable or incompatible with their cultural understanding of sexual identity. In addition, our findings might not generalize to countries with lower levels of religiosity than in the US, where

Christian morality is more likely to present in the political and legal landscape. Lastly, because data came from an Internet-based sample, results are not generalizable to all MSM.

The results of this study contribute to a critical domain of research that could benefit mental health providers and sexuality educators. Because we know little about how religiosity affects the health of MSM, future researchers should delineate the influence of religiosity on internalized homonegativity and outness from the influence of beliefs attributed to family of origin, racial/ethnic community norms, and other sociocultural variables. With a clearer understanding of the mechanisms underlying observed observations, mental health providers and sexuality educators will be better able to develop intervention programs that increase religious MSM's understanding and acceptance of their homosexuality.

## Acknowledgments

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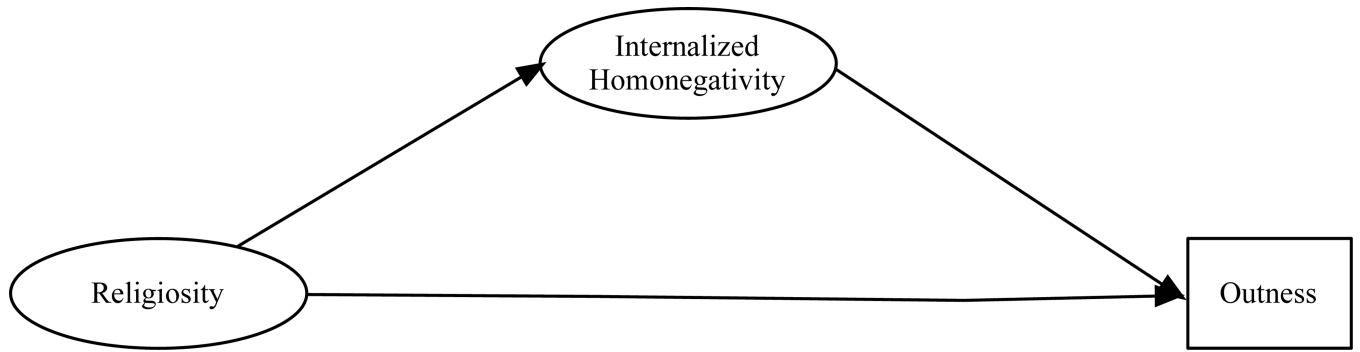
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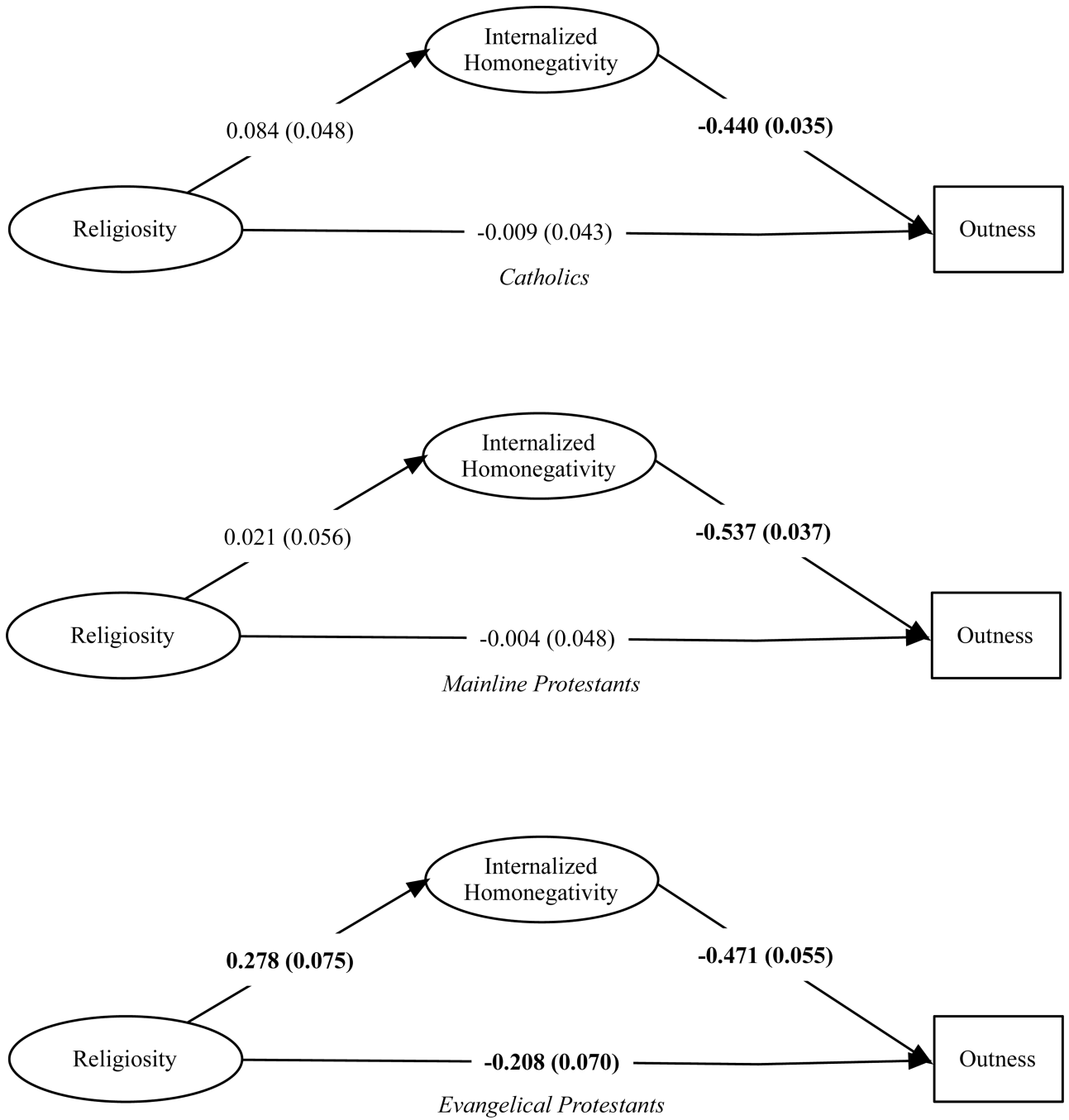


**Figure 1.**  
A hypothesized model that religiosity has both a direct and an indirect relationship with outness.

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**Figure 2.** Structural equation models with standardized path coefficients and standard errors. All models were adjusted for age, race/ethnicity, years of education, and HIV status. Statistically significant values are bolded (p<0.05).

**Table 1**

## Participant demographics(N=2612)

Variables	n (%)
Age	
18–24	941 (36.1)
25–29	663 (25.4)
30–39	693 (26.6)
40+	312 (12.0)
Race/Ethnicity	
Asian	486 (18.6)
Black	427 (16.4)
Latino	655 (25.1)
Other	334 (12.8)
White	710 (27.2)
Education	
< 12 years	81 (3.1)
12–15 years	1043 (40.0)
16 years	802 (30.7)
17+ years	685 (26.2)
HIV-Positive	
Yes	115 (4.4)
No	2484 (95.6)
Raised Religious Affiliation	
Catholic/Orthodox Christian	1032 (39.6)
Protestant	1031 (39.5)
Atheist/Agnostic	217 (8.3)
Spiritual	8 (0.3)
Other	320 (12.3)
Current Religious Affiliation	
Catholic/Orthodox Christian	537 (20.6)
Protestant	643 (24.6)
Atheist/Agnostic	846 (32.4)
Spiritual	130 (5.0)
Other	456 (17.4)
Outness	
Not at all open (out)	213 (8.2)
Open (out) to a few people they know	472 (18.1)
Open (out) to about half the people they know	284 (10.9)
Open (out) to most people they know	656 (25.2)
Open (out) to all or almost all people they know	981 (37.6)
Substance Use during sex last 3 mo.	
Yes	897 (34.4)

Variables	n (%)
No	1714 (65.7)

Note: Missing values were less than 1%. Persons identifying as atheist, agnostic, or spiritual were excluded from analyses.

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**Table 2**

Tests of measurement invariance between groups.

Model	X <sup>2</sup>	df	p	SCF	ΔX <sup>2</sup>	p	CFI	TLI	AIC	SABIC	RMSEA [90% CI]
Religiosity											
<i>Raised Religious Identity Between Catholics, Protestants, and Other (n=1036):</i>											
Configural invariance	0.999	3	0.801	1.280	--	--	1.000	1.004	26343.943	26445.300	0.000 [0.000, 0.038]
Metric invariance	10.252	9	0.331	1.073	9.544	0.145	1.000	0.999	26341.665	26427.429	0.013 [0.000, 0.043]
Constraining the latent	11.012	11	0.442	1.000	1.132	0.568	1.000	1.000	26337.679	26418.245	0.001 [0.000, 0.037]
Constraining the latent > & covariance	11.359	13	0.581	1.045	0.268	0.874	1.000	1.001	26334.531	26409.900	0.000 [0.000, 0.031]
<i>Current Religious Identity Between Catholics, Protestants, and Other (n=1636)::</i>											
Configural invariance	2.383	3	0.497	1.085	--	--	1.000	1.002	17288.792	17375.496	0.000 [0.000, 0.066]
Metric invariance	13.372	9	0.147	1.063	10.446	0.107	0.998	0.995	17288.422	17361.787	0.030 [0.000, 0.061]
Constraining the latent	17.119	11	0.104	1.015	4.690	0.096	0.997	0.995	17287.588	17356.507	0.032 [0.000, 0.060]
Constraining the latent > & covariance	39.528	13	0.000	1.074	16.024	0.000	0.986	0.980	17308.669	17373.142	0.061 [0.040, 0.083]
Internalized Homonegativity											
<i>Raised Religious Identity Between Catholics, Protestants, and Other (n=1036):</i>											
Configural	53.532	33	0.013	1.159	--	--	0.992	0.984	67484.811	67671.811	0.028 [0.013, 0.041]
Metric 1st Order	65.186	41	0.010	1.165	9.795	0.280	0.990	0.985	67482.766	67648.989	0.027 [0.014, 0.039]
Metric 2nd Order	71.864	45	0.007	1.161	5.962	0.202	0.989	0.985	67482.256	67638.090	0.027 [0.015, 0.039]
<i>Current Religious Identity Between Catholics, Protestants, and Other (n=1634):</i>											
Configural	60.061	33	0.003	1.148	--	--	0.985	0.971	46461.827	46621.808	0.039 [0.023, 0.054]
Metric 1st Order	70.383	41	0.003	1.159	8.570	0.380	0.984	0.975	46458.461	46600.666	0.036 [0.021, 0.050]
Metric 2nd Order	75.378	45	0.003	1.156	4.439	0.350	0.983	0.976	46456.034	46589.352	0.035 [0.021, 0.049]

NOTE: SCF=Scaling Correction Factor; CFI=Comparative Fit Index, TLI=Tucker-Lewis Index, AIC=Akaike Information Criterion, SABIC=Sample Size Adjusted Bayes Information Criteria, RMSEA=Root Mean Square Error of Approximation. R1: How important is religion in your life? R2: How religious are you? R3: How often do you pray? R4: How spiritual are you?

**Table 3**  
 Unstandardized (b) and Standardized ( $\beta$ ) Bivariate Regression Coefficients and Univariate Distributions for Raised and Current Religiosity Groups

	IH		Outness		Subsex	
	b [95% CI]	$\beta$	b [95% CI]	$\beta$	b [95% CI]	$\beta$
<i>Raised Religiosity Between Catholics/Orthodox Christians, Protestants, and Other (n=1036):</i>						
Religiosity	<b>0.11 [0.07, 0.15]</b>	<b>0.12</b>	-0.19 [-0.24, -0.14]	-0.15	<b>0.10 [0.03, 0.18]</b>	<b>0.06</b>
IH	--	--	<b>-0.63 [-0.68, -0.59]</b>	<b>-0.49</b>	0.03 [-0.05, 0.11]	0.02
Outness	--	--	--	--	<b>-0.19 [-0.25, -0.12]</b>	<b>-0.14</b>
Subsex	--	--	--	--	--	--
<i>Current Religiosity Between Catholics/Orthodox Christians, Protestants, and Other (n=1636):</i>						
Religiosity	<b>0.09 [0.04, 0.15]</b>	<b>0.08</b>	-0.12 [-0.19, -0.05]	-0.08	0.09 [-0.02, 0.20]	0.05
IH	--	--	<b>-0.66 [-0.71, -0.60]</b>	-0.50	0.02 [-0.08, 0.12]	0.01
Outness	--	--	--	--	<b>-0.16 [-0.24, -0.09]</b>	<b>-0.12</b>
Subsex	--	--	--	--	--	--
Univariate Distribution						
	Religiosity />M (SD)	IH />M (SD)	Outness />M (SD)	Subsex />n (%)		
<i>Raised Religiosity</i>	2.88 (1.11)	3.22 (1.05)	3.65 (1.36)	827 (34.72)		
<i>Current Religiosity</i>	3.28 (0.97)	3.32 (1.07)	3.48 (1.40)	536 (32.76)		

NOTE: IH=Internalized homonegativity and Subsex = substance use during sex. Bolded indicates significance at p<0.05. Because substance use during sex is dichotomous, the number and proportion endorsing the behavior and reported.

**Table 4**

Structural Equation Model Trimming.

Model	Log Likelihood	Free parameters	SCF	$\Delta LR \chi^2$	$\Delta df$	p	AIC	SABIC
<i>Raised Religiosity (n=2367):</i>								
Full model freely estimating the structural model	-54373.274	72	1.066	---	---	---	108890.548	109077.669
Full model constraining the structural model	-54379.050	60	1.092	12.342	12	0.419	108878.101	109034.035
Removing the path between IH & Subsex	-54376.047	59	1.093	5.814	1	0.016	108870.095	109023.430
Adjusted reduced constrained model	-53923.429	87	1.069	888.856	28	0.000	108020.857	108246.376
<i>Current Religiosity (n=1602):</i>								
Full model freely estimating the structural model	-36446.463	72	1.056	---	---	---	73036.925	73195.484
Full model constraining the structural model	-36448.823	60	1.075	4.912	12	0.961	73017.646	73149.778
Removing the path between IH & Subsex	-36448.494	59	1.075	0.612	1	0.434	73014.989	73144.919
Removing the path between Religion & Subsex	-36448.974	58	1.078	0.306	2	0.858	73013.949	73141.677
Removing the path between Religion & Outness	-36449.592	57	1.078	1.511	3	0.680	73013.183	73138.709
Adjusted reduced constrained model (n=1591)	-36122.788	85	1.059	640.590	28	0.000	72415.576	72602.178

Note: IH=internalized homonegativity, Subsex=substance use during sex, and Rel=religiosity. Model adjusted for age, race/ethnicity, education, and HIV status.