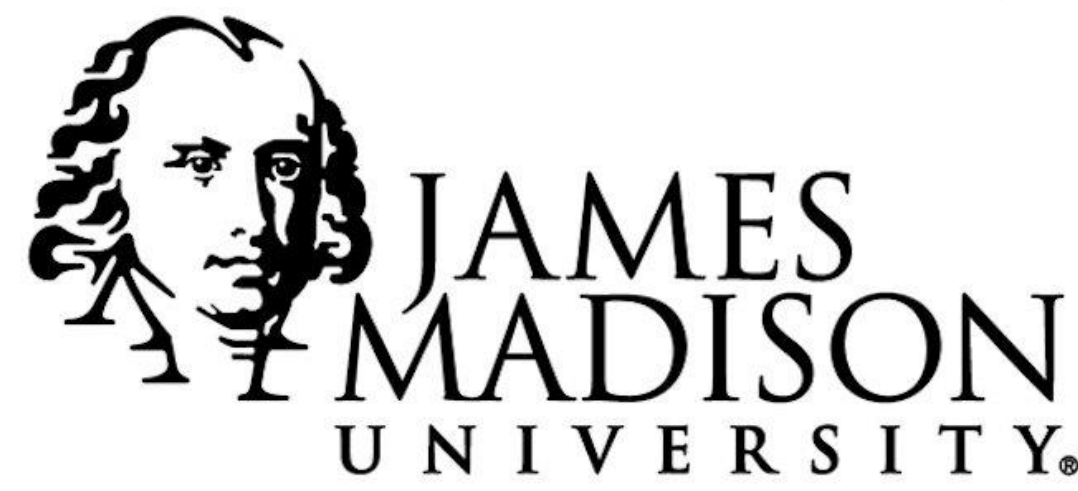


The Spiritual Values/Religion Subscale of the Self-Description Questionnaire III: Testing Measurement Invariance Across Heterosexual and Non-Heterosexual Young Adults



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::Introduction::

Religiosity has been shown to play a protective role for young adults

- Strong positive association between adolescent religiosity/spirituality and health outcomes (Ellison, 1995; Plante & Sherman, 2001; Rew & Wong, 2006)

Researchers have failed to find the same protective benefits of religiosity for non-heterosexuals as found with heterosexual young adults (Rostosky, Danner, & Riggle, 2007)

Heterosexuals and non-heterosexuals may differ in their conceptualization of religiosity

Measures of religiosity should be evaluated to ensure they function equivalently (i.e., are invariant) across these two groups

::Purpose::

The purpose of our study was to evaluate the measurement invariance of the Spiritual Values/Religion (SVR) Subscale

Several reasons why measurement invariance should not be assumed

- Non-heterosexual young adults may feel more stigmatized by religion and may conceptualize religiosity differently than heterosexual young adults
- Given positive health outcomes are related to religiosity for heterosexual young adults, religion may be more salient for heterosexual than non-heterosexual young adults (e.g., items that tap into importance of religion may be more salient for heterosexual than non-heterosexual young adults)

::Methods::

Participants

- Heterosexual young adults: $N = 326$ ($M_{age} = 20.64$ years)
- Non-heterosexual young adults: $N = 410$ ($M_{age} = 20.16$ years)

Non-heterosexual young adults consisted of self-identified lesbian, gay, bisexual, and queer

Procedure

- Participants for this study were recruited during national and international concert tours by a top recording artist in 2013, 2014, and via Born This Way Foundation's and Lady Gaga's social media (i.e., Facebook, Twitter, Little Monsters.com)

::Methods (Cont')::

Measure: Spiritual Values/Religion Subscale (Unidimensional)

Item 1: My parents are not very spiritual/religious people (r)

Item 2: I am a spiritual/religious person

Item 3: Spiritual/religious beliefs have little to do with my life philosophy (r)

Item 4: Spiritual/religious beliefs make my life better and make me a happier person

Item 5: My spiritual/religious beliefs provide the guidelines by which I conduct my life

Item 6: Continuous spiritual/religious growth is important to me

Item 7: I rarely if ever spend time in spiritual meditation or religious prayer (r)

Item 8: I am a better person as a consequence of my spiritual/religious beliefs

Item 9: I am basically an atheist, and believe that there is no being higher than man (r)

Item 10: I believe that there will be some form of continuation of my spirit or soul after my death

Item 11: Spiritual/religious beliefs have little to do with the type of person I want to be (r)

Item 12: Few, if any, of my friends are very spiritual or religious (r)

Response Scale

1 = Strongly Disagree 2 3 4 5 6 = Strongly Agree

Measurement Invariance Testing: Configural, metric, and scalar invariance were tested by constraining sets of parameters to be equal across groups in a series of steps (Cheung & Rensvold, 2002)

Step 1: Configural Invariance

- Do the two groups conceptualize religiosity in a similar manner?
- Factor structure constrained to be equal across the two groups

Step 2: Metric Invariance

- Do the items have equal saliency across the two groups?
- Factor loadings constrained to be equal across the two groups

Step 3: Scalar Invariance

- Do participants with the same level of religiosity choose the same response option?
- Item intercepts constrained to be equal across the two groups

We tested the degree to which configural, metric, and scalar invariance held based on the ΔCFI among models

::Results-Measurement Invariance::

Prior to testing measurement invariance, a one-factor model was fit to both groups individually

- The one-factor model provided adequate global and local fit for both groups (see Table 1)

Table 1

Fit Indices for the one-factor model

Group	ML χ^2	df	CFI	SRMR	RMSEA
Heterosexual	181.119*	54	0.951	0.044	0.085
Non-Heterosexual	242.520*	54	0.924	0.056	0.092

Configural, metric, and scalar invariance were supported (see Table 2)

Table 2

Tests of Invariance across Heterosexual and Non-heterosexual young adults

Model	ML χ^2	df	$\Delta\chi^2$	CFI	ΔCFI	RMSEA
Configural	423.068*	108		0.971	--	0.089
Metric	443.239*	119	20.171*	0.970	-0.001	0.086
Scalar	468.288*	130	25.049*	0.969	-0.001	0.084

::Results-Latent Mean Difference::

With configural, metric, and scalar invariance established, we also examined the latent mean difference between the two groups on the construct

- The heterosexual group was .37 standard deviation units higher than the non-heterosexual group on the latent continuum of spiritual value/religiosity

::Conclusions::

Summary

- Heterosexuals and non-heterosexuals conceptualized the construct of spiritual value/religion in a similar manner (configural invariance)
- Each item had equal saliency to the construct (metric invariance)
- Individuals with the same level of the construct chose the same response option (scalar invariance)

Implications

- These empirical results provided support for the use of SVR subscale to make comparisons across heterosexual and non-heterosexual young adults