Religiosity's Quadratic Moderation Effect on the Relationship between Gender Inequality and Subjective Well-being around the World

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Abstract

This paper reports two studies that sought to examine whether religiosity moderates the relationship between gender inequality and subjective well-being. Using multi-level and national-level analyses on 84 and 127 nations, respectively, we found evidence in support of this hypothesis. We also examined whether religiosity is a linear or a quadratic moderator of the relationship between gender inequality and subjective well-being. We found evidence that national-level religiosity is a quadratic moderator of the relationship.

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Introduction

Studies have shown that gender inequality is negatively correlated with subjective well-being (Chin Hon Foei, 2006; c.f. Veenhoven 2008, p. 56), even when income is controlled for (Napier, Thorisdottir, & Jost, 2010). Several researchers have argued that gender inequality negatively affects subjective well-being because it is seen as an injustice that causes feelings of guilt and moral outrage (Napier & Jost, 2008; Napier et al., 2010; Wakslak, Jost, Tyler, & Chen, 2007) as well as limiting the ability of many women to achieve the important goals in their lives (Tesch-Römer, Motel-Klingebiel, & Tomasik, 2008). However, gender inequality is not always found to be negatively linked to subjective well-being (e.g., Schyns, 1998), suggesting a complex relationship in which gender inequality is probably both positively and negatively linked to subjective well-being in different ways and in different contexts. Either way, the evidence suggests that gender inequality has some negative effects on subjective well-being.

Studies have also shown that beliefs that justify inequalities can buffer the negative effects of those inequalities on subjective well-being (e.g., Jost & Hunyady, 2002; Kluegel & Smith, 1986; Napier & Jost, 2008; O'Brien & Major, 2005; Wakslak et al., 2007). One particularly important kind of belief—religious belief—has been shown to buffer the negative effects of a variety of adverse circumstances on subjective well-being (e.g., Diener, Tay, & Myers, 2011; Joshanloo & Weijers, 2013a; Lazarus, 1993; Smith, McCullough, & Poll, 2003), including discrimination (Bierman, 2006; Ellison, Musick, & Henderson, 2008) and income inequality (Joshanloo & Weijers, 2013b). This religiosity-as-buffer effect is often explained with reference to the Terror Management theory of religion (Hackney & Sanders,

2003) or the Life Stress paradigm (Ellison, 1994; Schnittker, 2001), but it fits equally well within system justification theory (Jost & Banaji, 1994; Jost & Kay, 2005). With all of these kinds of explanation, religious belief or participation is thought to mitigate depression, stress or anxiety, often by instilling resilience via the belief that there is a good reason for these negative circumstances.

However, the relationship between religiosity and mental health or subjective well-being has been demonstrated to be complex in regards to both the shape of the relationship (e.g., Okulicz-Kozaryn, 2010; Galen & Kloet, 2011) and the cross- and multi-level effects involved (e.g., Eichhorn, 2012; Joshanloo & Weijers, 2013b; Diener et al., 2011). Most importantly, Joshanloo and Weijers (2013b) found that religiosity was a quadratic moderator of the relationship between income inequality and subjective well-being when a large multi-national sample was used. As a consequence of these considerations, a robust analysis of the moderating role of religiosity on the relationship between gender inequality and subjective well-being should incorporate individual- and culture-level variables, and check for non-linear moderation.

Therefore, our main hypothesis—the religiosity-as-buffer hypothesis—is that religiosity buffers the negative effects of gender inequality on subjective well-being and our subsidiary hypothesis is that religiosity is a quadratic moderator of the relationship between gender inequality and subjective well-being. In this paper, we report on a two studies that cross-culturally test these hypotheses.

Study 1

This study examines our hypotheses using recent data from the World Values Survey and European Values Study. Multi-level modelling was used to simultaneously subject the data to individual and national levels of analysis (Hox, 2010). Both individual- and cultural-

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level predictors can be used in multi-level analysis, which enables the investigation of cross-level interactions between predictors, and makes this kind of analysis the most appropriate for this study. National economic prosperity was also used as a control variable because evidence suggests that it might independently affect our variables of interest; it correlates with life satisfaction (e.g., Di Tella, MacCulloch, & Oswald, 2003; Helliwell, 2003) religiosity (e.g., Pew Forum on Religion & Public Life, 2007; Barro & Mitchell, 2004), and gender inequality (e.g., Klasen, 1999; UNDP, 2013). Furthermore, when Berg and Veenhoven (2010) cross-culturally investigated the relationship between income inequality and subjective well-being, they found that controlling for wealth significantly impacted the relationship, including changing negative relationships to positive ones. Our analysis also includes testing three-way interactions, in which gender interacts with religiosity and gender inequality in the prediction of life satisfaction, since this enables us to assess whether some of the effects of the two-way interactions are gendered.

Method

Participants

We combined data from all waves of the World Values Survey and European Values Study from 1999 to 2010 (i.e., 1999–2004, 2005–2007, and 2008–2010 waves). A total of 228,905 participants from 84 nations completed the measures of the study (EVS, 2011; WVS, 2009). The included countries, sample sizes, and national-level means of the variables under study are reported in Table 1.

Measures

Life satisfaction. Personal-level life satisfaction scores were used as the outcome in the multi-level analysis. Participants answered the question "All things considered, how

satisfied are you with your life as a whole these days?" on a 10-point scale ranging from 1 =
completely dissatisfied to 10 = *completely satisfied*.

Religiosity. Personal-level religiosity was measured with participants answers to the
question "How important is God in your life?" on a 10-point scale ranging from 1 = *not at all
important* to 10 = *very important*. Personal religiosity scores were group-mean centred. For
national religiosity, average personal religiosity was calculated for each nation. National
religiosity was grand-mean centred to be used as a national-level predictor. The quadratic
terms of personal and national religiosity were calculated by squaring centred variables.

National gender inequality. The Gender Inequality Index (GII) "captures the loss of
achievement due to gender inequality in three dimensions: reproductive health, empowerment
and labour market participation. The higher the GII value, the greater the discrimination"
(UNDP, 2013, p. 31). The GII ranges from 0, which indicates absolute gender equally, to 1,
which indicates absolute inequality. We used the GII values based on 2012 data (UNDP,
2013)[1]. This variable was grand-mean centred.

National economic prosperity. To measure the economic prosperity of the nations in
the study, the economy sub-index of the 2012 Legatum Prosperity Index was used. This index
measures "countries' performance in four key areas: macroeconomic policies, economic
satisfaction and expectations, foundations for growth, and financial sector efficiency"
(Legatum Institute, 2012, p. 12). The economy index ranges from -6.78 to 3.33. This variable
was grand-mean centred.

Age and gender were also included in the analysis as control variables because
previous research has indicated that they are significant predictors of life satisfaction (e.g.
Alesina, Di Tella, & MacCulloch, 2004; Greene & Yoon, 2004).

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[1] Obtained from http://hdr.undp.org/en/humandev/

Results

Multi-level analyses were conducted using SPSS 19 with restricted maximum

likelihood (REML) to estimate the models. We used a random-intercepts/random slopes

model. We first tested an unconditional means model (Peugh & Enders, 2005) excluding all

the predictors. An unconditional means model is identical to a one-way ANOVA with

random effects. The results of this analysis reveal the proportion of variability in life

satisfaction that exists at the individual and cultural levels before adding covariates. The

results showed that there was statistically significant variability both at the individual ($b =$

5.10, Wald $Z = 336.494$, p (one-sided) $< .001$) and cultural ($b = .98$, Wald $Z = 6.424$, p (one-

sided) $< .001$) levels. Therefore, it is justifiable to add predictors to the model to explain the

existing unexplained variance at both levels.

In a second analysis, we added all of the predictors (including, age, gender, and

national economic prosperity) to the model. The results are shown in Table 2. The results

showed that the slopes of personal religiosity ($b = .005$, Wald $Z = 4.290$, p (one-sided) $<$

.001), the quadratic term of personal religiosity ($b = .0001$, Wald $Z = 3.779$, p (one-sided) $<$

.001), age ($b = .0001$, Wald $Z = 6.025$, p (one-sided) $< .001$), and gender ($b = .020$, Wald $Z =$

4.502, p (one-sided) $< .001$) were significantly variable across the cultures, therefore these

random slopes were kept in the model.

Adding all of the predictors to the model reduced the unexplained within-culture

variability by (5.10 – 4.99 =) 0.11, meaning the covariates explained about 2% of the

variability in the individual-level scores of life satisfaction. The remaining amount of

unexplained variance is still highly significantly different from zero ($b = 4.99$, Wald $Z =$

331.181, p (one-sided) $< .001$). Adding the predictors to the model also reduced the

unexplained between-culture variability by (.98 - .59 =) 0.39, meaning the covariates

explained about 40% of the variability in the nation-level scores of life satisfaction. A

significant amount of variance remains to be explained by additional covariates ($b = .59$, Wald $Z = 5.767$, p (one-sided) $< .001$).

All the individual-level variables, age (negative), being a female (negative), personal religiosity (positive), and the quadratic term of personal religiosity (positive) were significant predictors. National gender inequality, national religiosity, and the quadratic term of national religiosity were not significant predictors of individual-level life satisfaction. National economic prosperity, however, was a significant positive predictor.

The interaction between personal religiosity and national gender inequality was significant, indicating that the relationship between gender inequality and life satisfaction is linearly moderated by personal religiosity. That personal religiosity is linear moderator of this relationship is consistent with our main hypothesis that religiosity buffers the negative effect of gender inequality on subjective well-being. The moderating effect of national religiosity is schematically shown in Figure 1. As Shown in the figure, the negative relationship between national gender inequality and life satisfaction is stronger for less religious people than for more religious ones.

The significant *t-value* for the quadratic term of personal religiosity indicates that the relationship between personal religiosity and life satisfaction is not entirely linear. However, we found that the relationship between national gender inequality and the quadratic term of personal religiosity was not significant. The relationship between national gender inequality and the quadratic term of national religiosity was also not significant. These results indicate that religiosity is not a quadratic moderator of the relationship between gender inequality and life satisfaction in the countries in this study.

The two-way interaction of national religiosity and national gender inequality was not a significant predictor of life satisfaction. However, we found that there was a significant three-way interaction (gender × national religiosity × national gender inequality). This

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interaction is depicted in Figure 2. Inspection of the graph reveals that gender inequality had a more adverse impact on the life satisfaction of women in nations with low or moderate levels of religiosity than those with high levels of religiosity. The graphs also indicate that for both males and females, national religiosity moderates the relationship between gender inequality and life satisfaction. Whereas the moderately religious groups have the flattest slopes, the slopes of both the most and least religious nations are steeper. However, the slope for the nations with lowest levels of religiosity is still more negative than the slope for the highly religious nations, which is consistent with our religiosity-as-a-buffer hypothesis.

Finally, there was a significant interaction between personal and national religiosity, such that the relationship between personal religiosity and life satisfaction was stronger in more (vs. less) religious nations.

Discussion

The results for the control variables are generally consistent with previous research. Age negatively predicted life satisfaction, which is to be expected when a linear relationship is assumed (Blanchflower & Oswald 2004). In contrast to older studies that focussed mainly on Western Europe and North America (e.g., Alesina et al., 2004), but in line with studies of other populations, such as Eastern and Central Europe (e.g., Schnepf, 2010), and recent suggestions that the subjective well-being of women is falling (e.g., Stevenson & Wolfers, 2009), being female was a weak negative predictor of life satisfaction. National economic prosperity was a significant positive predictor of life satisfaction, which, given the links between economic prosperity, national religiosity, and gender inequality mentioned earlier, vindicates its inclusion as a control variable.

The results for the religiosity variables are instructive. The "positive association between religiosity and life satisfaction is well documented" (Lim & Putnam, 2010, p. 914; e.g., Pew Forum on Religion & Public Life, 2007; Barro & Mitchell, 2004), and is replicated

by the significant result for personal religiosity in the present study. Furthermore, when this result is interpreted alongside the significant result for the quadratic term of personal religiosity, it provides evidence that the relationship between religiosity and subjective well-being is often complex and, in this case, curvilinear. Previous research has found a significant negative relationship between national religiosity and subjective well-being (e.g., Joshanloo & Weijers 2013b), but the results for national religiosity and the quadratic term of national religiosity were not significant in this study.

The multi-level model used in this analysis included national religiosity and the quadratic term of national religiosity in several two- and three-way interactions as well as using them as direct predictors of life satisfaction. Some of the interactions involving national religiosity were significant predictors of life satisfaction, suggesting that national religiosity only significantly affects life satisfaction for certain groups. For example, the significant two-way interaction between personal religiosity and national religiosity shows, in line with previous research (e.g., Eichhorn, 2012), that national religiosity is linked to life satisfaction for people whose personal religiosity matches their national religiosity. Furthermore, the significant three-way interaction between national religiosity, gender inequality, and gender shows that correlations between national religiosity and gender inequality predict life satisfaction slightly differently for men and women.

The main purpose of this paper was to investigate the moderating role of religiosity in the relationship between gender inequality and life satisfaction. The religiosity-as-buffer hypothesis, predicts that the negative effects of gender inequality on subjective well-being will be mitigated by religiosity. That the interaction between personal religiosity and gender inequality was a significant predictor of life satisfaction shows that personal religiosity is a moderator of the relationship between gender inequality and subjective well-being and is consistent with the religiosity-as-buffer hypothesis. This buffering effect of personal

religiosity can been seen in Figure 1; the least religious group has the steepest (most negative) slope and the highly religious group has the flattest (least negative) slope, indicating that subjective well-being becomes less affected by the negative impacts of gender inequality as religiosity increases. It seems, then, that a personal belief in religion might help individuals to justify gender inequality to themselves in such a way that they are less likely to see it as an injustice.

Furthermore, the significant result for the three-way interaction between national religiosity, gender inequality, and gender shows that national religiosity also plays a role, albeit a gendered one, in moderating the relationship between gender inequality and subjective well-being. The graphs in Figure 2 show how the least religious groups have the steepest (most negative) slopes, which suggests that the least religious groups are most affected by the negative impact of gender inequality and that national religiosity buffers the negative effects of inequality on subjective well-being.

A subsidiary aim of this paper was to assess whether religiosity was a non-linear moderator of the relationship between gender inequality and subjective well-being. The interactions between gender inequality and all of the quadratic terms of the religiosity variables were not significant, indicating that religiosity was not a non-linear moderator. However, the interaction of the quadratic term of national religiosity with gender inequality was close enough to being a significant predictor of life satisfaction (p-value = .150) that it might become significant in a larger sample. Furthermore, both of the graphs in Figure 2 display patterns that appear somewhat quadratic in nature; the moderately religious groups in both graphs have the flattest slopes, with the slopes of the most and least religious groups being more similar to each other than to the slope of their relative moderately religious groups.

Although, in this study, we tested our hypothesis in a relatively large number of nations, representative of most of the world's population, many nations have been excluded because they are not included in the World Values Survey or the European Values Study. In Study 2, we sought to replicate the current findings in an even larger number of nations, using slightly different scales and data sources.

Study 2

This study examines our main hypotheses using national-level data from three different large multi-national data sets, allowing for a more complete cross-cultural analysis. The data were subject to a moderated regression analysis with centred variables (Aiken & West, 1991; Jose, 2013a).

Method

The national gender inequality and economic prosperity indexes that were used in Study 1 were also used to measure gender inequality in Study 2. The national religiosity scores provided by Diener and colleagues (2011) were used to assess religiosity. These scores capture the average importance of religion in individuals' daily lives for each nation[2]. The life satisfaction index from the World Database of Happiness was used as the outcome variable in the analyses (Veenhoven, 2013). The life satisfaction scores for each nation indicate the average extent to which people are satisfied with their life as a whole on a scale ranging from 0–10. The life satisfaction data are from 2000–2009. The gender inequality, economic prosperity, and religiosity indexes were centred. The included nations and national-level means of the variables under study are reported in Table 3.

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[2] Calculated using data provided by the Gallup World Poll from 2005 to 2009.

Results

We conducted a moderated regression analysis to test the hypotheses of the study. The M&M (moderation & mediation) statistical program was used to graph the interaction (Jose, 2013b). The predictor (gender inequality) and moderator (religiosity) were entered together with the interaction term of the predictor and moderator, the quadratic term of the moderator, the interaction term of the predictor and quadratic term of the moderator. We also included economic prosperity in the analysis to control for its effects. There is a significant linear moderation if the interaction between the predictor and the moderator is significantly different from zero. There is a significant quadratic moderation if the interaction between the predictor and the quadratic term of the moderator is significantly different from zero (Jose, 2013b).

This analysis was conducted on the 127 nations for which data was available for gender inequality, religiosity, economic prosperity, and life satisfaction. The results of the regression analysis showed that approximately 65% of the variance in life satisfaction was explained by the predictors ($R^2 = .65$, adjusted $R^2 = .63$, $F (6, 120) = 37.443$, $p < .001$). The results are presented in Table 4. The interaction of the linear term of religiosity and gender inequality was not a significant predictor, indicating that religiosity was not a linear moderator of the relationship between gender inequality and life satisfaction. The quadratic term of religiosity was a significant predictor, showing the relationship between religiosity and life satisfaction is not linear. The interaction of gender inequality and the quadratic term of religiosity was a significant predictor of life satisfaction, indicating that the influence of gender inequality on life satisfaction is quadratically moderated by religiosity. The quadratic moderation is graphically depicted in Figure 3. The graph indicates that for highly religious nations, the relationship between gender inequality and life satisfaction is negative. However, as religiosity lowers to moderate levels, this relationship becomes less negative. Finally, as

religiosity decreases from moderate to very low levels, the relationship becomes more negative again, resembling the relationship at very high levels of religiosity. Finally, economic prosperity was a strong positive predictor of life satisfaction.

Discussion

The results of Study 2 were fairly consistent with those from the first study. Economic prosperity was a significant predictor of life satisfaction and national religiosity, gender inequality, and the interaction of national religiosity and gender inequality were not. One slight difference in the results is that, in this study, the quadratic term of national religiosity was a significant predictor of life satisfaction, whereas it did not reach significance in Study 1. This difference can be explained by the larger sample size used in Study 2. Another possible reason may be that Study 2 used only culture-level variables, whereas Study 1 had individual-level predictors as well. The consistency of these basic results between Study 1 and Study 2, provide evidence consistent with the assumption that the different measures used in the studies are measuring the same phenomena in similar ways. The other difference between the studies is that the interaction between gender inequality and the quadratic term of national religiosity was a significant predictor of life satisfaction in Study 2, whereas it did not reach significance in Study 1. Again, these differences can be explained by differences in sample sizes and analytic strategies between Study 1 and 2.

The results of Study 2 indicate that national religiosity is a quadratic moderator of the relationship between gender inequality and life satisfaction. The schematic representation of this smooth moderating effect in Figure 3 adds further support to our subsidiary hypothesis that religiosity is a quadratic moderator of the relationship between gender inequality and life satisfaction; the relationship is negative for the least religious group of nations and then

becomes less negative heading toward the moderately religious nations and then becomes more negative again heading toward the most religious group of nations.

Here, we propose an explanation for the most interesting result in this study—why the relationship between gender inequality and subjective well-being might become more negative as nations go from being moderately religious to highly religious. We propose that women in highly religious countries are less satisfied with life if they live in a nation with high gender inequality because they feel like they will never experience equality and certain freedoms. Highly religious nations tend to be very culturally homogenous and conservative (i.e. very slow to change social and economic policies). Indeed, prior research has shown that highly religious individuals and institutions are likely to value and endorse conformity, hierarchy, tradition, and preserving the social order (e.g., Roccas & Schwartz, 1997; Saroglou, Delpierre, & Dernelle, 2004; Schwartz & Huismans, 1995). Therefore, women in highly religious nations are unlikely to believe that they or their daughters will ever experience equality or have the capabilities to pursue all of their important goals. Achieving important goals increases life satisfaction and other measures of subjective well-being (Diener & Biswas-Diener, 2002; Diener & Fujita, 1995; Srivastava, Locke, & Bartol, 2001; Tesch-Römer et al., 2008) and it seems reasonable to assume that women being certain they or their daughters will never achieve some of their important goals will make them much less satisfied with their lives. Indeed, women who genuinely believe that their prospects will not change are likely to be disappointed that they happen to be female or with their society or their God for creating and perpetuating this inequality. They might also find the inequality unjust, causing them to be angry at God and possibly to experience other spiritual struggles (Exline & Martin 2005; Exline, Park, Smyth, & Carey, 2011; Pargament, Murray-Swank, Magyar, & Ano, 2005). So, we are proposing that high religiosity at the national level is very highly correlated with homogenous and conservative cultures and perceptions that gender

inequality will not change in relevant timeframes, which results in the relationship between gender inequality and life satisfaction more negative for highly religious nations than it is for moderately religious nations.

The schematic representation of national religiosity's moderating effect in Figure 3 can also be interpreted as being consistent with our main hypothesis—the religiosity-as-buffer hypothesis. All of the groups of nations that were more religious than the least religious group of nations display a flatter (less negative) slope, indicating that the negative effects of gender inequality on life satisfaction are reduced in all of the groups of nations that are more religious than the least religious group of nations.

General Discussion

The main purpose of this paper was to test whether religiosity buffers the relationship between gender inequality and subjective well-being. The results provide evidence in support of religiosity buffering the relationship between income inequality and subjective well-being. Furthermore, our findings suggest that the buffering effect of religiosity holds when we control for nations' levels of wealth, and individuals' gender and age. The analyses above suggest that several different mechanisms govern the effects of religiosity on the relationship between income inequality and subjective well-being, including individual-level, national-level, and cross-level mechanisms.

The subsidiary aim of this paper was to examine whether religiosity was a linear or a quadratic moderator of the relationship between gender inequality and subjective well-being. Conducting two studies, one on a larger sample of nations, was highly instructive in this regard. In study 1, our analysis of multi-level data from 84 nations revealed strong evidence for personal religiosity being a linear moderator of the relationship between gender inequality and life satisfaction and weak evidence that the quadratic term of national religiosity might

play the same role in a larger sample. Our analysis of national-level data from 127 nations in Study 2 confirmed our suspicion based on this weak evidence; Study 2 revealed support for national religiosity being a quadratic moderator of the relationship between gender inequality and life satisfaction. The support for a quadratic moderation was strong in this case because the coefficient for quadratic moderation was significant and the coefficient for linear moderation was not significant.

Conducting these two studies enabled us to better gauge the complex effects of religiosity on the relationship between gender inequality and subjective well-being. Most notably, individuals' belief in religion appears to mitigate the negative effects of national-level gender inequality, probably by enabling them to justify the inequality in such a way that it does not seem unjust, and that this religiosity-based mitigation begins to reduce in highly religious (and very conservative) nations, possibly because women in such nations realise that their lack of ability to pursue some of their important goals is not going to change in the relevantly near future.

This paper has shown evidence for several important implications for cross-cultural research on equality, religion, and subjective well-being. First, given the significance of several multi- and cross-level interactions involving religiosity variables reported in this paper, multi-level modelling should be incorporated into any cross-cultural investigation using religiosity as a variable. Second, many cross-cultural analyses of equality and subjective well-being (e.g., Alesina et al., 2004; Napier et al., 2010; Tesch-Römer et al., 2008) investigate a relatively small number of nations. In future, more researchers should attempt to validate their results with relevant data from as many cultures as possible, since the inclusion of understudied nations might weaken or strengthen the results. Third, this is now the second recent investigation to find evidence in support of national religiosity being a quadratic moderator of the relationship between a measure of inequality and subjective well-

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being (see also Joshanloo & Weijers 2013b), indicating that the relationship between all

forms of inequality and subjective well-being might be moderated by religiosity in a similar

manner and for similar reasons.

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Tables and Figures

Table 1

Sample sizes and mean scores for Study 1

	Sample size	GII	Religiosity	Life satisfaction	Economic prosperity
Netherlands	3607	.04	4.90	7.87	2.48
Sweden	3205	.06	4.00	7.69	2.79
Denmark	2530	.06	4.07	8.31	2.13
Switzerland	2513	.06	6.13	7.96	3.33
Norway	2115	.06	4.20	8.03	3.26
Germany	6175	.07	4.32	7.04	2.78
Finland	3186	.07	5.65	7.79	2.40
Slovenia	3409	.08	5.22	7.35	1.17
France	4117	.08	4.43	6.99	2.03
Iceland	1776	.09	6.07	8.05	.38
Italy	4531	.09	7.44	7.10	1.39
Belgium	3421	.10	5.03	7.51	2.08
Singapore	1512	.10	8.23	7.24	3.22
Austria	3032	.10	6.20	7.79	2.56
Spain	5109	.10	5.74	7.18	1.23
Portugal	2553	.11	7.34	6.69	.86
Australia	1421	.12	6.09	7.30	2.65
Canada	4095	.12	7.43	7.79	2.76
Ireland	2025	.12	7.48	8.01	1.91
Czech Republic	3729	.12	3.82	7.11	1.68
Japan	2458	.13	5.01	6.71	2.59
Cyprus	2050	.13	8.57	7.31	1.30
Greece	2642	.14	7.62	6.77	-.39
Poland	3605	.14	8.28	6.85	.84
Israel	1199	.14	7.78	7.03	1.71
Luxembourg	2821	.15	5.07	7.85	2.97
South Korea	2400	.15	5.56	6.30	2.00
Lithuania	2518	.16	6.46	5.91	-.35
Estonia	2523	.16	4.38	6.35	.38
Macedonia	2555	.16	7.65	6.13	-1.04
New Zealand	954	.16	5.35	7.89	1.81
Slovakia	2840	.17	6.81	6.58	.67
Croatia	2528	.18	7.22	6.93	.39
Great Britain	3602	.21	5.10	7.51	1.86
China	3015	.21	3.58	6.68	2.59
Latvia	2519	.22	5.69	5.92	-.25
Bulgaria	3501	.22	5.61	5.52	-.56
Malta	2502	.24	9.16	7.99	1.62
Albania	2534	.25	7.12	5.88	-.66
Hungary	2513	.26	5.38	6.11	.00

United States	2449	.26	8.39	7.46	2.12
Malaysia	1201	.26	8.07	6.84	2.45
Viet Nam	2495	.30	4.99	6.86	1.25
Moldova	3605	.30	8.15	5.67	-1.67
Trinidad and Tobago	1002	.31	9.67	7.26	-.25
Russian Federation	6037	.31	5.86	5.62	.37
Azerbaijan	1505	.32	6.98	5.91	-.47
Romania	4411	.33	8.88	5.96	-.56
Ukraine	3702	.34	6.95	5.49	-1.12
Armenia	1500	.34	8.43	5.67	-1.93
Kyrgyzstan	1043	.36	7.80	6.48	-1.66
Thailand	1534	.36	7.98	7.21	2.24
Chile	2200	.36	8.71	7.18	1.79
Turkey	8337	.37	9.26	6.17	-.07
Uruguay	1000	.37	7.32	7.46	.87
Argentina	2282	.38	8.41	7.48	.92
Mexico	3095	.38	9.41	8.19	1.43
Peru	3001	.39	9.08	6.73	1.26
Algeria	1282	.39	9.81	5.67	.86
Rwanda	1507	.41	9.45	4.97	-1.34
Philippines	1200	.42	9.56	6.65	.99
Georgia	3000	.44	9.10	5.21	-2.11
Morocco	3464	.44	9.83	5.78	1.43
Brazil	1500	.45	9.63	7.64	1.59
Colombia	3025	.46	9.67	8.31	1.00
South Africa	5988	.46	9.14	6.76	-.42
Venezuela	1200	.47	9.53	7.52	.23
Jordan	2423	.48	9.93	6.40	-.71
Indonesia	3019	.49	9.70	6.93	1.09
Iran	5199	.50	9.49	6.40	-.03
Uganda	1002	.52	9.26	5.65	-.61
Bangladesh	1500	.52	9.66	5.78	-.07
Guatemala	1000	.54	9.72	7.95	.24
Zimbabwe	1002	.54	9.61	3.95	-6.78
Tanzania	1171	.56	9.61	3.87	-.34
Iraq	5026	.56	9.84	4.82	-.55
Ghana	1534	.57	9.78	6.12	-1.19
Pakistan	2000	.57	10.00	4.85	-1.26
Egypt	6051	.59	9.77	5.57	-.84
Burkina Faso	1534	.61	9.11	5.57	-.72
India	4003	.61	8.01	5.47	.50
Zambia	1500	.62	9.18	6.06	-1.31
Mali	1534	.65	9.17	6.09	-.45
Saudi Arabia	1502	.68	9.78	7.28	1.64

Note. GII = Gender inequality index

Table 2

Hierarchical Linear Modelling Predicting Life Satisfaction

	b	St. Error	*t*	Sig.
Intercept	7.393	.160	45.948	.000
Age	-.008	.001	-6.228	.000
Female	-.087	.027	-3.217	.002
Personal religiosity	.081	.009	8.229	.000
Quad_personal religiosity	.007	.001	5.094	.000
National religiosity	.078	.097	.802	.425
Quad_national religiosity	-.078	.048	-1.633	.107
National gender inequality	-1.209	1.179	-1.025	.309
National economic prosperity	.193	.068	2.838	.006
Two-way interactions				
Personal religiosity × gender inequality	-.216	.094	-2.297	.024
National religiosity × gender inequality	-.008	.013	-.606	.545
Quad_personal religiosity × gender inequality	-.194	.550	-.353	.725
Quad_ national religiosity × gender inequality	-.344	.236	-1.455	.150
Personal religiosity × national religiosity	.032	.007	4.316	.000
Three-way interactions				
Gender × Personal religiosity × gender inequality	.037	.025	1.447	.148
Gender × Quad_personal religiosity × gender inequality	.002	.006	.413	.680
Gender × National religiosity × gender inequality	.307	.071	4.301	.000
Gender × Quad_ national religiosity × gender inequality	.023	.020	1.134	.260

Note. 'Quad' indicates the quadratic term of the moderator

Table 3

Mean scores for the national-level variables used in Study 2

	Religiosity	**GII**	**Life satisfaction**
Netherlands	.33	.045	7.6
Sweden	.16	.055	7.8
Denmark	.19	.057	8.3
Switzerland	.43	.057	8.0
Norway	.22	.065	7.9
Finland	.28	.075	7.9
Germany	.41	.075	7.1
Slovenia	.43	.080	6.9
France	.27	.083	6.6
Iceland	.39	.089	8.2
Italy	.73	.094	6.7
Belgium	.39	.098	7.3
Singapore	.60	.101	6.9
Austria	.53	.102	7.6
Spain	.43	.103	7.2
Portugal	.73	.114	5.7
Australia	.32	.115	7.7
Canada	.45	.119	7.8
Ireland	.57	.121	7.6
Czech Republic	.26	.122	6.5
Japan	.26	.131	6.5
Cyprus	.76	.134	7.1
Greece	.71	.136	6.4
Poland	.75	.140	6.4
Israel	.48	.144	7.0
Luxembourg	.40	.149	7.7
Korea, South	.42	.153	6.0
Lithuania	.41	.157	5.5
Estonia	.17	.158	6.0
Macedonia	.80	.162	4.7
New Zealand	.35	.164	7.5
Slovakia	.48	.171	5.9
Croatia	.69	.179	6.0
United Kingdom	.30	.205	7.2
Latvia	.36	.216	5.4

Bulgaria	.35	.219	4.4
Malta	.90	.236	7.1
United Arab Emirates	.96	.241	7.3
Albania	.35	.251	4.6
Hungary	.41	.256	5.5
Malaysia	.89	.256	6.5
United States	.66	.256	7.4
Tunisia	.92	.261	5.9
Kuwait	.89	.274	6.6
Vietnam	.35	.299	6.1
Moldova	.75	.303	4.9
Trinidad and Tobago	.86	.311	7.0
Kazakhstan	.50	.312	6.1
Russia	.32	.312	5.5
Azerbaijan	.59	.323	5.3
Romania	.84	.327	5.7
Tajikistan	.80	.338	5.1
Ukraine	.43	.338	5.0
Armenia	.68	.340	5.0
Costa Rica	.84	.346	8.5
Kyrgyzstan	.68	.357	5.5
Chile	.69	.360	6.7
Thailand	.95	.360	6.6
Turkey	.82	.366	5.6
Uruguay	.42	.367	6.7
Argentina	.64	.380	7.3
Mexico	.68	.382	7.9
Peru	.83	.387	6.2
Algeria	.90	.391	5.4
Sri Lanka	.99	.402	5.1
Rwanda	.90	.414	4.3
Philippines	.96	.418	5.9
Lebanon	.89	.433	4.7
Belize	.65	.435	6.6
Georgia	.78	.438	4.3
El Salvador	.88	.441	6.7
Ecuador	.82	.442	6.4
Morocco	.94	.444	5.4
Brazil	.88	.447	7.5
Namibia	.92	.455	5.2

Jamaica	.71	.458	6.7
Colombia	.85	.459	7.7
Nicaragua	.86	.461	7.1
South Africa	.85	.462	5.8
Venezuela	.77	.466	7.5
Paraguay	.92	.472	6.8
Cambodia	.92	.473	4.9
Bolivia	.88	.474	6.3
Burundi	.87	.476	2.9
Jordan	.95	.482	5.9
Honduras	.88	.483	7.0
Laos	.98	.483	6.2
Botswana	.74	.485	4.7
Nepal	.93	.485	5.3
Indonesia	.98	.494	6.3
Iran	.81	.496	5.9
Panama	.87	.503	7.8
Dominican Republic	.86	.508	7.5
Uganda	.93	.517	4.8
Bangladesh	.99	.518	5.3
Guatemala	.86	.539	7.2
Senegal	.98	.540	4.5
Zimbabwe	.85	.544	3.0
Syria	.87	.551	5.9
Tanzania	.97	.556	2.8
Iraq	.87	.557	4.7
Ghana	.93	.565	5.2
Togo	.88	.566	2.6
Pakistan	.97	.567	5.0
Malawi	.98	.573	6.2
Mozambique	.88	.582	3.8
Egypt	.99	.590	5.7
Haiti	.78	.592	3.9
Sudan	.96	.604	5.0
Kenya	.95	.608	3.7
Burkina Faso	.91	.609	4.4
Congo, Republic of the	.94	.610	3.7
India	.85	.610	5.5
Benin	.91	.618	3.0

Zambia	.94	.623	5.0
Cameroon	.95	.628	3.9
Cote d'Ivoire	.88	.632	4.4
Mauritania	.98	.643	4.9
Sierra Leone	.97	.643	3.5
Mali	.93	.649	4.7
Central African Republic	.94	.654	4.6
Liberia	.96	.658	4.3
Congo, Democratic Republic of the	.98	.681	4.4
Saudi Arabia	.98	.682	6.5
Niger	.98	.707	3.8
Afghanistan	.98	.712	4.1
Yemen	.95	.747	4.8

Note. GII = Gender inequality index

Table 4

Summary of Moderated Regression Analyses with National-Level Centred Variables

Predicting Life Satisfaction Moderated by National Religiosity

Predictors	b	β	t	p
Gender inequality	.324	.046	.352	.726
Religiosity	-.441	-.079	-.642	.522
Gender inequality × religiosity	-.528	-.016	-.160	.873
Quad_religiosity	-8.132	-.393	-2.847	.005
Gender inequality × quad_religiosity	-27.874	-.444	-2.799	.006
Economic prosperity	.543	.672	9.052	.000

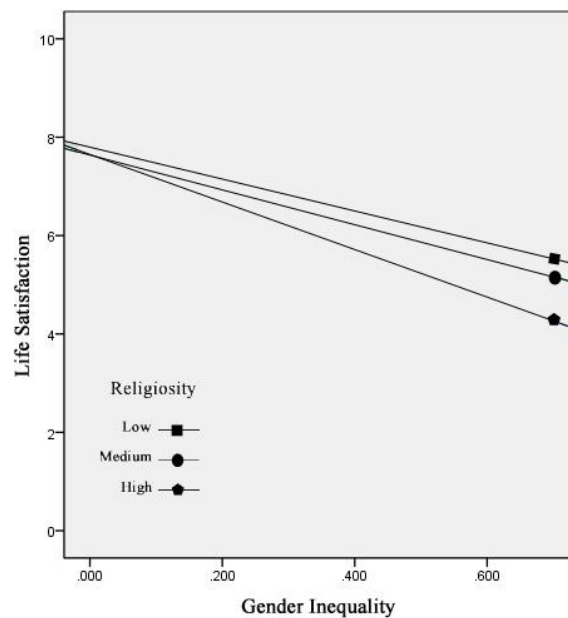*Note.* 'Quad' indicates the quadratic term of the moderator

Figure 1

The relationship between gender inequality and life satisfaction as moderated by religiosity
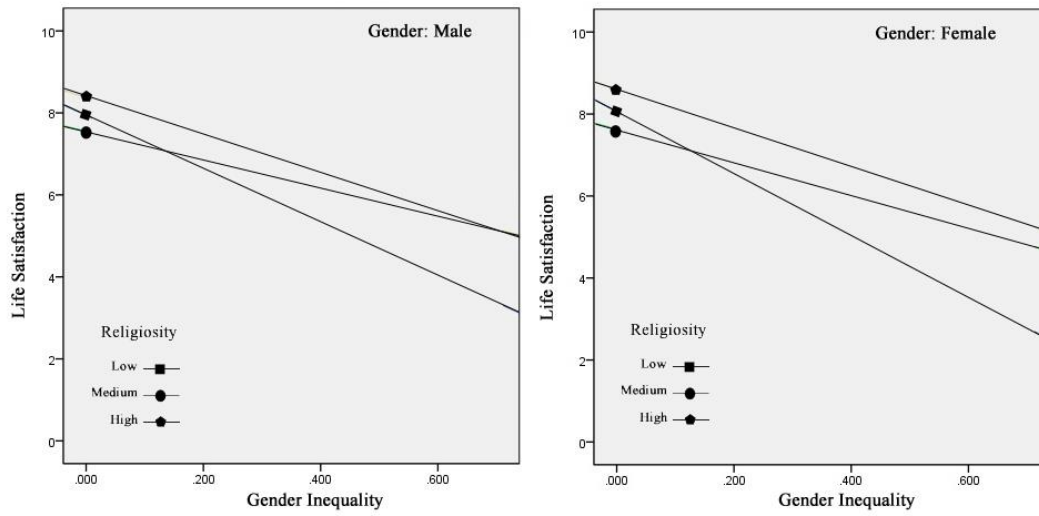
Figure 2

The relationship between gender inequality and life satisfaction as moderated by religiosity
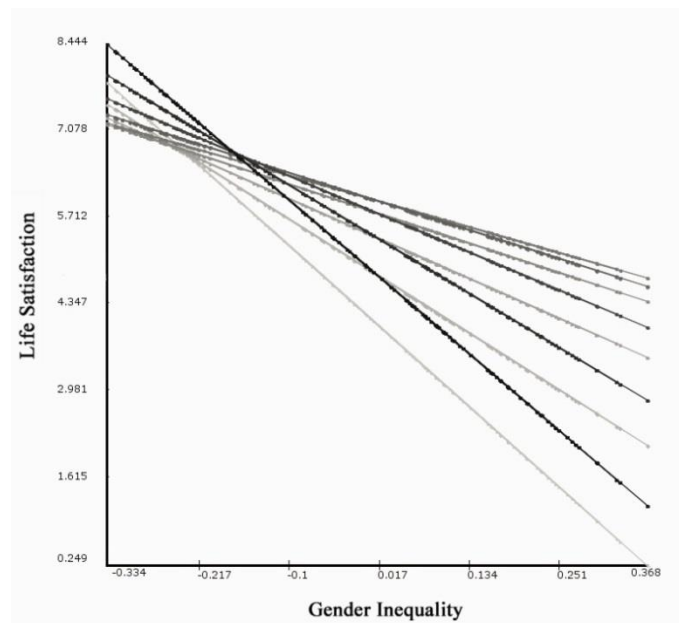
for both genders

Figure 3

Graphical depiction of the quadratic moderation results

Note. Dark lines represent high levels of religiosity, and light lines represent low levels of

religiosity.