Gender, Marital Status and Life Satisfaction: A Cross-National Study*

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ABSTRACT

This paper uses materials from the World Values Survey and the European Values Study from 2006-2014 to study the relationship of gender and marital status to life satisfaction. In an analysis of 103,217 respondents from 81 nations I find that while there do not seem to be main effects of gender on life satisfaction – that is, women are no more or less satisfied with their lives than are men -- gender moderates the effects of geographical region, age, employment status, education, religious affiliation, and attendance of religious services on life satisfaction. In particular, there are substantial differences in the effects of marital status on life satisfaction by gender. The gender differences in most effects are so substantial that I argue that it makes no sense to analyze life satisfaction data without performing separate analyses by gender.

The study of life satisfaction (or, more generally, subjective well-being) by behavioral scientists is an important area of research that goes back more than a century (Karapetoff 1903). A recent search of Web of Science indicates nearly five thousand articles with “life satisfaction” or “subjective well-being” in their titles and Diener’s (1984) seminal piece on subjective well-being has been cited over twenty-five hundred times.

The purpose of this paper is threefold: first, to replicate some of the findings of earlier studies of life satisfaction in a cross-national context; second, to explore the role of marital status in life satisfaction; and third, to examine gender differences in life satisfaction. This will be accomplished using a dataset including 81 nations drawn from two well-known cross-national surveys, the World Value Survey (WVS) and the European Value Study (EVS) from 2006-2014. The 81 nations are from six continents and together represent over 90% of the Earth’s population.

There have been several excellent reviews of the literature on life satisfaction (Diener and Ryan 2009; Dolan, Peasgood and White 2008; Helliwell and Putnam 2004) and numerous papers using the WVS and/or EVS to study life satisfaction or subjective well-being (for example, Diener and Tay 2015; Meisenberg and Woodley 2015; Oishi, Kesebir and Diener 2011; Rozer and Kraaykamp 2013; Verme

* This paper was presented at the annual meetings of the American Sociological Association, Seattle, August 21, 2016. Partial support for this research was provided by an on-campus research assignment from the College of Humanities and Social Sciences, North Carolina State University. I gratefully acknowledge the efforts of the GESIS Data Archive, the World Values Survey Association, and JDSsystems in making these data available.

2011) so this paper will only briefly review the general findings of this literature and focus on findings of particular interest.

Individual-level effects on life satisfaction

Age. Deaton (2008) and other studies find no effect of age on subjective well-being but some studies conclude that age has a U-shaped relationship (Blanchflower and Oswald 2008; Rozer and Kraaykamp 2013).

Health. The research literature generally shows a positive association between perceived health and subjective well-being (Roysamb et al. 2003).

Education. Witter, et al.'s (1984) meta-analysis of research linking education to subjective well-being suggests that most studies show a modest net positive effect of education on well-being.

Employment. Most studies show an effect of employment status on life satisfaction, with the full-time employed usually the most satisfied and unemployed the least satisfied (see, for example, Clark 2009).

Religious affiliation and religious attendance. Studies typically find that Hindus and Buddhists tend to have higher life satisfaction means and Jews have lower means, while there is a net positive relationship between attendance of religious services and life satisfaction (see, for example, Rozer and Kraaykamp 2013).

Income. The literature generally finds that income is positively associated with life satisfaction (for example, Clark, Frijters and Shields 2008; Clark 2009).

Gender. Meisenberg and Woodley's (2015) careful review of the literature on gender and life satisfaction suggests that while studies suggested that while women "had higher subjective well-being than men until the early to mid-1980s" women "have reported lower life satisfaction than men since at the least the late 1990s" (Meisenberg and Woodley 2015, p. 1540). There also seems to be substantial variation across countries. In particular, some studies find that women are happier in developing countries than in industrialized countries (Vieira Lima 2013) while others conclude that, generally speaking, women have higher levels of subjective well-being overall.

Inglehart (2002) summarizes this literature by concluding that "Almost every study that has addressed this question has found only minimal gender-related differences in subjective well-being" (p. 391) and Diener and Ryan (2009) argue that "women and men do not substantially differ in terms of average subjective well-being" (p. 396). Later I will argue that this lack of substantial gender-based differences is due to the operation of gender as a moderating variable in terms of the effects of other predictors on life satisfaction.

Marital status. The relationship of marital status to subjective well-being goes back at least to Durkheim's 1897 classic *Suicide* (Durkheim 1997), which reported that single persons had higher rates

of suicide than married persons. In general, married persons seem to have the highest levels of life satisfaction, followed closely by cohabitators while the formerly-married (widowed, divorced, separated) tend to have the lowest levels (see, for example, Dolan, Peasgood and White 2008; Mastekaasa 1994).

Recent research (Lee and Ono 2012; Soons and Kalmijn 2009; Stavrova, Fetchenhauer and Schlosser 2012) has focused on the so-called “cohabitation gap” or differences in subjective well-being between those in marital unions and those in non-marital unions. This literature generally shows that married persons have higher levels of subjective well-being than cohabitators, although the size of the gap seems to be moderated by contextual factors such as gender inequality and religious context.

Nation-level effects on life satisfaction

Gross national income. In a study of 63 nations drawn from the World Values Survey, Bonini (2008) concluded that “19% of individual life satisfaction is accounted for by country level characteristics” (p. 235). In Bonini’s study GDP (gross domestic product) was used as a proxy for economic development; it was concluded that “neither HDI (the UN Human Development Index) nor ESI (an Environmental Sustainability Index) provide a significantly better indicator of life satisfaction than GDP” (p. 235). Generally speaking, citizens of nations with higher GDP had higher levels of life satisfaction.

Gender inequality. Tesch-Romer et al (2008) examined the effects of nation-level gender inequality on differences in well-being between women and men. They concluded that “The larger the gender inequality in a society, the larger gender differences in SWB” (p. 342).

Ethnolinguistic fractionalization. Alesina, et al (2003) suggest that ethnic and linguistic conflict are related to a wide variety of outcomes. For example, Easterly and Levine (1997) noted ethnolinguistic fractionalization is negatively related to growth in per capita GDP, while La Porta (1999) found that ethnic fractionalization affects quality of government.

Plan of the analyses

The analyses that follow are descriptive in nature so no formal hypotheses will be offered. However, I will investigate three key issues:

- (1) Net of individual- and nation-level factors, is there an effect of gender on life satisfaction?
- (2) Net of individual- and nation-level factors, are the effects of the predictors different for men and women? That is, does gender moderate the effects of the predictors on life satisfaction?
- (3) Does the effect of marital status on life satisfaction differ for men and women? If so, what is the nature of this interaction?

Methods

Sample

The data under study are drawn from two large multinational survey programs: the World Value Survey (WVS; World Value Survey, 2008) and the European Value Study (EVS; European Value Study, 2011). I used the most recent survey from each included nation from 2006 onward, for a total of 96 nations. From this total nations were dropped due to unavailable data on gender inequality (Georgia, Hong Kong, Montenegro, Nigeria, Palestine, Serbia, Taiwan, and Uzbekistan), employment status (Argentina), ethnolinguistic fractionalization (Montenegro, Palestine, Yemen), religious affiliation (Bahrain, Egypt, Kuwait, Qatar) or frequency of religious attendance (Kuwait, Morocco, Qatar) leaving a total 81 nations surveyed between 2006 and 2014. The total population of these 81 nations was about 5.5 billion or approximately 90% of the Earth's population.

The total number of respondents in these 81 nations was 122,748. Of these, there were 10,053 non-codable responses to the religious affiliation question and 3,869 non-codable responses to the income question in addition to much smaller numbers of non-response or uncodable responses to other questions, resulting in 103,127 respondents who provided codable responses to all of the variables in the analyses.

Figure 1. Nations included in study (by region).

Table 1. Nations included, sample sizes, and nation-level variables.

Country and year of survey	Analytic sample	Life Satisfaction	GNI	Gender inequality
Africa				
Algeria (2013)	1,136	6.37	5,330	0.43
Burkina Faso (2007)	1,123	5.53	460	0.61
Ethiopia (2007)	1,369	4.94	220	0.55

Country and year of survey	Analytic sample	Life Satisfaction	GNI	Gender inequality
Ghana (2012)	1,552	6.42	1,580	0.55
Libya (2014)	1,773	7.26	11,957	0.22
Mali (2007)	938	6.20	500	0.67
Rwanda (2012)	1,527	6.47	610	0.41
South Africa (2013)	2,876	6.66	7,410	0.46
Tunisia (2013)	1,149	5.59	4,200	0.26
Zambia (2007)	1,106	6.12	930	0.62
Zimbabwe (2012)	1,500	6.04	820	0.52
Americas				
Brazil (2014)	1,431	7.85	2,205	0.44
Canada (2006)	1,754	7.71	37,610	0.14
Chile (2011)	866	7.29	12,290	0.36
Colombia (2012)	1,467	8.38	7,020	0.46
Ecuador (2013)	1,199	7.92	5,760	0.43
Mexico (2012)	1,915	8.50	9,720	0.38
Peru (2012)	1,122	7.18	5,680	0.39
Trinidad and Tobago (2011)	958	7.47	13,810	0.32
United States (2011)	2,104	7.47	50,350	0.26
Uruguay (2011)	890	7.60	11,840	0.36
Asia				
China (2012)	1,895	6.91	5,730	0.20
Indonesia (2006)	1,647	6.89	1,390	0.50
Japan (2010)	1,700	6.94	41,980	0.14
Malaysia (2012)	1,298	7.14	9,820	0.21
Pakistan (2012)	1,189	7.49	1,250	0.56
Philippines (2012)	1,197	7.34	2,960	0.41
Singapore (2012)	1,921	6.96	51,090	0.09
South Korea (2010)	1,131	6.63	21,320	0.10
Thailand (2013)	1,093	7.57	5,340	0.36
Viet Nam (2006)	1,447	7.10	760	0.32
Europe				
Albania (2008)	978	6.47	4,080	0.25
Austria (2008)	1,242	7.55	48,790	0.06
Belgium (2009)	852	7.71	45,980	0.07
Bosnia Herzegovina (2008)	1,082	7.12	4,520	0.20
Croatia (2008)	1,180	7.12	13,960	0.17
Denmark (2008)	1,307	8.40	60,260	0.06
Finland (2009)	831	7.70	48,570	0.07
France (2008)	758	6.96	43,510	0.08
Germany (2013)	1,922	7.42	47,250	0.05
Great Britain (2009)	829	7.62	42,650	0.19
Greece (2008)	1,439	6.85	28,330	0.15
Iceland (2009)	701	8.12	42,250	0.09
Ireland (2008)	803	7.84	51,150	0.11
Italy (2009)	1,090	7.32	37,690	0.07
Luxembourg (2008)	1,093	7.94	83,240	0.15
Macedonia (2008)	1,273	6.90	4,130	0.16
Malta (2008)	1,450	7.84	19,300	0.22
Netherlands (2012)	1,578	7.52	51,760	0.06
Norway (2008)	853	8.15	85,580	0.07
Portugal (2008)	1,316	6.50	22,440	0.12
Spain (2011)	1,015	6.77	31,280	0.10
Sweden (2011)	1,098	7.64	56,010	0.05
Switzerland (2008)	896	8.01	63,020	0.03
Middle East				
Cyprus (2011)	976	6.98	29,070	0.14

Country and year of survey	Analytic sample	Life Satisfaction	GNI	Gender inequality
Iran (2007)	2,369	6.50	3,500	0.51
Iraq (2012)	1,171	5.92	6,070	0.54
Jordan (2014)	1,192	6.61	4,560	0.49
Lebanon (2013)	1,094	6.48	9,870	0.41
Turkey (2011)	1,512	7.26	10,510	0.36
Oceania				
Australia (2012)	1,004	7.41	59,760	0.11
New Zealand (2011)	675	7.64	31,420	0.19
Former Soviet Union				
Armenia (2011)	1,073	5.24	3,430	0.32
Azerbaijan (2011)	1,002	6.74	5,530	0.34
Belarus (2011)	1,470	5.80	6,130	0.15
Bulgaria (2008)	1,007	5.73	5,940	0.21
Czech Republic (2008)	493	7.12	18,300	0.09
Estonia (2011)	1,479	6.20	15,610	0.15
Hungary (2009)	693	5.95	13,220	0.25
Kazakhstan (2011)	1,500	7.25	8,190	0.32
Kyrgyzstan (2011)	1,448	6.96	880	0.35
Latvia (2008)	975	6.37	12,430	0.22
Lithuania (2008)	1,207	6.35	12,600	0.12
Moldova, Rep. of (2008)	1,399	6.51	1,500	0.30
Poland (2012)	895	7.07	12,990	0.14
Romania (2012)	1,427	6.66	8,570	0.32
Russian Federation (2011)	2,193	6.17	10,820	0.31
Slovak Republic (2008)	1,156	6.92	17,110	0.16
Slovenia (2011)	976	7.35	24,560	0.02
Ukraine (2011)	1,488	5.91	3,140	0.33

Measurement

Dependent variable. The dependent variable in these analyses is life satisfaction, framed in the surveys as the question “All things considered, how satisfied are you with your life as a whole these days?” The respondent was shown a card with scores ranging from 1 (dissatisfied) to 10 (satisfied). Although is obviously a very simple measure, many studies (for example, Saris et al. 1996) have concluded that it is a relatively valid and reliable measure of life satisfaction and subjective well-being. For this sample the mean was 6.93 and the standard deviation 2.25.

Figure 1. Distribution of life satisfaction variable.

Nation-level variables. Three variables were included at the nation level (level-2). Gender inequality was measured by the United Nations' (United Nations Development Programme 2014) Gender Inequality measure. This measure ranges from 0-1 (1 indicates greatest inequality) and indicates "the loss in potential human development due to disparity between female and male achievements in two dimensions, empowerment and economic status" (United Nations). The logged value of gross national income (GNI) per capita in \$USD is included as well as a region indicator (Africa, America, Asia, Europe, Middle East, Oceania, and former Soviet Union). Finally, I included a measure of ethno-linguistic fractionalization (ELF); see, for example, (Alesina et al. 2003)

Individual-level variables. The coding categories and distributions by gender for categorical independent variables can be found in Table 2. The univariate descriptive statistics for continuous independent variables can be found in Table 3. For the analytic sample, 52.8% of the respondents were women and 47.2% men.

The income variable was problematic as the WVS and EVS use different ways of measuring individual income. The WVS asks a question about relative income. Respondents are asked "On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in." In the EVS respondents were asked "Here is a list of incomes and we would like to know in what group your household is, counting all wages, salaries, pensions and other incomes that come in. Just give the letter of the group your household falls into, after taxes and other deductions." The ten categories in the EVS corresponded to the equivalent of specific ranges in euros.

As Donnelly and Pol-Eleches (2012) point out, the 10-point scale in the WVS means very different things in different nations. Indeed, the distributions are substantially different between the two studies; the mean for WVS is 4.9 with $s=2.1$, while for EVS the mean is 6.02 with $s=3.16$ (of course, the

EVS nations are generally wealthier than the WVS nations so we would expect some difference even if the measures were identical). Even though these are the best indicators of income available from both studies the results for the income variable need to be considered in this light.

Table 2. Distributions of categorical variables by gender.

		Gender		
		Men	Women	Total
		%	%	%
Marital status				
	married	56.6	53.1	54.7
	cohabiting	6.7	6.6	6.7
	divorced	3.4	5.6	4.6
	separated	1.6	2.0	1.8
	widowed	3.2	11.1	7.4
	single/never married	28.5	21.6	24.8
Region				
	Africa	16.6	14.7	15.6
	Americas	13.2	13.3	13.3
	Asia	17.9	15	16.4
	Europe	24.1	25.5	24.8
	Middle East	7.6	6.7	7.1
	Oceania	1.5	1.7	1.6
	Post-Soviet	19.0	23.2	21.2
Health				
	very good	26.9	22.9	24.8
	good	44.3	42.4	43.3
	fair	23.0	26.7	25.0
	poor	5.4	7.4	6.5
	very poor	0.3	0.6	0.5
Employment status				
	full time (30 hours/week or more)	41.1	27.4	33.8
	part time (less than 30 hours a week)	7.1	9.1	8.2
	self employed	14.6	7.2	10.7
	retired/pensioned	15.9	15.4	15.6
	housewife (not otherwise employed)	1.0	23.2	12.8
	student	7.4	6.5	6.9
	unemployed	10.6	9.2	9.8
	other	2.2	2.0	2.1
Educational attainment				
	No formal education	3.0	4.1	3.6
	Inadequately completed elementary education	4.8	5.6	5.2
	Completed (compulsory) elementary education	11.2	12.3	11.8

	Gender		
	Men	Women	Total
	%	%	%
Incomplete secondary school: technical/vocational	10.9	11.3	11.1
Complete secondary school: technical/vocational	18.0	16.3	17.1
Incomplete secondary: university-preparatory	8.5	7.8	8.1
Complete secondary: university-preparatory	18.5	19.1	18.8
Some university without degree	9.6	9.5	9.6
University with degree	15.4	14	14.7
Religious affiliation			
No religious denomination	15.6	11.8	13.6
Buddhist	3.4	3.0	3.2
Hindu	1.8	1.3	1.5
Jew	0.2	0.2	0.2
Muslim	23.6	20.3	21.9
Orthodox	11.6	14.0	12.9
Other	3.9	4.0	4.0
Protestant	14.7	16.6	15.7
Roman Catholic	25.2	28.7	27.1
Attendance of religious services			
more than once a week	13.5	12.5	13.0
once a week	18.2	19.6	18.9
once a month	10.1	11.8	11.0
only on special holy days	18.7	20.7	19.8
once a year	6.0	5.9	6.0
less than once a year	10.9	9.7	10.3
never, practically never	22.6	19.8	21.1

Table 3. Distributions of continuous variables by gender.

	Men	Women	All respondents
Age (in years)	43.1 (17.1)	44.0 (17.2)	43.5 (17.2)
Number of children	1.7 (1.7)	1.9 (1.7)	1.8 (1.7)
Income	5.2 (2.4)	5.1 (2.5)	5.2 (2.5)

Table entries are means with standard deviations in parentheses.

Analyses

The primary analyses are multilevel (or hierarchical linear) models (Raudenbush and Bryk 2002). Because the respondents in the WVS and EVS are nested within countries, conventional OLS models would tend to underestimate the values of the standard errors leading to an increased likelihood of Type I errors. HLM models account for this nesting. The unconditional means model for these data suggests that about 16.8% of the variation in individual life satisfaction is accounted for by country-level characteristics, which suggests a fair amount of nesting of respondents within nations and validates the decision to use multilevel models.

To account for the fact that probability and quota sampling were used at the nation level, and for the variation in population size between nations, the analyses were weighted both at the individual level (using the sample weights provided by original data providers) and at the nation level (by dividing the national population by the sample size).

Table 4 reports results of multilevel models predicting life satisfaction for (a) all respondents, (b) men, (c) women using a quadratic specification for the effects of age, and (d) women using a linear specification for the effects of age. The fifth column ("Gender difference") reports the statistical-significance of the interaction between a specific variable and gender in a model including all of the controls specified in the full model for all respondents.

Note that there is no main effect for gender; that is, net of the other factors in the model, there is no predicted effect of gender on life satisfaction.

There are interactions with gender for most of the individual-level variables in the model: region, age, marital status, employment status, education, religious affiliation, and attendance of religious services. On the other hand, none of the gender interactions with nation-level variables (GNI, gender inequality, or ethnolinguistic fractionalization) even approach statistical significance (although the main effects of gender inequality and ethnolinguistic fractionalization are statistically-significant in all models).

Table 4. Hierarchical linear models predicting life satisfaction.

		All respondents	Men	Women (quad age)	Women (linear age)	Gender difference
Gender	Men	---				
	Women	.122				
Region						*
	Africa	---	---	---	---	
	Americas	1.476*	1.371*	1.526*	1.525*	
	Asia	.430	.390	.420	.423	
	Europe	-.130	-.081	-.206	-.198	

Table 4. Hierarchical linear models predicting life satisfaction.

		All respondents	Men	Women (quad age)	Women (linear age)	Gender difference
	Middle East	1.196*	1.032*	1.353*	1.350*	
	Oceania	.458	.321	.529	.531	
	Post Soviet	.246	.259	.209	.210	
Income		.212*	.192*	.223*	.223*	
Gender Inequality		-7.142*	-7.099*	-7.282*	-7.251*	
logGNI		-.193	-.213	-.184	-.183	
Health						
	very good	---	---	---	---	
	good	-.224	-.145	-.306	-.309	
	fair	-.643	-.463	-.798*	-.801*	
	poor	-1.463*	-1.268*	-1.647*	-1.647*	
	very poor	-3.084*	-3.274*	-2.942*	-2.934*	
Age		-.020	-.044*	-.004	.005	*
Age ²		.000	.001*	.000		
Children		.035*	.086*	-.002	-.003	
Ethnolinguistic fractionalization		2.450*	2.418*	2.401*	2.393*	
Marital status						*
	married	---	---	---	---	
	cohabiting	-.194	.004	-.310	-.305	
	divorced	-.476*	-.681*	-.322*	-.325*	
	separated	-.474*	-.389*	-.459*	-.461*	
	widowed	-.261*	-.373*	-.236*	-.217*	
	single/never married	-.175	-.229	-.085	-.067	
Employment status						*
	full time	---	---	---	---	
	part time	-.148	-.197	-.085	-.085	
	self employed	.173	.004	.447	.448	
	retired/pensioned	.154	.014	.325*	.356*	
	housewife	-.075	-.578	.119	.125	
	student	.321*	.171	.429*	.447*	
	unemployed	.051	.135	-.060	-.052	
	other	.218	.258	.197	.205	
Education						
	No formal education	---	---	---	---	
	Incomplete primary	.163	.246*	.131	.131	
	Completed primary	.139	.079	.215*	.214*	
	Incomplete secondary (voc/tech)	.011	.122	-.034	-.037	
	Complete secondary (voc/tech)	.264*	.408*	.183*	.181*	
	Incomplete secondary (univ. prep)	.133	.094	.243*	.243*	
	Complete secondary (univ. prep)	.302*	.519	.157*	.156*	
	Some university	.091	.283	.007	.006	
	University degree	.287*	.429*	.240*	.237*	

Table 4. Hierarchical linear models predicting life satisfaction.

	All respondents	Men	Women (quad age)	Women (linear age)	Gender difference
Religious affiliation					*
No religious affiliation	---	---	---	---	
Buddhist	-.184	-.223	-.160*	-.160*	
Hindu	.640*	.431*	.709*	.708*	
Jew	-1.779*	-1.280*	-2.104*	-2.096*	
Muslim	.008	.007	-.056	-.057	
Orthodox	.025	-.241*	.206	.205	
Other	.114	.122	.041	.040	
Protestant	.249	.250	.228	.229	
Roman Catholic	.141	.104	.148	.150	
Attendance of religious services					*
more than once a week	---	---	---	---	
once a week	-.004	.197	-.196*	-.195*	
once a month	.005	.225	-.201*	-.199*	
only on special holidays	.037	.410	-.305*	-.304*	
once a year	-.272*	-.298*	-.273*	-.273*	
less often	-.015	.117	-.149	-.147	
never, practically never	.027	.075	-.093	-.093	
constant	8.638*	9.158*	8.557*	8.371*	
Wald chi ²	229038.8	139808.8	556095.6	490498.0	
df	52	51	51	50	
Log pseudolikelihood	-1043925.2	-544113.9	-497959.0	-497970.1	
N	103,127	48,288	54,839	54,839	

The nature of the interaction effects can be seen more clearly in Table 5, which shows predicted category means for life satisfaction separately for men and for women.

Table 5. Predicted life satisfaction scores for categorical variables by gender.

	Men		Women	
	mean	s.e.	mean	s.e.
Region				
Africa	6.61	0.51	6.60	0.45
Americas	7.98	0.32	8.12	0.32
Asia	7.00	0.27	7.02	0.24
Europe	6.53	0.31	6.40	0.30
Middle East	7.64	0.38	7.95	0.36
Oceania	6.93	0.26	7.13	0.25
Post Soviet	6.87	0.23	6.81	0.22
Health				
very good	7.22	0.31	7.44	0.25

		Men		Women	
		mean	s.e.	mean	s.e.
	good	7.07	0.13	7.13	0.12
	fair	6.75	0.33	6.64	0.21
	poor	5.95	0.35	5.79	0.22
	very poor	3.94	0.36	4.51	0.34
Marital status					
	married	7.08	0.12	7.05	0.12
	cohabiting	7.08	0.14	6.74	0.22
	divorced	6.40	0.20	6.72	0.16
	separated	6.69	0.16	6.59	0.16
	widowed	6.70	0.17	6.83	0.14
	single/never married	6.85	0.18	6.98	0.15
Employment status					
	full time	6.96	0.11	6.83	0.13
	full time	6.76	0.17	6.74	0.13
	part time	6.96	0.15	7.28	0.34
	self employed	6.97	0.13	7.18	0.13
	retired/pensioned	6.38	0.39	6.95	0.16
	housewife	7.13	0.18	7.28	0.15
	student	7.09	0.25	6.78	0.26
	unemployed	7.21	0.25	7.03	0.27
	other	6.67	0.14	6.82	0.12
Education					
	No formal education	6.91	0.14	6.96	0.16
	Incomplete primary	6.75	0.16	7.04	0.13
	Complete primary	6.79	0.13	6.79	0.14
	Incomplete secondary (voc/tech)	7.08	0.13	7.01	0.13
	Complete secondary (voc/tech)	6.76	0.16	7.07	0.15
	Incomplete secondary (univ prep)	7.19	0.23	6.98	0.12
	Complete secondary (univ prep)	6.95	0.13	6.83	0.13
	Some university	7.10	0.14	7.06	0.12
	University degree	6.98	0.13	7.16	0.13
Religious affiliation					
	No religious denomination	6.93	0.12	6.86	0.15
	Buddhist	6.71	0.28	6.70	0.17
	Hindu	7.36	0.13	7.57	0.12
	Jew	5.65	0.38	4.77	0.93
	Muslim	6.94	0.13	6.81	0.14
	Orthodox	6.69	0.14	7.07	0.21
	Other	7.06	0.20	6.90	0.18

	Men		Women	
	mean	s.e.	mean	s.e.
Protestant	7.18	0.26	7.09	0.14
Roman Catholic	7.04	0.12	7.01	0.15
Attendance of religious services				
more than once a week	6.82	0.20	7.14	0.13
once a week	7.02	0.12	6.94	0.10
once a month	7.05	0.14	6.94	0.13
only on special holidays	7.23	0.25	6.83	0.14
once a year	6.52	0.15	6.87	0.15
less often	6.94	0.17	6.99	0.14
never, practically never	6.90	0.17	7.05	0.18

Findings and Discussion

Recall that I had three objectives in these analyses. First, I wanted to find out if there were effects of gender on overall life satisfaction net of all the individual- and nation-level controls in our analysis. Second, I wanted to examine the possibility that gender moderates the effects of other individual- and nation-level variables in our analyses. Third, I had a particular interest in gender specific effects of marital status on life satisfaction.

It is clear from the analyses of all respondents in Table 4 that there is no overall net effect of gender on life satisfaction scores in these data. Even with a sample size of over 100,000 respondents the difference between men and women's life satisfaction scores, net of all the other controls in the model, is not statistically-significant. On a life satisfaction scale that ranges from 1 to 10 with a mean about seven and a standard deviation of 2.25 the net difference between men and women on life satisfaction score is only about .122. This finding is not inconsistent with other studies of life satisfaction; while a few studies do find differences between men and women, these tend to be in geographically restricted areas such as single nations.

Gender appears to moderate the effects of region, age, marital status, employment status, education, religious affiliation, and attendance at religious services. Women seem to have extensively higher life satisfaction scores in the Americas, in the Middle East, and in Oceania but relatively similar scores to men in other regions. Women seem to have higher life satisfaction scores in most employment status categories except for full-time employment and unemployed. Women who are Hindus or Orthodox Christians have a higher mean life satisfaction scores, while Jewish women tend to have lower mean satisfaction scores than Jewish men.

The effects of age are particularly intriguing. For men, age has a curvilinear (U-shaped) effect on life satisfaction – highest for younger and older men, and lowest for middle-aged men. On the other hand, for women age does not have a statistically-significant effect.

With regards to marital status, cohabiting women have substantially lower life satisfaction scores than cohabiting men; married men and women have similar life satisfaction scores. Divorced women have substantially higher life satisfaction scores than divorced men. Focusing on the interaction results for marital status we can see that the largest differences between men and women come in the “cohabiting” and “divorced” categories. Cohabiting women have predicted life satisfaction scores .34 units lower than men (larger than one standard deviation), while divorced women have scores .32 units higher than men (also larger than one standard deviation).

In general, the effects of most of the variables are so different for men and women that the only reasonable analytic strategy is to report separate analyses for men and for women. Otherwise we risk gross misinterpretations of the data. For example, the analysis for all respondents suggests that age has no net effect on life satisfaction – neither the first- or second-order terms are statistically-significant. Such a conclusion, however, would completely miss the fact that there are statistically-significant (quadratic) effects for men but no effects – not even a linear effect – for women.

One interesting methodological note from these analyses is the importance of weighting the data at both the individual- and nation-levels. In many studies using the WVS and/or EVS either the data are explicitly not weighted at one or both levels or the issue is ambiguous. It is important to weight the EVS and WVS data at the individual level because each of the nation-level surveys use some type of probability or quota sampling. It is also crucial to weight the data at the nation-level to account for the differences in national populations; otherwise, the responses from a very small country such as Luxembourg would be given the same weight as those of China. In additional analyses (not reported here) we find that replicating the analysis for all respondents without weighting in Table 3 produces results that show statistically-significant effects for nearly every variable and category in the analysis. Thus, we should cast a critical eye on the conclusions drawn from unweighted analysis of the WVS and EVS data.

Future research on this topic should expand the analyses of the effects of marital status on life satisfaction separately by gender. In these analyses, for example, we find that while married men and married women have essentially the same level of life satisfaction, cohabiting women seem much less satisfied with their lives than cohabiting men. While some research (for example, Lee & Ono 2012) has explored this issue, most of the research has been conducted in industrialized nations. On another issue, why are divorced women more satisfied than divorced men? Is this a phenomenon of industrialized nations or a more general one? Is the moderating effect of gender different in nations with greater gender equality? These are all questions I intend to explore in further research with these data.

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