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Happiness and Life Satisfaction in Rwanda

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Abstract

This study investigated predictors of happiness and life satisfaction in Rwanda. Data from the World Value Survey (2007; 2012) and gathered from 3,030 Rwandese (age ranging 16 to 90 years, mean age = 34.2, SD = 12.7; 50.5% were females) were pooled for the analysis. For the comparison, international World Value Survey data were utilized. A fixed effects multilevel regression model was used to predict happiness and life satisfaction from gender, health, socio-economic, and some subjective measures. Males had greater self-rated happiness and life satisfaction scores than females. State of health and sense of freedom of choice predicted both happiness and life satisfaction. Valuing of friends, weekly religious attendance, and national pride positively predicted happiness whereas household's financial satisfaction, full-time employment, high-income group, being a student, and sense of trust predicted life satisfaction. This study suggests that health status, household's financial satisfaction and emancipative values could maximize subjective well-being in Rwanda.

Keywords: happiness, life satisfaction, Subjective well-being, Rwanda, panel data.

Introduction

Happiness and life satisfaction matter to individuals and nations. Happiness is most closely associated with emotions, feelings or moods (Gustafsson, Johansson, & Palmer, 2009; Watson, Clark, & Tellegen, 1988). Life satisfaction is concerned with people's judgments about the quality of their life, which might include evaluations of their work or personal relationships (Brickman & Campbell, 1971; Coburn, 2004; Diener, Emmons, Larsen, & Griffin, 1985). In this study, subjective well-being is defined as an individual's affective (happiness) and cognitive (life satisfaction) self-evaluation (Diener, Suh, Lucas, & Smith, 1999). In recent years, maximising the happiness and life satisfaction of citizens is becoming a fundamental goal of most governments' welfare policies in developed nations (Miret et al., 2014; Stiglitz, Sen, & Fitoussi, 2009).

Indicators of happiness and life satisfaction may have different salience in developing and developed countries (Fleche, Smith, & Sorsa, 2011; Howell & Howell, 2008; Jorm & Ryan, 2014). This study sought to investigate predictors of happiness and life satisfaction in Rwanda, which is a developing country.

The Case of Rwanda

Rwanda is a landlocked East African country located in the Great Lakes Region and bordering Burundi, Tanzania, Uganda and Democratic Republic of Congo. Rwanda was the victim of genocide in 1994 which shocked the humanity. In the space of 100 days, extremists Hutu killed an estimated 800,000 Tutsi and moderate Hutu. The genocide had a lasting and profound impact on Rwanda and its neighbouring countries, particularly in the eastern part of Zaire (now the Democratic Republic of Congo), where "Hutu genocidaires" began to regroup in refugee camps along the border with Rwanda. To avert further genocide, the Rwandan government still supporting military incursions into the Democratic Republic of Congo, such

as during the first (1996–1997) and second (1998–2003) Congo Wars (Omeje, 2013). Also, social networks of armed rebel groups that may be connected by common economic interests still operating in the region. Nevertheless, officially Rwanda is presented by the international community as a post-conflict country (Abbott & Wallace, 2012; Omeje, 2013).

The present Rwandese Government with support from the international community has brought stability and economic growth. The country is widely seen as a successful story of post-conflict country, but at the price of the suppression of genuine political debate (Abbott & Wallace, 2012).

Despite this progress, Rwanda remains one of the poorest countries in the world with life expectancy at birth of 63.39 years and 77 % of the population still living with less than one US dollar per day. As expected, the poverty, lack of clean water, food, sanitation and health care might be associated with how people see and live their lives. Previous studies investigating the association between economic growth and happiness have reported that individuals or countries with a higher income are happier than poor nations (Inglehart, Foa, Peterson, & Welzel, 2008). Nevertheless, longitudinal studies do not find a strong positive relationship between happiness and income (Easterlin, 1974, 2005). On the other hand, some studies have showed that although the correlation between income and happiness is often small, the outcome might be bigger in developing countries (Howell & Howell, 2008). These findings suggest two happiness constructs which might help to explain subjective well-being in Rwanda: first, subjective well-being is strongly associated with income in poor nations (Howell & Howell, 2008); second, subjective well-being might be different across different socio-cultural contexts (Diener, Suh, Smith, & Shao, 1995; Suh, 2000).

African nations including Rwanda have a strong collectivist culture which may affect their subjective well-being (Kitayama & Markus, 2000). Collectivists tend to see themselves

as inevitably embedded in a network of social relationships. The core element of collectivism is interdependence, social obligation and group harmony. Thus, the behaviour of collectivists is best predicted from the norms and goals of the group. When personal goals are not overlapping with those of the group, individuals in collectivist society might be in trouble for opposing the sacred social norms, the social hierarchy, which they generally perceive to be legitimate and unquestionable (Sullivan, Landau, Kay, & Rothschild, 2012). The genocide in Rwanda had a lasting and profound impact on people (Omeje, 2013), thus, people might be sensitive to deviations from the authoritarian group's norms and strive to curtail any activity that threatens the established social order. As a collectivist culture, individuals in Rwanda might base their judgements strongly on norms and emotions because cultural mechanisms perpetually highlight the relational and interdependent aspect of the self. Yet, twenty-two years later, many things have changed. With the financial support from the international community, the government has achieved political stability and sustained economic development; thus the happiness construct and factors that influence happiness and life satisfaction might change.

Research on Happiness and Life Satisfaction.

The most recent UN World Happiness Report reported a low score of 4.3 for Rwanda; on the other hand, using a scale from 0 to 10, Gallup's World Poll reported a low score of 3.6 for Rwandese (Helliwell, Layard, & Sachs, 2012).

However, despite Rwanda's position at the bottom of the league table on the world happiness, the World Database of Happiness (using a scale from 0 to 10) suggest that Rwanda is doing better (4.9) compared to their neighbours for example, Burundi (2.9), Tanzania (2.5), Uganda (4.5) and Democratic Republic of Congo (4.4) (Veenhoven, 2015).

The surveys conducted by World Value Survey and other worldwide poll organisations seem to be a great asset to explore not only the subjective well-being counstruct but also the determinants of happiness and life satisfaction in a post-conflict country like Rwanda (World-Values-Survey, 2015).

Goal of the study.

The present study used prospective panel data from the World Value Survey to investigate predictors of happiness and life satisfaction among the Rwandese compared to combined data from other countries. Maximising the happiness and life satisfaction (i.e., subjective well-being) of citizens is a fundamental goal of social welfare policies. In order to decide what policies should be pursued to maximise subjective well-being there is a need to identify the key drivers of happiness and life satisfaction within specific populations.

Method

Sources of data.

The present study analyses existing data from the World Value Survey (WVS: 2007; 2012). Data were collected from 3,030 participants (with an average of 1,515 respondents per each survey for the 2 years). The age of respondents ranges from 16 to 90 years with a mean of 34.2 and standard deviation of 12.7.

Measures

Happiness and life satisfaction

Happiness was measured using the question: Taking all things together, would you say you are: 1=Not at all happy; 2=Not very happy; 3=Quite happy; and 4=Very happy. Life satisfaction was evaluated using the question: All things considered, how satisfied are you with your life as a whole these days? On a scale of 1 to 10 if 1=dissatisfied and 10=satisfied.

Income and financial satisfaction Several measures of icnome were utlized. First, scale of incomes was assessed using the statement: *We would like to know in what group your household is, counting all wages, salaries, pensions and other incomes that comes in*. (1 indicates the lowest income group, and 10 the highest income group). *Household's financial satisfaction* was measured using the question: How satisfied are you with the financial situation of your household? (1= completely dissatisfied, and 10 = completely satisfied). To assess preference for income inequality, respondents were asked to choose "1", if they want incomes to be made more equal, and "10", if they need larger income differences as incentives.

State of health was measured using the question: All in all, how would you describe your state of health these days? If 1=very poor, 2=poor, 3=fair, 4=good, and 5=very good.

Personal freedoms, trust, friends, leisure and religion. Freedom of choice and control over life was assessed using the question: How much freedom of choice and control do you feel you have over the way your life turns out? (1 = none at all and 10 = a great deal). To evaluate Trust, respondents were asked: Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? (0= Can't be too careful or; 1= Most people can be trusted).The importance of friends and leisure were measured using the statements: Indicate how important friends/leisure are in your life (1= not at all important, 4=very important). Attendance to religious service used the statement: Apart from Weddings, Funerals and Christenings, how often do you attend religious services? 1= never, 2= once a year or less, 3= on special holidays, 4=once a month, 5= every week.

Demographics. Data on gender, employment status , education level, age, and marital status are reported on the WVS. For employment status the choices range from Full time, to Unemployed; Education level is reported elementary, secondary to university/college level; Age is reported in bands as follows: 15-24, 25-34, 35-44, 45-54, 55-64, 65 and over.

Procedure.

Data were collected by the World Value Survey website (www.worldvaluesurvey.org). Participants of each country were selected at random within the representative sample and interviewed face-to-face by a local field organisation that was supervised by WVS's academic researchers. During both surveys, an identical questionnaire was used and translated into Kinyarwanda (the national language of Rwanda) and back translated into English for checking. Kish selection grid was used to ensure that the person chosen within a household was selected randomly. Interviews in urban areas were generaly carried out in respondents' homes, but in rural areas most particiapants preferred to be interviewed outside their homes (e.g. under a tree). The average interview length was an hour but interviews with illiterate participants took on average 112 minutes (World-Values-Survey, 2015).

Data was checked for missing values and although more than 95% of cases were complete, *listwise deletion* was applied (Snijders & Bosker, 2012). Correlations among variables were tested prior to analysis because highly correlated predictors might lead to multicollinearity and to unpredictable coefficients and standard errors (Jorm & Ryan, 2014; Miller & Chapman, 2001). There was no evidence of multicollinearity among the measured variables.

Data Analysis

First, a multilevel analysis contrasted happiness and life satisfaction in Rwanda in contrast to the happiness and life satisfaction across the globe (Smith, Ager, & Williams, 1992). Fixed effects model was used in the present study because it is suitable for the panel data and multilevel analysis (Bell & Jones, 2015; Hausman, 1978 ; Torres-Reyna, 2007).

Variables used in the present study were measured using different scales, thus standardisation procedures were applied to ascertain which of the explanatory variables has a greater effect on happiness and life satisfaction. The variables were scaled so that higher values reflected more of the positive characteristics.This study used p < .001, p < .01 and p < .05 as level of significance and I emphasised the interpretation of the results using thumb's effect sizes (Cohen, 1992). Thus, $r \leq .10$ was used as a "small" effect size, $r > .10$ and $\leq .30$ as a "medium" effect size, and $r > .30$ as a "large" effect size.

Results

Table 1 provide the descriptive statistics, happiness and life satisfaction across the globe and in Rwanda by gender, age group, marital status, employment status and education attainment level. The 'happiness values' are presented on the left and 'life satisfaction values' are presented on the right of the table 1.

Across the globe, the average happiness (on a scale of 1 to 4) was M=3.057. The happiness in Rwanda (M=3.126) was slightly above the average across the globe. In Rwanda, females were less happy than males. Being an older person (over 65 years), divorced, widowed, retired or less educated were associated with less happiness in Rwanda (see Table 1).

A similar pattern was seen for life satisfaction. Life satisfaction (on a scale of 1 to 10) was lower less in Rwanda (M=5.722) than the average across the globe (M=6.608). In

Rwanda, females were less satisfied with their lives compared to males. Older people in

Rwanda were worse off than any other age groups.

Table 1.Happiness and Life satisfaction across the globe and in Rwanda by socio-demographic variables

	Happiness				Life Satisfaction			
	All nations		Rwanda		All nations		Rwanda	
Variables	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Happiness (1-4)	3.057	0.750	3.126	0.647	6.608	2.444	5.722	2.020
Gender								
Females	3.062	0.754	3.094	0.653	6.617	2.456	5.674	2.014
Males	3.051	0.747	3.159	0.639	6.573	2.437	5.770	2.025
Age group								
age16to24	3.137	0.730	3.176	0.591	6.774	2.377	5.818	2.036
age25to34	3.095	0.740	3.169	0.617	6.605	2.406	5.932	1.882
age35to44	3.062	0.741	3.127	0.675	6.551	2.425	5.690	1.997
age45to54	3.012	0.750	3.052	0.647	6.505	2.466	5.329	2.152
age55to64	2.988	0.770	2.927	0.791	6.572	2.505	5.244	2.306
age65&over	2.975	0.793	2.786	0.788	6.624	2.578	4.696	2.209
Marital status								
Married	3.089	0.732	3.135	0.602	6.631	2.440	5.646	2.011
Together	3.165	0.721	3.291	0.731	7.048	2.298	6.048	1.594
Divorced	2.834	0.787	2.818	0.882	6.123	2.487	5.303	1.776
Separated	2.872	0.839	2.973	0.781	6.305	2.590	5.781	2.136
Widowed	2.767	0.839	2.836	0.794	6.033	2.686	4.978	2.282
Single	3.073	0.743	3.150	0.590	6.630	2.365	5.936	2.051
Employment								
Fulltime	3.084	0.704	3.204	0.551	6.772	2.301	6.533	1.723

Table 1 Cont…	Happiness				Life satisfaction			
	All nations		Rwanda		All nations		Rwanda	
Variables	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Part-time	3.104	0.738	3.352	0.700	6.783	2.360	6.523	1.696
Self-employ.	3.101	0.759	3.118	0.657	6.578	2.427	5.534	2.023
Retired	2.924	0.798	2.897	0.724	6.440	2.592	5.759	1.766
Housewife	3.095	0.763	3.125	0.630	6.693	2.523	5.315	1.933
Students	3.177	0.706	3.256	0.571	6.906	2.246	6.220	1.917
Unemployed	2.918	0.840	3.178	0.653	5.929	2.670	6.332	1.504
Other empl.	3.035	0.728	2.920	0.702	6.264	2.432	6.092	1.933
Education								
Elementary	3.007	0.795	3.082	0.646	6.407	2.604	5.470	2.078
Secondary	3.080	0.742	3.252	0.603	6.597	2.423	6.331	1.586
University	3.152	0.688	3.259	0.591	6.976	2.212	6.680	1.659

Note: source World Value Survey (World-Values-Survey, 2015); $P<0.05$, indicated significant difference between means (Stata, 2013). Number of respondents: All nations together: N=335,268; Rwanda: N=3,030.

Comparative analysis of happiness and life satisfaction: Global Community vs Rwanda

Table 2 present the multilevel regression analyses of happiness and life satisfaction across the globe and in Rwanda. The results related to happiness are presented on the left and these related to life satisfaction are presented on the right of the table 2.

Across the globe

When all nations were included into the equation, the multilevel analysis showed a positive association with state of health, household's financial satisfaction, being female, freedom of choice, being married, trust, importance of friends, leisure, preference for income inequality, weekly religious attendance and national pride. GDP per capita, Gini coefficient, low-income scale groups and being unemployed were negatively associated with happiness and life satisfaction. Nevertheless, according to Cohen's rules of thumb (Cohen, 1992) only three factors were above the "small" effect size (> 0.10). State of health, household's financial satisfaction and freedom of choice showed a "medium" effect sizes and were positively associated with happiness and life satisfaction.

In Rwanda

In terms of happiness in Rwanda, state of health, freedom of choice, importance of friends, weekly religious attendance, and national pride positively predicted happiness. The association between happiness and household's financial satisfaction was non-significant. By way of contrast however, being an older person, retired, unemployed or being female negatively predicted happiness in Rwanda. Other factors not reported were non-significant.

With regard to life satisfaction, state of health, household's financial satisfaction, freedom of choice, being full-time employed, students, trusting other people or being in high-income scale group positively predicted life satisfaction in Rwanda.

Nevertheless, according to Cohen's rules of thumb, most of these factors have "small" effect sizes. Thus, to maximize the happiness and life satisfaction in Rwanda, policies should focus on health status, household's financial satisfaction and freedom of choice.

Table 2: Multilevel regression analysis of determinants of happiness and life satisfaction across the globe and in Rwanda.

	Happiness		Life satisfaction	
	All nations	Rwanda	All nations	Rwanda
	Coef. (b)	Coef. (b)	Coef. (b)	Coef. (b)
Pref Inc ineq	.012***	.062***	.014***	-.001
Low incomes scale	-.024***	.077	-.017***	-.006
Middle income sc	.004	.066	.004	.017
High income scale	.008**	.034	.014***	.081**
Fulltime	-.033***	-.046	-.001	.063**
Part-time	-.017***	-.010	-.002	.037**
Self-employed	-.022***	-.018	-.004	.028**
Retired	-.009*	-.103*	-.001	.034
Housewife	-.004	-.017	.011**	.002
Students	-.004	.015	.009**	.053***
Unemployed	-.039***	-.043*	-.018***	.049**
Other employ	-.001	-.058***	.001	.014
Elementary educ	-.011***	.009	.006*	.007
Secondary educ	-.013***	-.011	.004	-.019
University educ	-.014***	-.022	.006*	-.002
GDP per capita	-.035***	drop	-.055***	drop
Gini coef	-.031***	drop	-.039***	drop
age16to24	.033*	drop	.013	drop
age25to34	.006	-.043**	-.004	-.015
age35to44	-.005	-.031	-.012	-.019

Table 2 Cont…	Happiness		Life satisfaction	
	All nations	Rwanda	All nations	Rwanda
	Coef. (b)	Coef. (b)	Coef. (b)	Coef. (b)
age45to54	-.009	-.009	-.009	-.012
age55to64	-.002	-.032	.002	.005
age65andover	.010	-.054*	.008	-.023
Gender	.027***	-.035**	.024***	.017
Married	.083***	drop	.029	drop
Together	.023**	.012	.008	.001
Divorced	-.014*	-.041	-.010	.001
Separated	-.013*	-.017	-.011*	.010
Widowed	-.016	-.035**	-.007	.003
Single	-.005	-.037*	-.018	-.003
State of health	.264***	.394***	.139***	.238***
Financial Satisfact	.181***	.019ns	.392***	.319***
Freedom of choice	.088***	.160***	.196***	.253***
Friends important	.041***	.045*	.014***	.027
Trust	.022***	.009	.017***	.030*
Rel. Weekly attend	.031***	.098***	.018***	.021
Rel. Monthly attend	.006***	.046*	.004*	.059**
Rel. Special days	.005**	.014	.005**	.036
Never attend	-.004*	.009	.001	.095**
Social hostility	.022*	drop	.007	drop
Meaning of life	.005**	-.015	-.008***	.001
Leisure important	.039***	.036*	.014***	-.020

Table 2 Cont…	Happiness		Life satisfaction	
	All nations	Rwanda	All nations	Rwanda
	Coef. (b)	Coef. (b)	Coef. (b)	Coef. (b)
National pride	.086***	.084***	.053***	-.032ns
Intercept	-.226***	-.103*	.046***	-.188***
Rho	.094	0	.090	0
Rsq overall	0.227	0.319	0.378	0.498
N	255407	2943	255407	2943

Note: Level of significance: *** p< .001; ** p< .01; * p< .05; Otherwise, non-significant. All variables were standardised to a mean of 0 and standard deviation of 1 in the pooled individual-level sample. Source: World Value Survey (World-Values-Survey, 2015).

Discussion

This study investigated happiness and life satisfaction in Rwanda. The main finding is that, after controlling for socio-economic and demographic factors, these factors: health status, household's financial satisfaction and freedom of choice will improve subjective well-being in Rwanda. Government programs in Rwanda need to be developed to assist older people, retired people and female to improve their overall subjective well-being. For example, programs improving people's health status and encouraging emancipative values will improve lives of older people, women and retired people.

In line with previous studies, health status has been associated with happiness (Abbott & Wallace, 2012; Angner, Ghandhi, Purvis, Amante, & Allison, 2013; Padela & Heisler, 2010; Sabatini, 2014; Zajacova & Dowd, 2014) and life satisfaction (Barger, Donoho, & Wayment, 2009; Dubrovina, Siwiec, & Ornowski, 2012; Kim & Sok, 2012; Liang & Lu, 2014). Good health is associated with greater well-being, while setbacks in health have negative effects on subjective well-being. For example, people who have painful chronic conditions and those that become seriously disabled have permanently lower levels of subjective well-being compared to their counterparts who are not disabled (Headey, 2010). Multilevel analysis showed a positive association between health status and both happiness and life satisfaction even after controlling for several factors including GDP per capita, relative income, psychological factors, socio-economic and demographic factors. Patrick and Erickson's model (Patrick & Erickson, 1993), for example, suggests an association between self-reported health and subjective well-being; they argued that the diseases produce symptoms of varying severity which impact respectively on: personal functioning, general health perceptions, psychological aspect of well-being and social functioning. Health status has been reported to be associated with country level of economic development. Developed nations have better welfare system which provides basic needs such as adequate health care

systems. For example, while health status positively predicted happiness across nations, the effect was much more in Rwanda.

The possitive relationship between household's financial satisfaction and subjective well-being among the Rwandese suggests that income, not only allows individuals to purchase goods and services (Howell & Howell, 2008), but it also goes hand in hand with happiness and life satisfaction (Diener & Diener, 1995; Ng & Diener, 2014). In line with several studies, absolute and mostly relative income play an important role in influencing happiness and life satisfaction (Boyce, Brown, & Moore, 2010; Easterlin, 1974, 2005). If GDP per capita can no longer be used as the best indicator of people's living standards (Stiglitz et al., 2009), being in a country where basic needs (e.g. health, education and income indispensable for a decent standard of living) are provided play an important role in people's subjective well-being (Inglehart et al., 2008). People in Rwanda, a country which is classified by the World Bank as a low-income country (World-Bank, 2015) were slighly less satisfied with their lives compared to their counterparts across the globe.

Emancipative values such as freedom of choice predicted both happiness and life satisfaction among the Rwandese. However, freedom of choice and control over life still a big challenge in Rwanda. Matfess (Matfess, 2015), for example, called the Rwandan regime a "developmental authoritarianism" in view of the fact that the government intervenes into the economy and at the same time, it imposes legal restrictions on association, speech, and identity. Like other authoritarian governments, they might manipulate the perceived risk of social rupture and prolonged conflict to justify harsh restrictions and the persecution of opposition (Abbott & Wallace, 2012; Matfess, 2015).

In Rwanda, females were less happy compared to their counterparts across the globe. Emancipative values will have a more positive effect on happiness and might improve female's happiness in Rwanda. Since the genocide in 1994, Rwanda and its neighbouring

countries (i.e Great Lakes Region) have been exposed to atrocities and sexual violence and rapes have been used as a weapon of war. Rapes not only affect women's well-being, it is identified by psychologists as the most intrusive of traumatic events (Omeje, 2013). The challenge to implement some policies could be high in a strong collectivist culture and post-conflict country, especially when people may perhaps perceive the social hierarchy as legitimate and unquestionable (Sullivan et al., 2012).

Limitations and further directions:

This study has the following limitations. First, single item measures are limited in their reliability (Fisher, Matthews, & Gibbons, 2016). Future related studies should seek to utilize multi-item measures.

Second, "small" effect sizes were observed for most of the socio-economic indicators. There might be circumstances (that were not measured in this study) under which these factors may powerfully affect people's subjective well-being. For example, in Rwanda, older people, the retired people and female were less happy than men while being female across the globe positively predicted happiness (Rozer & Kraaykamp, 2013). Future studies are encouraged to re-examine these variations using a large data.

Finally, the World Value Survey like most "Values surveys" does not hold information on individual incomes in continuous form. In these surveys, income is typically reported in terms of income scales. It will be interesting to replicate these findings using data with income as a continuous predictor. Also, there might be other potential predictors of subjective well-being that were not measured in this study.

Conclusion

Being an older person, retired or being a female negatively predicted happiness in Rwanda. By way of contrast however, being female in other nations positively predicted happiness. This study suggests that health status, household's financial satisfaction and emancipative values could maximize subjective well-being in Rwanda.

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Appendix 1 Correlation between happiness/life satisfaction and other factors

	All countries		Rwanda	
	Happiness	Life satisf	Happiness	Life satisf
Happiness	1.000		1.000	
Life satisfaction	0.470***	1.000	0.358***	1.000
State of health	0.372***	0.301***	0.498***	0.505***
GDP per capita	0.131***	0.182***	0.269***	0.371***
Gini coef	0.071***	0.043***	0.269***	0.371***
Pref Inc ineq	0.048***	0.055***	0.006	-0.058***
Low incomes sc	-0.142***	-0.179***	-0.182***	-0.354***
Middle income	0.050***	0.048***	0.130***	0.136***
High income	0.118***	0.153***	0.123***	0.355***
Fulltime	0.024***	0.047***	0.0484**	0.162***
Part-time	0.017***	0.020***	0.090***	0.103***
Self0-employed	0.019***	-0.004**	-0.011	-0.079***
Retired	-0.064***	-0.024***	-0.035*	0.001
Housewife	0.020***	0.014***	-0.001	-0.048**
Students	0.045***	0.034***	0.060***	0.074***
Unemployed	-0.058***	-0.087***	0.021	0.080***
Other employm	-0.0041**	-0.018***	-0.055**	0.031
Elementary ed	-0.040***	-0.049***	-0.066***	-0.120***
Secondary ed	0.023***	-0.0039*	0.119***	0.185***
University ed	0.064***	0.077***	0.060***	0.140***
age16to24	0.049***	0.031***	0.0420*	0.026
age25to34	0.027***	-0.007	0.0528**	0.082***
age35to44	0.0033*	-0.011***	0.002	-0.007
age45to54	-0.025***	-0.018***	-0.038*	-0.065***
age55to64	-0.033***	-0.005***	-0.063***	-0.048*
age65andover	-0.036***	0.002	-0.103***	-0.099***
Gender	0.007***	0.008***	-0.050**	-0.023
Married	0.048***	0.010***	0.013	-0.036*
Together	0.036***	0.045***	0.089***	0.056***
Divorced	-0.055***	-0.037***	-0.050**	-0.021

Appendix 1 Cont…	All countries		Rwanda	
	Happiness	Life satisf	Happiness	Life satisf
Separated	-0.033***	-0.016***	-0.037*	0.004
Widowed	-0.097***	-0.059***	-0.129***	-0.106***
Single	0.011***	0.0049**	0.023	0.067***
Financial Satisfact	0.341***	0.560***	0.254***	0.585***
Freedom of choice	0.246***	0.399***	0.218***	0.412***
Friends important	0.122***	0.086***	0.120***	0.112***
Trust	0.058***	0.075***	0.089***	0.140***
Week attend	0.079***	0.029***	0.014	-0.104***
Month attend	0.007***	0.017***	0.061***	0.112***
Special days	-0.037***	-0.039***	0.002	0.050**
Never attend	-0.038***	-0.012***	-0.012	0.057***
Social hostility	-0.058***	-0.099***	0.269***	0.371***
Meaning of life	0.037***	-0.001	-0.024	-0.080***
Leisure important	0.140***	0.1280	0.015	-0.031
National pride	0.163***	0.126***	0.075***	-0.012

Note: Source:(World-Values-Survey, 2015) Pairwise correlations, ***P<.001; **p<.01;

*p<.05; Otherwise, non-significant.