

Well-being for believers? Contextualising the effects of religiosity on life-satisfaction



Jan Eichhorn
University of Edinburgh
School of Social and Political Science [Sociology]

London
29th November 2010
ESDS International Annual Conference

APPROACH

Background: Higher personal religiosity tends to be associated with greater happiness

Several quantitative studies have found that greater self-reported individual religiosity is associated with greater self-reported individual life-satisfaction. Religiosity has become a standard control variable in econometric models of life-satisfaction.

This finding has been shown to be robust for a number of operationalisations of religiosity and for comprehensive socio-economic controls.

Explanations for those tend to either emphasize an intrinsic mechanism (based on for example feelings of stability associated with religiosity) or extrinsic mechanisms (for example the embeddedness in religious communities).

Based on these findings policy suggestions have been made suggesting for example a greater importance of spirituality in schools in the UK, as school children have been shown to be happier if they were more religious/spiritual.

Waite & Lehrer 2003, Ferris 2002, Gauthier et al. 2006, Moghaddam 2008, Holder et al. 2010, Helliwell & Putnam 2004

Cautionary considerations: The rationale for this study – Contextualising religiosity

While robustness was shown for several religiosity measures, the results are not as uniform when the models are applied to different measures of life-satisfaction/subjective well-being.

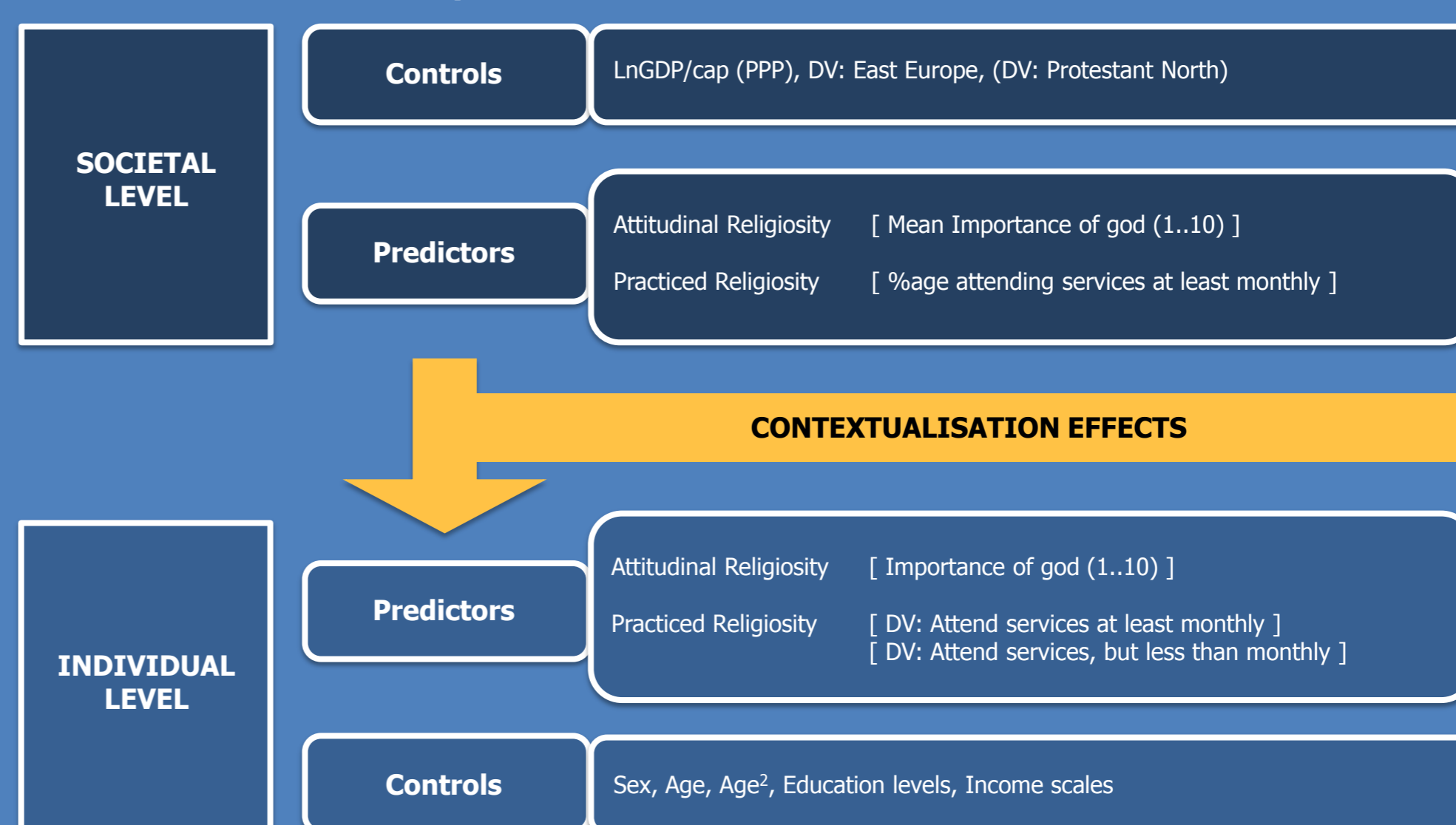
Many of the studies that investigated this relationships used samples drawn from only one country or, if the studies were comparative, the compared the individual-level based results from a small number of countries only.

However, qualitative studies have shown that the role of religion can vary greatly with regards to its importance for happiness (partially due to different conceptions of happiness itself).

This investigation therefore aims to explore whether the individual-level positive effect of religiosity on life-satisfaction is altered or moderated when taking into account contextual religiosity.

Lewis & Cruise 2006, Swinyard et al. 2001, Snoep 2008, Uchida et al. 2004

Specifications of the multilevel model



Source of data: World Values Survey (pooled wave 4 & 5)
43 countries (East-/ West-Europe & Anglo-Saxon)
→ Allowing for cross-sectional applicability of life-satisfaction
Equalising population weight used

Hierarchical linear modelling approach
Dependent: Personal life-satisfaction (1..10) – robust in linear multilevel models
Use of individual-level and country-level main effects as well as contextualising effects of average attitudinal and practiced

WVS 2010, Uchida et al. 2004, Lu & Gilmour 2004, Pittau et al. 2010, IMF 2010

RESULTS

Attitudinal religiosity as context

| Dependent variable: Life-Satisfaction | Importance of god | | Importance of god and service attendance | |
|--|-------------------|-------------------|--|-------------------|
| | Non-Interaction | Interaction | Non-Interaction | Interaction |
| Intercept | -3.683 (-1.32) | -3.694 (-1.32) | -3.382 (-1.22) | -2.894 (-0.87) |
| Societal Level | | | | |
| Av. Imp. of God | 0.067 (1.20) | 0.068 (1.22) | 0.045 (0.80) | 0.041 (0.71) |
| DV: Eastern Europe | -0.641 (-1.76) | -0.641 (-1.76) | -0.664 (-1.84) | -0.713 (-1.71) |
| X LnGDP/cap | 1.062 (4.10)*** | 1.064 (4.11)*** | 1.039 (4.05)*** | 0.994 (3.20)** |
| Fixed Individual | | | | |
| Sex | 0.007 (0.36) | 0.002 (0.09) | 0.002 (0.11) | -0.006 (-0.28) |
| Age | -0.052 (-8.29)*** | -0.052 (-8.44)*** | -0.052 (-8.33)*** | -0.052 (-8.42)*** |
| Age² | 0.001 (8.03)*** | 0.001 (8.03)*** | 0.001 (8.03)*** | 0.001 (8.15)*** |
| Education | 0.056 (6.12)*** | 0.056 (6.25)*** | 0.055 (5.98)*** | 0.054 (6.00)*** |
| Income | 0.187 (13.1)*** | 0.189 (13.3)*** | 0.186 (13.2)*** | 0.187 (13.3)*** |
| Importance of God | 0.058 (9.05)*** | | 0.046 (7.41)*** | |
| DV: attend, monthly+ | | | 0.203 (3.98)*** | |
| DV: attend, - monthly | | | 0.063 (1.79) | |
| Random Individual | | | | |
| Importance of God | | -0.490 (-2.07)* | | -0.377 (-1.84) |
| X Av. Imp. of God | | 0.019 (2.99)** | | 0.017 (2.76)** |
| X DV: Eastern Europe | | 0.022 (0.86) | | 0.016 (0.70) |
| X LnGDP/cap | | 0.043 (2.01) | | 0.032 (1.72) |
| DV: attend, monthly+ | | -1.542 (-0.67) | | 0.021 (0.76) |
| X Av. Imp. of God | | 0.021 (0.76) | | 0.105 (0.45) |
| X DV: Eastern Europe | | 0.105 (0.45) | | 0.160 (0.74) |
| X LnGDP/cap | | 0.160 (0.74) | | |
| DV: attend, - monthly | | 0.866 (0.62) | | 0.866 (0.62) |
| X Av. Imp. of God | | -0.026 (-1.22) | | -0.027 (-0.19) |
| X DV: Eastern Europe | | -0.027 (-0.19) | | -0.065 (-0.50) |
| X LnGDP/cap | | -0.065 (-0.50) | | |
| Reduction in Error | | | | |
| Within societies | 0.057 | 0.060 | 0.058 | 0.063 |
| Between societies | 0.808 | 0.808 | 0.813 | 0.809 |

74,703 individuals in 43 societies

Practiced religiosity as context

| Dependent variable: Life-Satisfaction | Service attendance | | Service attendance and importance of god | |
|--|--------------------|-------------------|--|-------------------|
| | Non-Interaction | Interaction | Non-Interaction | Interaction |
| Intercept | -3.101 (-1.33) | -2.224 (-0.78) | -3.803 (-1.60) | -2.488 (-0.87) |
| Societal Level | | | | |
| Service attendance | 0.511 (1.59) | 0.255 (0.76) | 0.407 (1.25) | 0.689 (1.96) |
| DV: Eastern Europe | -0.691 (-2.09)* | -0.761 (-1.98) | -0.630 (-1.88) | -0.730 (-1.91) |
| X LnGDP/cap | 1.001 (4.28)*** | 0.930 (3.33)** | 1.067 (4.60)*** | 0.958 (3.45)** |
| Fixed Individual | | | | |
| Sex | 0.027 (1.30) | 0.023 (1.10) | 0.002 (0.12) | -0.006 (-0.26) |
| Age | -0.053 (-8.30)*** | -0.053 (-8.28)*** | -0.052 (-8.33)*** | -0.052 (-8.40)*** |
| Age² | 0.001 (8.17)*** | 0.001 (8.19)*** | 0.001 (8.03)*** | 0.001 (8.11)*** |
| Education | 0.052 (5.95)*** | 0.051 (5.83)*** | 0.055 (5.99)*** | 0.055 (6.03)*** |
| Income | 0.185 (12.8)*** | 0.184 (12.9)*** | 0.186 (13.2)*** | 0.187 (13.3)*** |
| Importance of God | | | 0.045 (7.39)*** | |
| DV: attend, monthly+ | 0.398 (7.33)*** | | 0.202 (3.96)*** | |
| DV: attend, - monthly | 0.161 (4.50)*** | | 0.062 (1.79) | |
| Random Individual | | | | |
| Importance of God | | | -0.077 (-0.44) | 0.158 (3.27)** |
| X Service attendance | | | -0.004 (-0.16) | 0.008 (0.49) |
| X DV: Eastern Europe | | | | |
| X LnGDP/cap | | | | |
| DV: attend, monthly+ | | -1.700 (-0.82) | | -1.134 (-0.55) |
| X Service attendance | | 0.463 (2.25)* | | 0.076 (0.39) |
| X DV: Eastern Europe | | 0.135 (0.61) | | 0.078 (0.36) |
| X LnGDP/cap | | 0.193 (0.97) | | 0.130 (0.65) |
| DV: attend, - monthly | | 0.362 (0.30) | | 0.392 (0.31) |
| X Service attendance | | -0.021 (-0.13) | | -0.252 (-1.50) |
| X DV: Eastern Europe | | 0.001 (0.01) | | 0.003 (0.02) |
| X LnGDP/cap | | -0.021 (-0.18) | | -0.027 (-0.22) |
| Reduction in Error | | | | |
| Within societies | 0.052 | 0.055 | 0.058 | 0.063 |
| Between societies | 0.824 | 0.815 | 0.819 | 0.819 |

Significance values: *p<0.05, **p<0.01, ***p<0.001
Entries are un-standardised regression coefficients with t-ratios in parentheses

Main effects of individual religiosity

Without contextualisation both attitudinal and practiced religiosity show significant, positive effects on life-satisfaction in accordance with previous findings. **After contextualisation** however this effect is weakened and in most models rendered **statistically insignificant** for both, attitudinal and practiced religiosity.

Main effects of contextual religiosity

There are **no observable direct effects of average levels** of religiosity on individual life-satisfaction. This finding applies to models with and without interaction terms and both, for mean attitudinal and practiced religiosity.

Interaction effects between context and individual religiosity

Individual attitudinal religiosity is significantly moderated by both, mean attitudinal and practiced religiosity. With higher context religiosity, greater levels of individual attitudinal religiosity are associated with greater life-satisfaction. For individual practiced religiosity there is no such robust, significant interaction effect with either of the context religiosity variables.

CONCLUSION

Summary

| Significant effect on Life-Satisfaction, based on full models | | Without contextualisation | Attitudinal religiosity context | Practiced religiosity context |
|---|-------------|---------------------------|---------------------------------|-------------------------------|
| Attitudinal religiosity | Direct | + | | |
| | Interaction | | + | + |
| Practiced religiosity | Direct | + | | |
| | Interaction | | | |

For people living in societies where more people value god as important in their lives or societies where more people attend religious services regularly, a positive association of a personally greater importance of god with life-satisfaction can be observed.

There is no direct, independent effect of personal religiosity. It is context dependent (possibly suggesting a congruence effect: Higher self-reported life-satisfaction stemming from conforming with your context).

Personal service attendance is not relevant analogously: Its main effect is rendered insignificant after contextualisation, and there is no interaction effect with average levels of attitudinal or practiced religiosity.

Consequences

The standard use of religiosity as a control variable in quantitative models predicting life-satisfaction is therefore questionable.

Similarly, policy recommendations based on individual-level analyses need to be scrutinised to understand whether identified relationships relating to religiosity are due to intrinsic or extrinsic mechanisms.

Recommendations for further research

Qualitative projects should aim to explore in depth how people might perceive the role of religion for them personally in the context of the importance religion takes in their environment. More detailed accounts of the difference between attitudinal and practiced religiosity should be employed to understand why their roles may differ.

Quantitative projects should aim to differentiate more explicitly between different religious belief systems and conduct similar analyses also for other world regions. Furthermore, operationalisations distinguishing religion and spirituality should be sought in order to more adequately explore the possible differences between relevant intrinsic and extrinsic processes.

REFERENCES

- Ferris, Abbot. 2002. Religion and The Quality of Life. *Journal of Happiness Studies* 3 (2): 199-215.
Gauthier, Kristopher, Christopher, Andrew, Walter, Mark, Mourad, Ronney & Marek, Pam. 2006. Religiosity, Religious Doubt, and the Need for Cognition: Their Interactive Relationship with Life Satisfaction. *Journal of Happiness Studies* 7(2): 139-154.
Helliwell, John & Putnam, Robert. 2004. The social context of well-being. *Philosophical Transactions of the Royal Society B: Biological Sciences* 359: 1435-1446.
IMF. 2010. International Monetary Fund. Retrieved from <http://www.imf.org/external/data.htm> (12th February 2010).
Holder, Mark, Coleman, Ben & Wallace, Judy. 2010. Spirituality, Religiosity, and Happiness in Children Aged 8-12 Years. *Journal of Happiness Studies* 11(2): 131-150.
Lewis, Christopher & Cruise, Sharon. 2006. Religion and happiness: Consensus, contradictions, comments and concerns. *Mental Health, Religion & Culture* 9(3): 213-225.
Lu, Luo & Gilmour, Robin. 2004. Culture and Conceptions of Happiness: Individual Oriented and Social Oriented SWB. 2004. *Journal of Happiness Studies* 5: 269-291.
Moghaddam, Massoud. 2008. Happiness, Faith, Friends, and Fortune – Empirical Evidence from the 1998 US Survey Data. *Journal of Happiness Studies* 9(4): 577-587.
Pittau, M. Grazia, Zelli, Roberto & Gelman, Andrew. 2010. Economic Disparities and Life Satisfaction in European Regions. *Social Indicator Research* 96(2): 339-361.
Snoep, Liesbeth. 2008. Religiosity and happiness in three nations: a research note. *Journal of Happiness Studies* 9(2): 207-211.
Swinyard, William, Kau, Ah-Keng & Phua, Hui-Yin. 2001. Happiness, Materialism, and Religious Experience in the US and Singapore. *Journal of Happiness Studies* 2(1): 13-32.
Uchida, Yukiko, Norasakkunkit, Vnail & Kitayama, Shinobu. 2004. Cultural Constructions of Happiness: Theory and Empirical Evidence. *Journal of Happiness Studies* 5: 223-239.
Waite, Linda & Lehrer, Evelyn. 2003. The Benefits from Marriage and Religion in the United States: A Comparative Analysis. *Population and Development* 29(2): 255-275.
WVS. 2010. World Values Survey. Retrieved from <http://www.worldvaluessurvey.org> (12th February 2010).