Citation

Zimmer, Z., Chiu, C. T., Saito, Y., Jagger, C., Ofstedal, M. B., & Lin, Y. H. (2020). Religiosity dimensions and disability-free life expectancy in Taiwan. *Journal of aging and health*, *32*(7-8), 627-641. https://doi.org/10.1177/0898264319843445

Abstract

Objectives: Eight years of panel data are used to investigate the association between three dimensions of religiosity and total and disability-free life expectancy (TLE/DFLE) in Taiwan.

Method: Data come from the 1999 "Taiwan Longitudinal Study on Aging" (TLSA; N = 4,440; Age 55+). Dimensions of religiosity are public, private, belief, and coping. Mortality is linked to a national database. Disability is activities of daily living (ADLs). TLE/DFLE estimates use the Stochastic Population Analysis for Complex Events (SPACE) software.

Results: Those who engage in public and private religiosity live longer and more years disability-free than others, but proportion of life disability-free does not differ across levels of religiosity. Coping is less associated with TLE and DFLE. Coping however associates with more years disabled among men. Findings are robust to model specifications.

Discussion: The way in which religiosity associates with health depends upon the definition. When it does associate, religiosity increases TLE and DFLE proportionately.

Keywords disability, health, mortality, life expectancy, religion

Citation

Zimmer, Z., Rojo, F., Ofstedal, M. B., Chiu, C. T., Saito, Y., & Jagger, C. (2019). Religiosity and health: A global comparative study. *SSM-population health*, *7*, 100322. doi: 10.1016/j.ssmph.2018.11.006

Abstract

The objective of this paper is to understand global connections between indicators of religiosity and health and how these differ cross-nationally. Data are from World Values Surveys (93 countries, N=121,770). Health is based on a self-assessed question about overall health. First, country-specific regressions are examined to determine the association separately in each country. Next, country-level variables and cross-level interactions are added to multilevel models to assess whether and how context affects health and religiosity slopes. Results indicate enormous variation in associations between religiosity and health across countries and religiosity indicators. Significant positive associations between all religiosity measures and health exist in only three countries (Georgia, South Africa, and USA); negative associations in only two (Slovenia and Tunisia). Macro-level variables explain some of this divergence. Greater participation in religious activity relates to better health in countries characterized as being religiously diverse. The importance in god and pondering life's meaning is more likely associated with better health in countries with low levels of the Human Development Index. Pondering life's meaning more likely associates with better health in countries that place more stringent restrictions on religious practice. Religiosity is less likely to be related to good health in communist and former communist countries of Asia and Eastern Europe. In conclusion, the association between religiosity and health is complex, being partly shaped by geopolitical and macro psychosocial contexts.

Keywords Comparative research, International, Multi-level modeling, Population health, Religion, Religious diversity, Self-assessed health

Citation

Zimmer, Z., Chiu, C. T., Saito, Y., Lin, Y. H., Ofstedal, M. B., & Jagger, C. (2020). Does religious activity distinguish the mortality experiences of older Taiwanese? An analysis using eighteen years of follow-Up data. *Journal of religion and health*, *59*(1), 289-308. doi: 10.1007/s10943-019-00778-x

Abstract

This paper extends investigation of religiosity and longevity to Taiwan using a 1989 survey: *N* = 3849, aged 60+, with 18 years of follow-up. Religious activity is measured as worship and performance of rituals. A Gompertz regression, adjusted and non-adjusted for covariates and mediating factors, shows the hazard of dying is lower for the religiously active versus the non-active. Transformed into life table functions, a 60-year-old religiously active Taiwanese female lives more than 1 year longer than her non-religious counterpart, *ceteris paribus*. Mainland Chinese migrants are examined carefully because of unique religious and health characteristics. They live longer, but the religiosity gap is similar.

Citation

Ofstedal, M. B., Chiu, C. T., Jagger, C., Saito, Y., & Zimmer, Z. (2019). Religion, life expectancy, and disability-free life expectancy among older women and men in the United States. *The Journals of Gerontology: Series B*, 74(8), e107-e118. https://doi.org/10.1093/geronb/gby098

Abstract

Objectives

Existing literature shows religion is associated with health and survival separately. We extend this literature by considering health and survival together using a multistate life table approach to estimate total, disability-free, and disabled life expectancy (LE), separately for women and men, for 2 disability measures, and by 2 indicators of religion.

Method

Data come from the Health and Retirement Study (1998–2014 waves). Predictors include importance of religion and attendance at religious services. The disability measures are defined by ADLs and IADLs. Models control for sociodemographic and health covariates.

Results

Attendance at religious services shows a strong and consistent association with life and health expectancy. Men and women who attend services at least once a week (compared with those who attend less frequently or never) have between 1.1 and 5.1 years longer total LE and between 1.0 and 4.3 years longer ADL disability-free LE. Findings for IADL disability are similar. Importance of religion is related to total and disabled LE (both ADL and IADL), but the differentials are smaller and less consistent. Controlling for sociodemographic and health factors does not explain these associations.

Discussion

By estimating total, disability-free, and disabled LE, we are able to quantify the advantage of religion for health. Results are consistent with previous studies that have focused on health and mortality separately.

Keywords: Disability, Mortality, Religion/spirituality

Citation

Zimmer, Z., Jagger, C., Chiu, C. T., Ofstedal, M. B., Rojo, F., & Saito, Y. (2016). Spirituality, religiosity, aging and health in global perspective: A review. *SSM-population health*, *2*, 373-381. 10.1016/j.ssmph.2016.04.009

Abstract

Persistent population aging worldwide is focusing attention on modifiable factors that can improve later life health. There is evidence that religiosity and spirituality are among such factors. Older people tend to have high rates of involvement in religious and/or spiritual endeavors and it is possible that population aging will be associated with increasing prevalence of religious and spiritual activity worldwide. Despite increasing research on religiosity, spirituality and health among older persons, population aging worldwide suggests the need for a globally integrated approach. As a step toward this, we review a subset of the literature on the impact of religiosity and spirituality on health in later life. We find that much of this has looked at the relationship between religiosity/spirituality and longevity as well as physical and mental health. Mechanisms include social support, health behaviors, stress and psychosocial factors. We identify a number of gaps in current knowledge. Many previous studies have taken place in the U.S. and Europe. Much data is cross-sectional, limiting ability to make causal inference. Religiosity and spirituality can be difficult to define and distinguish and the two concepts are often considered together, though on balance religiosity has received more attention than spirituality. The latter may however be equally important. Although there is evidence that religiosity is associated with longer life and better physical and mental health, these outcomes have been investigated separately rather than together such as in measures of health expectancy. In conclusion, there is a need for a unified and nuanced approach to understanding how religiosity and spirituality impact on health and longevity within a context of global aging, in particular whether they result in longer healthy life rather than just longer life.

Keywords: Aging Global aging, Health expectancy, Older adults, Mindfulness, Mortality, Religion, Spirituality

Citation

Jagger, C. (2017). RELIGIOSITY, HEALTH, AND AGING IN INTERNATIONAL AND CROSS-CULTURAL PERSPECTIVES. *Innovation in Aging*, 1(suppl_1), 675-675. doi: 10.1093/geroni/igx004.2403

Abstract

This symposium consists of four papers that employ robust data from different countries worldwide to examine associations between religiosity and health among older persons. Globally, older persons are experiencing gains in life expectancy. Whether gains represent healthy years is in dispute. External factors such as advances in treatments contribute to healthy aging, but evidence suggests factors internal to the individual are also influential. One such, religiosity, is increasingly recognized as a potential contributor to longer and healthier lives. Although there is wide intra-country variation in the percent that report being religious, religion is a component in the lives of a great many older persons in most countries. Moreover, evidence shows older persons engage in religious activity more frequently than younger. Given the ubiquity of religiosity in lives of elders globally, we can learn much by

examining associations in international and cross-cultural perspective. Chiu et al. investigate religious activity, life and active life expectancy across a number of European countries, whilst Saito et al. report similar analyses but for Singapore, a country with diverse cultural and religious populations. Cartwright reports on aging immigrants in the U.S., representing a wide range of cultural and religious traditions. Taking the discourse to the cellular level, Hill et al. examine biomarker data from the U.S., linking religiosity and telomere length, while exposing potential intervening mechanisms. Together, these papers provide a contemporary and methodologically advanced evaluation of religiosity's role in health and aging within and across national and cultural environments.

Citation

Haviva C, Zimmer Z, Ofstedal MB, Jagger C, Chiu CT and Saito Y. 2018. A Project Summary: Linking Spirituality and Religiosity to Life and Health Expectancy A Global Comparative Study. Available online at globalagingandcommunity.com/projects/religion-and-health-expectancy/publications/.