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Can religion buy happiness? The case of Singapore

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Vitae

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Highlights

- We examine the link between life satisfaction and religiosity
- Social capital increases life satisfaction
- We do not find significant effect of religious denomination and life satisfaction for all types of denominations
- Social and individual religiosity are in general associated with higher life satisfaction

Abstract

This paper investigates the determinants of life satisfaction in Singapore. Specifically we explore the effect of religiosity on life satisfaction. Using World Values Survey data, we find that in general religiosity leads to higher levels of life satisfaction. However, we do not find link between religious denomination and subjective wellbeing, except for Muslim and other religious denomination i.e. Taoist and Shenism.

Keywords: well-being, life satisfaction, religiosity, Singapore, trust

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1. Introduction

Since the work of Diener et al. (1985), determinants of life satisfaction has been subject of economic (Layard, 2005; Sacks et al, 2010), sociologic (Greene and Yoon, 2007) and psychological (Fryer and Payne, 1986) attention. Empirical studies report that life (dis)satisfaction reduces employee performance (Jones, 2006) and increases migration intentions (Ostrachshenko and Popova, 2014). Naturally, life satisfaction has important implication for the society as it is a useful tool to compare inclusiveness of development within communities and across nations (Helliwell, 2008).

Significant strand of research has consistently focused on monetary determinants of life satisfaction (see Easterlin, 1974; Blanchflower and Oswald, 2004) while new line of studies finds that there are other non-income determinants of life satisfaction. These include gender, health, age, TV consumption, Internet use and religion (see e.g. Calasanti, 1996; Luttmer, 2005; Kataria and Regner, 2011; Pénard et al., 2013).

Adam Smith argued that religion adapts humans ‘for another and better world to come’ (Smith [1776] 1981: 778) and religiosity in existing life is happiness inducing. Later commenting Smith, Malthus (1798) notes ‘The professed object of ... Smith’s inquiry is the nature and the causes of the wealth of nations ... however, perhaps still more interesting...inquiry into the causes which affect the happiness of nations’.

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The aim of this study is to investigate whether religiosity increases life satisfaction in Singapore. Building on a traditional econometric specification of life satisfaction we investigate the impact of social and individual religiosity on life satisfaction. We rely on the World Values Survey for Singapore and show that in general individual religiosity has a stronger positive effect on life satisfaction than social religiosity.

The paper is organized as follows. The next section reviews related literature. Section 3 presents data and methodology and Section 4 discusses results. Finally, section 5 concludes the study.

2. Related Literature

Does religiosity increase subjective well-being?

Since the works of Durkheim ([1987] 1951) and Hunsberger (1985) there has been increase in the recognition of the religious domain in the empirical studies on life satisfaction. A meta-analysis of 100 studies by Koenig et al. (2001) reports that 80 studies find positive link while 13 studies find no link between religion and life satisfaction. The authors propose an explanation of this relationship. Because religion forms purpose in life and religious practice generates a sense of belonging, the life satisfaction is increasing function of religiosity. Indeed, a strand of studies reports that religiosity has stronger impact on life satisfaction than income (Elison et al., 1989). Clark and Leikes (2009) examined impact of religion on well-being among 90 000 individuals from 26 European countries. They found positive link between average religiosity and life satisfaction. In contrast, increase in the share of atheists reduces overall life satisfaction in the region. Contemporary empirical studies have documented that the link could be operating through private devotion, attendance and religious affiliation (Bergan and McConatha, 2001). One can recognize two major streams of studies on the link between religion and life satisfaction.

First explores the relationship between social religiosity and life satisfaction (Leon et al., 1990; Lim and Putnam, 2010). Early empirical literature, (Bibby and Brinkerhoff, 1974; Hadaway, 1978) documents that religious socialization enhances the feeling of belonging and community, and confirms religiosity ultimately increases life satisfaction. Diener et al (1999) shows that social religiosity increases likelihood of life satisfaction rather than individual religiosity.

The second aspect of empirical research on job satisfaction is individual religiosity. The results are mixed. While some studies find that religious denomination is not significant predictor of life satisfaction (Lim and Putnam, 2010), there is evidence that religiosity increases life satisfaction in countries with higher social capital (Okulicz-Kozaryn, 2010).

3. Data and Methodology

Data for this study are taken from the fourth (1999-2004) wave of the World Values Survey (WVS) and we keep only individuals surveyed in Singapore. The WVS is cross-sectional, multi-country survey representatively covering almost 90% of the world population². The Singapore WVS was conducted in personal face to face interviews from March to August, 2002. The qualified respondents are Singapore citizens and are at least 18 years old. Substitution was used when the person no longer lives in the address stated or when the case is not contactable after 3 tries. Data on 1512 individuals was obtained, but due to missing variables our final sample consists of approximately 1400 observations.

The WVS contains several distinct dimensions of religiosity: denomination, attendance of religious services and personal prayer. The descriptive statistics for the religiosity measures and other variables used in our statistical analysis are presented in Table 1.

The dependent variable is self-reported level of life satisfaction. To capture life satisfaction, we use the answers for the following question: "All things considered, how satisfied are you with your life as a whole these days?" Respondents were shown a card, where 0 (zero) means completely dissatisfied and 10 represents highest level of life satisfaction. The average level of life satisfaction in Singapore is around 7.2. In the sample, respondents affiliated with Muslim religious tradition are to some extent happier (7.4) than respondents that do not attribute themselves with

²http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_110/files/WVSbrochure6-2008_11.pdf

any of the religious denominations (6.96). Protestants and Roman Catholics report almost the same average life satisfaction (7.0).

For our empirical exercise we estimate the following standard life satisfaction model:

$$LS_i = \alpha_1 + \alpha_2 * X_i + \alpha_3 * relig_i + \varepsilon_i$$

where the self-reported life satisfaction (LS_i) of individual i depends on a set of individual socio-demographic characteristics (X_i), religiosity ($relig_i$).

Among other socio-demographic characteristics, we include age, gender, level of education, income and labor market status. Following previous studies, we include trust and identity among other determinants of subjective well-being (Clark and Lelkes, 2009). We use ordered logistic regression model throughout the analysis.

Table 1. Description and summary statistics of the variables.

Variable	Description	Mean (std. dev.)
LS	All things considered, how satisfied are you with your life as a whole these days? Values from 1 (dissatisfied) to 10 (satisfied)	7.2380 (1.8000)
MARRIED	1 if respondent is married or living together as married, 0 otherwise	0.4867(0.4999)
CHILD	1 if respondent has one or more children, 0 otherwise	0.484 (0.4999)
UNIVERSITY	1 if respondent has some university education or graduated with degree, 0 otherwise	0.0979 (0.2973)
FEMALE	1 if respondent is female, 0 otherwise	0.5224 (0.4996)
HOUSEWIFE	1 if respondent is a housewife, 0 otherwise	0.1210 (0.3262)
TRUST	1 if respondent agrees that “most people can be trusted”, 0 otherwise	0.1470 (0.3542)
FREEDOM	Respondent’s answer on “how much freedom of choice and control you feel you have over the way your life turns out”. Values from 1 (none at all) to 10 (a great deal)	
Income groups		
INC1999	1 if respondent’s household income is in \$0 - \$1999 income group, 0 otherwise	0.3326 (0.4713)
INC4999	1 if respondent’s household income is in \$2000 - \$4999 income group, 0 otherwise	0.4670 (0.4990)
INC7999	1 if respondent’s household income is in \$5000 - \$7999 income group, 0 otherwise	0.1288 (0.3351)
INC8000	1 if respondent’s household income is \$8000 or above, 0 otherwise	0.0714 (0.2576)
Social religiosity		
ATTEND	The natural log of the respondent's frequency of attendance of religious services ³	2.716 (1.5861)
SOCIAL	The natural log of the respondent’s time spend with people at church, mosque or synagogue	2.0724 (1.5710)
BELONG	1 if respondent belongs to Religious organizations, e.g., church, mosque, temple	0.2103 (0.4076)
Individual religiosity		
Religious denomination		
MUSLIM	1 if respondent is Muslim, 0 otherwise	0.3806 (0.4857)
BUDDHIST	1 if respondent is Buddhist, 0 otherwise	0.1717 (0.3772)
HINDU	1 if respondent is Hindu, 0 otherwise	0.1173 (0.3219)

³ Following Lim and Putnam (2010) we convert this into interval scale ‘by approximating days of attendance per year and then log-transforming the result’.

NORELIG	1 if respondent is not a member of any denomination or has no religion, 0 otherwise	0.1120 (0.3155)
OTHRELIG	1 if respondent belongs to any other denomination, 0 otherwise	0.2181 (0.4131)
BELIEVE IMPORTANT	1 if respondent believes in God, 0 otherwise How important is God(s) in your life? Values from 0 (not important) to 10 (very important)	0.9271 (0.2600) 8.2317 (2.4898)
RELIGIOUSITY	1 if respondent agrees that religion is very or rather important, 0 otherwise	0.8204 (0.3839)
STRENGTH	1 if respondent gets comfort and strength from religion, 0 otherwise	0.857 (0.394)
PRAYER	1 if respondent takes some moments of prayer, meditation or contemplation or something like that, 0 otherwise	0.813 (0.389)

4. Results

The effect of individual religiosity on life satisfaction

Table 2 reports a series of regression estimations, with self-reported subjective wellbeing as the dependent variable in each equation. The coefficients of socio-demographic characteristics in the first model are intuitive and line with previous findings (Eq. 1). Age has non-linear U shaped effect on LS. In addition having higher income has a positive and significant effect on LS. The lack of significance of gender is typically found in the literature (see Veenhoven, 1997). Respondents who think that most people can be trusted report the higher levels of LS. However, Eq. (2) reveals that not all types of religious denomination increases LS. The estimated coefficients on Buddhist, Hindu and No religion play no role in the life satisfaction of respondents: perhaps religious denomination among individuals in Singapore can be considered rather an official membership. Results reveal that importance of religion has larger positive effect on life satisfaction than importance of God in one's. People that practice prayer, meditation or get strength from religions tend to have higher life satisfaction even when gender, trust and age controlled.

Table 2. Life satisfaction and individual religiosity

	Eq. 1	Eq. 2	Eq. 3	Eq. 4	Eq. 5	Eq. 6	Eq. 7
MARRIED	0.406** (0.169)	0.409** (0.169)	0.434** (0.171)	0.435*** (0.169)	0.393** (0.168)	0.390** (0.169)	0.409** (0.168)
CHILD	0.212 (0.192)	0.155 (0.193)	0.178 (0.193)	0.140 (0.192)	0.196 (0.191)	0.204 (0.193)	0.186 (0.192)
UNIVERSITY	-0.390** (0.189)	-0.356* (0.190)	-0.349* (0.191)	-0.368** (0.185)	-0.361* (0.188)	-0.392** (0.196)	-0.390** (0.188)
FEMALE	0.006 (0.104)	0.006 (0.105)	0.010 (0.105)	-0.013 (0.104)	0.013 (0.105)	-0.023 (0.106)	-0.020 (0.105)
HOUSEWIFE	0.298* (0.167)	0.294* (0.167)	0.295* (0.168)	0.288* (0.167)	0.305* (0.165)	0.317* (0.169)	0.299* (0.168)
TRUST	0.284** (0.137)	0.304** (0.138)	0.283** (0.139)	0.295** (0.138)	0.291** (0.138)	0.280** (0.137)	0.295** (0.136)
FREEDOM	0.510*** (0.041)	0.505*** (0.042)	0.513*** (0.042)	0.497*** (0.041)	0.505*** (0.041)	0.502*** (0.041)	0.510*** (0.042)
AGE	-0.059*** (0.021)	-0.053** (0.021)	-0.060*** (0.021)	-0.055*** (0.021)	-0.058*** (0.021)	-0.061*** (0.021)	-0.059*** (0.021)
AGE ² /100	0.066*** (0.025)	0.060** (0.025)	0.068*** (0.025)	0.062** (0.025)	0.065*** (0.024)	0.067*** (0.025)	0.066*** (0.024)
INC1999	-0.899*** (0.214)	-1.040*** (0.219)	-0.898*** (0.215)	-1.029*** (0.213)	-0.953*** (0.215)	-1.021*** (0.216)	-0.956*** (0.214)
INC4999	-0.534*** (0.200)	-0.657*** (0.201)	-0.528*** (0.199)	-0.643*** (0.198)	-0.591*** (0.201)	-0.636*** (0.201)	-0.592*** (0.199)
INC7999	-0.457**	-0.507**	-0.509**	-0.526***	-0.479**	-0.537***	-0.471**

	(0.202)	(0.202)	(0.203)	(0.200)	(0.201)	(0.204)	(0.203)
MUSLIM		0.523***					
		(0.165)					
BUDDHIST		0.243					
		(0.176)					
HINDU		0.268					
		(0.221)					
OTHERELIG		0.302*					
		(0.156)					
BELIEVE			0.315*				
			(0.190)				
IMPORTANT				0.077***			
				(0.020)			
RELIGIOSITY					0.342***		
					(0.126)		
STRENGTH						0.378***	
						(0.129)	
PRAYER							0.338***
							(0.119)
<i>N</i>	1401	1398	1379	1399	1398	1367	1394

Standard errors in parentheses. Reference income group: 8000\$ or above. Reference religious denomination: No, not a member

*p<0.1, **p<0.05, ***p<0.01

The effect of social religiosity on life satisfaction

In Table 3 we turn to investigate the impact of social religiosity on life satisfaction. First, we find positive link between attendance of religious services and time spend with people at church, mosque or synagogue and life satisfaction (Eq. 1). Apparently religious commitment increases individual's social interaction that raises state of mind and wellbeing. Another possible explanation maybe be that collective religious practice establish social ties that promote understanding and shared assistance, thus increasing life satisfaction (Lim and Putnam, 2010; Marsden, 1988). Eq. 3 examines whether belonging to religious organization has effect on life satisfaction. People that belong to church, mosque or synagogue report a higher level of life satisfaction.

Overall, there is a positive link between religiosity and life satisfaction. Religious institutions increase social integration and bring together people with similar values (Witter et al, 1985) whereas religiosity increases life satisfaction as it forms purpose to life (Poloma and Pendleton, 1991). In short, religious denomination itself doesn't enhance individual's life satisfaction. Only when people have both firm sense of religious belonging and social religiosity does religion increases life satisfaction.

Table 3. Life satisfaction and social religiosity

	Eq. 1	Eq. 2	Eq. 3
MARRIED	0.309*	0.391**	0.412**
	(0.175)	(0.170)	(0.169)
CHILD	0.194	0.208	0.195
	(0.200)	(0.193)	(0.193)
UNIVERSITY	-0.440**	-0.382**	-0.406**
	(0.206)	(0.188)	(0.188)
FEMALE	0.020	0.018	0.007
	(0.109)	(0.105)	(0.104)
HOUSEWIFE	0.326*	0.299*	0.313*

	(0.176)	(0.167)	(0.166)
TRUST	0.267*	0.272**	0.255*
	(0.140)	(0.138)	(0.139)
FREEDOM	0.484***	0.507***	0.511***
	(0.043)	(0.041)	(0.041)
AGE	-0.042*	-0.057***	-0.058***
	(0.022)	(0.021)	(0.021)
AGE ² /100	0.044*	0.063**	0.065***
	(0.025)	(0.025)	(0.025)
INC1999	-1.066***	-0.892***	-0.869***
	(0.223)	(0.213)	(0.214)
INC4999	-0.709***	-0.537***	-0.504**
	(0.210)	(0.199)	(0.199)
INC7999	-0.675***	-0.471**	-0.440**
	(0.213)	(0.201)	(0.201)
ATTEND	0.133***		
	(0.033)		
SOCIAL		0.053*	
		(0.030)	
BELONG			0.230*
			(0.122)
<hr/>			
<i>N</i>	1288	1397	1401

Standard errors in parentheses. Reference income group: 8000\$ or above. Reference religious denomination: No, not a member

*p<0.1, **p<0.05, ***p<0.01

5. Conclusion

In this study we explored the determinants of life satisfaction in Singapore. In line with theory social capital and individual socio economic factors have direct effect on self-reported level of life satisfaction. Our results show that in general religiosity leads to higher levels of life satisfaction. However, we do not find link between religious denomination and subjective wellbeing, except for Muslim and other religious denomination i.e. Taoist and Shenism.

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