

Faith or Social Foci? Happiness, Religion, and Social Networks in Sweden

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Abstract: In this article, we study 19-year-olds in Sweden ($n = 2,942$) with and without an immigration background (Iran, Yugoslavia, and Sweden). We follow-up on a recent study, which shows that religion and happiness tend to be positively associated at the individual level only in countries with high aggregate levels of religiosity and proposes that what affects happiness is not religiosity per se but conformity to the standard in one's country. We take these results a step further and study the relationship between religion and happiness across immigrant groups that have significantly different experiences of religion. Are we more likely to find a positive association between religion and happiness among young Swedes with parents born in Iran and Yugoslavia than among those with two Sweden-born parents? And do these associations depend on their sense of affiliation with Sweden? We argue that there are strong theoretical reasons to assume that previous results also apply to the observed association between religious networks and happiness, and we study to what extent previous results can be generalized to societies like Sweden, which has a very low aggregate level of religiosity, and whether that effect differs by immigration background. The results show that religion and religiousness per se have little impact on happiness. In particular, we find that social networks tend to be positively associated with happiness, and that this effect is driven by co-organizational membership among friends.

Introduction

During the past 20 years, academic interest in the connection between religion and well-being has grown substantially (Ellison, 1998; Cotton *et al.*, 2006; Green and Elliot, 2010).¹ Many studies demonstrate a positive relationship between a high degree of religious participation and lower prevalence of symptoms of depression and anxiety and higher scores on self-rating indicators of good mental health and life satisfaction (Koenig, 2001; Strawbridge *et al.*, 2001; Sawatzky *et al.*, 2005; Zullig *et al.*, 2006; Sternthal *et al.*, 2010). A number of studies have focused specifically on the relationship between religion and religious activity, suggesting that religious activity is a source of happiness (e.g. Borooah, 2006; Inglehart, 2010) and well-being (e.g. Helliwell, 2003, 2006; Helliwell and Putnam, 2004). However, in a recent study, Eichhorn (2012) demonstrated that religion and happiness tend to be positively associated at the individual level only in countries with high aggregate levels of religiosity.² The proposed reason for this is that

what affects happiness is not religiosity per se but conformity to the standard in one's country. A question not addressed by Eichhorn is the relationship between religion and happiness across immigrant groups that have significantly different experiences of religion. If we follow this reasoning, it follows that the likelihood of finding positive associations between religion and happiness in countries with low aggregate levels of religiosity is larger for immigrants originating from highly religious contexts than for the native population. The reason is that highly religious immigrants may have an alternative reference group (or country) and thus entice happiness from conforming to their country of origin (i.e. a country with a high level of aggregate religiosity) rather than to their country or residence (i.e. a country of low level of aggregate religiosity).

In this article, we address these questions by using unique data on 19-year-olds in Sweden who were sampled according to immigration background (Iran, Yugoslavia, and Sweden). Despite the fact that the State and the Evangelical Lutheran Church did not officially

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separate until January 2000, Sweden has one of the lowest levels of aggregate religiosity in the world (Zuckerman, 2008; Eichhorn, 2012), with less than a quarter of the population claiming to believe there is a God (Eurobarometer, 2005). At the same time, Swedes report very high levels of life satisfaction, with 90 per cent claiming they are 'overall satisfied with life' (Eurobarometer, 2005). Sweden also has a relatively large presence of immigrants, many of whom come from regions and countries where religion is of central importance in public and private life, including the two groups that will be analysed in this study.³

Lim and Putnam (2010) recently suggested that the association between religion and life satisfaction can be explained by social networks within the congregation.⁴ The argument is that social networks that build on religious faith are more important for people's life satisfaction than other social network ties because people tend to find social exchange more meaningful when it comes from someone with whom they share a core set of values. Assuming that the result regarding life satisfaction can be extended to happiness (see footnote 1), and drawing on Eichhorn's (2012) findings, we argue that there are strong reasons to assume that religious networks and happiness are positively associated *only* in countries with high aggregate levels of religiosity, such as the United States. Thus, we study the extent to which Lim and Putnam's (2010) results can be generalized to societies that have a very low aggregate level of religiosity, such as Sweden. Moreover, there are reasons to expect differences between individuals with and without an immigrant background, and we expect that social ties based in religion are more important for immigrants coming from countries with higher levels of aggregate religiosity.

Religion and Happiness

Two main explanations have been posited for the observed correlation between religion and happiness, one focusing on the private and subjective dimensions of religion, and one focusing on religion's role in facilitating access to social networks and support (see Lim and Putnam, 2010). For the former set of explanations, religion is believed to give inner peace and meaning and a sense of belonging, which in turn increases happiness (Greeley and Hout, 2006). Religion is also believed to offer a framework for interpreting one's surroundings and for ascribing meaning and purpose to an unpredictable world (Emmons *et al.*, 1998; Inglehart, 2010). The second set of explanations argues that religion functions as a source of solidarity and source of mutual identification in society (Durkheim, 1976 [1915]),

emphasizing that religious activity largely consists of, and is a focus for, social relations (Simmel, 1905). From this perspective, religion is positively linked to happiness since religious organizations give people opportunities to meet with and connect to like-minded people, thus both catering to homophily preferences and furthering social homophily (e.g. McPherson *et al.*, 2001). Lim and Putnam (2010) found that the number of friends a person has in a congregation explains the link between religious service attendance and life satisfaction. This link could not be explained by considering the number of friends per se, even if the number of friends marginally reduced the effect of service attendance on life satisfaction. When we take the number of friends within the congregation into account, the association between religious service attendance and life satisfaction was reduced to almost zero. The authors concluded that social networks that build on religious faith are distinct from other social networks (Lim and Putnam, 2010). The reason is that social networks that build on religious faith link people with a shared sense of identity, something that would explain the lack of support for the idea of social networks as a mediating factor in previous research, which did not distinguish between religious and secular friendship ties (Ellison *et al.*, 1989; Greeley and Hout, 2006). Hence, the proposed mechanism is that people tend to find social network ties more meaningful when they link to someone with a shared social identity (Ellison and George, 1994; Underwood, 2000; Lim and Putnam, 2010).

However, churches and other religious organizations are not the only foci that can potentially generate strong ties between individuals who share mutual identities. Such contacts are also likely to be generated in nonreligious voluntary organizations, and there are strong reasons to believe that in countries with low levels of aggregate religiosity such organizations are even more important than religious ones. It is not likely that the strong connection between religion and life satisfaction mediated through congregational social networks that Lim and Putnam (2010) find in the United States can be generalized to societies such as Sweden, where the overall level of organization is very high but largely nonreligious (Rothstein, 2001; Putnam and Campbell, 2010).⁵

Research on the relationship between religion and happiness among immigrants is fairly limited. Still, there are a few studies on this topic, and they show a positive association between religious participation and well-being among immigrants (Harker, 2001; Ellison *et al.*, 2009; Connor, 2012). Most of these studies analyse the United States, although Connor (2012) studied the relationship between religion and well-being of

immigrants in Australia, Western Europe, and the United States. His results indicate that immigrants from different regions of origin experience different levels of well-being. Religious involvement has a small positive effect on well-being, at least on immigrants in the United States and Western Europe, and immigrants' involvement in non-religious group activities seems to have a smaller effect on well-being than religious involvement. For the United States, only religious involvement has a positive effect on well-being, whereas involvement in non-religious activities show a slight negative association with well-being. These findings are consistent with Lim and Putnam's claim that in the United States, congregations stand out as the most dominant and widespread organizational foci. However, for immigrants in Western Europe, involvement in both religious and non-religious activities affects well-being positively (Connor, 2012).

Data and Measurement

We use data from the Swedish survey *Social Capital and Labor Market Integration* (SC09), in which a telephone interview was conducted between October and December 2009 on a sample of 19-year-olds ($n = 5,695$). The SC09 sample was based on three different cohorts of Swedes born in 1990: (i) all individuals with at least one parent born in Iran; (ii) 50 per cent of all individuals with at least one parent born in (former) Yugoslavia; and (iii) a simple random sample of 2,500 individuals with two Swedish-born parents. In total, 2,942 interviews were completed, resulting in a response rate of 51.6 per cent. The largest share of the non-response was the *not-at-home* non-response with 37.6 per cent. The refusal rate was 8.1 per cent.⁶ Iran and the former Yugoslavia are both major sources of immigration to Sweden. Immigration from Iran consists primarily of political refugees and other humanitarian migrants. Yugoslavia, on the other hand, was the source of extensive labour immigration in the 1960s, and more recently also of refugees fleeing the Yugoslav wars. Since the sample was selected based on the parents' country of origin, the sample includes first- and second-generation immigrants from these regions of origin. Descriptive statistics are summarized in Table 1, where we see that 47 per cent of the respondents' have both parents born in Sweden, 31.5 per cent have at least one parent born in former Yugoslavia, and 21.5 per cent have at least one parent born in Iran.

About 20 per cent of respondents with at least one parent born abroad also have one parent born in Sweden. Furthermore, 15.2 per cent of those with at least one parent born in Iran were themselves born in Iran (and

25.8 per cent were born in Iran or Iraq), whereas as many as 66.3 per cent of the respondents with at least one parent born in Yugoslavia were themselves born in former Yugoslavia. This reflects the fact that the wave of refugees from Iran started during the late 1970s and early 1980s, whereas the refugees from former Yugoslavia came to Sweden during the early to mid-1990s. Most of the respondents with immigrant backgrounds have parents who emigrated from their countries of origin because of conflicts that were largely religious in character: the revolution in Iran, in 1979, which resulted in Ayatollah Khomeini's Islamist regime and the civil war in Yugoslavia in the early 1990s, in which religious affiliation was very much associated with ethnicity.

Dependent Variable

We measure happiness with the statement *In general I am happy*, to which respondents could reply on a five-level Likert-scale ('strongly disagree' to 'strongly agree') that we treat as an ordinal scale variable. As seen in Table 1, the mean score is 4.36, but the standard deviation of 0.83 is non-negligible and there is sufficient variance along the whole 5-point scale. The average happiness score is high, as one would expect in a sample of Swedes, but there are differences across the three groups (not shown in Table 1); respondents with a Yugoslav background tend to be happiest (4.43), followed by respondents with a solely Swedish background (4.39), and Iranian background (4.19).⁷

Independent Variables

Respondents are first asked whether they are religious. For respondents who say that they are at least somewhat religious, religious belonging is coded in three broad categories: Christians, Muslims, and Others. To these we add the group 'Not religious', consisting of those claiming not to be religious at all. The group 'Others' includes religious groups that in the sample are too small to constitute categories of their own (e.g. Jews and Buddhists) as well as respondents claiming to be religious but who do not belong to any particular religious tradition. This group contains about 3 per cent of the respondents. The largest group—53 per cent—consists of those who are not religious (i.e. they do not belong to any religious tradition and they see themselves as atheists or 'not at all religious'), followed by Christians (27 per cent) and Muslims (16 per cent). It is not shown in Table 1, but among respondents with two Swedish-born parents, 36 per cent are Christian and 62 per cent are atheists or not at all religious. The Swedes and the Iranians are equally non-religious.

Table 1 Descriptive statistics

Variable	<i>n</i>	Median	Mean	SD	Min.	Max.
Happiness						
Self-reported happiness	2,870	5	4.36	0.83	1	5
Religion and identity						
Muslim	2,942	0	0.16	0.37	0	1
Christian	2,942	0	0.27	0.44	0	1
Other	2,942	0	0.06	0.23	0	1
Service attendance	2,874	1	1.55	0.86	1	6
Religion important for identity	2,883	0	0.13	0.34	0	1
Affinity to Swedish culture	2,878	0	0.46	0.50	0	1
Immigrant background						
At least one parent born in Yugoslavia	2,942	0	0.32	0.47	0	1
At least one parent born in Iran	2,942	0	0.22	0.41	0	1
Immigrant	2,942	0	0.26	0.44	0	1
Friendship						
No. of close friends (max. 5)	2,942	5	4.07	1.19	0	5
No. of close friends religious	2,942	0	0.58	1.02	0	5
No. of close friends organizational members	2,942	1	1.19	1.32	0	5
Ln (No. of daily contacts)	2,873	3.21	3.33	1.00	0	6.21
Control variables						
Sex (woman = 1)	2,942	0	0.49	0.50	0	1
Ln (Family income, hundreds SEK)	2,928	8.38	8.26	0.64	3.69	12.04
Mark in ninth form	2,855	210	207.85	64.72	0	320
Parents education						
Not finished high school	2,846	0	0.06	0.24	0	1
Finished high school	2,846	1	0.54	0.50	0	1
At least 2 years of post high school schooling	2,846	0	0.38	0.48	0	1
PhD	2,846	0	0.02	0.15	0	1

Among those with at least one parent born in Iran, 61 per cent consider themselves to be non-religious, 21 per cent as Muslims, 9 per cent as Christians, and just short of 8 per cent belong to the 'Others' group. Those with at least one parent born in Yugoslavia constitute the most religious group, with only 35 per cent identifying as non-religious. In this group, we also find the highest percentage of Muslims (38 per cent), whereas 26 per cent are Christian.

Immigration background is indicated by two variables, one indicating the parents' country of birth according to the sampling strategy (Yugoslav and Iranian), and one indicating whether the respondent is herself an immigrant to Sweden (27 per cent of the sample).

Religious activity is indicated by religious service attendance, that is, how often respondents participate in religious services at a church, mosque, synagogue, or other house of worship. Previous studies have found service attendance to be associated with happiness and other forms of subjective well-being (Witter *et al.*, 1985; Cannella Jr and Lubatkin, 1993; Lim and Putnam, 2010). In the survey, respondents could report the frequencies

'each day', 'more than once a week', 'about once a week', 'more than once a month', 'more than once a month', 'more seldom', or 'never'. We code the answer into a variable measuring weekly religious activity, ranging from 1 (never) to 6 (every day).⁸

Respondents were also asked a number of questions about their self-identity, and we include an indicator variable for religious identity that takes on the value 1 if the respondent ranked religion as the most important basis for identity, and 0 otherwise. We also measure affinity with Swedish culture with the question 'to what extent do you feel an affinity with Swedish culture and Swedish traditions?' where answers were given on a 5-level Likert scale, ranging from 'no affinity' (1) to 'a great deal of affinity' (5). We coded answers 4 and 5 as indicating strong affinity with Swedish culture. About 47 per cent of the respondents feel a strong affinity with Swedish culture, and between-group differences are surprisingly small and indicative of rather weak nationalist sentiments among Swedes.⁹

The respondents' social network is measured by questions on friendship. The respondents were asked to

name up to five close friends, and the number of friends is used as a measure of the presence of a social network of close friends. As seen in Table 1, the number of friends ranges from 0 to 5, with a mean of 4.1 and a standard deviation of 1.2. To gauge religious networks, we used information on whether the respondents regard their close friends as religious or not. For each alter, the respondent was asked to what extent alter is religious. The answer is given on a four-point scale, recoded as non-religious ('not at all religious' and 'not especially religious') and religious ('somewhat religious' and 'very religious'). On average, 0.58 out of 4.1 friends are religious ($SD = 1.02$). We also asked whether the respondents are or have been members of the same organization as the named alters.¹⁰ The average respondent was or had been a member of the same organization with 1.19 of his or her friends, and there is considerable variation here ($SD = 1.32$). Finally, we include an indicator of the number of persons whom the respondent is 'in touch with, on average, on an ordinary day'. The raw score is 48.5 people per day ($SD = 70.7$). In the analyses, we use the log of the number of daily contacts ($Mean = 3.33$, $SD = 1$).

In addition to the variables of main interests, we include control variables measuring sex, (logged) disposable family income,¹¹ parents' education, and ninth-grade marks. These variables are included since they may interfere with the expected association between religion and happiness (Morris, 1991). Personal income refers to salaries and additional work-related incomes. Parents' education is measured as the level of education for the most educated parent, coded as a four dummy variables (not finished high school; finished high school ['gymnasium']; at least 2 years of post-high school schooling; PhD).

Assessing Cohort Limitations

Previous research has established a U-bend relationship between age and happiness, such that people in middle-age are the least happy (e.g. Blanchflower and Oswald, 2008; Stone *et al.*, 2010; but see Wolbring *et al.*, 2013). The social factors that may explain this relationship include employment, income, health, and social relationships. Because these factors vary across the life course both in absolute and relative terms, happiness levels can also vary across age groups. Huge variations would be a clear indication that mechanisms and factors at work on one age group might not impact happiness the same way in another age group. Furthermore, some previous studies report that older people attend religious activities more frequently than younger (Iannaccone, 1992, 1998). Other studies, however, have not been able

to establish such an association (Long and Settle, 1977). In his review of the literature, Moberg (1972) concluded that older people showed a decline in religious activities outside the home but an increase in religious feelings. The associations between age and religious activities found in longitudinal studies (Blazer and Palmore, 1976) seem to be due to the fact that people who seldom attend religious services are more prone to drop out of longitudinal studies (Markides *et al.*, 1987). Some studies find a U-shaped association between church attendance and age, such that the young and the old were more likely to attend religious services (Sullivan, 1985; Sawkins *et al.*, 1997). Still other studies found no association at all (Cameron, 1999).

Since we study a cohort of 19-year-olds while still aiming to make more general claims for the adult population as a whole, we use the most recent World Value Survey (WVS) data for Sweden, collected in 2006, in order to roughly assess the impact of those age differences in happiness and religious activity found in previous research. Although the WVS does not contain the rich relational information that we have access to in SC09, it has the advantage of having been used repeatedly in studies of both happiness and religion. The WVS sample does not allow for analysis of single age cohorts, so we split the WVS sample ($n = 1,003$) into quartiles to assess differences between four age groups (18–33, 34–47, 48–60, 61–85). Here we briefly present our findings, referring the reader to the Supplementary material for specific details on items results.

The mean happiness score is 1.62, and we find that the age group 48–60 is somewhat less happy than the other groups (1.68). The two youngest age groups do not differ (both with a score of approximately 1.6), whereas the oldest group (61–85) is the happiest (1.58), thus suggesting a U-bend relationship. However, the difference is not significant and is driven by a disproportionately larger share of 'quite happy' answers in the 48–60 group. For service attendance, the three youngest groups have a mean score of roughly 6.1, whereas the oldest groups (61–85) have a mean of 5.4, indicating a significantly higher tendency to attend services among the older population. To perceive oneself as a religious person is clearly much less common among the youngest (22 per cent) than among the oldest (48 per cent). This tendency is linear and significant both substantially and statistically.

However, more important is the fact that the mechanisms linking religion and happiness may differ across age groups, i.e. the correlation between religiousness and happiness might be contingent on age. We use the WVS to assess also this challenge. Using the same age quartiles and controlling for immigration background, the analysis

(see Supplementary material) reveals that being religious and attending church services does not impact happiness for age groups 18–33, 34–47, and 48–60. However, for the oldest quartile of the sample, age group 61–85, service attendance substantially and significantly affects happiness, whereas there is still no effect from being a religious person. Keeping in mind that younger Swedes seem less prone to attend religious services and to consider themselves religious, the WVS analysis suggests that results for our cohort could be extended to a significant share of the adult population,¹² whereas there is reason to believe that other mechanisms are at play in the oldest quartile of the adult population.

Results

We estimated a range of models to test the association between religion, religious activity, and happiness. In this section, we present a selection of these results, focusing on the weak relationship between religion and happiness and the strong relationship between social networks and happiness. The results are robust across a range of specifications, including alternative binary coding of the dependent variable and different constellations of independent variables. In the following, we discuss only results from Ordinal Logistic Regression models with robust standard errors, as estimated with Stata 12.1 (StataCorp, 2011).

The first model (Model 1) gives the binary relationship between happiness and the major religious faiths. Both Christians and Muslims report a significantly higher degree of happiness than non-religious individuals. However, the link between religiousness and happiness is not particularly robust. In the full model (Model 6), the parameter estimates are no longer statistically significant, and for Christians the size is considerably smaller. In fact, even when we factor in parents' country of origin, the association between religious affiliation and happiness becomes statistically non-significant (Model 2). However, stating religious affiliation is a relatively weak indicator of how important religion is in a person's life. The two variables 'Service attendance' and 'Religious identity' are better indicators of the importance of religion. As is evident from Models 3 and 4, service attendance has a significant positive impact on happiness (that disappears when factoring in social networks), whereas religious identity has no significant effect on happiness. It is worth emphasizing that these weak relationships are not driven by multicollinearity between religious affiliation and religious activity. These null results are in line with Eichhorn (2011). In a society like Sweden, religion plays a very minor role. So what makes a Swede happy?

The full models (Models 5 and 6) are an indication that happiness has a strong social dimension. The higher the number of daily social contacts an individual has, the greater her happiness. However, to have close friends per se does not contribute to perceived happiness. It turns out that close friends are important when they are organized around a shared social focus, even if that focus is not shared religious faith. The number of close friends that the respondents perceive as being religious has no impact on happiness. As it turns out, the interaction between religious friends and religious identity is also non-significant (data not shown). Thus, the results run counter to the assumption that religious persons are happier when surrounded by a circle of religious friends. Instead, we find a strong and robust positive association between happiness and the number of friends with whom one shares organizational affiliation. Religious and non-religious respondents alike are significantly happier when they have friends belonging to the same organizations and clubs as themselves. These results support the argument that one's friends have a stronger impact on happiness if these are friends with whom one shares a sense of social identity and belonging. However, this shared sense of social identity does not have to be religiously grounded.

Separate analyses of the three groups confirm the results reported above with one particularly interesting exception. The most notable difference between the three groups relates to the impact of having friends with a shared organizational affiliation. Figure 1 is a striking illustration of this finding, showing the predicted probabilities for happiness given the number of friends with whom the respondent shares organizational membership. These plots are based on Model 6, estimated separately for each group with all other variables held constant at their mean.

As the number of friends with a shared organizational membership increases so does the probability that the respondent will declare that she or he is happy. The difference between 0 and 5 co-organizational friends amounts to an increase in the probability of happiness of slightly more than 20 percentage points. Incidentally, this is the same figure as Lim and Putnam (2010) reported for congregational friendship networks. So there are good reasons to believe that congregational friendship networks and co-organizational friendship networks are functionally equivalent, but that the former affect happiness (and other forms of subjective well-being) only in countries with high aggregate levels of religiosity, in which congregations fulfill important personal and social needs. As visualized in Figure 1, there is one very important caveat to this finding: the strong linear

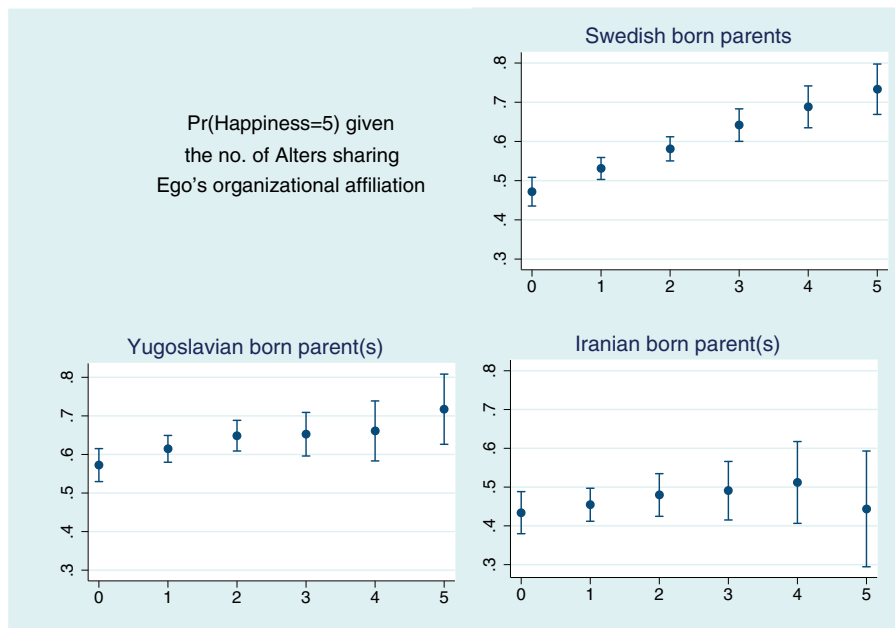


Figure 1 Relationship between being very happy and number for friends sharing organizational membership conditional on parents country of birth. (5 per cent confidence intervals)

relationship holds true only for respondents with both parents born in Sweden.

Discussion

This article confirms results reported in Eichhorn (2011): in a country with a low level of aggregate religiosity such as Sweden, religion is not especially important for happiness.

The few significant positive associations we found are not robust and disappeared when we controlled for parents' country of origin. For respondents with two parents born in Sweden, happiness is unaffected by religion, whether measured as religious affiliation or religious service attendance.

Unlike Lim and Putnam (2010), we failed to find an association between the prevalence of co-religious friends and happiness. These results did not differ significantly between the native Swedes and the two immigrant groups (Iranians and Yugoslavs) in our sample. Rather, we found that friendship ties are more positively associated with happiness if they are embedded in co-organizational memberships. These co-organizational memberships involve both religious and non-religious organizations. However, in Sweden, the stock of memberships in religious organizations is just a small fraction of the total organizational involvement (Rothstein,

2001). Hence, our findings strongly indicate that it is membership in non-religious, social organizations and clubs that drive the positive effect between social involvement and happiness in a country like Sweden with a low aggregate level of religiosity, and not religious networks. Thus, our study provides an important addition to previous research by showing that mechanisms linking religion and happiness vary across contexts, and that Eichhorn's (2011) distinction between countries with high and low levels of aggregate levels of religiosity may be relevant also in this respect.

However, the finding that friendship ties are more positively associated with happiness if they are embedded in co-organizational memberships is context dependent. We only found a positive association for respondents whose parents were born in Sweden, and not for respondents of Iranian or Yugoslavian background. We can only speculate why this is the case. Sweden has a tradition of a very high involvement in nonreligious voluntary organizations (Rothstein, 2001), and one may assume that individuals with two Swedish-born parents are socialized into valuing organizational life more highly compared to individuals who are more influenced by non-Swedish traditions. Another potential explanation is that kinship plays a more important role as a social foci for respondents with an immigrant background, fulfilling a function equivalent to civil organizations (and

Table 2 Ordered logistic regression of happiness on religion and social networks

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Muslim	0.248* (0.109)	0.197 (0.131)	0.138 (0.134)	0.182 (0.137)	0.180 (0.141)	0.181 (0.142)
Christian	0.244** (0.087)	0.147 (0.090)	0.063 (0.098)	0.055 (0.098)	0.045 (0.100)	0.050 (0.100)
Other	-0.270 (0.201)	-0.162 (0.208)	-0.201 (0.209)	-0.185 (0.209)	-0.171 (0.213)	-0.156 (0.214)
Yugoslav		0.249* (0.118)	0.250* (0.117)	0.230 (0.118)	0.297* (0.121)	0.313** (0.121)
Iranian		-0.402*** (0.107)	-0.387*** (0.107)	-0.405*** (0.107)	-0.374*** (0.109)	-0.317** (0.111)
Immigrant		-0.116 (0.129)	-0.121 (0.129)	-0.092 (0.130)	-0.130 (0.133)	-0.133 (0.134)
Service attendance			0.104* (0.053)	0.110* (0.054)	0.095 (0.056)	0.087 (0.057)
Religious identity				-0.121 (0.122)	-0.088 (0.124)	-0.083 (0.124)
Swedish affinity				0.293*** (0.076)	0.282*** (0.077)	0.271*** (0.078)
(ln) Daily contacts					0.120** (0.039)	0.110** (0.039)
# Friends					0.014 (0.037)	0.013 (0.037)
# Friends org. aff.					0.150*** (0.031)	0.123*** (0.032)
# Friends religious					-0.024 (0.045)	-0.019 (0.045)
Control variables						Yes
(sex, income, parents education, and 9th grade mark)						
Log pseudolikelihood	-2,823.48	-2,807.83	-2,805.78	-2,797.67	-2,777.38	-2,767.40
<i>n</i>	2,704	2,704	2,704	2,704	2,704	2,704

Unstandardized coefficients with standard errors in parenthesis.

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$

religion), of embedding friendship ties in a context of shared identity.

To conclude, we have found that in Sweden there is no positive effect of religion on happiness. This is equally true for respondents with both parents born in Sweden as for individuals with an immigrant background. Hence, the expectation of finding a more positive association between religion and happiness for individuals originating from countries with a high aggregate level of religiosity was not met. In particular, there is no relationship between religious friendship networks and happiness for any of the three groups. However, for the group with two Swedish-born parents, other forms of organized friendship compensate for the lack of congregational networks that Lim and Putnam (2010) identified as providing the positive influence of religion on happiness. Thus, it seems to us that in a society with a low aggregate level of religiosity, religious belonging or service attendance will not improve happiness in any way. If we tie this to Inglehart's (2010) conceptualization, we would say that Sweden provides a demonstration that in modern (low-level religious) society, traditional routes (religion) to happiness do not work, but that some aspects of the modern way of life (participation in nonreligious organizations) does effectively work as a functional equivalent of traditional behaviors and values.

Notes

1 We study happiness empirically as measured by agreement with the survey statement 'In general I am happy'. The research literature on religion that we cite not only uses similar indicators to measure happiness (e.g. Eichhorn, 2012), but also include work on religion and its impact on 'life-satisfaction' (e.g. Lim and Putnam, 2010) and 'well-being' (e.g. Connor, 2012), including 'subjective well-being' and 'psychological well-being'. It can be argued that subjective well-being encompasses both life satisfaction and happiness, and that the former is a cognitive and more inert emotion, whereas the latter is an affective and more current emotion (see e.g. Gamble and Gärling, 2012). Thus, there are important conceptual hierarchies and distinctions to consider. According to the most recent World Value Survey data, the correlation between happiness and life satisfaction lies consistently around 0.5 in the developed world. In their meta-analysis of religion and subjective well-being, Witter *et al.* (1985) found

that different measures (including happiness, life satisfaction, well-being) produced consistent results with no impact on effect size. We give the different indicators used in previous studies equal weight in our background discussion, being fully aware that this is an oversimplification.

- 2 Eichhorn (2011) analysed pooled World Value Survey data (2000–2004 and 2005–2007 waves) from 43 countries (Europe plus Australia, Canada, New Zealand, and USA; $n = 74,703$). For country sample sizes, etc., see www.worldvaluessurvey.org. Life satisfaction is measured on an ordinal scale (1 to 10). The data are analysed with a hierarchical linear model, with individuals nested within countries, implemented in HLM6.
- 3 In 2009, 14 per cent of the Swedish population was born abroad and 11 per cent of those born in Sweden had at least one parent who was born outside Sweden (Statistics Sweden, 2010). Sweden is the third largest recipient of asylum seekers in the EU (Swedish Migration Board, 2010).
- 4 Lin and Putnam (2010) analyse data from the Faith Matters Study, a 2006 national US random sample of people age 18 years and above targeting religious issues. The survey had a panel structure, with a second wave carried out in 2007. The response rate was 53 per cent ($n = 3,108$) and 61.6 per cent in the panel ($n = 1,915$). For further details on the survey, and results, see Putnam and Campbell (2010). Life satisfaction was measured on an ordinal scale (1 to 10). Lim and Putnam (2010) primarily used the panel for robustness check, and analyzed 2006 data by means of logistic regression, running STATA11.
- 5 In comparison, membership in voluntary organizations in Sweden is at an internationally high level. In 1992, 92 per cent of Swedish adults belonged to a voluntary organization, and 52 per cent considered themselves active members (Rothstein, 2001). Although this share had decreased somewhat by the year of 2000, a comparison of memberships in voluntary organizations shows that Sweden is ranked second out of 35 countries (Baer, 2007). At the same time, however, only 1.8 per cent of the population were active members of the (Lutheran) State Church of Sweden, and the corresponding figure for Christian free churches was less than 1 per cent (Rothstein, 2001). Unfortunately, there are no

reliable figures for active membership in Muslim organizations.

- 6 The non-response analysis carried out by Statistics Sweden suggests that there is a slight under-representation of 19-year-olds with low grades and poorly educated parents (Löfgren, 2010). All interviews were conducted in Swedish. Language did not cause problems: interviewers reported very low Swedish proficiency in only 0.1 per cent of the interviews.
- 7 A one-sample *t*-test reveals that the mean happiness score for respondents with at least one Yugoslavian or Iranian born parent differs significantly from the grand mean. We do not believe this is an indication of cultural differences in their parents' countries of origin (i.e. based on our own calculations on 2005 World Value Survey data, Slovenians and Serbs are significantly less happy than Swedes).
- 8 Service attendance differs between Christian and Muslim respondents ($\chi^2[5]=61.51$) such that a larger share of Muslims answer that they never participate in religious service. There are no significant differences in the tail of the distribution, i.e. among those who take part in religious services once a week or more often. The difference does not affect our results.
- 9 A total of 46 per cent of respondents with at least one Yugoslavian born parent have a strong affinity with Swedish culture, compared with 47 per cent among respondents with two Swedish born parents, and 48 per cent among respondents with at least one Iranian born parent.
- 10 These co-organizational memberships involve both religious and non-religious organizations. In Sweden, however, membership in religious organizations is just a small fraction of the total organizational involvement (Rothstein, 2001).
- 11 We have tested for different income measures and not found any that confounds the effect of our core independent variables (personal income has no significant effect on happiness, while disposable income has a significant positive effect on happiness).
- 12 It should be noted that we cannot disentangle age effects and cohort effects, since we use cross-sectional data. Moreover, it should be noted that the comparison between our 19-year-old interviewees and the group of 18- to 33-year-olds in the World

Value Survey is far from perfect. However, constructing narrower age groups in the WVS data would leave us with too few observations.

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Supplementary Data

Supplementary data are available at *ESR* online.

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