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ETHNIC AND RACIAL STUDIES
https://doi.org/10.1080/01419870.2018.1519587

Routledge
Taylor & Francis Group

The happiness of European Muslims post-9/11

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ABSTRACT
We examine the happiness trajectory of Muslims living in European countries following the terrorist attacks on 11 September 2001, using six rounds of the European Social Survey (ESS). We find a decline, and then a subsequent return to average happiness among the general Muslim migrant population relative to others after 9/11. However, a small subgroup of Muslims, young male Muslim immigrants from Middle East, report a persistent low level of subjective well-being. This may be seen as a potential source of a threat on integration of Muslims and hence social cohesion and peace in European countries. Our findings persist after controlling for perceived discrimination, migrant status, and demographic and socioeconomic characteristics, as well as fixed effects for year and country of residence.

ARTICLE HISTORY Received 23 March 2018; Accepted 30 July 2018

KEYWORDS Happiness; life satisfaction; immigrants; religion; Muslims; Europe

Introduction

The terrorist attracts on 11 September 2001 increased social tensions between Muslims and Non-Muslim communities in European countries where Muslims are a significant minority group, with security agencies becoming particularly focused on Muslims. An important descriptive question is what happened to the well-being of Muslims in Europe relative to others. In particular, we want to know how the happiness and life satisfaction of Muslim populations developed immediately after 9/11 and in the ensuing 10 years, relative to the well-being of the dominant religious groups in Europe, Protestants and Catholics. Understanding the development of their well-being is a first step to assess how perceived treat and hostility have reshaped integration prospects of Muslims. A persistent low level of well-being can be potentially a source of social tensions between Muslims and established communities and can

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affect the socioeconomic and cultural integration of Muslims in European societies.

Immigrants from developing countries are typically in a disadvantaged position in Europe, with less productive skills and education, and facing a large cultural distance to the native European population (Zorlu 2016; Rooth 2010). The Muslim migrant minorities in many European countries have particularly poor socio-economic outcomes, and the association of their religion with Islamic fundamentalism can feed negative societal attitudes. For example, in the United States, Padela and Heisler (2010) demonstrated that post-9/11, a significant percentage of Arab-Americans experienced racially motivated abuse and had lower levels of happiness and health than the general populace. Our study adds information on this phenomenon for 13 European countries.

Previous studies suggest amplified hostility toward Muslims and their appearance in both the United States and Europe after 9/11 (Allen and Nielsen 2002; Sander 2006; Kaushal, Kaestner, and Reimers 2007; Hanes and Machin 2014; Rytter and Pedersen 2014; Lynch and Veale 2015), where Muslims have, for instance, faced stricter surveillance and control (Harcourt 2006). What this has meant for the levels of well-being amongst Muslim migrants and for subgroups within the large Muslim communities is not well documented, although we have prior information for particular countries and subgroups. Romanov, Zussman, and Zussman (2012) found that Arab residents in Israel experienced substantial declines in happiness after terrorist attacks; and Hole and Ratcliffe (2015) showed that Muslim teenagers in Britain experienced a substantial decline in well-being following the London bombings in 2005.

It is likely that suspicions for association with terrorism would often base on appearance, rather than a verified identification of Muslims as such, so that young men with an typical appearance of Middle East and North Africa may be recognized as a profile of a potential terrorist. Therefore, we distinguish an association effect based on regional appearance from effects based on religion by comparing well-being of Muslims and Non-Muslims from the Middle East and North Africa as well as Muslims from outside this region.

Existing studies on the impact of 9/11 have looked at labour market outcomes (Goel 2010; Rabby and Rodgers 2011), the housing market (Ratcliffe and von Hinke Kessler Scholder 2015) and stress-related health disorders (Ohlsson and Shah 2011). These studies reveal that the effects are not the same in different regions, nor even over time. Studies in the United States indicate a significant decline in wages of Muslims and Arabs, but with little change to their overall employment (Kaushal, Kaestner, and Reimers 2007). Rabby and Rodgers (2010) similarly report a decline in both employment and wages of Arabs in the US, particularly for Arab men under the age of 25, yet these changes were found to be temporary. European studies, on the other hand, have found no significant employment effect for Muslims (Aslund and Rooth 2005; Braakmann 2010). These

diverse results leaves the question of the effects of 9/11 in Europe on general well-being open.

The general literature on well-being has found that socio-economic factors, such as income, education and health, are powerful individual determinants of well-being (see e.g. Shields and Price 2005; Clark et al. 2005; Frey, Gallus, and Steiner 2014; Powdthavee and Stutzer 2014). Consequently, demographic groups with relatively low income and education, or relatively poor health, have a lower starting level of well-being than average, making it important to condition the effects of religion on those determinants. Still, some ethnic minorities have been shown to have a relatively low level of well-being, even after controlling for observed social, economic, and demographic characteristics (Verkuyten 2008; Safi 2010; Bartram 2011; Gokdemir and Dumludag 2012).

We use six waves of the European Social Survey to quantify the subjective well-being of Muslims post 9/11, differentiating by type of home country, type of migrant, and type of destination country. Because we also measure whether individuals perceive discrimination, we can distinguish between effects mediated by perceived discrimination and other factors, with the caveat that within the dataset 9/11 can only be considered an unexpected additional factor, limiting any claims of causality. This paper is the first empirical study assessing the long lasting impact of 9/11 on the subjective well-being of European Muslims.

The paper proceeds by first spelling out the potential causal mechanisms behind dynamics in the happiness of Muslims in Europe, after which we explain our data, followed by results and conclusions.

Mechanisms

In the aftermath of the 9/11 attacks, there was an anti-Muslim backlash in many Western countries, particularly after the discovery of the attackers' European connections. Previous authors have argued this affected Muslims in Europe via increased prejudice, discrimination, and violence (Allen and Nielsen 2002; Sander 2006; Kaushal, Kaestner, and Reimers 2007). According to Allen and Nielsen (2002), and Human Rights Watch (2002), Muslims experienced greater stigmatisation and discrimination in many European countries and in the USA after the attacks. In particular, young Muslims became a target on account of their physical similarities to the terrorists who executed the attacks. Accordingly, it seems likely that the well-being of young Muslims will be affected more than that of older Muslims, an empirical regularity we examine in the data.

Discrimination and association with terrorism are not confined to individuals who actually are Muslims: appearance and nationality too can be sources of negative associations. We thus look for happiness effects for

people from the Middle East and North Africa, where most of the population are Muslim, and also where all of the 9/11 terrorists came from. Yet that region also houses large Christian and other minorities (see for example Akram and Johnson 2001), which allows us to distinguish an association effect based on regional appearance from effects based on religion.

The European countries which host Muslim immigrants differ in minority policies and institutions, which have led to different types of migrant communities. Germany and Northern European countries primarily host Muslims who immigrated as guest workers from Turkey and North Africa. On the other hand, Muslims in France and the UK are mostly from former colonies; those in France are primarily North African, while those in the UK are Indian, Pakistani or Bengali. Because negative attitudes might depend on these differences, we look at inter-country differences in well-being, and subsequently focus on the pattern of well-being over time after September 11 in selected host countries.

Considering the overwhelming global impact of 9/11, we expect that the subjective well-being of Muslims will follow one of three possible patterns. First, it could continue to decline indefinitely after the attacks, as 9/11 has been followed by a still-escalating international conflict between Islamic fundamentalism and much of the West, such as via more recent attacks in Madrid, London, Amsterdam, Paris, Brussels, and elsewhere. Second, it could remain unchanged after the attacks, if increasingly hostile attitudes and feelings of alienation simply do not affect subjective well-being. Third, it could decline sharply in the immediate aftermath of the attacks, and subsequently begin to recover as migrant communities get used to the changed attitudes towards them. Such a recovery could be also driven by resilient responses of Muslims to rising hostilities. Gimpel, Tam, and Wu (2007) show that Arab Americans have gained more voting power in terms of a rise in voter registration as a response to the policy aftermath of 9/11. In case of an prompt response, subjective well-being of Muslims could remain unchanged over time.

The relative development pattern of the subjective well-being of Muslims is hypothesized to be driven by shifts in attitudes of the population toward Muslims and discrimination after 9/11. Simultaneously, this pattern can be affected by the way in which Muslims respond to negative attitudes and treatments. It is assumed that any gap in the subjective well-being of Muslims and Christians (Catholic or Protestant) is closely related to differences in both structural determinants of well-being such as socioeconomic characteristics and factors linked to the minority position of Muslims in European societies, such as discrimination and the degree of inclusiveness. Negative attitudes toward Muslims are likely in a form of discrimination and exclusion. If Muslims are receptive for these negative attitudes, their subjective well-being will be negatively affected. Relevantly, several papers suggest that

subjective well-being is negatively related to perceived discrimination; a correlation that varies across minority groups (Safi 2010; Kirmanoglu and Baslevent 2014; Kööts-Ausmees and Realo 2016; Verkuyten 2008). Safi (2010) shows that the ethnic gap in well-being shrinks (and sometimes disappears) when perceived discrimination is taken into account, implying it is a mediator between cultural attitudes and well-being. The question is to what extent the impact of 9/11 has been through perceived discrimination. In order to assess the mediating role of discrimination more thoroughly, we explore the contribution of perceived discrimination the impact of 9/11 on the well-being of Muslims. Therefore, we use two variables measuring perceived discrimination on the grounds of religion and ethnicity in our analysis.

Another line of the literature suggests that subjective well-being is positively related to institutional structure. Individuals living in societies with stronger social cohesion and inclusive political and economic institutions appear to have a more positive life evaluation compared to individuals in less cohesive and inclusive societies (Spruk and Kešeljević 2016). A cohesive society can mitigate the impact of external shocks (terrorist attacks) on the well-being on its members. However, this is not necessarily an outcome for a Muslim minority if they are seen as a part of violence. If non-Muslims tend to suspect Muslims of terrorism, their social relationships will probably deteriorate, since the literature suggests that the quality of social relationships as perceived social support is a significant predictor of subjective well-being (Siedlecki, Salthouse, Oishi, & Jeswani 2014).

Data

We use six rounds of the European Social Survey (ESS) (2002, 2004, 2006, 2008, 2010, and 2012) that were recently made available by the Norwegian Social Science Data Services. These six rounds are repeated cross-sections, rather than longitudinal. The ESS is a well-established representative survey collected by face-to-face interviews. Sampling and survey methods are given in detail on the website of the ESS http://www.europeansocialsurvey.org/. The surveys were conducted in 29 countries, but some countries participated in a limited number of waves. For the purpose of this study, we selected European countries which were involved in all six rounds and included a reasonable number of Muslim respondents. This left 13 countries in North-West and Southern Europe: Belgium, the Netherlands, Germany, Denmark, Finland, Sweden, France, UK, Ireland, Spain, Portugal, Switzerland, and Norway. The ESS includes about 1900 observations on average per country in each ESS round. This is a very small proportion of population and it is unlikely that the ESS includes many Muslims, due to the relatively small proportion of Muslims in the population. Portugal, Finland and Ireland have a smallest number of Muslims, with 20, 23 and 61 observations respectively. For the

other countries involved, the sample numbers are relatively high, ranging from 138 to 376.

We focus on individuals aged between 15 and 80 years old, and use design and population size weights for all calculations and estimations so as to get representative effects. Two key measures of subjective well-being are used: happiness and life satisfaction, both measured on scales from 1 to 10. The key independent variable is the number of years since 9/11. This variable has more variation than the biennial ESS surveys, as interviews took place at varied times throughout each two-year period. There were insufficient observations before 9/11 to generate before/after comparisons.

Table 1 summarizes the variables used in this study, and shows the average levels of happiness and life satisfaction by sub-group. The differences are roughly as expected: gender differences are negligible; individuals either in partnership or single have a higher level of well-being than those who are separated, divorced or widowed; well-being increases with education, income and health; well-being is lower for unemployed and disabled people; Muslims and individuals who experience discrimination on the basis of religion or ethnicity have a relatively lower level of well-being; migrants who arrived longer ago are a bit happier, although this might be an age-effect rather than anything else; average well-being increases steadily over the ESS waves, after a decline from 2002 to 2004.

Country level differences confirm an established pattern; subjective well-being is higher in Northern Europe and Southern Europe.

Figures in the appendix show the levels of happiness and life satisfaction against the year of the interview, with the happiness levels in between the waves interpolated[1]. Happiness and life satisfaction levels are highest for Protestants, moderate for Catholics, and lowest for Muslims. It decreases initially, and increases after 2006 for Protestants. For Catholics and people without religious affiliation, the level of happiness and life satisfaction is relatively stable. For Muslims, there is a recovery in 2004, another decline in 2006 (perhaps due to the London attacks of 2005), but then recovering to a level parallel with that of Protestants.

Interestingly, there is a pronounced and unexpected difference between happiness and life satisfaction, even though the general pattern and eventual relative levels are the same: happiness goes up and down more, with life satisfaction showing more slow movements. For Muslims, life Satisfaction thus decreases more slowly between 2002 and 206, after which there is a slow recovery.

Figure 1 shows the smoothed lines for income and employment in the same period, where we see large and sustained gaps between the Muslim groups and all other groups, which means that part of the happiness differences might be due to persistent socio-economic differences.

Table 1. Summary statistics.

		Happiness	Life satisfaction	% Sample
Gender	Male	7.46	7.09	47.30
	Female	7.47	7.07	52.62
Marital Status	Married	7.68	7.28	49.09
	Separated	6.58	6.08	1.50
	Divorced	6.85	6.38	8.04
	Widowed	6.79	6.72	8.21
	Unmarried	7.52	6.93	3.39
	Legal Partner	7.43	7.04	29.78
Education	Low	7.24	6.72	18.18
	Lower Secondary	7.49	7.12	18.59
	Upper Secondary	7.42	7.01	35.67
	Tertiary	7.68	7.39	27.56
Local language	No	7.48	7.1	88.54
	Yes	7.42	6.93	11.46
Household income	1st decile	6.61	6.01	5.99
	2nd decile	6.97	6.44	8.44
	3rd decile	7.23	6.74	9.43
	4th decile	7.42	7	9.33
	5th decile (Median)	7.5	7.13	8.72
	6th decile	7.68	7.31	8.62
	7th decile	7.75	7.47	12.02
	8th decile	7.84	7.6	7.22
	9th decile	7.94	7.71	4.56
	10th decile	8.07	7.89	4.30
Socioeconomic Status	Paid work	7.57	7.18	50.42
	In Education	7.84	7.63	8.34
	Unemployed	6.59	5.67	5.29
	Sick or Disabled	6.34	5.57	2.73
	Retired	7.43	7.16	22.02
	Housework	7.51	7.11	9.33
	Other	7.27	7.03	1.88
Country of origin	Native	7.48	7.11	84.26
	Developing	7.27	6.76	3.33
	Developed	7.97	7.75	0.44
	EUext13	7.44	7.09	1.05
	EU15	7.63	7.18	3.06
	2ndG-west	7.42	6.97	3.84
	Muslim Country	7.25	6.74	1.54
	2ndG-Dvlping	7.39	6.87	2.48
Religion	Catholic	7.43	7.06	29.46
	Protest	7.74	7.57	20.74
	Orthodox	7.37	7.03	0.44
	Muslim	7.3	6.76	1.62
	Atheist	7.4	6.98	39.17
	Other	7.46	6.88	8.56
Discrimination (religion)	Not-marked	7.47	7.08	99.00
	Marked	7.15	6.72	1.00
Discrimination (ethnicity)	Not-marked	7.47	7.09	99.47
	Marked	6.65	6.12	0.53
Years Since Migration (Immig)	YSM <5	7.36	6.92	1.68
	YSM 1020	7.36	6.91	1.39
	YSM 1120	7.39	6.97	1.95
	YSM >20	7.44	6.94	4.27
Wave of ESS Survey	2002	7.5	7.02	16.51
	2004	7.37	6.99	16.50
	2006	7.41	7.05	16.61

(*Continued*)

Table 1. Continued.

		Happiness	Life satisfaction	% Sample
	2008	7.46	7.03	17.03
	2010	7.48	7.13	16.33
	2012	7.59	7.25	17.02
Health condition	Very good	8.1	7.79	24.61
	Good	7.61	7.27	44.97
	Fair	7.06	6.6	23.59
	Bad	6.29	5.67	5.77
	Very bad	5.28	4.5	1.07
ESS countries	Belgium	7.72	7.42	6.97
	Netherlands	7.84	7.7	7.47
	Germany	7.3	7.07	11.25
	Denmark	8.33	8.47	6.02
	Finland	8.03	7.98	7.86
	Sweden	7.86	7.85	7.12
	France	7.28	6.42	7.13
	UK	7.53	7.17	8.64
	Ireland	7.53	7.18	8.45
	Spain	7.55	7.2	7.49
	Portugal	6.64	5.79	8.03
	Switzerland	8.06	8.08	6.96
	Norway	7.98	7.86	6.62

Methodology

Our model relates well-being of individual *i* in region *j* at time *t* (*WBijt*), to years since September 2001 (*Disijt*), religious affiliation (*Musijt*), country of origin (*Mij*), and a number of control variables (*xijt*):

$$WB_{ijt} = Dis_{ijt}\delta_1 + Mus_{ijt}\delta_2 + (Dis_{ijt} \times Mus_{ijt})\delta_3 + M_{ij}\delta_4 + D_{ij}\delta_5 + \gamma_t + \tau_j + x_{ijt}\beta + \varepsilon_{ijt}$$

The distance measures the number of years since September 11, 2001, and a dummy variable for Muslim measures the effect on Muslims relative to Protestants, the reference group. The interaction of the Muslim dummy with distance separates any distinct effect for Muslims. The models include fixed effects for the receiving countries, using Belgium as the reference group, and fixed-effects for the year of the survey. There is a wide set of additional controls, including first- and second-generation origin countries, age, gender, marital status, years of education, deciles of household income, socioeconomic status, and health conditions.

We use an OLS estimator with clustered error-terms since alternative estimation methods provide similar results but are less easy to interpret (Ferrer-Carbonell and Frijters 2004). Table 2 shows the results for happiness and Table 3 for life satisfaction, with each showing the same succession of three models. Models 1 (happiness) and 4 (life satisfaction) include the baseline characteristics. Models 2 and 5 include additional household characteristics: marital status, income, education, labour market status and health

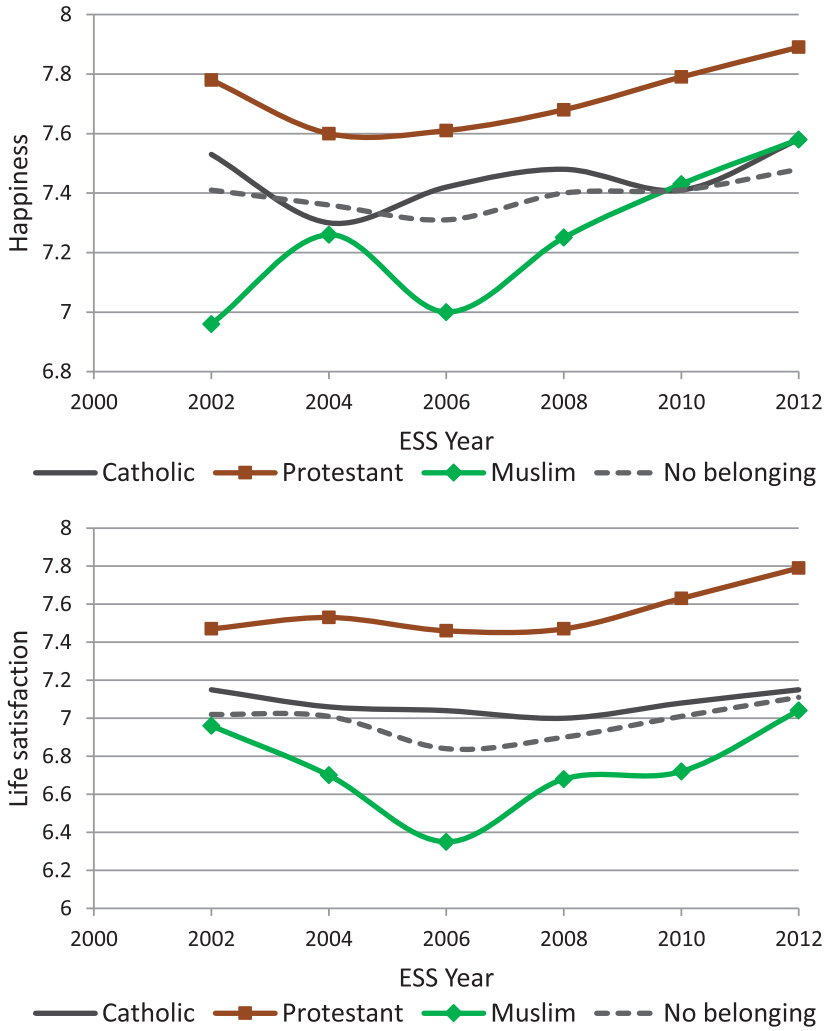


Figure 1. Levels of happiness and life satisfaction following 9/11.

conditions which are strongly associated with well-being (Shields and Price 2005). Finally, Models 3 and 6 include perceived discrimination on the basis of religion and ethnicity.,.

The differences between Tables 2 and 3 indicate stronger effects on happiness by being an immigrant or Muslim, than on life satisfaction. The estimates show that immigrants from Muslim countries, other developing countries, and the EU13 have a lower level of happiness compared to native-born individuals. Given country of origin, Muslims have the lowest level of happiness compared to the reference group, although Catholics, Orthodox and non-religious groups also tend to have a lower level of happiness relative to Protestants.

Table 2. OLS estimates of happiness.

		Model 1	Model 2	Model 3
	Distance from 9/11	−0.011	0.021	0.021
	Muslim * Distance	0.076***	0.086***	0.077***
Religious	Catholic	−0.155***	−0.131***	−0.134***
Affiliation	Orthodox	−0.254*	−0.176	−0.176
	Atheist	−0.201***	−0.077***	−0.078**
	Other	−0.061*	0.080*	0.092**
	Muslim	−0.730***	−0.552***	−0.439***
	Strength of religiosity	0.051***	0.049***	0.051***
Origin countries	OECD high income	−0.258	−0.144	−0.140
	EU15	−0.623	−0.270	−0.269
	EU-13ext	−0.738	−0.370	−0.366
	Developing countries	−0.918*	−0.531*	−0.519
	Muslim Countries	−0.880	−0.448	−0.426
	2ndG-western	−0.111*	−0.179*	−0.164*
	2ndG-non-west	−0.175***	−0.223***	−0.178**
Years since	Ysm <5	0.495	0.069	0.070
migration	Ysm 10–20	0.554	0.156	0.162
	Ysm 11–20	0.635	0.208	0.212
	Ysm >20	0.733	0.327	0.338
Discrimination	(religion)			−0.362***
	(ethnicity)			−0.544***
Controls for	Age, gender	Yes	Yes	Yes
	host countries	Yes	Yes	Yes
	ESS-rounds	Yes	Yes	Yes
	Marital status		Yes	Yes
	Education		Yes	Yes
	Language		Yes	Yes
	Household income		Yes	Yes
	socioeconomic status		Yes	Yes
	health condition		Yes	Yes
	N	148004	146653	146653
	R^2	0.043	0.166	0.167

Notes: Model 1 includes gender, age, age squared, fixed effects for host countries and ESS rounds. Model 2 extends the model by including marital status, years of education and years of education-squared, proficiency in host country language, household income and socioeconomic status. Model 3 also includes health conditions in addition to the regressors of Model 2. The estimates of extended models are available on request. We have also tried non-linear specifications of *Distance* which resulted in very similar results. Robust standard errors are clustered on ESS rounds.

* $p < 0.1$, ** $p < 0.05$,*** $p < 0.01$.

The coefficients for distance indicate no statistically significant correlation with happiness. However, the coefficients for interactions of distance with being Muslim are significant. This means that the happiness of Muslims is initially low a year or two after the attacks, but increases as time elapses. The increasing trend of happiness since September 11, 2001 is much stronger for Muslims than for other groups. The coefficients for distance are statistically significant for life satisfaction. The interaction with being Muslim is positive but not significant (in Table 3), indicating the lack of a distinct trend.

Interestingly, the increasing trend of happiness is a little bit stronger in Model 2 with additional controls for socioeconomic characteristics, compared to the baseline model (Model 1). After controlling for perceived discrimination in Model 3, the trend of happiness for Muslims remains statistically significant

Table 3. OLS estimates of life satisfaction.

		Model 4	Model 5	Model 6
	Distance from 9/11	−0.002	0.033**	0.033**
	Muslim * Distance	0.007	0.021	0.012
Religious	Catholic	−0.110**	−0.073	−0.075*
Affiliation	Orthodox	−0.258	−0.161	−0.161
	Atheist	−0.279***	−0.124**	−0.125**
	Other	−0.113***	0.022	0.033
	Muslim	−0.577*	−0.318	−0.209
	Strength of religiosity	0.055***	0.055***	0.056***
Origin countries	OECD high income	0.170	0.140	0.142
	EU15	−0.383	−0.119	−0.121
	EU-13ext	−0.545*	−0.242	−0.240
	Developing countries	−0.724**	−0.396	−0.384
	Muslim Countries	−0.661*	−0.286	−0.264
	2ndG-western	−0.175***	−0.208***	−0.191***
	2ndG-non-west	−0.220***	−0.221***	−0.175*
Years since	Ysm <5	0.214	−0.085	−0.082
migration	Ysm 10–20	0.265	0.014	0.023
	Ysm 11–20	0.327*	0.035	0.043
	Ysm >20	0.421**	0.130	0.143
Discrimination	(religion)			−0.314***
	(ethnicity)			−0.611***
Controls for	Age, gender	Yes	Yes	Yes
	host countries	Yes	Yes	Yes
	ESS-rounds	Yes	Yes	Yes
	Marital status		Yes	Yes
	Education		Yes	Yes
	Language		Yes	Yes
	Household income		Yes	Yes
	Socioeconomic status		Yes	Yes
	Health condition		Yes	Yes
	N	147968	146621	146621
	R^2	0.078	0.204	0.205

Notes: Model 1 includes gender, age, age squared, fixed effects for host countries and ESS rounds. Model 2 extends the model by including marital status, years of education and years of education-squared, proficiency in host country language, household income and socioeconomic status. Model 3 also includes health conditions in addition to the regressors of Model 2. The estimates of extended models are available on request. We have also tried non-linear specifications of *Distance* which resulted in very similar results. Robust standard errors are clustered on ESS rounds.

* $p < .1$, ** $p < .05$,*** $p < .01$.

and return to the magnitude in Model 1. However, the gap in happiness between Muslims and Protestants declines from 0.552 to 0.439. These results suggest that perceived discrimination has little effect on the increasing trend of happiness of Muslims which is potentially a recovery after an initial decline. The gap is however not entirely set off by discrimination.

Happiness and life satisfaction first decrease with age, but begin to increase after 45 years of age. Well-being in immigrants from high income OECD countries and EU15 countries does not differ from that of the native population, while immigrants from developing countries have the lowest well-being. Immigrants from Muslim and extended EU countries have a significantly lower level of happiness, but any difference in life satisfaction is statistically insignificant. Duration of residence appears to have little relevance to

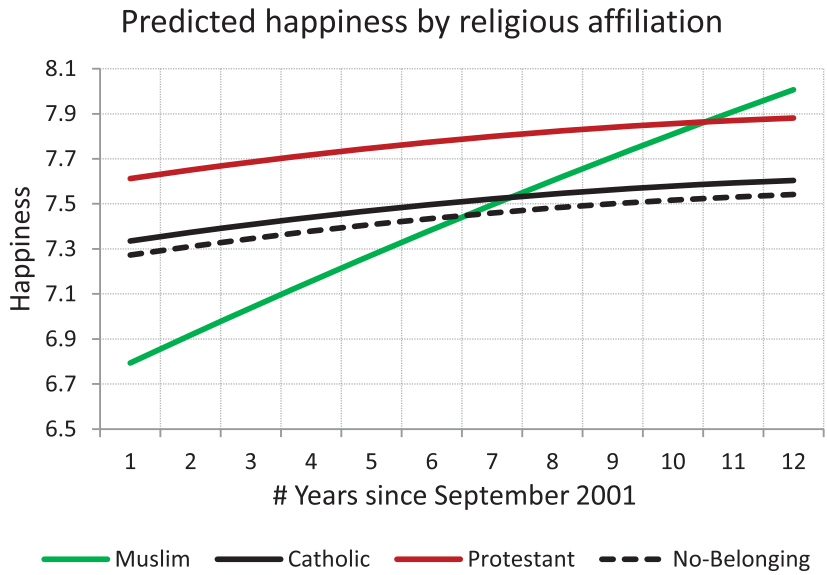


Figure 2. Predicted level of happiness over the post-September 11 period.

well-being; the coefficients are positive and increase with longer duration of residence (years since migration, 'ysm') but these coefficients are not significant. Second-generation immigrants from developing countries also have a significantly lower well-being than the native population. The same holds for second-generation immigrants from developed countries, although the effect is less pronounced.

Figure 2 plots the predictions of happiness from the most extended model, with a quadratic specification of Distance (Model 3) for the main religious groups, thus controlling for a large array of variables. This Figure indicates that Muslims experience a much stronger increase in happiness compared to other groups which show a very slight and steady increase. Despite the non-linear specification for distance, the lines are almost straight which underlines that linearity is a good approximation. The happiness of the Muslim population appears to catch up with that of the Protestants, indicating that the difference in happiness levels found in Figure 1 and Table 1 is attributable to poorer socio-economic conditions and the proximity to 9/11 for large parts of the sample period. However, it is worth noting that the confidence intervals at either end of the duration of the sample are large.

Sources of effects on Muslims

The general pattern shown above might differ by sub-populations or contextual factors. To test this we looked at national and regional contexts by

including particular groups of additional variables in turn. The full specification of all additional variables are included in the appendix.

Young Muslims

Young Muslims of fighting age (between 15 and 30), in particular young Muslim males, are more likely to be perceived as potential supporters of Islamic Jihad than older Muslims; they may therefore perceive greater tension between the Muslim community and the host society. To test this, we add dummies for three age categories (15–20, 21–25, and 26–30 years of age) and interact them with Muslim religiosity. The 21–25 age category is that of prime fighting age, and thus where we expect to see the greatest effects of 9/11.

Table 4 shows the results. The coefficients of the interaction term between Distance and Muslim are similar to the earlier models: it is significant and positive for happiness, and insignificant for life satisfaction. The interaction terms between age categories and being Muslim indicate that well-being differs among age groups: Muslims aged 15–20 have a significantly higher level of happiness and life satisfaction than their non-Muslim peers, while Muslims aged 21–25 have significantly lower happiness levels. The coefficients for

Table 4. The impact of 9/11 on well-being of young Muslims.

		Happiness Model 1	Life satisfaction Model 1
	Distance	0.022	0.033**
Interactions	Muslim*Distance	0.065***	0.012
	Muslim*Age15–20	0.237**	0.279**
	Muslim*Age21–25	−0.756*	−0.532
	Muslim*Age26–30	−0.005	0.136
	Muslim*Age21–25*Distance	0.125*	0.051
	Muslim*Male	−0.175	−0.246
	Muslim*Male*Age21–25*Distance	−0.039	−0.072
Discrimination	(religion)	−0.367***	−0.323***
	(ethnicity)	−0.528***	−0.589***
Main effects	Age	−0.044***	−0.056***
	Age-sq	0.000***	0.001***
	age20	0.157**	0.192**
	age21–25	0.099**	0.103
	age26–30	0.056	0.096*
	Male	−0.078***	−0.052***
	Catholic	−0.130**	−0.075*
	Orthodox	−0.177	−0.161
	Atheist	−0.078**	−0.126***
	Other	0.093*	0.034
	Muslim	−0.309**	−0.097
N	146653	146653	146621
R^2	0.166	0.166	0.204

Notes: The models also include all control variables in the most extended model in Table 2 (Model 3). Robust standard errors are clustered on ESS rounds.
* $p < .1$, ** $p < .05$,*** $p < .01$.

the older age category are not significant. This table indicates that Muslims aged 21–25 experience a dip in happiness during this period of their lives, with a persistent low level of happiness in the period following the September 11 attacks.

We also estimate the effect of time/distance since 9/11 separately for the Muslim subsample aged 21–25 years. The coefficient of the interaction term between distance and being Muslim is significant and positive, with each year adding 0.065 to average happiness, nullifying the 0.309 difference with the reference group (Protestants) after five years[2]. A separate, but similar, pattern holds for Muslims aged between 21 and 25: the interaction for that group with distance is insignificant, but it is large and positive, wiping out the negative effect of Muslims between 21 and 25 (=−0.800) within about seven years. We find no strong or additional effect for Muslim men, though the effect is in the expected direction.

Is it region or religion?

Muslims in European countries originate from several distinct countries spread over the African and Asian continents. This raises the question of whether the impact of the September 11 attacks is different for Muslims from different countries. Since the attackers were Middle Eastern, we are interested in separating the effects of religion and region by comparing Muslims (both immigrants and second generation) and non-Muslims from the Middle East. Muslims from the Middle East may experience more stereotyping and suspicion.

We interact first- and second-generation Muslim and non-Muslim immigrants from Middle East countries with Distance, in addition to the complete set of variables and controls in Table 2 (Model 1). Subsequently, we interact Non-Muslims from the Middle East and Muslim immigrants from outside the Middle East with distance (Model 2).

The estimates in Table 5 indicate that Muslim immigrants from outside of the Middle East start from a low level of happiness in 2002 (−0.526 versus Protestants), but experience a rapid increase each year (0.102) such that they have caught up after five years. In contrast, the Muslims from the Middle East show significantly less catching up, with the interaction term with distance significantly negative for happiness (−0.121). This, together with the interaction term for Muslims means that the Middle East Muslims have remained at a low level of life satisfaction after 2002 whilst other Muslims have caught up.

Non-Muslims from the middle-east also show no significant catching up or decline, suggesting that effects of 9/11 are Muslim-specific rather than based on appearance or origin-country. Table 5 thus supports the idea that 9/11 affected all Muslims in 2002, but that the Muslims from outside the Middle

Table 5. The impact of 9/11 on well-being of Muslims from Middle East.

	Happiness		Life satisfaction	
	Model 1	Model 2	Model 1	Model 2
Distance	0.021	0.021	0.033**	0.033**
Muslim*Distance	0.102***	−0.020	0.028	−0.043
Muslim 2nd gen. from Middle East *Distance	−0.006		−0.000	
Muslim immigr. from Middle East *Distance	−0.121***		−0.071**	
Non-Muslim from Middle East *Distance	−0.039	−0.039	−0.057	−0.056
Muslim from outside Middle East *Distance		0.124***		0.071
Muslim	−0.526***	−0.526***	−0.270	−0.270
Middle East	0.281***	0.289***	0.141	0.142
Discrimination (religion)	−0.365***	−0.365***	−0.315**	−0.315**
Discrimination (ethnicity)	−0.556***	−0.555***	−0.616***	−0.616***
N	146653	146653	146621	146621
R^2	0.167	0.167	0.205	0.205

Notes: The models also include all control variables in the most extended model in Table 2 (Model 3). Robust standard errors are clustered on ESS rounds.
* $p < .1$, ** $p < .05$,*** $p < .01$

East have recovered. The coefficients for second generation Muslims from the Middle East are insignificant, showing that the negative effects holds for the whole community rather than just the first generation.

Attacked countries

Muslims in different host countries are exposed to varying levels of tension, caused primarily by terrorist attacks in selected countries such as England (7 July 2005), Spain (11 March 2004), and the Netherlands (2 November 2004). To ascertain the level of differences across countries, we allow the well-being of Muslims in European countries to vary by country (Model 1). We further interact with distance to see whether the time-profile varies by country also (Model 2).

The estimates of the models with the interactions are displayed in Table 6 (the complete set of parameters in these extended models are shown in Table A1 in the appendix). The estimations indicate that Muslims in Finland, Norway, Switzerland, Denmark and Netherlands have a significantly higher level of happiness, while Muslims in France, Belgium, Ireland and Spain have a lower level of life satisfaction, compared to Germany, the reference country. Since there were no direct terrorist events specifically related to Belgium and Ireland in this period, the finding of relatively low levels of Muslim well-being in these countries suggests that effects of terrorism have been European-wide rather than country specific.

Muslims in Germany also experienced a significant increase in well-being post-9/11. For other countries, there is no distinct pattern differences from the reference country. Hence there is little evidence of a link between the well-being of Muslims and Islamic terrorist attacks in the host country in the early post 9/11 period.

Table 6. The impact of 9/11 on well-being of Muslims across host countries.

		Happiness		Life Satisfaction	
		Model 1	Model 2	Model 1	Model 2
	Distance	0.021	0.023	0.033**	0.034**
Interactions	Muslim*Distance	0.073**	−0.010	0.029	−0.001
	Muslim* Belgium	−0.243	0.471	−0.393*	0.007
	Muslim*Netherlands	0.077	0.716**	−0.022	0.141
	Muslim*Germany (ref.)				
	Muslim*Denmark	0.035	0.736	−0.347	0.050
	Muslim*Finland	0.834	1.557**	0.688*	1.094***
	Muslim*Sweden	−0.010	0.710**	−0.407	−0.003
	Muslim* France	−0.041	0.135	−0.341**	−0.196
	Muslim*UK	0.181	0.571	0.069	0.440
	Muslim*Ireland	−0.312	0.419	−1.199**	−0.791
	Muslim*Spain	−0.081	0.589	−0.399*	0.682
	Muslim*Portugal	0.167	0.877	0.151	0.551
	Muslim*Switzerland	−0.162	0.812*	−0.268*	0.228
	Muslim*Norway	0.040	0.956**	−0.016	0.458
	Muslims in GE*Distance		0.176*		0.100
	Muslims in NL*Distance		0.009		0.059
	Muslims in FR*Distance		0.123		0.058
	Muslims in ES*Distance		0.009		−0.161*
	Muslims in UK*Distance		0.076		0.008
	Muslim*Age15–20	0.231**	0.213**	0.262**	0.253*
	Muslim*Age21–25	−0.744	−0.770	−0.528	−0.510
	Muslim*Age26–30	0.003	0.007	0.143	0.148
	Muslim*Age21–25*Dist.	0.103	0.104	0.009	0.002
	Muslim*Male	0.185	−0.179	−0.258	−0.249
Discrimination	(religion)	−0.367***	−0.368***	−0.323**	−0.324**
	(ethnicity)	−0.527***	−0.526***	−0.586***	−0.588***
Religion	Catholic	−0.136**	−0.136**	−0.080*	−0.080*
	Orthodox	−0.180	−0.180	−0.167	−0.167
	Atheist	−0.079**	−0.079**	−0.128***	−0.128***
	Other	0.094**	0.093**	0.032	0.032
	Muslim	0.338**	−0.699**	−0.002	−0.280
Countries	Developed	−0.136	−0.137	0.134	0.136
of origin	EU15	−0.270	−0.271	−0.134	−0.133
	EUext13	−0.366	−0.367	−0.250	−0.249
	Developing	−0.517	−0.518	−0.395	−0.394
	MuslimCntry	−0.410	−0.409	−0.262	−0.260
	2ndG-west	−0.168**	−0.166**	−0.200***	−0.198***
	2ndG-Dvlping	−0.193**	−0.196**	−0.202**	−0.204**
N		146653	146653	146621	146621
R^2		0.167	0.167	0.206	0.206

Notes: Robust standard errors are clustered on ESS rounds. The models also include all control variables in the most extended model in Table 2 (Model 3) and thus the main effects of the interactions.
* $p < .1$, ** $p < .05$,*** $p < .01$

Finally, Table A1 in the appendix shows the difference in terms of religious effects when we include two measures of discrimination. In the second model, we see that feelings of being discriminated and feelings of religious discrimination matter strongly for both life satisfaction and happiness. However, they have no significant effect on any of the Muslim-related variables, for instance only changing the Muslim-intercept from −0.78 to −0.70. Somewhat unexpectedly, the lower levels of well-being for Muslims from the Middle East

are not captured in feelings of being discriminated, suggesting that it is not the negative reaction of the host society that drives the differences.

Conclusions

This paper examined the impact of the attacks on September 11, 2001, on the subjective well-being of Muslim immigrants in European countries using the European Social Survey. The data indicates a catching-up of Muslim well-being following a very low level in 2002, although the lack of data for the pre-attack period impedes any direct observation of a preceding decline in Muslims' well-being.

We have identified differing effects of the attacks on various groups of Muslims and non-Muslims. The analysis indicates that young Muslims aged 21–25 have a significantly lower level of subjective well-being, and that young Muslim men appear to face especially large negative effects. They experience little increase in happiness and a significant decline in life satisfaction over time. Our results further suggest that the impact of the attacks is particularly negative and large for Muslim immigrants from the Middle East, while Muslim immigrants from other part of the world experience much weaker effects, as do non-Muslim immigrants from the Middle East. The analysis indicates that Muslims in various host countries experience different levels of well-being, but no obvious relation with terrorist attacks were found. Time profiles of well-being hence did not differ significantly for Muslims across host countries.

Overall, this paper shows strong differences in both levels and time-profiles of well-being across communities in Europe. Particularly the Muslim communities from the Middle-East look distinct from all other communities, with no indications of convergence with the rest, not even amongst second generation migrants. In contrast, the wider Muslim migrant community in Europe shows strong signs of convergence in well-being.

These findings are robust to the weak socioeconomic position and specific demographic characteristics of Muslims, and to their perceived discrimination on the ground of ethnicity and religion. Our results suggest that the impact of 9/11 on the subjective well-being of European Muslims is partly through perceived discrimination. The mediating role of discrimination is limited. The overall pattern of an initial decline and subsequent increase in the subjective well-being of European Muslims indicates a 'normalisation' of relative well-being of Muslims, and resilience of Muslims communities in European countries. At the same time, a small subgroup of Muslims, young male Muslim immigrants from Middle East, report a persistent low level of subjective well-being.

These findings have implications for understanding the position and integration prospects of Muslim migrants in European countries. The estimated persistent nature of low level of well-being of young male Muslim immigrants may be seen as a potential source of a threat on integration of Muslims and hence social

cohesion and peace in European countries. It remains unclear whether this low level of subjective well-being is driven by social tensions in European countries or by factors outside the country of residence, stemming from country of origin and world-wide concerns. More research can shed light on origins of this persistent low level subjective well-being among young Muslim immigrants.

Notes

1. The smoothing uses a Catmull-rom spline that goes perfectly through the data points, although the choice of smoothing method mattered very little. We did this mainly for visual purposes, as there is only so much one can do with 6 points.
2. When discrimination variables are not included in the model, the coefficient of the interaction term between distance and being Muslim is a slightly higher, 0.074. Also the difference with the reference group (Protestants) is estimated to be 0.405. A comparison of these coefficients with the coefficients from the model with controls for discrimination suggests a modest role of discrimination as a mediating mechanism.

Acknowledgement

This paper has been presented at the Netherlands Demography Day 2016 in Utrecht.

References

Aslund, O., and D. O. Rooth. 2005. "Shifts in Attitudes and Labor Market Discrimination: Swedish Experiences after 9-11." *Journal of Population Economics* 18: 603–629.

Allen, C., and J. S. Nielsen. 2002. *Summary Report on Islamophobia in the E.U. after 11 September 2001*. Vienna: European Monitoring Centre on Racism and Xenophobia.

Akram, S. M., and K. R. Johnson. 2001. "Race, Civil Rights, and Immigration Law after September 11, 2001: The Targeting of Arabs and Muslims." *New York University Annual Survey of American Law* 58: 295.

Bartram, D. 2011. "Economic Migration and Happiness: Comparing Immigrants' and Natives' Happiness Gains from Income." *Social Indicators Research* 103 (1): 57–76.

Braakmann, N. 2010. "Islamistic Terror and the Labour Market Prospects of Arab Men in England: Does a Country's Direct Involvement Matter?" *Scottish Journal of Political Economy* 57: 430–454.

Clark, A. E., F. Etilé, F. Postel-Vinay, C. Senik, and K. Van der Straeten. 2005. "Heterogeneity in Reported Well-Being: Evidence from Twelve European Countries" *Economic Journal* 115 (502): C118–C132.

Ferrer-i-Carbonell, A., and P. Frijters. 2004. "How Important Is Methodology for the Estimates of the Determinants of Happiness?" *The Economic Journal* 114 (July): 641–659.

Frey, B. S., J. Gallus, and L. Steiner. 2014. "Open Issues in Happiness Research." *International Review of Economics* 61: 115–125.

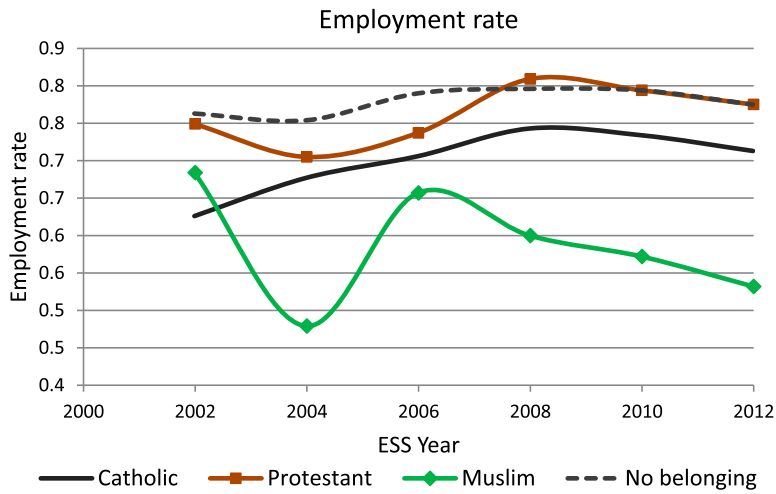
Gimpel, J. G., W. K. Tam, and C. T. Wu. 2007. "Spatial Dimensions of Arab American Voter Mobilization after September 11." *Political Geography* 26 (3): 330–351.

Goel, D. 2010. "Perceptions of Immigrants in Australia after 9/11." *Economic Record* 86: 596–608.

Gokdemir, O., and D. Dumludag. 2012. "Life satisfaction among Turkish and Moroccan Immigrants in the Netherlands: The Role of Absolute and Relative Income." *Social Indicators Research* 106 (3): 407–417.
Hanes, E., and S. Machin. 2014. "Hate Crime in the Wake of Terror Attacks: Evidence from 7/7 and 9/11." *Journal of Contemporary Criminal Justice* 30 (3): 247–267.
Harcourt, B. E., 2006. "Muslim Profiles Post-9/11: Is Racial Profiling an Effective Counterterrorist Measure and Does It Violate the Right to Be Free from Discrimination?" University of Chicago Law & Economics, Online Working Paper, 288.
Hole, A. R., Ratcliffe, A., 2015. "The Impact of the London Bombings on the Wellbeing of Young Muslims." The Sheffield Economic Research Paper Series (SERPS).
Human Rights Watch. 2002. *We Are Not the Enemy: Hate Crimes Against Arabs. Muslims, and Those Perceived to Be Arab or Muslim after September 11*. Human Rights Watch Report 14 (6G) (November).
Kaushal, N., R. Kaestner, and C. Reimers. 2007. "Labor Market Effects of September 11th on Arab and Muslim Residents of the U.S." *Journal of Human Resources* 42 (2): 275–308.
Kirmanoglu, H., and C. Baslevent. 2014. "Life Satisfaction of Ethnic Minority Members: An Examination of Interactions with Immigration, Discrimination, and Citizenship." *Social Indicators Research* 116: 173–184.
Kööts-Ausmees, L., and A. Realo. 2016. "Life Satisfaction among Ethnic Minorities in Europe." *Journal of Cross-Cultural Psychology* 47 (3): 457–478.
Lynch, O., and A. Veale. 2015. "Being Muslim and Being Irish after 9/11: Self-conceptions of Place in Irish Society." *Ethnic and Racial Studies* 38 (11): 2003–2018. doi:10.1080/01419870.2015.1050047.
Ohlsson, A., and P. S. Shah. 2011. "Effects of the September 11, 2001 Disaster on Pregnancy Outcomes: A Systematic Review." *Acta Obstetricia et Gynecologica Scandinavica* 90(1): 6–18.
Padela, A. I., and M. Heisler. 2010. "The Association of Perceived Abuse and Discrimination after September 11, 2001, with Psychological Distress, Level of Happiness, and Health Status among Arab Americans." *American Journal of Public Health* 100 (2): 284–291.
Powdthavee, N., and A. Stutzer. 2014. *Economic Approaches to Understanding Change in Happiness*. IZA Discussion Paper No. 8131, Bonn: IZA.
Rabby, F., and W. M. Rodgers. 2011. "Post 9-11 U.S. Muslim Labor Market Outcomes." *Atlantic Economic Journal* 39: 273–289.
Rabby, F., Rodgers, W. M., 2010. *The Impact of 9/11 and the London Bombings on the Employment and Earnings of U.K. Muslims*. IZA DP No. 4763.
Ratcliffe, A., and S. von Hinke Kessler Scholder. 2015. "The London Bombings and Racial Prejudice: Evidence from the Housing and Labor Market." *Economic Inquiry* 53 (1): 276–293.
Romanov, D., A. Zussman, and N. Zussman. 2012. "Does Terrorism Demoralize? Evidence from Israel." *Economica* 79 (313): 183–198.
Rooth, D. O. 2010. "Automatic Associations and Discrimination in Hiring: Real-World Evidence." *Labour Economics* 17: 523–534.
Rytter, M., and M. H. Pedersen. 2014. "A Decade of Suspicion: Islam and Muslims in Denmark after 9/11." *Ethnic and Racial Studies* 37 (13): 2303–2321.
Safi, M. 2010. "Immigrants' Life Satisfaction in Europe: Between Assimilation and Discrimination." *European Sociological Review* 26 (2): 159–171.
Sander, A. 2006. "Experiences of Swedish Muslims after the terror attacks in the USA on 11 September 2001." *Journal of Ethnic and Migration Studies* 32 (5): 809–830.

Shields, M. A., and S. W. Price. 2005. "Exploring the Economic and Social Determinants of Psychological Wellbeing and Perceived Social Support in England." *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 168 (3): 513–537.
Siedlecki, K. L., T. A. Salthouse, S. Oishi, and S. Jeswani. 2014. "The Relationship Between Social Support and Subjective Well-Being Across Age." *Social Indicators Research* 117: 561–576.
Spruk, R., and A. Kešeljević. 2016. "Institutional Origins of Subjective Well-Being: Estimating the Effects of Economic Freedom on National Happiness." *Journal of Happiness Studies* 17 (2): 659–712. doi:10.1007/s10902-015-9616-x.
Verkuyten, M. 2008. "Life Satisfaction among Ethnic Minorities: The Role of Discrimination and Group Identification." *Social Indicators Research* 89: 391–404.
Zorlu, A. (2016). "Immigrants' Occupational Mobility – Down and Back up Again." *IZA World of Labor* 2016: 290. doi:10.15185/izawol.290.

Appendix



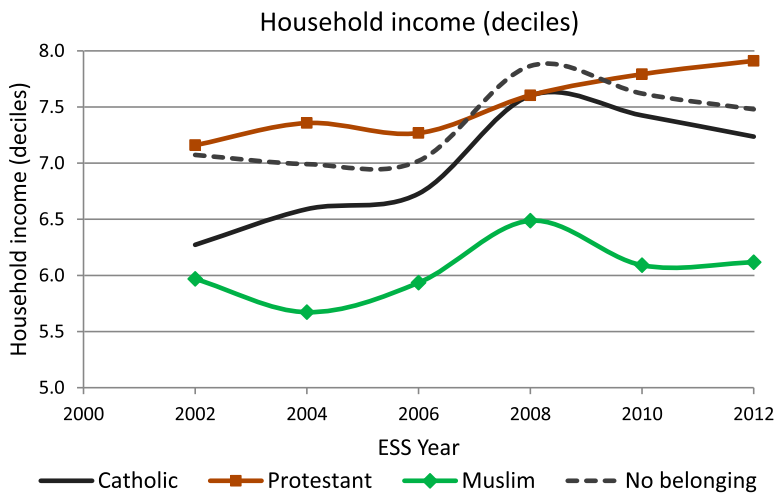


Table A1. OLS estimates of happiness and life satisfaction (extended models).

		Happiness		Life satisfaction	
		Model 1	Model 2	Model 1	Model 2
Years since 9/11	Distance	0.025	0.025	0.034**	0.034**
Interactions	Muslim*Distance	−0.011	−0.010	−0.002	−0.001
	Muslim*Age21-25*Distan.	0.104	0.104	0.003	0.002
	Muslim*Male	−0.188	−0.179	−0.265	−0.249
	Muslim*Age < 20	0.212**	0.213**	0.255*	0.253*
	Muslim*Age21-25	−0.814	−0.770	−0.561	−0.510
	Muslim*Age26-30	−0.026	0.007	0.117	0.148
	Muslims in GE*Distance	0.184**	0.176*	0.109	0.100
	Muslims in NL*Distance	0.028	0.009	0.078	0.059
	Muslims in FR*Distance	0.129	0.123	0.063	0.058
	Muslims in ES*Distance	0.030	0.009	−0.139	−0.161*
	Muslims in UK*Distance	0.095	0.076	0.026	0.008
	Muslim* Belgium	0.494	0.471	0.036	0.007
	Muslim*Netherlands	0.601**	0.716**	0.033	0.141
	Muslim*Germany (ref.)				
	Muslim*Denmark	0.770*	0.736	0.085	0.050
	Muslim*Finland	1.526***	1.557**	1.066***	1.094***
	Muslim*Sweden	0.731**	0.710**	0.021	−0.003
	Muslim* France	0.129	0.135	−0.202	−0.196
	Muslim*UK	0.518	0.571	0.396	0.440
	Muslim*Ireland	0.505	0.419	−0.701	−0.791
	Muslim*Spain	0.543	0.589	0.632	0.682
	Muslim*Portugal	0.948	0.877	0.627	0.551
	Muslim*Switzerland	0.880*	0.812*	0.298	0.228
	Muslim*Norway	1.014**	0.956**	0.518	0.458
Gender and Age	Male	−0.078***	−0.075***	−0.052***	−0.049***
	Age	−0.044***	−0.044***	−0.056***	−0.056***
	Age-squared	0.000***	0.000***	0.001***	0.001***
	Age <20	0.158**	0.155**	0.194**	0.191**
	Age 21–25	0.099**	0.100**	0.104	0.105
	Age 26–30	0.056	0.058	0.097*	0.099*
Marital Status	Married (reference)				
	Separated	−0.878***	−0.879***	−0.806***	−0.807***
	Divorced	−0.583***	−0.584***	−0.506***	−0.506***
	Widowed	−0.857***	−0.855***	−0.484***	−0.483***
	Unmarried	−0.255***	−0.259***	−0.152**	−0.155**
	Legal Partner	−0.396***	−0.398***	−0.289***	−0.291***
Religion	Muslim	−0.780***	−0.699**	−0.355	−0.280
	Catholic	−0.133**	−0.136**	−0.077*	−0.080*
	Protestant (Reference)				
	Orthodox	−0.179	−0.180	−0.166	−0.167
	Atheist	−0.079**	−0.079**	−0.127***	−0.128***
	Other	0.081*	0.093**	0.021	0.032
	Religiosity	0.049***	0.051***	0.055***	0.057***
Country of origin	Native (Reference)				
	Developed countries	−0.143	−0.137	0.131	0.136
	EU15	−0.273	−0.271	−0.133	−0.133
	EUext13	−0.372	−0.367	−0.253	−0.249
	Developing countries	−0.531	−0.518	−0.406	−0.394
	Muslim Countries	−0.433	−0.409	−0.285	−0.260
	2nd Gener.-Western	−0.182**	−0.166**	−0.215***	−0.198***
	2nd Gener.-Developing count.	−0.240***	−0.196**	−0.250**	−0.204**

(*Continued*)

Table A1. Continued.

		Happiness		Life satisfaction	
		Model 1	Model 2	Model 1	Model 2
ESS (host)country	Germany (Reference)				
	Belgium	0.263**	0.262**	0.187	0.186
	Netherlands	0.328***	0.330***	0.415***	0.416***
	Denmark	0.717***	0.717***	1.060***	1.061***
	Finland	0.509***	0.505***	0.671***	0.668***
	Sweden	0.356**	0.358**	0.578***	0.580***
	France	−0.038	−0.038	−0.640***	−0.641***
	UK	−0.010	−0.003	−0.115	−0.108
	Ireland	−0.064	−0.063	−0.225	−0.224
	Spain	0.366***	0.367***	0.263	0.264
	Portugal	−0.408**	−0.409**	−0.999***	−1.000***
	Switzerland	0.348**	0.348**	0.532***	0.531***
	Norway	0.362***	0.365***	0.430***	0.432***
Years Since Migration (Immigrant)	YSM <5	0.081	0.080	−0.063	−0.062
	YSM 1020	0.165	0.169	0.033	0.041
	YSM 1120	0.204	0.208	0.037	0.044
	YSM >20	0.326	0.336	0.132	0.144
ESS Survey	2002	0.094	0.092	−0.017	−0.017
	2004	−0.100	−0.106	−0.119**	−0.124**
	2006	−0.089	−0.090	−0.091*	−0.092*
	2008	−0.079**	−0.077**	−0.188***	−0.186***
	2010	−0.058***	−0.059***	−0.061***	−0.061***
	2012 (reference)				
Education	Education years	0.050***	0.049***	0.055***	0.054***
	Education years-square	−0.002**	−0.001**	−0.001***	−0.001***
First language home	Local language	0.124*	0.114**	0.092*	0.082*
Household income	1st decile (reference)				
	2nd decile	0.213**	0.213**	0.239**	0.239**
	3rd decile	0.349***	0.350***	0.416***	0.416***
	4th decile	0.430***	0.431***	0.568***	0.569***
	5th decile (Median)	0.445***	0.444***	0.639***	0.638***
	6th decile	0.563***	0.563***	0.757***	0.757***
	7th decile	0.581***	0.580***	0.854***	0.853***
	8th decile	0.632***	0.631***	0.925***	0.924***
	9th decile	0.717***	0.716***	1.026***	1.025***
	10th decile	0.799***	0.798***	1.151***	1.150***
Socioeconomic Status	Employed (reference)				
	In Education	0.053**	0.055*	0.155***	0.156***
	Unemployed	−0.594***	−0.591***	−0.991***	−0.988***
	Sick or Disabled	−0.143	−0.139	−0.291***	−0.288***
	Retired	0.123***	0.124***	0.219***	0.220***
	Housework	0.025	0.025	0.035*	0.035*
	Other	−0.160**	−0.159**	−0.089*	−0.088*
Health	Very good (reference)				
	Good	−0.460***	−0.460***	−0.470***	−0.469***
	Fair	−0.944***	−0.942***	−1.060***	−1.057***
	Bad	−1.592***	−1.589***	−1.887***	−1.884***
	Very bad	−2.550***	−2.545***	−2.964***	−2.959***
Discrimination	On the basis of religion		−0.368***		−0.324**
	On the basis of ethnicity		−0.526***		−0.588***
	Constant	8.057***	8.065***	7.690***	7.697***
	N	146653		146621	
	R^2	0.166		0.205	

*$p < .1$; **$p < .05$; ***$p < .01$.