This is the accepted version of the paper published as Röder A. (2015) "Immigrants' attitudes towards homosexuality: Socialization, Religion, and acculturation in European host societies", *International Migration Review* 49(4), 1042-1070. https://doi.org/10.1111/imre.12113

<u>Immigrants' attitudes towards homosexuality: Socialisation, religion and acculturation in European host societies</u>

Antje Röder, Trinity College Dublin

Attitudes towards homosexuality have changed substantially in many countries, but vast differences remain globally, especially along religious lines. Many immigrants to Europe originate from countries with greater opposition to homosexuality, and it is examined here to what extent this influences their attitudes, and whether changes occur within and across generations. Using European Social Survey data, this study shows that socialisation in the origin country impacts attitudes long after migration, but that acculturation takes place both within the first generation and for the children of migrants. Evidence also shows that religious differences especially in relation to Muslim immigrants are persistent across generations.

With European countries becoming increasingly diverse in terms of the origins and religious backgrounds of their populations (OECD, 2008), questions emerge about the attitudes and values of immigrants and their descendants who often come from countries with very different value orientations (Norris and Inglehart, 2012). This study focuses on attitudes towards homosexuality as one aspect of cultural integration that has already led to significant controversy between immigrant and local communities, in particular in the Netherlands, the most tolerant European country in this regard (Widmer et al., 1998). Globally, public opinion on homosexuality differs widely across countries, as do legal frameworks that range from declaring it illegal, to institutionalising it in the form of gay marriage. The trend in Western countries has been in the direction of greater liberalisation in both policies and attitudes, and can be understood as part of 'a wider transformation in the meaning and organization of sex more generally, involving a shift in the locus of sexuality from the family to the individual, and a shift in the purpose of sex from procreation to pleasure' (Frank and McEneaney, 1999: 914). Yet, large differences between countries persist (see for example Gerhards 2010; Jackle and Wenzelburger, 2011; Stulhofer and Rimac, 2009), and Inglehart Norris (2003) go as far as to argue that the 'true clash of civilisations' is evident in relation to attitudes about gender and sexuality rather than political values and democracy. Does this 'clash' over cultural values also occur within European societies? Or do migrants adopt the host country beliefs and discard those of the origin country?

Despite the relevance of the issue of cultural integration of migrants from increasingly diverse origins for social cohesion in Europe, there has been relatively little research that studies the attitudes of immigrants systematically. Examining the specific case of attitudes towards homosexuality allows not only to gain a better understanding of acculturation processes amongst immigrants, but also contributes to the discussion whether cultural values are primarily individual traits or largely dependent on the society an individual lives in

(Norris and Inglehart, 2012). Both broader cultural contexts and individual factors especially religious denomination and religiosity - have been identified as important in shaping public opinions on homosexuality (Adamczyk and Pitt, 2009, Sherkat et al., 2011, Van den Akker et al., 2012; Yuchtman-Yaar and Alkalay, 2007). Studies in the United States for example have found that homosexuality appears to be more strongly stigmatised amongst Latino and Black communities (Lewis, 2003; Marín, 2003), but that much of these effects disappear when religion is accounted for (Negy and Eisenman, 2005; Schulte and Battle, 2004; Sherkat et al., 2010). Within Europe, there is evidence that immigrants, and especially those of Muslim faith, hold less favourable attitudes than the native population, which is largely claimed to be due to different religious beliefs and more conservative origin country background (Gerhards, 2010; Lubbers et al., 2009; Simon, 2008; Stulhofer and Rimac, 2009; Van der Akker et al., 2012). Yet none of these studies go further to support this assumed importance of the origin country context and do not attempt to disentangle it from the impact of religion. Here, by including data of both immigrants and natives from 27 host and 186 origin countries in a multiple origin and destination design (see Van Tubergen, 2005), individual effects, and especially religious denomination and religiosity, are analysed together with origin country effects to determine their relative importance.

A second question emerges from this: if migrants are indeed influenced by their origin country and religious beliefs, to what extent is this maintained amongst longer staying migrants and their children? Assimilation theory predicts that immigrants gradually adopt the ways of life and associated beliefs in the host society (Alba and Nee, 2003), while others suggest that minorities attempt to maintain the value systems of the origin country and transmit their beliefs to the next generation and are particularly reluctant to change their cultural values (Idema and Phalet, 2007). Previous research on aspects of cultural integration supports both views to an extent. For example the views of Muslim migrants on gender

equality, sexual liberalization, democratic and religious values are located about half way between those of the population in the origin country and that of the host country (Norris and Inglehart, 2012). Similarly, it has been shown that acculturation plays a role both within the first generation and between generations in relation to gender role attitudes (Leaper and Valin, 1996; Yamanaka and McClelland, 1994), generalised trust (Dinesen and Hooghe, 2010) and conservative values orientations (Röder and Mühlau, 2012). This study aims to contribute to this debate by providing evidence for the level of intra- and inter-generational acculturation in relation to homosexuality, which has become more central in debates about the (lack of) socio-cultural integration of migrants.

Culture and religion: what shapes migrants' attitudes towards homosexuality?

As Greenberg (1988) notes, 'sexual culture is not universal to the human species' (p.25). At the same time, practices around gender and sexuality are some of the most fundamental parts of a society's normative system (Bourdieu, 2001), and it is therefore unsurprising that they have become the centre of disputes about immigrants' cultural integration. While evidence of homosexual behaviours can be found across many societies throughout history, there are large differences in its role and perception, which interact with broader social, political and family structures. The current narrative of 'modern' European values of liberalism and tolerance often ignores the long history of repression of homosexuality, and the only quite recent decriminalisation and more widespread acceptance of homosexual relationships among Europeans publics (Greenberg, 1988). While social tolerance is often associated with modernisation and a 'post-materialist' cultural shift towards individualism and self-expression, as well as a move away from religious authority towards secularism (Inglehart,

1987, 1990, 1997), this ignores historical variations and shifting interpretations even within the same religious traditions (Boswell, 1980).

Despite this, it is clear that profound changes have taken place in relation to the perception of homosexuality in recent decades, and many Western European countries now support gay rights and allow gay marriage or civil unions. However, attitudes continue to differ even within Europe, with Eastern European countries remaining less supportive. Globally, even larger differences can be observed, and in many of the world regions where immigrants to Europe originate from, attitudes are comparatively unfavourable, and homosexuality may even be illegal or carry the death penalty (Gerhards, 2010; Stulhofer and Rimac, 2009).

In this context, the role of religion is particularly prominent, as religious beliefs tend to be strongly tied up with more general prejudices, even if religious scripture does not necessarily support such prejudices (Boswell, 1980). The public debate in Europe focuses largely on Islam, which is often associated with a strong maintenance of patriarchal norms. As Al-Haqq Kugle (2010) discusses, the Qur'an itself does not explicitly express disapproval of homosexuality, though many later texts, as well as the sharia, do indeed stigmatise and criminalise homosexual relationships. This has become the dominant interpretation of scripture in many parts of the Muslim world, and is used to justify culturally embedded homophobia. Or, as Habib (2010, p. xl) notes, Islam does not condemn homosexuality, but Muslims generally do. Notwithstanding the focus on Islam in this context, other world religions similarly sanction homosexuality, if to varying degrees (Olson et al., 2006). Boswell (1980) argues that while there is little to suggest that Christian scripture is strongly concerned with homosexuality, or that early Christianity condemned it, Christian churches stigmatised homosexuality for centuries and are only now gradually opening up, with Eastern Orthodox remaining very conservative in this regard (Turcescu and Stan, 2005).

Previous research supports the important role of religion in shaping attitudes, both on the individual and the societal level (Adamczyk and Pitt, 2009; Finke and Adamczyk, 2008; Yuchtman-Yaar and Alkalay, 2007). Those belonging to a religion and displaying greater levels of religiosity are less tolerant regarding homosexuality than those who do not consider themselves part of a religious group or are more loosely affiliated (Brewer, 2003; Francoeur and Noonan, 2004). Furthermore there are differences between religious denominations, and Muslims appear to condemn homosexuality most strongly (Finke and Adamczyk, 2008; Gerhards, 2010; Yuchtman-Yaar and Alkalay, 2007). Despite the complexities of homosexuality in Islam discussed above, the general view in the Western world is that homophobia and gender discrimination more generally are deeply engrained in Islamic culture. This, on the other hand, makes it easy for those that oppose more liberal views to dismiss any attempt to re-evaluate the religion's stance on sexuality as Western imperialism (Habib, 2010; p.xxvi). As Zanghellini (2010) notes, 'homosexuality has become one of the principal battlegrounds over which normative contemporary Western identity and its Muslim counterpart are being enacted and consolidated' (p.269). These broader debates are particularly relevant when looking at Muslims living in Western countries, where homosexuals increasingly gain recognition and are more and more vocal about demanding equal rights where they do not already enjoy them. In this context, then, attitudes towards homosexuality signify much broader questions about the approval of Western norms and values that are often placed in stark opposition to migrants' own traditions and beliefs.

The above discussion shows how religion and culture are strongly interwoven, particularly in relation to moral norms, which is also corroborated in cross-national research (Adamczyk and Pitt, 2009; Yuchtman-Yaar and Alkalay, 2007). While immigrants on the one hand tend to maintain their religious orientation, and are indeed often more religious than the European public (Van Tubergen and Sindradottir, 2011), their more conservative attitudes

may equally stem from their origin cultures more broadly. Many migrants will have spent their formative, or 'impressionable' years abroad (Alwin and Krosnick, 1991), which can have a lasting effect on their attitudes. With most immigrants in Europe arriving from countries with less permissive attitudes towards homosexuality, they can be expected to be overall less tolerant than natives. Those from countries with relatively little difference in attitudes compared to the host country will have more supportive attitudes than those from countries where public support for homosexuality is comparatively much lower.

H1: Immigrants hold more negative attitudes towards homosexuality than natives, and this gap is greater for immigrants from countries with more negative public opinion compared to the host country.

While it is not possible to fully disentangle what part of a particular religious group's attitudes are explained by religion itself, and what part by more general cultural aspects, the multiple origin design allows us to analyse origin country factors separately from religious denomination. With much of the literature discussed above noting the more negative attitudes of Muslims, and to a lesser extent Eastern Orthodox Christians, we can expect similar patterns amongst migrants. More important, however, is the extent to which such differences can be explained by individual characteristics, particularly religiosity, and origin country public opinion as a proxy for the general societal norms immigrants were socialised into. If socialisation in a less permissive culture is one of the core explanations for attitudes, then it may, together with demographic differences and varying levels of religious commitment explain religious differences (Hypothesis 2a). Alternatively, immigrants may attempt, more or less successfully, to maintain aspects of their origin culture, particularly when confronted with the normative expectations of the host culture that, as discussed above, are posited as opposite to their own, and religion could be an important vehicle for this (Connor, 2010). In

this case, religious differences would not only persist when controls are introduced, but remain across generations (Hypothesis 2b).

H2a: Religious differences between migrants are explained by demographic differences, individual level religiosity and origin country public opinion.

H2b: Religious differences between migrants remain across generations after controlling for demographic differences, individual level religiosity and origin country public opinion.

Acculturation of attitudes within and across generations?

Alba and Nee (2003) refer to assimilation as the 'decline of an ethnic distinction and its corollary cultural and social differences'. Acculturation is related to this, and specifically refers to the adoption of cultural pattern of mainstream society, such as attitudes and norms (Arends-Tóth and Van de Vijver, 2007). It is often understood that cultural traits are relatively stable once they have been formed early in life, and that generational change accounts for shifts in attitudes. This is well documented in relation to gender roles (Bolzendahl and Myers, 2004; Pampel 2011; Scott et al., 1996), where cohort substitution rather than changes within cohorts explain the increasingly more egalitarian attitudes observed in many countries amongst the general population. For homosexuality, both intra-and inter-cohort changes have been shown to be of importance (see Baunach, 2011 for the United States). In relation to immigrants, this is particularly relevant, as this would suggest that first generation immigrants will not only be strongly shaped by the context in which they were socialised in the origin country, but will maintain this at least to some extent when living in a comparatively more tolerant host society.

Their children, on the other hand, can be expected to be more strongly influenced by the host country, by being exposed to the culture of mainstream society during their impressionable years. Socialisation theory suggests that primary socialisation in the family succeeds in transmitting parental attitudes to children, and this has been shown to be the case for example in relation to political (Jennings, 1984) and gender role attitudes (Kulik, 2002). In a study of young people in Brussels, Teney and Subramanian (2010) find that the second generation held greater levels of sexual prejudice than the children of natives. However, secondary socialisation outside of the family is also important, and education appears to be the main driver of more tolerant attitudes in the context of homosexuality in particular (Van der Meerendonck and Scheepers, 2004). While parents may attempt to maintain ethnic identities and uphold cultural values by sheltering their offspring from exposure (Portes and Rumbaut, 2001), this appears to be only partially successful in transmitting traditional values, such as gender role attitudes (Read, 2003). Therefore, it is expected that second generation migrants will be overall more supportive of homosexuality than first generation migrants due to their greater contact with the host country in their impressionable years; additionally, public opinion in the origin country will influence their attitudes less strongly than those of their parents' generation.

H3: Second generation migrants hold more positive attitudes towards homosexuality than first generation migrants; the difference in origin and host country public opinion has a weaker effect on their attitudes than those of the first generation.

Despite the importance of early years in attitude formation, exposure to different kinds of values may lead to changes already within one generation. For attitudes towards homosexuality, some change within age cohorts has been documented for Canada and the United States (Andersen and Fetner, 2008; Baunach, 2011). For immigrants, learning about the host country and to some extent adopting its beliefs is part of the process of acculturation,

although this can be selective across different domains (Berry, 1997). Within-generation change amongst migrants has been well documented in relation to gender roles (Inglehart and Norris, 2009; Leaper and Valin, 1996; Yamanaka and McClelland, 1994). Similarly, for attitudes towards homosexuality, Ahrold and Meston (2010) show that greater acculturation in other domains is indicative of more permissive attitudes towards homosexuality amongst Hispanic and Asian groups in the United States, a finding that is corroborated by Luu and Bartsch (2011) for Vietnamese migrants. Length of residence in the host country is therefore expected to be linked to more tolerant attitudes. Similarly, the differential between host and origin country attitudes should lose salience over time.

H4: First generation immigrants who have been in the country for longer have more tolerant attitudes towards homosexuality than their more recently arrived counterparts; the effect of the host-origin differential in attitudes weakens with longer residence in the host country.

Data and methodology

Data was extracted from Rounds 1 to 4 of the European Social Survey (ESS) collected biannually from 2002 to 2008. The ESS is a high quality cross-national dataset that covers a wide range of European countries and is designed for comparative analyses. It has a sample that approximates a simple random sample and comparatively high response rates¹. Data from 27 out of the 33 countries covered by these four rounds of the survey were pooled so that the dataset includes the EU15 countries plus 9 New Member States (Bulgaria, Czech

¹ Target effective response rates of 70 per cent are specified for each country. While this is not achieved for all countries, response rates are generally high.

Republic, Estonia, Hungary, Latvia, Poland, Romania, Slovenia and Slovakia), plus the EFTA states Iceland, Norway and Switzerland².

It should be noted that while the ESS is not a migrant survey, it offers the advantage of including natives as a comparison group, as well as including information on origin countries of the respondent and the parents. The subdivision between second generation migrants with two and only one foreign born parent is important, as the latter are rarely included in research of migrants. On the other hand, some migrants may be underrepresented, in particular less well integrated groups who may have lower likelihoods of participating in the study. These groups could be expected to be more traditional in their beliefs, so that the gap between migrants and natives may be underestimated as a consequence.

Dependent variable

Only one item in the ESS measures attitudes towards homosexuality across all rounds of the survey. Respondents were asked to rate their answer on a five point scale from 'strongly agree' to 'strongly disagree' to the statement 'gay men and lesbians should be free to live their own life as they wish'. While it is somewhat limiting to have only one item, the ESS is currently the only survey that allows a cross-national analysis and the inclusion of origin country characteristics. It should be noted, however, that the classification of 'homosexuals' as a separate social category should not be taken for granted historically or cross-culturally (Boswell 1980), and that what is being referred to here should therefore be considered in the context of a particular way of perceiving homosexuality in Western societies. This, coupled

-

² Only EU and EFTA countries were included, as they share important institutional characteristics and can be compared more straightforwardly, particularly in light of particular European discourses that prevail in relation to social tolerance. Data for Lithuania was not yet available at the time of analysis. Croatia was excluded as it was not possible to clearly determine migrant status as a consequence of its former membership of Yugoslavia; similarly Cyprus was excluded as its division, and the associated struggles over territorial sovereignty, have led to a lack of clarity of country of birth information.

with the normative link between Western identity and tolerance of homosexuality discussed above (Habib, 2010; Zanghellini, 2010), has as a consequence that agreement with this item is intrinsically linked with broader approval of Western lifestyles and values, often formulated in opposition particularly to Muslim beliefs, which needs to be considered carefully when interpreting findings.

Independent variables

Immigrant groups are defined firstly as four generational groups: those who themselves and whose parents were born in the country ('natives'), those who themselves and whose parents were born abroad ('first generation'), those whose parents were born abroad but who themselves were born in the residence country ('second generation') and lastly those who only have only 'one foreign born parent'. Any cases that do not belong to these categories, or where details of the origin country were missing, were excluded from the analysis. Second generation migrants from the first round of the ESS had to be excluded, as this round did not include details of parents' country of birth. The three immigrant groups are then further subdivided by religious denomination, which is based on a combination of two variables in the ESS: one that determines whether a respondent belongs to a religious denomination, and if so, which one. The categories of this variable include all respondents who indicated that they did not belong to a religion ('no religion'), those that are 'Catholic or Protestant', 'Eastern Orthodox' or 'Muslim', and lastly those who belong to any 'other' religion. A consequence of this approach is that the reference group is the 'typical' native regardless of religious denomination. Previous research has already well established the differences amongst the native population along religious lines (see for example Adamczyk and Pitt, 2009; Brewer, 2003; Finke and Adamczyk, 2008; Francoeur and Noonan, 2004; YuchtmanYaar and Alkalay, 2007) so that this approach allows a more straightforward comparison of immigrant groups to an average native and a simpler presentation of results.

Religiosity and attendance. Previous research has clearly shown that individual levels of religiosity and religious practice are important for attitudes on moral issues (Jaspers et al., 2007; Scheepers et al., 2002; Van der Akker et al., 2012; Whitley, 2009). Religiosity needs to be controlled for in models, especially as differences observed by origin country and religious denomination may at least partially be due to the greater levels of religiosity amongst particular minority groups in Europe, as has been shown by Van Tubergen and Sindradottir (2011). Religiosity is based on self reported level on a zero to ten scale, while attendance, apart from special occasions, is measured as 'weekly or more often', 'less than weekly' and 'never' (reference category) based on respondents' own assessment, and prayer as 'daily', 'weekly', 'less than weekly' or 'never' (reference category).

Length of residence is an important variable to determine acculturation over time, and is measured here linearly in years. In the ESS, length of stay is coded into five categories (less than one year, one to 5 years, 6 to 10 years and 11 to 20 years and more than 20 years). These have been substituted by the mean value of each bracket (.5, 3, 8, 15.5 years) and 37.5 years for the top bracket³. While length of residence as a measurement of change over time is not ideal, and panel data would be preferential, it is unlikely that the full effect of length of residence is due to selectivity within the sample, as this would require earlier cohorts to have held systematically more tolerant attitudes.

Differences in acceptance of homosexuality between host and origin country are based on World Value Survey data. The scores reflect the percentage of individuals who stated that

_

³ Checks indicated that the assumption of linearity is appropriate for the outcome variables, and that findings did not differ substantively in models that used either indicator. For easier interpretation, especially of interaction effects, the linear variable is presented in models here.

they would not like to have homosexuals as neighbours, reflecting the social distance towards homosexuals in a country. Data from 2006 or the closest year available is used. The difference between host and origin country is calculated for this variable. Using this indicator has the limitation that it does not cover all source countries for immigrants in Europe. However, with 12.8 percent for first generation, 7.6 percent for second generation and 4.6 percent for respondents with one foreign born parent, the number of missing cases is relatively modest. Differentials between host and origin country in Human Development Indicators (UNDP, 2010) are used additionally as a proxy for level of modernisation of a country, which has been shown to be very strongly linked to attitudes towards homosexuality (Gerhards, 2010; Jackle and Wenzelburger, 2011; Stulhofer and Rimac, 2009). The HDI is made up of several components that include economic development (GDP), education and life expectancy, and has the advantage of covering a much wider range of countries than the WVS, so that far less than one percent of respondents with migration background have missing information on this variable. It is, however, a more indirect measurement of the difference in attitudes in the origin country, and cannot reflect religious and cultural divisions that may be at least to some extent independent of human development⁴.

Control variables in the models are gender, age, education, income, marital status and place of residence. Men, older people, rural residents and those of lower socio-economic status have been shown consistently to be more opposed towards homosexuality (see for example Stulhofer and Rimac, 2009; Van der Akker et al., 2012). Gender is included as a dummy variable 'female', and age is measured in years. Education is measured as 'primary', 'lower secondary', 'upper secondary' and 'tertiary'. Income is measured by the relative income

⁴ While one strategy to address religious differences in the host country would have been the inclusion of origin country majority religion, or 'religious zones' (Yuchtman-Yaar and Alkalay, 2007), this was not possible due to the strong overlap between individual and country level religious denomination.

position within the relevant country of residence. *Place of residence* includes 'rural', 'country village', 'town or small city', 'suburbs' and 'city'. Additionally, those who conform to a 'traditional' model of partnership are expected to have lower levels of support for alternative lifestyles (Jackle and Wenzelburger, 2011). Marital status contains the categories 'never married', 'divorced/separated', 'widowed' and 'married'. On the country level, Human Development Indicators were included to control for the differences between levels of *host country contexts* within Europe (Gerhards, 2010; Stulhofer and Rimac, 2009). Appendix one shows the distribution of these variables across the main immigrant groups.

Modelling

The data include individuals from 27 different countries, who differ in terms of their immigrant status and, in the case of immigrants, their origin country. Individuals are seen to be nested within communities within residence countries. Communities are defined by the combination of the origin and the host country, as well as generational status. For second generation migrants, the country of birth of the parent(s) is used to define the community. The variables required to test the hypotheses here, as well as the control variables, include those on the level of the host country (Human Development Index), the community level (difference between origin and host country) and the individual level (all other variables). Due to the nested structure of the data, hierarchical linear models with three levels are estimated using full maximum likelihood estimation (IGLS) in MLwiN 2.23.

To allow comparison between natives and different migrant groups, all are included in the same model. There are 128,435 natives, 9,255 first generation, 1,914 second generation and 5,132 individuals with one foreign born parent in the dataset, with a total of 144,736 cases at level 1. There are 2,021 communities at level 2, and 27 host country at the highest

level. The group sizes at level 2 vary from only one person in a particular host origin combination to 9,590 (native Germans), with an average of 72 per group. Linear models are estimated, with higher values indicating more positive attitudes⁵. Random intercepts were specified for higher levels, and random slopes for variables that are interacted with higher level predictors. Continuous variables were standardised with the exception of host-origin country differentials, as this allows a more meaningful comparison of subgroup differentials across models. All models are controlled for ESS round (not reported).

Findings

Immigrants' attitudes compared

Overall, only first generation immigrants are on average less accepting of homosexuality than natives, with no significant difference observed for the second generation (Model 1). Respondents with one foreign born parent appear to be even more supportive of homosexuality than a typical native. Models 5a and 5b should be examined for the effect of host and origin country differentials in public opinion on migrants' attitudes. Models 5a and 6a include the difference in attitudes based on World Value Survey (WVS) data, whereas Models 5b and 6b use the proxy of Human Development Indicators (HDI). Coefficients for both measurements show that first generation immigrants are strongly influenced by the origin country in the expected direction: the larger the difference in public opinion between host and origin country, the more negative their views on homosexuality. Effects are in the expected direction for second generation migrants, but remain far below conventional significance levels. This supports both parts of Hypothesis 1 for the first generation, but not for the second.

_

⁵ Ordered logistic models were also estimated, and results are highly comparable.

Table 1: Effects of generational status, religion and religiosity

	Model	Model 1		Model 2		Model 3		Model 4	
	Coeff	SE	Coeff	SE	Coeff	SE	Coeff	SE	
Intercept	3.672*	* .063	3.672**	.098	3.662**	.072	3.752**	.069	
First generation	226*	* .060							
Catholic/Protestant			225**	.048	233**	.051	124**	.045	
Orthodox			268**	.059	348**	.061	275**	.056	
Muslim			765**	.058	817**	.060	697**	.055	
Other			483**	.062	528**	.063	368**	.059	
No religion			.038	.047	031	.050	105*	.045	
Second generation	001	.069							
Catholic/Protestant			041	.069	020	.071	.051	.066	
Orthodox			286**	.096	320**	.096	243**	.091	
Muslim			374**	.092	589**	.093	421**	.087	
Other			074	.126	225	.123	002	.119	
No religion			.227**	.064	.117#	.066	.033	.061	
One foreign born parent	.157*	.062							
Catholic/Protestant			.005	.050	023	.053	.041	.048	
Orthodox			038	.090	167#	.090	114	.086	
Muslim			358#	.189	620**	.184	500**	.179	
Other			225*	.105	274**	.103	126	.099	
No religion			.321**	.049	.205**	.052	.101*	.046	
Gender (ref: male)	Female				.190**	.006	.249**	.006	
Age					215**	.004	177**	.004	
Education (ref: lower sec.)	Primary				143**	.010	115**	.010	
	Upper secondary				.083**	.008	.075**	.008	
	Tertiary				.210**	.008	.209**	.008	
Income					.035**	.003	.030**	.003	
Marital status (ref: married)	Never married				.043**	.008	.030**	.008	
	Divorced/separat	ted			.138**	.010	.097**	.010 .008 .008 .003 .003 .008	
	Widowed				058**	.011	041**		
Place of residence (ref: City)	Suburb				028**	.010	025*	.010	
	Town				090**	.008	078**	.010 .008 .008 .003 .008 .010 .011 .010 .008 .008 .013	
	Village				163**	.008	125**		
	Rural				205**	.013		.013	
Religiosity							079**	.004	
Attendance (ref: never)	Weekly						393**	.011	
	Less than weekly						076**	.007	
Prayer (ref: never)	Daily						108**	.011	
	Weekly						017	.011	
	Less than weekly						006	.008	
Host country HDI					.268**	.053	.265**	.053	
Country level intercept	.223	.063	.216	.060	.084	.025	.083	.024	
Immigrant group intercept	.083	.008	.041	.005	.050	.006	.038	.005	
Individual level variance	1.175	.004	1.172	.004	1.077	.004	1.046	.004	
Log likelihood difference to p		388.13 ^{a,}		9.69 ^a	1224		4295		

Significance levels #=p < .10, =p < .05, =p < .01, two-tailed; ^aChi-square test sig. at 99.9%; ^bCompared to empty model; case numbers: $n_1 = 144,736$, $n_2 = 2,021$, $n_3 = 27$; all models controlled for ESS round

Religious dividing lines?

Hypotheses 2a and 2b make opposing predictions regarding the persistence of religious differences when controlling for demographic differences, religiosity and origin country context. In Model 2, attitudes of immigrants are analysed for each religious group, each time in comparison to a 'typical native'. Model 3 then adds a range of control variables, to determine to what extent the different composition of these religious groupings accounts for the differences in attitudes. In Model 4, religiosity and religious attendance are introduced as further controls, to determine if it is individual religiosity and religious observance that determine outcomes rather than religious denomination and immigrant status. Lastly, origin country factors are controlled for in Models 5 and 6.

Pronounced differences along religious lines can be observed: a first generation migrant with no religion does not differ significantly from the typical native, whereas all other first generation groups hold significantly less supportive attitudes towards homosexuality. These differences increase rather than decrease when control variables are introduced. When religiosity and attendance are controlled for, differences decline, but remain significant, and even those migrants who do not identify with a particular religious denomination are significantly less accepting of homosexuality compared to a similarly (un)religious native. The remaining difference is largest for Muslim first generation migrants, and this is not accounted for by demographic differences and only partially by individual religious commitment.

Turning to the second generation, only Eastern Orthodox and Muslim migrants are significantly less supportive of homosexuality once demographic composition and individual level religiosity are controlled for. For other groups, there is either little difference overall, or

whatever difference there is appears to be due to different levels of religiosity. Amongst individuals with only one foreign born parent, those with no religion are again significantly more supportive than natives on average, and this remains significant with controls and accounting for levels of religiosity and attendance. Of those belonging to a religion, only Muslims are significantly less supportive than the average native when controls are included. The magnitude of this difference is roughly comparable to that for second generation migrants with two foreign born parents.

Accounting for attitudinal differences in the origin country of first generation migrants using the WVS indicator fully accounts for the negative effect of being Catholic and Protestant or Eastern Orthodox migrant, and reverses the negative effect for those who do not belong to a religion. (Models 5a and 5b) For Muslims and the 'other' group, the effect reduces substantially, but remains highly significant. Amongst the second generation and those with one foreign born parent, only Muslims and Eastern Orthodox migrants were shown to hold more negative attitudes, and this is reduced to some extent by the inclusion of host-origin country differentials for those with two foreign born parents, but not for those with only one foreign born parent. The reduction in the effect of religious denomination is also weaker for the second generation than the first generation both in relative and in absolute terms. Using the HDI indicator, very similar patterns are observed overall, although the effect of being a first generation Eastern Orthodox migrant remains significant. Overall, this supports Hypothesis 2b more strongly than Hypothesis 2a: while religious group differences are partially explained by different demographic composition, the greater levels of religiosity of many migrants, and the impact of origin country socialisation, these factors cannot fully explain the less supportive attitudes of Eastern Orthodox, and particularly Muslim migrants, which persist even in the second generation.

Table 2: Effect of host-origin country differentials on attitudes towards homosexuality

	Model 5a (WVS)		Model 5b (HDI)		Model 6a (WVS)		Model 6b (HDI)	
	Coeff	SE	Coeff	SE	Coeff	SE	Coeff	SE
Intercept	3.757**	.067	3.756**	.067	3.757**	.065	3.756**	.065
First generation (Gen1)								
Catholic/Protestant	.040	.041	.007	.042	.040	.038	.004	.039
Orthodox	065	.054	139*	.054	051	.052	132**	.051
Muslim	385**	.057	463**	.056	362**	.055	448**	.054
Other	169**	.057	188**	.057	161**	.054	185**	.055
No religion	.076#	.042	.023	.041	.082*	.038	.025	.038
Second generation (Gen 2)								
Catholic/Protestant	.072	.064	.068	.064	.070	.060	.067	.061
Orthodox	196*	.093	210*	.091	195*	.089	210*	.089
Muslim	366**	.109	369**	.106	375**	.106	378**	.103
Other	.042	.124	.037	.125	.037	.122	.032	.123
No religion	.063	.063	.058	.062	.063	.059	.058	.058
One foreign born parent (FBP)								
Catholic/Protestant	.033	.043	.045	.044	.034	.039	.045	.040
Orthodox	105	.082	098	.083	100	.080	093	.080
Muslim	515**	.181	482**	.180	509**	.179	477**	.178
Other	128	.097	117	.097	127	.095	117	.095
No religion	.090*	.042	.105*	.042	.094*	.038	.109**	.039
Length of residence					.057**	.022	.057**	.021
Dif. host-origin WVS Gen 1 ^b	673**	.065			653**	.064		
x length of residence					.135*	.061		
Dif. host-origin WVS Gen2 b	148	.136			149	.131		
Dif. host origin WVS FBP b	.046	.095			.042	.091		
Dif. host-origin HDI Gen1 b			-1.203**	.120			-1.108**	.121
x length of residence							.250*	.112
Dif. host-origin HDI Gen2 b			366	.297			359	.290
Dif. host-origin HDI FBP b			155	.188			162	.183
Country level intercept	.089	.026	.088	.025	.089	.025	.089	.025
Group intercept	.024	.004	.026	.004	.017	.003	.019	.004
Length-group slope					000	.000	004	.004
Individual level variance	1.046	.004	1.046	.004	1.045	.004	1.045	.004
Log likelihood difference to Mod	odel 4 120.04°		97.24 ^a		192.32 ^a		168.65 ^a	

Generational differences

Hypothesis 3 anticipated that second generation migrants are more accepting of homosexuality than first generation migrants, and less strongly influenced by the origin country. As already summarised above, the first generation is less supportive of homosexuality, but this is not the case for the second generation when seen overall, and the

Reported selectively; same control variables included as in Model 4 in Table 1 Significance levels #=p < .10, $^*=p < .05$, $^{**}=p < .01$, two-tailed; case numbers: $n_1=144,736$, $n_2=2,021$, $n_3=27$

^aChi-square test sig. at 99.9%; co-variances not reported; ^bUnstandardised coefficients

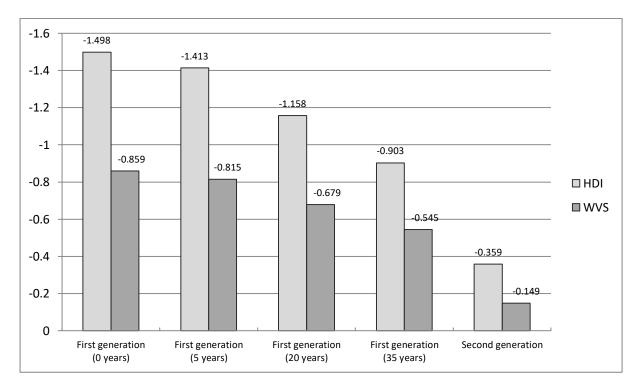
opposite seems to be true for respondents with one immigrant parent. The difference between first generation and the other two migrants groups is significant at the 99% level when based on Model 1. The descriptive Table (Appendix 1) shows that the second generation is overall younger and less likely to be married than the first generation, which may explain these differences. Yet, once the same control variables are introduced to Model 1 as in Model 3 (not shown here), the second generation and respondents with one foreign born parent remain significantly more supportive than the first generation. However, the more tolerant attitudes of respondents with one foreign born parent in comparison to natives are largely explained by demographic differences. Closer examination of immigrants of different religious denominations (Models 2 to 4) also shows that for all religious subgroups, attitudes of the second generation are more positive compared to the equivalent first generation group, with the exception of Eastern Orthodox migrants, for whom attitudes of the children of two foreign born parents are very similar to those of the first generation. Models 5a and 5b should again be consulted for the effects of origin country on attitudes. No significant effect is found for the second generation, and the difference between the effect compared to the first generation is highly significant. Taken together, the data clearly confirm Hypothesis 3 in relation to inter-generational acculturation.

Intra-generational acculturation

For intra-generational acculturation, Hypothesis 4 states that longer stay in the host country is associated with more favourable attitudes, and a weaker influence of the origin country context. Models 6a and 6b should be consulted for length of stay effects and their interaction with the host-origin differential in public support for homosexuality; both show clearly that longer residence is associated with more supportive attitudes, and this coefficient is similar in

size and significance in a model without the interactions with the host-origin differential (not presented here). The interaction effect between length of residence and differences in host-origin context for both indicators additionally shows that with longer residence this differential exerts a weaker influence on attitudes. This supports Hypothesis 4, in that intragenerational acculturation occurs. These findings are illustrated in Figure 1, which shows how the size of the effect of WVS and HDI differentials decreases for first generation immigrants who have been in the country for different lengths of time and for the second generation.

Figure 1 – Effects of difference in host-origin HDI and WVS by length of residence and generational status



Conclusion and discussion

Findings show that religiosity, generational status and origin country characteristics all contribute to explaining attitudes towards homosexuality amongst immigrants in Europe. First generation immigrants are overall less accepting of homosexual lifestyles, which is to a

large extent because they come from countries with weaker support for homosexuality. Importantly, however, their opposition weakens with longer stay, partly because the origin country context appears to lose salience with longer residence in the host country. Additionally, the second generation is overall more supportive than the first, thus providing evidence for inter-generational acculturation in addition to intra-generational change. However, some differences between religious groups remain, suggesting that acculturation does not occur in a uniform way.

Before turning to the more frequently studied first generation and the children of two foreign born parents, one group merits particular attention, as they exhibit a somewhat different pattern: the children of one foreign born parent are overall more accepting of homosexuality, even when compared to the average native⁶. Differences compared to the children of two migrants parents are perhaps unsurprising, in the sense that inter-marriage is one of the strongest indicators of social integration amongst immigrant groups (Gordon, 1964), and children of mixed parents are generally better integrated socially than the offspring of same-ethnic parents (Kalmijn, 2010). Their parents are likely to have arrived at a younger age and not already in a relationship with another migrant. Additionally, there is likely to be a strong selection effect: the foreign born parent chose a partner from outside the ethnic group, demonstrating a greater level of social integration, while the native parent is likely to be more open-minded about otherness both as a cause and consequence of having a non-native partner. This may indeed explain the comparatively high levels of support amongst this group, who benefit from their integration into the mainstream at the same time as being more exposed to greater diversity within their own family. Interestingly, however, those who are of Muslim faith in this group are as strongly opposed to homosexuality as their

⁶ It should be noted that the more tolerant attitudes compared to natives are partly the outcome of the low levels of religious belonging and religiosity amongst this group, and that those not belonging to a religion amongst the native population are similarly supportive of homosexuality.

peers with two foreign born parents. As we do not know the religious denomination of the parents, we can only speculate that the native born parent in such couples may indeed also be Muslim or at least favourably disposed towards Islam if they have a Muslim partner and brought up their child to be a Muslim despite the 'bright' boundaries that exist in Europe towards Islam (Alba, 2005). Further research may be able to shed light on this phenomenon, and explain the stronger maintenance of negative attitudes amongst this group.

The overall more negative attitudes of Muslims across all generational groups confirm findings of previous studies (Gerhards, 2010; Simon, 2008; Stulhofer and Rimac, 2009; Van der Akker et al., 2012). Additionally, this study shows that Eastern Orthodox migrants and the heterogeneous 'other' group appear to have more negative attitudes as well, although this can to a large extent be explained by the origin country context⁷. For Muslims, on the other hand, a more complex story emerges: while acculturation occurs also for this group within and across generations, a relatively large difference in attitudes remains. It may be that one generation has simply not been enough to bridge the relatively large initial gap, and that we will see further change in the future. On the other hand, the debate in Europe on the 'cultural clash' with its focus on Muslims in particular may actually be reinforcing divisions, leading to a greater preservation of particular cultural values amongst this group, as shown by Connor (2010) in relation to the greater maintenance of religiosity in more unfavourable countries. This is mirrored on the other side by identity politics that present the West as decadent and Islam as morally superior (Zanghellini 2010, p.271), and opens the door to Islamist

7

⁷ For the second generation the effect of being Eastern Orthodox remains, even if it is substantially smaller than for second generation Muslims. It should be noted that second generation Eastern Orthodox migrants primarily reside in Greece and Estonia and are part of quite distinct groups. In Greece, the majority have parents who were born in Turkey, and based on their older age profile are likely to be descendents of the population exchange between these countries in 1923. In Estonia, second generation Russians predominate amongst this group, and previous research has shown their greater religious identification and the continued importance of Russian identity for this group (Nimmerfeldt, 2008), which may contribute to the persistence of cultural values in this context.

⁸ Models not presented here also show that intra-generational acculturation, measured as length of residence, occurs for Muslim migrants to a similar extent as for migrants belonging to other religious denominations.

movements that 'stress conformity to narrow norms, which they projects as both 'natural' and also scriptural' (Al-Haqq Kugle 2010, p.270). That this pattern is most pronounced for Muslims rather than other minority religions seems to support this idea, although the heterogeneity of the 'other' category only allows tentative comparisons. While this study could show that individual factors together with origin country socialisation cannot explain fully the less supportive attitudes of Muslims, future research will be needed to determine more clearly the roots of these patterns as well as tracking future developments particularly amongst the second and subsequent generations of Muslims in Europe.

References

Adamczyk, A. and Pitt, C. ,2009. Shaping attitudes about homosexuality: The role of religion and cultural context. *Social Science Research* 38, 338-351.

Al-Haqq Kugle, S. 2010. Homosexuality in Islam: Critical Reflection on Gay, Lesbian, and Transgender Muslims, Oxford: Oneworld.

Arends- Tóth, J. and Van der Vijver, F. 2009. Cultural differences in family, marital, and gender-role values among immigrants and majority members in the Netherlands. *International Journal of Psychology* 44(3), 161-69.

Ahrold, T.K. and Meston, C.M., 2010. Ethnic differences in sexual attitudes of US college students: Gender, acculturation, and religiosity factors. *Archives of Sexual Behavior* 39(1), 190-202.

Alba, R.D., 2005. Bright vs. Blurred boundaries: Second-generation assimilation and exclusion in France, Germany, and the United States. *Ethnic and Racial Studies* 38(1), 20-49.

Alba, R.D. and Nee, V., 2003. Remaking the American Mainstream: Assimilation and Contemporary Immigration. Harvard University Press, Cambridge MA.

Alwin, D.F. and Krosnick, J.A., 1991. Aging, cohorts, and the stability of socio-political attitudes over the life span. *American Journal of Sociology* 97(1), 169-95.

Andersen, R. and Fetner, T., 2008. Cohort differences in tolerance of homosexuality: Attitudinal change in Canada and the United States, 1981-2000. *Public Opinion Quarterly* 72(2), 311-30.

Baunach, D.M., 2011. Decomposing trends in attitudes toward gay marriage, 1988-2006. Social Science Quarterly 92(2), 346-63. Berry, J.W., 1997. Immigration, acculturation, and adaptation. *Applied Psychology: An International Review* 46, 5-68.

Bolzendahl, C. And Myers, D.J., 2004. Feminist attitudes and support for gender equality: Opinion change in women and men, 1974-1998. *Social Forces* 83(2), 759-90.

Boswell, J., 1980. Christianity, Social Tolerance, and Homosexuality. Chicago: University of Chicago Press.

Bourdieu, P., 2001. The Male Domination. Polity Press, Cambridge.

Brewer, P.R., 2003. The shifting foundation of public opinion on gay rights. *Journal of Politics* 65(4), 1208-20.

Connor, P. 2010. Contexts of immigrant receptivity and immigrant religious outcome: the case of Muslims in Western Europe, *Ethnic and Racial Studies* 33(3), 376-403.

Dinesen, T.T. and Hooghe, M., 2010. When in Rome, do as the Romans do: The acculturation of generalised trust among immigrants in Western Europe. *International Migration Review* 44(3), 697-727.

Finke, R. and Adamczyk, A., 2008. Cross-national moral beliefs: the influence of national religious context. *Sociological Quarterly* 49, 615-50.

Francoeur, R.T. and Noonan, R.J., 2004. *International Encyclopaedia of Sexuality*. Continuum, New York.

Frank, D.J. and McEneaney, E.H., 1999. The individualization of society and the liberalization of state policies on same-sex sexual relations, 1984-1995. *Social Forces* 77(3), 911-44.

Gerhards, J., 2010. Non-discrimination towards homosexuality: The European Union's policy and citizens' attitudes towards homosexuality in 27 European countries. *International Sociology* 25(1), 5-28.

Gordon, M., 1964. Assimilation in American Life. Oxford University Press, Oxford.

Greenberg, D.F., 1988. *The Construction of Homosexuality*. University of Chicago Press, Chicago.

Habib, S., 2010. Introduction, in Habib, S. (ed.) *Islam and Homosexuality*, Praeger, Santa Barbara, CA, xvii-lxii.

Hekma, G., 2002. Imams and homosexuality: A post-gay debate in the Netherland. *Sexualities* 5, 237-48.

Idema, H. and Phalet, K., 2007. Transmission of gender-role values in Turkish-German migrant families: The role of gender, intergenerational and intercultural relations. *Zeitschrift für Familienforschung* 19(1), 71-105.

Inglehart, R., 1997. *Modernization and Postmodernization*. Princeton University Press, Princeton, NJ.

Inglehart, R., 1990. *Culture Shift in Advanced Industrial Societies*. Princeton University Press, Princeton, NJ.

Inglehart, R., 1987. Value change in industrial societies. *American Political Science Review* 81(4), 1289-303.

Inglehart, R. and Norris, P., 2009. Muslim integration into Western cultures: between origins and destinations. *HKS Faculty Research Working Papers Series* March 2009, RWP09-007.

Inglehart, R. and Norris, P., 2003. The true clash of civilisations. Foreign Policy 135, 62-70.

Inglehart, R. and Welzel, C., 2005. *Modernization, Cultural Change, and Democracy*. Cambridge University Press, Cambridge.

Jackle. S. And Wenzelburger, G., 2011. Religion and religiousness as determinants of homonegativity. A multi-level analysis of 79 countries. *Berliner Journal für Soziologie* 21(2), 231-63.

Jaspers, E., Lubbers, M. And De Graaf, N.D., 2007. 'Horrors of Holland': Explaining attitudes change towards euthanasia and homosexuals in the Netherlands. *International Journal of Public Opinion Research* 19(4), 451-73.

Jennings, M. 1984. The intergenerational transfer of political ideologies in eight Western nations. *European Journal of Political Research* 12, 261-76.

Kalmijn, M., 2010. Consequences of racial intermarriage for children's social integration', *Sociological Perspectives* 53(2), 271-86.

Kulik, L. 2002. The impact of social background on gender-role ideology. *Journal of Family Issues* 23(1), 53-73.

Leaper, C. and Valin, D., 1996. Predictors of Mexican American mothers' and fathers' attitudes toward gender equity. *Hispanic Journal of Behavioral Science* 18(3), 343-55.

Lewis, G.B., 2003. Black-white differences in attitudes toward homosexuality and gay rights. *Public Opinion Quarterly* 67(1), 59-78.

Lubbers, M., Jaspers, E. and Ultee, W. 2009. Primary and secondary socialization impacts on support for same-sex marriage after legalization in the Netherlands. *Journal of Family Issues* 30(12), 1714-45.

Luu, T.D. and Bartsch, R.A., 2011. Relationship between acculturation and attitudes toward gay men and lesbians in the Vietnamese American community. *Journal of Applied Social Psychology* 41(11), 2621-33.

Marín, B.V., 2003. HIV prevention in the Hispanic community: Sex, culture, and empowerment. *Journal of Transcultural Nursing* 14, 186-92.

Negy, C. and Eisenman, R., 2005. A comparison of African American and White college students' affective and attitudinal reactions to lesbian, gay and bisexual individuals: an exploratory study. *Journal of Sex Research* 42(4), 291-98.

Nimmerfeldt, G., 2008. Collective identities of Russian and Estonian youth, in Integration of Second Generation Russians in Estonia, Institute of International and Social Studies, Tallinn, 107-32.

Norris, P. and Inglehart, R.F., 2012. Muslim integration into Western cultures: Between origins and destinations. *Political Studies* 60(2), 228-51.

OECD, 2008. International Migration Outlook. OECD, Paris.

Olson, L.R., Cadge, W. and Harrison, J.T., 2006. Religion and public opinion about same-sex marriage. *Public Opinion Quarterly* 87(2), 340-60.

Pampel, F., 2011. Cohort Changes in the socio-demographic determinants of gender egalitarianism. *Social Forces* 89(3), 961–82.

Portes, A. and Rumbaut, R.G., 2001. Legacies: the story of the immigrant second generation. University of California Press, Los Angeles, CA.

Read, J., 2003. The sources of gender role attitudes among Christian and Muslim Arab-American women. *Sociology of Religion* 64(2), 207-22.

Röder, A. And Mühlau, P., 2012. What explains immigrants' high levels of trust in host country institutions? *Journal of Ethnic and Migration Studies* 38(5), 777-92.

Scheepers, P., Te Grotenhuis, M. And Van der Slik, F., 2002. Education, religiosity and moral attitudes: Explaining cross-national effect differences. *Sociology of Religion* 63(2), 157-76.

Schulte, L.J. and Battle, J., 2004. The relative importance of ethnicity and religion in predicting attitudes towards gays and lesbians. *Journal of Homosexuality* 47(2), 127-42.

Scott, J., Alwin, D. F. and Braun, M., 1996. Generations and changing sex-role attitudes: Britain in a cross-national perspective. *Sociology* 30(3), 427–45.

Sherkat, D.E., De Vries, K.M. and Creek, S., 2010. Race, religion, and opposition to samesex marriage. *Social Science Quarterly* 91(1), 80-98.

Sherkat, D.E., Powell-Williams, M., Maddox, G. And De Vries, K.M., 2011. Religion, politics, and support for same-sex marriage in the United States, 1988-2008. *Social Science Research* 40(1), 167-80.

Simon, B., 2008. Attitudes towards homosexuality: levels and psychological correlates among adolescents without and with migration background (former USSE and Turkey). Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie 40(2), 87-99.

Stulhofer, A. and Rimac, I., 2009. Determinants of homonegativity in Europe. *Journal of Sex Research* 46(1), 24-32.

Teney, C. and Subramanian, S.V. (2010) 'Attitudes toward homosexuals among youth in multiethnic Brussels', *Cross-Cultural Research*, 44(2), 151-73.

Turcescu, L, and Stan, L., 2000. Religion, politics and sexuality in Romania. *Europe-Asia Studies* 57(2), 291-310.

UNDP. 2010. *Human Development Indicators* 2010. United Nations Development Programme.

Van den Akker, H., Van der Ploeg, R. And Scheepers, P., 2012. Disapproval of homosexuality: Comparative research of individual and national determinants of disapproval of homosexuality in 20 European countries. *International Journal of Public Opinion Research* 25(1), 64-68.

Van de Meerendonck, B. And Scheepers, P., 2004. Denial of equal civil rights for lesbians and gay men in the Netherlands, 1980-1993. *Journal of Homosexuality* 47(2), 63-80.

Van Tubergen, F., 2005. Self-employment of immigrants: A cross-national study of 17 Western societies. *Social Forces* 84, 709-32.

Van Tubergen, F. and Sindradottir, J., 2011. The religiosity of immigrants in Europe: A cross-national study. *Journal for the Scientific Study of Religion* 50(2), 272-88.

Widmer, E.D., Treas, J. And Newcomb, R., 1998. Attitudes toward nonmarital sex in 24 countries. *The Journal of Sex Research* 35(4), 349-58.

Whitley, B., 2009. Religiosity and attitudes toward lesbians and gay men: A meta-analysis. *International Journal for the Psychology of Religion* 19(1), 21-38.

Yamanaka, K. and McClelland, K., 1994. Earning the model-minority image: Diverse strategies of economic adaptation by Asian-American women. *Ethnic and Racial Studies* 17(1), 79-114

Yuchtman-Yaar, E. and Alkalay, Y., 2007. Religious zones, economic development and modern value orientations: Individual versus contextual effects. *Social Science Research* 36, 789-807.

Zanghellini, A. (2010) Neither homophobic nor (hetero) sexually pure: Contextualizing Islam's objections to same-sex sexuality, in Habib, S. (ed.) *Islam and Homosexuality*, Praeger, Santa Barbara, CA, 269-95.

Appendix 1: Dependent and independent variables by immigrant group

Dependent variable Attitudes towards homosexuality Disagree strongly (%) 6.5 6.3 9.5 8.3 5.5 Disagree (%) 9.5 9.3 12.3 10.3 7.7 Neither (%) 15.4 15.5 15 17.2 13.7 Agree (%) 39.5 39.8 35.7 36.8 37.7 Agree (%) 39.5 39.8 35.7 36.8 37.7 Agree strongly (%) 29.2 29.1 27.4 27.4 35.3 Independent variables Individual level variables Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5 Flace of residence Friedlence Friedlenc	foreign parent
Disagree strongly (%) 6.5 6.3 9.5 8.3 5.5 Disagree (%) 9.5 9.3 12.3 10.3 7.7 Neither (%) 15.4 15.5 15 17.2 13.7 Agree (%) 39.5 39.8 35.7 36.8 37.7 Agree strongly (%) 29.2 29.1 27.4 27.4 35.3 Independent variables Individual level variables Individual level variables Individual level variables Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5	
Disagree (%) 9.5 9.3 12.3 10.3 7.7 Neither (%) 15.4 15.5 15 17.2 13.7 Agree (%) 39.5 39.8 35.7 36.8 37.7 Agree strongly (%) 29.2 29.1 27.4 27.4 35.3 Independent variables Independent variables Individual level variables Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Low	
Neither (%) 15.4 15.5 15 17.2 13.7 Agree (%) 39.5 39.8 35.7 36.8 37.7 Agree strongly (%) 29.2 29.1 27.4 27.4 35.3 Independent variables Individual level variables Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2	
Agree (%) 39.5 39.8 35.7 36.8 37.7 Agree strongly (%) 29.2 29.1 27.4 27.4 35.3 Individual level variables Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3	
Agree strongly (%) 29.2 29.1 27.4 27.4 35.3 Independent variables Individual level variables Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marrial status 40.0	
Independent variables Individual level variables Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Individual level variables Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Frimary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8	
Religious denomination Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Christian (%) 58.6 60.0 49.8 45.3 45.4 Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level 90.0 47.3 46.0 41.1 43.5 Educational level 91.0 16.4 16.7 16.0 13.5 8.9 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 19.9 19.9 19.9 19.9 19.9 19.9 19.9 19.9 19.0	
Muslim (%) 1.2 0.3 12.0 13.3 0.8 Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level 8.9 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status 8 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3	
Other non-Christian (%) 0.6 0.4 3.2 1.9 0.7 No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
No religion (%) 38.2 39.3 35.0 39.5 53.1 Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Female (%) 53.1 53.0 54.0 50.9 53.4 Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Age (in years) 47.0 47.3 46.0 41.1 43.5 Educational level 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Educational level Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Primary (%) 16.4 16.7 16.0 13.5 8.9 Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Lower secondary (%) 21.5 21.7 19.5 22.4 19.9 Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Upper secondary (%) 34.9 35.0 31.8 38.4 37.7 Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Tertiary (%) 27.2 26.6 32.7 25.7 33.5 Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Income 6.4 6.4 6.4 6.3 6.7 Marital status Married (%) 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Marital status 54.1 54.1 59.5 44.2 45.9 Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Married (%)54.154.159.544.245.9Never married (%)27.927.921.139.635.4Divorced/separated (%)9.28.811.99.912.2Widowed (%)8.99.17.46.36.5	
Never married (%) 27.9 27.9 21.1 39.6 35.4 Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Divorced/separated (%) 9.2 8.8 11.9 9.9 12.2 Widowed (%) 8.9 9.1 7.4 6.3 6.5	
Widowed (%) 8.9 9.1 7.4 6.3 6.5	
• •	
Place of residence	
City (%) 19.1 18.2 28.4 27.9 21.7	
Suburb (%) 12.5 12.2 15.2 14.6 14.1	
Town (%) 31.0 30.8 31.9 34.5 32.7	
Village (%) 31.1 32.0 21.8 21.0 27.6	
Rural (%) 6.4 6.8 2.7 2.0 4.0	
Religiosity 4.7 4.7 5.3 5.1 4.2	
Religious attendance	
Weekly(%) 15.4 15.7 15.5 14.6 9.2	
Less than weekly (%) 51.3 51.1 53.7 54.6 49.4	
Never (%) 33.3 33.2 30.8 30.6 41.3	
Prayer	
Daily (%) 20.8 20.5 28.0 22.3 14.7	
Weekly or more (%) 14.7 14.7 15.8 13.2 11.9	
Less often (%) 27.8 27.8 27.9 30.1 26.9	
Never (%) 36.8 37.1 28.3 34.5 46.6	
Length of residence (in years) n/a n/a 23.0 n/a n/a	
Community level variables	
Difference host-origin WVS n/a n/a 0.25 0.25 0.13	
Difference host-origin HDI n/a n/a 0.11 0.10 0.05	
Host country level variable	
Case numbers 144,736 128,435 9,255 1,914 5,133 Valid percentages reported	

Valid percentages reported