# The Religiosity of Children of Immigrants and Natives in England, Germany, and the Netherlands: The Role of Parents and Peers in Class

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Abstract: This article examines the role of parents and peers for the religiosity of ethnic minority and majority adolescents, about which little is known in the literature. We analyze data from the nationally representative and cross-nationally comparative survey 'Children of Immigrants Longitudinal Study in Four European Countries' CILS4EU (2010–2011) with information from >13,000 adolescents in England, Germany, and the Netherlands. Results from this school-based survey show that ethnic minority adolescents, and in particular those with Muslim parents, are more religious than native-majority adolescents. Transmission of more private aspects of religiosity (i.e. 'the subjective importance people attach to religion') is more successful among ethnic minority families compared with native-majority families. No minority-majority differences are found in the intergenerational transmission of more public dimensions of religiosity (i.e. frequency of 'religious attendance' and 'prayer'). Furthermore, we find that beyond the influence of parents, the religiosity of adolescents is positively associated with the average religiosity of their peers in class. In line with the argument that peer influence is stronger between members of the same, rather than different, ethnic groups, we also observe that the strength of the relation between average religiosity in class and individual religiosity increases with the share of co-ethnic peers in class.

## Introduction

In the sociology of religion, it is often argued that social forces play an important role in determining people's religiosity (Need and De Graaf, 1996; Te Grotenhuis and Scheepers, 2001). Individuals are affected by the religiousness of people in their social network: parents, relatives, spouses, neighbors, friends, peers, teachers, coworkers, and so on. In more religious contexts and networks, individuals are more likely to become and remain religious themselves, due to processes of religious socialization, the reinforcement of religious norms and values, and monitoring of religious behavior and imposing sanctions when religious prescriptions are violated (Sherkat and Wilson, 1995; Sherkat, 1998).

In line with these arguments, research has repeatedly found that religious transmission from parents to children is strong (Wilson and Sandomirsky, 1991;

Hayes and Pittelkow, 1993; Myers, 1996; Ruiter and Van Tubergen, 2009). Of all social forces that determine people's religiosity, parents are considered most important (Hunsberger and Brown, 1984). A limitation of previous work, however, is that studies relied on samples of the general population, which largely comes down to studying the majority group. Little is known about whether parental transmission and other social influence processes are similar or different among immigrants and their children, or how minority and majority groups affect each other. In light of the growing ethnic diversity in contemporary western societies, it seems imperative to study how social forces shape the religiosity of different groups.

Although recently, some studies have been done on parental transmission among specific immigrant groups and their children (Güngör,Fleischmann and Phalet, 2011; Maliepaard and Lubbers, 2013), no comparisons

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were made to processes of intergenerational transmission among the majority group, and cross-group influences were not studied either. Hence, current work can best be characterized as adopting a *single-group perspective*, in which either the majority or the minority group is studied, and intergroup influences are ignored. We propose taking a *multiple-group perspective*, which studies both minority and majority groups and also considers cross-group influences. Specifically, we make two contributions to the literature on how social forces shape people's religiosity.

First, we develop and test hypotheses about whether parental transmission is stronger or weaker among minority or majority groups. Such direct comparisons across groups have not been made in previous work. Second, we elaborate on this multiple-group perspective and study the role of peers in class in shaping people's religiosity. Although scholars have argued more generally that social forces determine people's religiosity, little empirical work has been done on peer influence (Regnerus, Smith and Smith, 2004; Regnerus and Smith, 2005). In one study, where Australian students were asked to name the three people who had the greatest influence on their religious beliefs, 44% of the respondents named their parents as having the most important influence, as against 15% who named their friends (Hunsberger and Brown, 1984). Previous studies have been limited by their focus on general samples, and by the fact that cross-group influences were not studied.

To study parental transmission and peer effects, we focus on the religiosity of adolescents. Two research questions are therefore addressed in our study. First, to what extent do parents affect the religiosity of their adolescent children, among minority and majority groups? Second, to what extent is the religiosity of minority and majority adolescents affected by peers from their own group and that of other groups in class?

The context in which we study these questions is Europe, and more specifically three countries that have seen a strong increase in their ethnic minority populations in the past decades: Germany, England, and the Netherlands. We study the degree to which individuals engage in religious practices and are subjectively attached to a religion, two core indicators of 'religiosity' (Hall, Meador and Koenig, 2008).

# Theory and Hypotheses

Religious transmission from parents to children is strong and parents are often considered the most important social force determining people's religiosity (Myers, 1996). Through regular association and interaction, parents provide their children with ample opportunities to observe and imitate their religious beliefs and behavior. In addition, parents often actively socialize their children, so that they adhere to the same religious practices, and also monitor and sanction their children in case of deviance to religious norms (Sherkat, 1998; Bao *et al.*, 1999).

Although parental religious transmission is likely to be important in native as well as immigrant families, there is reason to believe there may be differences across these minority and majority groups. There are two lines of theoretical argumentation here, which lead to opposite predictions. A first line of reasoning comes from the work of Kelley and De Graaf (1997), who argue that when the religiosity of the parents deviates from the majority religion in a certain country, parents will put more effort in transmitting their religion to their children. For example, highly religious parents who live in a more secular country are expected to monitor and control their children more strongly than when they live in a more religious country. Elaborating on this line of reasoning, one could assume a similar process to occur among immigrant parents. Many immigrants are affiliated to a religion that differs from the (predominantly Christian) majority group, as showed by Van Tubergen and Sindradottir (2011) in a study of firstgeneration immigrants in 27 European countries. Belonging to a religious minority group, immigrant parents might put more effort to religiously socialize their children than majority parents. Therefore, this line of reasoning leads to the hypothesis that religious transmission is stronger among immigrant adolescents compared with native adolescents (H1a).

An alternative line of reasoning comes from the work of Kuszynski, Marshall and Schell (1997), who argue that immigrant parents may encourage their children to hold different values than their own to help them adapt to the host society. If the majority groups have religious norms and values that differ from those common in their countries of origin, immigrant parents might consider their religious values and traditions as a hindrance to the socioeconomic incorporation of their children, as they will likely face discrimination in the labor market (Riach and Rich, 2002). Immigrant parents may therefore choose to raise their children with less strict religious values, or at least allow them to be less religious, to help them integrate into the host society. Because (most) native parents do not face these kinds of religious barriers to the same degree, the alternative line of reasoning leads to the hypothesis that religious transmission is weaker in immigrant families compared with native families (H1b).

To further examine these two alternative lines of reasoning, we differentiate between Muslim immigrants

and non-Muslim immigrants. A large part of the immigrants that moved to Germany, the Netherlands, and England came from predominantly Muslim countries such as Turkey, Morocco, and Pakistan. Moreover, adherence to Islam is often seen as a hindrance to the socioeconomic incorporation in European societies given the anti-Muslim attitudes of the majority population (Strabac and Listhaug, 2008), as well the sociocultural distance created by adhering to Muslim prescriptions within the more secular-Christian societies (Foner and Alba, 2008).<sup>1</sup>

Following the idea that parents who are a religious minority in the host country and who feel their cultural identity is threatened, put more effort into transmitting their religiosity to their children, one would expect to see higher transmission rates among Muslim immigrant parents than among non-Muslim immigrant parents. Other religions are less 'under attack' in Europe, and some immigrant parents might have the same (Christian) religion as the majority population. Thus, following the reasoning of Kelley and De Graaf (1997), one would expect to see that religious transmission is stronger in Muslim immigrant families compared with non-Muslim families (H2a).

Alternatively, however, one could elaborate on the arguments of Kuszynski, Marshall and Schell (1997), and assume that, given the relatively strong anti-Muslim sentiments in European countries, in particular Muslim parents more often reduce their efforts to transmit their religion to their children. We derive the hypothesis that religious transmission is weaker in Muslim immigrant families compared with non-Muslim families (H2b).

The peers that adolescents encounter in class represent the second social force we study, and we study this within a multiple-group perspective as well. As adolescents spend a large amount of their time in class, surrounded by their peers, classmates have an important socializing influence. Classmates observe and imitate each other's behavior, and also exert social control on socially acceptable behavior (Brechwald and Prinstein, 2011). Research concerning a number of different outcomes has repeatedly acknowledged the important socializing role that peers in class play, for instance, with regard to alcohol use and smoking (Veenstra and Dijkstra, 2011). Little is known about whether peers also affect each other's religiosity, although a few studies do show that peer effects occur (Regnerus, Smith and Smith, 2004; Regnerus and Smith, 2005).

Following the more general literature on peer influence, one could argue that adolescents (i.e. both immigrant origin and native-majority) who are surrounded by more religious peers in class, will become (and/or remain) more religious themselves, as compared with

respondents who are in a class with less religious peers. The underlying process of peer influence is similar to the positive effect of being raised by religious parents, or to growing up in countries that are more religious and being exposed to the religiosity of neighbors, coworkers, and friends (Ruiter and Van Tubergen, 2009; Van Tubergen and Sindradottir, 2011). Peers in class are another socializing agent, and we assume adolescents will adjust their religiosity to that of the overall norms and practices of the peers in class. This leads us to formulate the hypothesis that the higher the average religiosity of the peers in class, the higher will be the religiosity of the adolescent (H3).

The multiple-group perspective elaborates on this core hypothesis, arguing that not everyone in class in class is equally influential. Peer influence processes are group dependent. School classes are made up with adolescents from different national origins and different religions, and we assume that peer influence happens more strongly within such groups rather than between groups. The reason is that friendships are most often made within groups, with similar others (i.e. the homophily tendency; Veenstra and Dijkstra, 2011), and peer influence depends on the quality and strength of relationships (Brechwald and Prinstein, 2011). For example, a Turkish adolescent will be affected more strongly by the religiosity of his Turkish peers in class, than by the religiosity of his native-majority peers in class, or by peers from other origins. We derive the hypothesis that the proportion co-ethnics in class has a positive influence on the effect of the average religiosity of the peers in class on the religiosity of the adolescent (H4).

#### **Data and Measurements**

#### Data

We use data from the first wave of the 'Children of Immigrants Longitudinal Study in Four European Countries' (CILS4EU). These data were collected in the academic year 2010-2011 among adolescents in England, Germany, the Netherlands, and Sweden, and contain information from nationally representative samples of children of immigrants as well as native reference groups (Kalter et al., 2013). In this study we do not use the data from Sweden, as response rates for the parental interviews were too low.<sup>2</sup> The survey among the adolescents consists of a self-completion questionnaire concerning a wide range of subjects. Cognitive pretesting and pilot studies were conducted in all countries. This resulted in a carefully constructed measurement instrument, which was standardized by intensive translation and backtranslation.

The data collection took place at high schools, which were drawn from identical sampling frames in the three countries. The sampling frames were stratified by education level and the percentage of non-Western immigrant students in schools. Given the clustered sampling frame, we use weights in to correct for this. A probability-proportional to size procedure was used to ensure that schools with a higher percentage of non-Western immigrants were oversampled. At least two classes were randomly selected per school. The classes were in the 9th grade in England, the 10th grade in Germany and the 3rd grade in the Netherlands. Students in these grades are all ~15 years old. Research teams visited the schools and gave standardized instructions to the students on how to complete the questionnaire. The students completed the questionnaire in a classroom with a researcher present. On average the questionnaire took 50 minutes to complete. Students who were ill or otherwise absent received a questionnaire at home. Participants received an additional questionnaire for their parents, which could be returned to the research teams by mail.

A strength of the survey is that in addition to the data collection among adolescents, the parents were also interviewed. In many previous studies on parental transmission, the relation between parental religiosity and that of their children is often studied with 'reflexive questions', where children have to report about the religiosity of their parents (Voas and Fleischmann, 2012), and which can inflate the correlation between parent's and child's religiosity due to recall bias. Parental questionnaires in several nonnative languages were available and were provided to students at their request. In case the parents did not respond, they were sent a reminder and were ultimately contacted by phone when possible.

The response rates among schools, individual students, and their parents can be found in Table 1. In total 13,663 students in 699 classes completed the survey. A total of 8,715 parents returned a completed questionnaire to the researchers or participated by phone.

With respect to definitions, by immigrant children we mean 'children of immigrants', i.e. adolescent children

**Table 1** Response rates among schools, adolescents, and their parents

Units	Total	England	Germany	The Netherlands
Schools	33%	13%	54%	33%
Adolescents Parents	90% 62%	98% 37%	81% 77%	91% 71%

who are either born abroad or who are born in the host countries, but one or both of his parents were born abroad. We contrast immigrant children with 'native children', i.e. adolescents who are born in the host country and whose parents were both born in the host country as well. We then coupled this information to the information about the religious denomination of the parents to differentiate between immigrant children with a Muslim background and those with a non-Muslim immigrant background. Note that there is a small number of native children whose parents identified themselves as Muslims ( $n\!=\!45$ ), and these were excluded from the analyses.

Our surveys from the three countries contain a mixture of Muslim and non-Muslim groups, many smaller groups, and some larger immigrant groups. In our sample from England, most non-Muslim immigrants are from India, while most Muslim immigrants are Pakistani. In Germany, Russians are the largest non-Muslim immigrant group, while Turks are the largest Muslim immigrant group. The largest non-Muslim immigrant group in the Netherlands is from Suriname, whereas Turks are the largest Muslim immigrant group in our data.

### **Dependent Variables**

The hypotheses proposed are about the 'religiosity' of adolescents, without any differentiation to specific kinds of religious dimensions. The concept of 'religiosity' is often conceptualized as having three different dimensions: practices (e.g. attendance), subjective attachment, and adherence to beliefs (Hall, Meador and Koenig, 2008). The data allow us to study the first two dimensions, as we have information on frequency of religious attendance and praying (i.e. practices) and the degree of subjective importance of religion (i.e. subjective attachment). Thus, to capture the comprehensive nature of religiosity, we study these various religious aspects, and empirically assess whether we find similar or different processes. Note, however, that we can study religious transmission better for subjective religiosity than for the other two aspects (see below).

Religious attendance is measured with the item: 'How often do you attend a religious meeting place (such as a church, mosque, synagogue, or temple)?' This question has the following answer categories: '1 = Never', '2 = Sometimes (but less than once a month)', '3 = At least once a month', '4 = At least once a week', and '5 = Every day'.

Frequency of prayer is measured with the item: 'How often do you pray?' and the possible answers are as follows: '1 = Never', '2 = Sometimes (but less than once a

month)', '3 = At least once a month', '4 = At least once a week', '5 = Every day', and '6 = Five times a day or more'.

Subjective religiosity is measured with the item: 'How important is religion to you?' and the possible answers are as follows: '1 = Very important', '2 = Important', '3 = Not very important', and '4 = Not important at all'. The responses were recoded so that a high score indicates someone is more religious.

## Independent Variables

The independent variables used in this study are briefly discussed below.

Parental subjective religiosity is measured with the same question as for adolescents, namely, 'How important is religion to you?', and has the same 4-point answer categories. Measures of parental religious attendance and prayer are available for the Netherlands, where the questions were the same as those for the adolescents, but not England and Germany. Therefore we analyze parental transmission of subjective religiosity in all three countries and parental transmission of religious attendance and prayer only in the Netherlands.

Class religiosity is measured by taking the mean religiosity of the other adolescents in class. The class religiosity measure corresponds to the adolescent religiosity measure under study. Thus, in the analysis of subjective religiosity of adolescents, we use the mean subjective religiosity of peers in class. For religious attendance and praying, we use the average religious attendance and prayer of the classmates.

Proportions of co-ethnic classmates is measured as the number of classmates from the same ethnic background as the respondent.

Previous studies have shown that parental religious transmission (and value transmission in general) can be influenced by whether both biological parents are present (Myers, 1996), the number of siblings (Aldous and Klein, 1991), and family cohesion (Bao *et al.*, 1999). These variables are therefore included in the analyses as controls and are measured as follows.

Households with both *Biological parents* are indicated by a dummy variable. Households with both biological parents score 1 and households without both biological parents score 0.

Siblings refers to the number of brothers and sisters that an adolescent reports are living with them at their primary home.

Family cohesion is measured with responses to five statements. The introduction to the statements reads: 'How often are the following statements true about your family?'. The five statements are as follows: 'We like to spend free time with each other', 'It becomes tense when

everyone is at home' (reverse coded), 'We feel very close to each other', 'When we are together the atmosphere is uneasy' (reverse coded), and 'We fight about small things' (reverse coded). The four answers that respondents could give are the following: 'Always' (1), 'Often' (2), 'Sometimes' (3), and 'Never' (4). The responses to these five statements form a reasonably reliable scale with a Cronbach's alpha of 0.73. The scale is constructed by taking the mean of the responses to the five statements, which were first recoded so that a higher score indicates greater family cohesion.

The other controls included are as follows: *Age*, measured in years; *Gender*, with males as the reference category (*Female* in the tables); *Background*, with Muslim immigrants and non-Muslim immigrants, and natives as the reference category.

Table 2 shows the (unweighted) descriptive statistics of the variables in each of the three countries.

#### Missing Values

The best way to treat missing data, is to conduct multiple imputation (Rubin, 1987). We use multiple imputation by fully conditional specification (Van Buuren, Boshuizen and Knook, 1999; Van Buuren, 2007). In this method, imputation models specify the estimation method and the predictor variables to be used. The estimation methods that were used included multinomial, ordered, and binomial logistic regression, as well as 'predictive mean matching', a linear regression method that only returns imputed values that fall within the observed range. In the imputation of the missing values on parental subjective religiosity, predictive mean matching was used. The predictor variables used came from the parental and the youth data and included, among others, adolescent religiosity, parental education level (reported by the adolescents), parental ethnic background (reported by the adolescents), household income, and several attitude measures from the parents, as well as the adolescents.3

In line with recent insights (Graham, Olchowski and Gilreath, 2007) and considering practical limitations of working with a large number of data sets, we created 20 imputed data sets for this study using the 'MI' package in STATA 12 (StataCorp, 2011). Rubin's combination rules (1987) are used to combine the findings from the analyses on the 20 imputed data sets into a single set of results.

#### Limitations

There are some limitations to the current study. The cross-sectional nature of the data means that the

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Table 2 Descriptive statistics of the dependent and independent variables used in the analyses

:	England ( $N=4,285$ )	4,285)	(	Germany (N = 4,973)	= 4,973)	1	The Netherlands (N=4,360)	1ds (N=4	(098)
Variables	Mean/ proportion	S	Kange	Mean/ proportion	S	Kange	Mean/ proportion	SD	Kange
Dependent variables									
Subjective religiosity	1.40	1.15	0-3	1.55	1.03	0–3	1.22	1.02	0–3
Religious attendance	1.01	1.23	0-4	1.05	1.06	0-4	69.0	1.04	0-4
Prayer	1.38	1.67	0-5	1.44	1.54	0-5	1.07	1.65	0-5
Difference score subjective religiosity	69.0	0.73	0-3	0.67	0.71	0–3	0.65	0.67	0–3
Difference score religious attendance	I			I			0.44	99.0	0-4
Difference score prayer	I			I			0.93	1.28	0—5
independent vanables Background									
Natives	0.61		0/1	0.52		0/1	69.0		0/1
Non-Muslim immigrants	0.27		0/1	0.25		0/1	0.19		0/1
Muslim immigrants	0.12		0/1	0.23		0/1	0.12		0/1
Parental subjective religiosity	1.70	1.05	0-3	1.76	0.99	0–3	1.53	0.94	0–3
Parental religious attendance	I			I			0.88	1.04	0-4
Parental prayer	I			I			1.71	1.81	0-5
Class subjective religiosity	1.39	0.61	0.17 - 3	1.54	0.48	0–3	1.22	0.59	0–3
Class religious attendance	I			I			69.0	0.55	0-3.08
Class prayer	I			I			1.06	0.89	0 - 4.58
Proportion co-ethnic classmates	0.47	0.36	0-1	0.44	0.35	0–1	0.57	0.36	0-1
Family cohesion	2.09	09.0	0-3	2.00	0.56	0–3	2.17	0.52	0–3
Number of siblings	1.51	1.40	0-21	1.45	1.38	0-13	1.35	1.10	0 - 14
Living with biological parents	0.63		0/1	89.0		0/1	0.73		0/1
Age	14.35	0.49	13–17	14.83	0.77	13–18	14.57	0.65	13–17
Female	0.49		0/1	0.49		0/1	0.51		0/1

causality of the relations cannot strictly be determined. Unobserved heterogeneity and reverse causality could play a role. It is unlikely, however, that for instance the relation between parental and adolescent religiosity runs only from adolescents to parents. There is research suggesting that the relation between values held by parents and children is reciprocal; however, influence from children on their parents is assumed to be most likely when children become adults (Glass, Bengtson, and Dunham, 1986). Another reverse-causality problem could be that children choose schools/classes with more religious classmates. Research suggests, however, that children are not the main decision makers when it comes to school choice (Reay and Lucey, 2010). Furthermore, when assessing the influence of religiosity of peers in class, we control for parental religiosity. Nevertheless, the results should be interpreted with the usual caution.

## **Analytic Strategy**

Three issues should be mentioned with respect to our analytical strategy. First, the data have a multilevel structure, with adolescents nested in classes. To take into account this hierarchical structure, we use random intercept multilevel linear regression analyses (Snijders and Bosker, 2011).

Second, when studying religious transmission (H1a-H2b), a problem arises with respect to the differential religiosity of the three groups that we distinguished: native-majority parents, Muslim immigrants, and other immigrants. Muslim immigrant parents are far more religious than native-majority parents. To illustrate, ~71% of the Muslim parents indicate that religion is 'very important' to them, as compared with only 10% of the native-majority parents. An analysis, in which religiosity of the adolescent would be regressed on the religiosity of the parent and then separately for the three groups would be erroneous, given the unequal distribution of the three groups and the restricted range of the answer categories. Therefore, a matching strategy is preferable, in which 'similar' religious parents of the various groups are compared.

To do so, we first distinguished three categories of parents: 'secular', 'moderate religious', and 'highly religious'. With respect to *subjective religiosity*, we consider parents who find religion 'not important at all (4)' or 'not very important (3)' to be secular; those who find religion 'important (2)' are considered moderately religious, and those who find it 'very important (1)' highly religious. Regarding *religious attendance*, we consider parents who never attend (1) secular, parents who attend up to once a month (2–3) are considered moderately religious, and those who attend weekly or even daily

(4–5) as highly religious. With respect to *praying*, we classify parents who never pray (1) as secular, those praying up to once a week (2–4) are considered moderately religious, and those praying daily or even five times a day (5–6) are highly religious.

Because for each dimension of religiosity the secular category contained too few Muslim immigrant parents, we leave out this category from our analysis. Furthermore, this group of secular parents differs qualitatively from the other categories, as these parents are not religious and hence cannot transmit their religiosity. We leave the specific study of this group to future research. Therefore, we focus on how 'moderate religious' and 'highly religious' parents with various backgrounds transmit their religion to their children. The second step is to compute the absolute difference scores between the religiosity of the parent and child. This difference score captures unsuccessful transmission of religiosity, and such deviations can go in two directions: children can be less religious than their parents, or more religious. It should be noted that theoretically, our assumptions are mainly such that unsuccessful transmission implies children being less religious than their parents. With regard to subjective religiosity, for the category of 'highly religious parents', any deviations between children and their parents are by definition downward, i.e. children are less religious. With respect to children with 'moderately religious parents', both upward and downward deviation is possible (as well as no deviation). With regard to religious attendance and prayer, upward and downward deviation is possible in families with 'moderately' as well as 'highly religious parents'. However, empirically it appears that only a small minority of children across these categories reports being more religious than their parents. Specifically, among children raised by 'moderately religious parents', in terms of subjective religiosity, only 18% are more religious than their parents, 32% have the same degree of religiosity, and 50% are less religious (results not presented here). With regard to religious attendance, ~9% of the children of moderate religious parents and 6% of those raised by highly religious parents are more religious than their parents. These figures are 13 and 5% for praying. In summary, our difference score works perfectly well for children being raised by highly religious parents with regard to subjective religiosity, but some caution is warranted in interpreting the findings for religious attendance and praying, and then in particular for the middle category of moderate religious parents—although the proportions of more religious children are not high. The difference scores are the dependent variables in our analysis of religious transmission, i.e. Tables 4 and 5.

Finally, it should be noted that the survey data contain measures of parental subjective religiosity in all three countries. This means that we can study religious transmission with respect to subjective religiosity in all countries, and likewise we can study the effect of subjective religiosity of classmates in all countries. Parents' frequency of praying and religious attendance, however, is only measured in the Netherlands.

## Results

### **Descriptive Results**

Table 3 provides a descriptive overview of the (weighted) religiosity of native, non-Muslim, and Muslim immigrant adolescents in the three countries. All three measures show that on average immigrant adolescents are significantly more religious than their native-majority peers. In addition, Muslim immigrant children are significantly more religious than non-Muslim immigrant children. These differences are observed in all three countries.

We also estimated the correlations between the religiosity of parents and children, to assess whether parental transmission is similar or different across the three measures used here. For subjective religiosity, we find correlations of 0.62 for England, 0.55 for Germany, and 0.60 for the Netherlands. With respect to praying and religious attendance in the Netherlands, correlations are 0.67 and 0.73, respectively.

#### **Parents**

Table 4 presents the results of the multilevel linear regression models for the difference scores between adolescent and parental subjective religiosity in all three countries. Analyses of families with moderately religious parents (a) and highly religious parents (b) across the three countries show nearly uniform results. In support of hypothesis H1a (and opposite to H1b), which predicted that religious transmission would be stronger in immigrant families compared with native families, the results show that difference scores are lower for immigrants compared with natives, with the exception of moderately religious Muslim immigrant families in England, who do not differ significantly from natives in their transmission of subjective religiosity. The results also show that differences in transmission are more pronounced when looking at highly religious families, instead of moderately religious families. In Germany, for instance, among families with moderately religious parents, differences scores of non-Muslim immigrant adolescents are 0.11 lower compared with natives, while among families with highly religious parents, scores of non-Muslim adolescents are 0.38 lower.

Furthermore, differences between non-Muslim immigrants and Muslim immigrants support hypothesis H2a (and reject H2b), as lower difference scores among Muslim immigrants suggest that transmission is more successful in these families. For example, in England, among families with highly religious parents, while the difference score is 0.48 lower among non-Muslim immigrant adolescents, it is 0.75 lower among Muslim immigrant adolescents. Postestimation analyses (not presented here) reveal that differences between non-Muslim immigrants and Muslim immigrants are only significant (P < 0.05) among families with highly religious parents, not among moderately religious families.

Table 5 presents the results of multilevel linear regression analyses on the difference scores between adolescent and parental religious attendance and prayer in the Netherlands. None of the differences between natives, non-Muslim immigrants, and Muslim

**Table 3** Descriptive overview of the religiosity of native, non-Muslim, and Muslim immigrant adolescents in the three countries

Country	Subjecti Natives	ve religiosity Non-Muslim Immigrants	Muslim Immigrants	Religiou Natives	s attendance Non-Muslim Immigrants	Muslim Immigrants	Praying Natives	Non Muslim Immigrants	Muslim Immigrants
England Germany The Netherlands	0.93 <sup>a,b</sup> 1.10 <sup>a,b</sup> 0.85 <sup>a,b</sup>	1.89 <sup>b,c</sup> 1.58 <sup>b,c</sup> 1.70 <sup>b,c</sup>	2.71 <sup>a,c</sup> 2.53 <sup>a,c</sup> 2.62 <sup>a,c</sup>	1.57 <sup>a,b</sup> 1.78 <sup>a,b</sup> 1.44 <sup>a,b</sup>	2.43 <sup>b,c</sup> 2.02 <sup>b,c</sup> 1.93 <sup>b,c</sup>	3.35 <sup>a,c</sup> 2.69 <sup>a,c</sup> 2.75 <sup>a,c</sup>	1.70 <sup>a,b</sup> 2.04 <sup>a,b</sup> 1.65 <sup>a,b</sup>	3.03 <sup>b,c</sup> 2.43 <sup>b,c</sup> 2.56 <sup>b,c</sup>	4.48 <sup>a,c</sup> 3.37 <sup>a,c</sup> 3.71 <sup>a,c</sup>
Average	0.95 <sup>a,b</sup>	1.72 <sup>b,c</sup>	2.60 <sup>a,c</sup>	1.59 <sup>a,b</sup>	2.15 <sup>b,c</sup>	2.86 <sup>a,c</sup>	1.79 <sup>a,b</sup>	2.68 <sup>b,c</sup>	3.71 <sup>a,c</sup>

<sup>&</sup>lt;sup>a</sup>Differs significantly from non-Muslim immigrants (P < 0.05).

<sup>&</sup>lt;sup>b</sup>Differs significantly from Muslim immigrants (P < 0.05). T-tests are used to compare group means.

 $<sup>^{</sup>c}$ Differs significantly from natives (P < 0.05).

**Table 4** Results of multilevel linear regression models for the difference scores (between parents and children) on subjective religiosity

Variable			•			sity (Ger	re subje rmany) Model			nce scor sity (the 3a	•	ands)
	b	(S.E.)	b	(S.E.)	b	(S.E.)	b	(S.E.)	b	(S.E.)	b	(S.E.)
Constant	0.02	(0.71)	1.78	(0.75)	1.32	(0.37)	1.66	(0.40)	1.07	(0.47)	2.52	(0.57)
Native	Ref.		Ref.		Ref.		Ref.		Ref.		Ref.	
Non-Muslim immigrant	-0.22	(0.06)	-0.48	(0.07)	-0.11	(0.04)	-0.38	(0.06)	-0.26	(0.05)	-0.62	(0.07)
Muslim immigrant	-0.16	(0.10)	-0.75	(0.09)	-0.17	(0.05)	-0.84	(0.06)	-0.32	(0.06)	-0.84	(0.07)
Family cohesion	-0.09	(0.04)	-0.18	(0.04)	-0.18	(0.03)	-0.20	(0.04)	-0.12	(0.04)	-0.25	(0.06)
Siblings	0.00	(0.02)	-0.04	(0.02)	0.02	(0.01)	-0.04	(0.01)	0.00	(0.02)	-0.05	(0.02)
Biological parents	-0.06	(0.05)	-0.09	(0.07)	-0.09	(0.04)	-0.13	(0.05)	-0.06	(0.05)	-0.19	(0.06)
Age	0.01	(0.05)	-0.01	(0.05)	-0.00	(0.02)	0.01	(0.03)	0.02	(0.03)	-0.03	(0.04)
Female	-0.19	(0.05)	-0.06	(0.07)	-0.11	(0.04)	-0.04	(0.04)	-0.14	(0.04)	-0.05	(0.06)

Note. Bold parameters express significance at P < 0.05.

**Table 5** Results of multilevel linear regression models for the difference scores (between parents and children) on religious attendance and prayer in the Netherlands

Variable	Difference (the Nethe		ıs attendance		Difference score prayer (the Netherlands)					
	Model 1a		Model 1b		Model 2	2a	Model 2	2b		
	b	(S.E.)	b	(S.E.)	b	(S.E.)	b	(S.E.)		
Constant	-0.30	(1.03)	-0.01	(0.37)	1.69	(1.03)	1.27	(0.82)		
Native	Ref.		Ref.		Ref.		Ref.			
Non-Muslim immigrant	-0.01	(0.12)	-0.01	(0.04)	-0.14	(0.13)	0.02	(0.09)		
Muslim immigrant	-0.04	(0.13)	-0.05	(0.06)	-0.18	(0.16)	0.24	(0.13)		
Family cohesion	-0.20	(0.10)	-0.03	(0.03)	-0.43	(0.10)	-0.07	(0.06)		
Siblings	0.07	(0.03)	-0.01	(0.02)	-0.14	(0.03)	-0.02	(0.03)		
Biological parents	-0.17	(0.11)	-0.05	(0.04)	-0.32	(0.11)	0.00	(0.07)		
Age	0.11	(0.07)	0.06	(0.02)	0.11	(0.07)	0.02	(0.06)		
Female	0.22	(0.09)	-0.12	(0.03)	-0.05	(0.10)	-0.08	(0.06)		

Note. Bold parameters express significance at P < 0.05.

immigrants are significant, and therefore the results do not provide support for any of our hypotheses.

#### Peers

As the results in Table 6 show, the religiosity of peers in class matters for adolescent's own religiosity. In line with hypothesis H3, there is a statistically significant and positive relation between the religiosity of classmates and all three measures of adolescent religiosity in England, Germany, and the Netherlands. Thus, when taking into account the religiosity of their parents and various other relevant control variables, we find that adolescents in classes with more religious classmates are more religious

themselves. The relationship is strong in terms of effect size, in particular for subjective religiosity. To illustrate, if the average subjective class religiosity increases by one standard deviation in England (standard deviation, SD=0.61), the adolescent subjective religiosity increases by  $(0.61\times0.33\ =)\ 0.20$ . In Germany and the Netherlands, the standardized effect is 0.15 and 0.20, respectively. The analyses of the Dutch data show a standardized increase of 0.09 for religious attendance and 0.10 for praying. Thus, the association with peers' religiosity seems stronger for subjective religiosity, than for the two measures of religious practices.

The association with peers' religiosity is not constant over groups, however. In line with the multiple-group

Variable	Subje	ctive r	eligios	ity			Religious attendance and Prayer (the Netherlands only)					
	Engla	nd	Germ	any	The Neth	erlands	Religiou attenda		Prayer	-		
	b	(S.E.)	b	(S.E.)		(S.E.)	b	(S.E.)	b	(S.E.)		
Constant	0.54	(0.07)	0.48	(0.06)	0.54	(0.08)	-0.25	(0.07)	-0.54	(0.13)		
Religiosity of classmates (centered) × Proportion of		(0.04)	0.31	(0.04)	0.34	(0.03)	0.17	(0.04)	0.26	(0.04)		
co-ethnic classmates	-0.01	(0.07)	-0.04	(0.07)	0.01	(0.07)	0.19	(0.06)	0.16	(0.07)		
Proportion of co-ethnic	0.17	(0.06)	0.20	(0.05)	0.13	(0.07)	0.16	(0.07)	0.20	(0.11)		

Table 6 Results of multilevel linear regression models for class religiosity effects on adolescent religiosity

Note. Bold parameters express significance at P < 0.05. Control variables included in the analysis (but not presented in the table): parental religiosity, family cohesion, number of siblings, households with biological parents, age, and gender. See online supplement for effects of these control variables.

perspective, we find evidence to suggest that adolescents are more strongly affected by members of their own group than by other groups. Specifically, the results show that the proportion of co-ethnics in class is positively associated with the relationship between average class religiosity and adolescents' religious attendance and prayer in the Netherlands, however, not with adolescent subjective religiosity. An increase in the proportion co-ethnics in class by one-standard deviation (i.e. 0.36) relates to an increase of  $(0.36 \times 0.19 =) 0.07$  in the association between the average attendance of peers in class and adolescents' religious attendance and an increase of 0.03 in the coefficient of class religiosity. To illustrate, the association between class religiosity and adolescent religious attendance is 0.17 for an adolescent in a class with no co-ethnics, while it is 0.24 for and adolescent with 36% co-ethnics in class.

## Sensitivity Analyses

classmates

We carried out several sensitivity analyses to assess the robustness of the findings. In aggregating the religiosity of the other classmates, the reciprocal relationship between classmates is ignored. Adolescents are not only expected to be influenced by their classmates but they also influence their classmates, and therefore this measure may be biased. Additional analyses were performed where the religiosity of the parents of the classmates (instead of the peers themselves) was used as a measure of class religiosity. Although this measure may also be biased because it is not possible to control for other variables that may influence the religiosity of the classmates, such as their gender and age, the bias is different from the measure presented in our main analysis. If these different measures arrive at the same

conclusions, we can have more confidence in our findings. The results of the analyses are presented in Table 7. Importantly, the same substantive conclusions are drawn when we use this alternative measure of class religiosity.

## **Conclusions and Discussion**

In this study, we examined the religiosity of adolescents in three Western European countries: England, Germany, and the Netherlands. We took a multiple-group perspective to study differences between majority and minority groups, distinguishing between natives, non-Muslim immigrants, and Muslim immigrants, as well as cross-group influences. A unique large-scale data set was used, which includes information from >13,000 adolescents and their parents. Three major conclusions can be drawn from the results of our study.

First, adolescents from an immigrant background in all three countries are considerably more religious than their native counterparts. This is in line with previous studies on immigrant adolescents and adults in Europe (e.g. Van Tubergen and Sindradottir, 2011; Güngör, Bornstein and Phalet, 2012). Moreover, we find that immigrants from a Muslim background are more religious than immigrants from other backgrounds.

Second, there are group differences in parental religious transmission with respect to subjective religiosity, as indicated by the importance of religion to people's lives. Our results show that among families with moderate to highly religious parents, transmission of subjective religiosity is more successful for immigrants compared with natives. This lends support to the theory by Kelley and De Graaf (1997) that transmission of religion is dependent on the context encountered by

**Table 7** Results of multilevel linear regression models for class religiosity effects on adolescent religiosity (alternative measure of class religiosity)

Variable	Subj	ective	religi	osity			Religious attendance and Prayer (the Netherlands only)				
	Engl	and	Gern	nany	The Nether	lands	Religious attendar		Prayer		
	b	(S.E.)	b	(S.E.)	b	(S.E.)	b	(S.E.)	b	(S.E.)	
Constant Religiosity of classmates (centered) × Proportion	0.51 0.30	( /		(0.06) (0.06)	0.54 0.37	(0.08) (0.05)	-0.20 0.29	(0.07) (0.04)	-0.57 $0.16$	(0.13) (0.04)	
of co-ethnic classmates Proportion of co-ethnic classmates	0.05 <b>0.14</b>	(0.10) ( <b>0.07</b> )	0.10 <b>0.20</b>	(0.09) ( <b>0.05</b> )	$-0.05 \\ 0.04$	(0.08) 0.07	0.15 0.14	(0.06) (0.06)	<b>0.22</b> 0.12	( <b>0.07</b> ) (0.12)	

Note. Bold parameters express significance at P < 0.05. Control variables included in the analysis (but not presented in the table): parental religiosity, family cohesion, number of siblings, households with biological parents, age, and gender. See online supplement for effects of these control variables.

parents. Immigrant parents, who belong to a religious minority, may put more effort into transmitting their religious values compared with natives. In addition, our findings show that among immigrant families with highly religious parents, transmission of subjective religiosity was more successful among those from a Muslim background compared with those from a non-Muslim background. This may be explained by the fact that Islamic religion is not just a minority religion in Western countries, it is a religion under much social scrutiny, possibly leading Muslim immigrant parents to put even more effort in socializing their children with Islamic religion. Another explanation for these group differences in religious transmission, according to the reasoning of Phalet and Schönpflug (2001), is that community cohesion is stronger among immigrants and among Muslim immigrants in particular, leading to more reinforcement of parental example-setting. In line with this, Maliepaard and Lubbers (2013) showed that religious transmission differed between two Muslim groups that differ in terms of community cohesion. Religious transmission appeared stronger among the more cohesive Turkish community than among Moroccan parents.

With regard to parental transmission of religious attendance and prayer, which could only be examined in the Netherlands, we did not find any group differences. This indicates that parental transmission of religiosity cannot be viewed as a single concept, but that it is necessary to distinguish between different aspects of religiosity. Whereas subjective religion is strongly transmitted within immigrant families, particularly among Muslims, immigrant parents are no more or

less successful in transmitting the more public aspects of religiosity to their children. Possibly, some immigrant parents might fear to socialize their children in public expressions of religion, or the immigrant children might have such hesitations themselves, in face of anti-immigrant and anti-Muslim sentiments. In previous work, it was also found that religious transmission among Muslim immigrants is weaker with respect to religious attendance as compared with more subjective and private aspects of religiosity (Maliepaard and Lubbers, 2013).

This might be some evidence for that idea that with regard to public expressions of religion, immigrant parents may be cutting their adolescent children some slack, by putting less effort into religious transmission to help them integrate into secular Western societies, as argued by Kuszynski, Marshall and Schell (1997).

The third conclusion to be draw from our results is that the religiosity of classmates matters to the religiosity of adolescents. Adolescents with classmates who are more religious find religion more important, attend religious meetings more often, and pray more often. Elaborating on the multiple-group perspective, we further examined whether the background of classmates was important for their socializing role. Our findings with regard to religious attendance and prayer in the Netherlands suggest that the religiosity of classmates has a stronger socializing influence if a larger proportion of the classmates are from the same ethnic background. Peer influence processes thus seem to be group dependent (Veenstra and Dijkstra, 2011). With regard to subjective religiosity, we do not find that the background of classmates matters however. A possible explanation for these differences is that subjective religiosity is a more private aspect of religion, which is less overtly communicated between peers. Instead, the more public expressions of religion, such as praying and religious attendance, are more clearly observed by peers in class, and therefore more subject to peer pressure and sanctioning in case of norm violations.

## **Notes**

- 1 In the United States, immigrant (Islamic) religion is considered less of a hindrance to incorporation into society (Foner and Alba, 2008). However, recent research shows that prejudice toward Muslims is also present in the United States (Croucher *et al.*, 2013)
- 2 In addition to a low response rate among parents, the Swedish data contained a considerable amount of item nonresponse in the adolescent questionnaire. This made imputations for Sweden considerably less reliable and therefore these data are excluded from the analyses.
- 3 A full overview of all the imputation models can be found in the online Supplement.

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