

Parental Influence on Friendships Between Native and Immigrant Adolescents

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Parental influence on friendships between native ($N = 5,683$) and immigrant ($N = 3,371$) adolescents (aged ± 15) was investigated with the CILS4EU data of pupils in German and Dutch school classes ($N = 446$) and parents. The researchers examined whether parents affect friendships across group boundaries by shaping the structural opportunities to establish out-group friends and their children's out-group attitudes. The results show that if parents have more out-group friends and if they consider it less important to maintain in-group traditions, their children have more out-group friends. Part of this relationship is mediated by children's out-group attitudes. Some evidence is found that the opportunity structure mediates the relationship between parental characteristics and adolescent out-group friendship.

Friendship between native and immigrant adolescents is important in societies that are becoming increasingly multiethnic. Previous research showed that interethnic friendship reduces ethnic prejudice, especially for natives (Pettigrew & Tropp, 2006; Pettigrew, Tropp, Wagner, & Christ, 2011; Tropp & Pettigrew, 2005), and friendship with natives can advance the economic integration of immigrant children due to increased human capital (e.g., language skills) and social capital (e.g., having access to [informal] information) (Kanas, van Tubergen, & Van der Lippe, 2011; Lancee, 2010, 2012; Martinovic, van Tubergen, & Maas, 2009).

Relations between groups are theorized to depend on the *preferences* of individuals to associate with similar others, on the *opportunities* to meet similar others, and on the influence of *third parties*, such as institutions, parents, or friends (Blau, 1977; Kalmijn, 1998; McPherson, Smith-Lovin, & Cook, 2001; Moody, 2001). It is an established finding that

adolescents prefer same-ethnic friends, even when the opportunity to meet out-group friends has been taken into account (Baerveldt, Zijlstra, de Wolf, Van Rossem, & Van Duijn, 2007; Mouw & Entwisle, 2006; Wimmer & Lewis, 2010). Relative to the focus on the preferences and opportunities for out-group friendship, however, third-party influence has remained understudied.

Parents are among the most important third parties in adolescent life. Parents teach their children to develop out-group attitudes and behavior (Nauck, 2001; White & Gleitzman, 2006). In addition, parents can disapprove of their children's interethnic relations (Edmonds & Killen, 2009; Munniksma, Flache, Verkuyten, & Reseestra, 2012; Phalet & Schönplflug, 2001; Tolsma, Lubbers, & Coenders, 2008) or stimulate them to establish friendships outside their own group (Hamm, 2001; Windzio, 2012). Parental influence may explain a considerable part of the variation in adolescent out-group friendships and is therefore the focus of this study.

We examine *how* parents affect out-group friendship by studying to what extent children's out-group attitudes and opportunities to meet out-group peers in class explain the relationship between parental characteristics and out-group friendship. Some studies have controlled for some form of out-group contact but have not explicitly assessed how it

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explains parental effects on out-group friendship (e.g., Clark-Ibáñez & Felmlee, 2004; Edmonds & Killen, 2009). Additionally, studies have examined out-group attitudes but have only included parental attitudes (and not their children's) or specifically addressed interethnic dating only (Edmonds & Killen, 2009). Because a consistent mediation approach of parental influence on out-group friendship is lacking, we pose the following research question: To what extent and how do parents affect friendships between native and immigrant adolescents?

We use data from the Children of Immigrants Longitudinal Study in Four European Countries project (CILS4EU) (Kalter et al., 2013), which enable us to study the mechanisms of parental influence through the opportunity structure and out-group attitudes. The study included data about secondary school children in German and Dutch school classes. Native and immigrant adolescents were studied separately because some determinants of out-group contact are known to work in opposite directions for the two groups (Vermeij, van Duijn, & Baerveldt, 2009) or are weaker predictors for immigrants (Stephan & Stephan, 2000; Tropp & Pettigrew, 2005). Germany and the Netherlands are suitable to study simultaneously because they are neighboring countries that both currently experience a growing share of immigrant children (Castles & Miller, 2003). Moreover, we can examine to what extent the results are similar between the two countries. The children in our study are on average 15 years old ($SD = 0.65$). Although teenagers are said to deviate from their parents in search of their own identities (Moffitt, 1993), previous studies have found parental effects on interethnic friendships in similar and even older age groups (Clark-Ibáñez & Felmlee, 2004; Edmonds & Killen, 2009).

PARENTAL INFLUENCE ON PREFERENCES

Parents socialize their children by teaching them how to think and behave (Bandura, 1997; Min, Silverstein, & Lendon, 2012; Sinclair, Dunn, & Lowery, 2005). Children internalize parental attitudes as if they were their own or face parental disapproval if they deviate from them. Parents also raise their children with particular attitudes toward out-group members (Hughes et al., 2006; Sinclair et al., 2005). Adolescents with negative out-group attitudes may avoid out-group interaction and are less likely to develop out-group friendships in comparison to adolescents with neutral or positive out-group attitudes. Studies have shown that posi-

tive out-group attitudes lead to out-group friendships, but evidence for the reversed causal relation has also been found (Pettigrew & Tropp, 2006). Therefore, we acknowledge that out-group attitudes are partly caused by out-group friends but consider it safe to say that out-group attitudes have a causal relationship with out-group friendship as well to a considerable extent.

Based on the argument that parents socialize their children through their attitudes and behavior, we can derive three hypotheses. First, parental socioeconomic status, and more specifically educational status, are argued to affect the degree to which parents raise their children with tolerant out-group attitudes due to the individualistic and universalistic character of higher education (Borgonovi, 2012; Hello, Scheepers, Vermulst, & Gerris, 2004; Jaspers, Lubbers, & De Vries, 2008). Therefore, we hypothesize that (a) *the higher the socioeconomic status of parents, the more out-group friends their children have because (b) their children hold more positive out-group attitudes (H1).*

Second, previous research has focused on parental inclinations toward maintaining in-group traditions (Buunk, Pollet, & Dubbs, 2012; Munniksmä et al., 2012). Both native and immigrant parents may have norms and values that are specific to their ethnic background. For example, the Netherlands and Germany are characterized by an individualistic culture, whereas some immigrant groups (e.g., Turkish, Moroccan, or Russian immigrants) are more collectivistic (Hofstede, 2001). Parents who aim to keep in-group traditions have an incentive to ensure that their children embrace their ethnic heritage. If their children have out-group friends, however, parents run the risk that the cultural norms and values of other groups become internalized by their children (Vedder, Berry, Sabatier, & Sam, 2009). To prevent this, parents may instill negative out-group attitudes and disapprove of their children having out-group friends. Thus, we expect that (a) *the more parents consider it important to maintain in-group traditions, the fewer outgroup friends their children have because (b) their children hold more negative out-group attitudes (H2).*

Socialization also occurs through behavioral imitation (Bandura, 1997; Hurd, Zimmerman, & Reischl, 2011). Parents with out-group friends signal to children that out-group friendships are possible, valuable, and are not criticized by them (Clark-Ibáñez & Felmlee, 2004). Their children are therefore less likely to develop a preference for in-group friends and less likely to expect parental disapproval of out-group friends. Thus, we

hypothesize that (a) *the more out-group friends parents have, the more out-group friends their children have because* (b) *their children hold more positive out-group attitudes* (H3).

PARENTAL INFLUENCE ON OPPORTUNITIES

The opportunity structure to meet out-group peers is vital for developing out-group friendship (Blau, 1977). When the direct environment enables children to meet out-group peers, out-group friendships should increase. Because we study friendship within classes, the most important opportunity structure is the availability of out-group friends within classes, and parents may affect this as follows. Immigrant parents with a higher socioeconomic status are more likely to live in native-dominant neighborhoods (Semyonov & Glikman, 2009) and send their children to native-dominant schools than are immigrant parents with a lower socioeconomic status (Ladd, Fiske, & Ruijs, 2002). Moreover, immigrant adolescents with parents of high socioeconomic status are more likely to enroll in higher educational tracks (Levels, Dronkers, & Kraaykamp, 2008). As native peers are overrepresented in these higher educational tracks, there are ample opportunities to befriend them. This leads to the same expectation as the hypothesis based on the preference argument (H1), except that the mechanism is different: the effect of socioeconomic status is now mediated by children's opportunities to befriend out-group peers. We hypothesize that (a) *the higher the socioeconomic status of immigrant parents, the more out-group friends their children have because* (b) *their children have more opportunities to befriend out-group peers* (H4).

For natives, a higher parental socioeconomic status is likely to be associated with reduced opportunities to meet immigrant peers because native adolescents with parents of high socioeconomic status generally find themselves among many other native peers in class. From this opportunity structure argument, we expect that (a) *the higher the socioeconomic status of native parents, the fewer out-group friends their children have because* (b) *their children have fewer opportunities to befriend out-group peers* (H5). This is contradictory to the hypothesis that we based on the preference argument (H1).

Parents who wish to preserve in-group traditions and parents with few out-group friends are likely to prefer in-group over out-group friends for their children. To prevent out-group relations, they may choose a school with few out-group members. Studies on school choice showed that parents

indeed consider the school's ethnic composition important and that parental choices affect ethnic segregation in primary and secondary schools (Denessen, Driessena, & Sleegers, 2005; Karsten et al., 2006; Noreisch, 2007; Söderström & Uusitalo, 2010). Hence, the hypotheses about parental attitudes toward preserving in-group traditions (H2) and parental out-group friends (H3) on out-group friendships hold but are mediated through a different mechanism. We test the hypotheses that (a) *the more important parents consider keeping in-group traditions, the fewer out-group friends their children have because* (b) *their children have fewer opportunities to befriend out-group peers* (H6) and (a) *the more out-group friends parents have, the more out-group friends their children have because* (b) *their children have more opportunities to befriend out-group peers* (H7).

METHOD

Data and Sample

We test our hypotheses using German and Dutch CILS4EU data (Kalter et al., 2013). The parental response rate in the other two countries, England and Sweden, was considered too low to include them in the study (37% and 49%, respectively). Data on 9,376 adolescents were collected in 493 school classes during school hours between October 2010 and June 2011 in Germany and the Netherlands. We selected ± 15 -year-old pupils in classes with at least 10 pupils ($N_{\text{pupils}} = 9,054$; $N_{\text{classes}} = 446$). Schools were selected with a probability proportional to their size using the number of pupils in the relevant educational level. Additionally, the sample is stratified on the number of immigrant children attending the school to reach sufficient immigrant children. Thus, schools with more immigrant children are oversampled, but the sample is varied in terms of educational level, socioeconomic status, region, and size. We weigh the data for the sampling design, so that the descriptive results are generalizable to the adolescent population in Germany and the Netherlands. At the same time, oversampling enables us to test the hypotheses without power issues for immigrants.

The overall response rate among pupils is 86%. Half of the sample is male, and half is female. Pupils received a questionnaire for one of their parents. There was no instruction on which parent should fill in the questionnaire. It turned out that 78% of the respondents were mothers and 22% were fathers. The parent also reported information about his or her partner, provided that the partner

lived in the same household. Overall, the parental response rate was 76%.

The parental birth country that the adolescent reported determined whether the adolescent was a native or an immigrant. If at least one of the adolescent's biological parents was born abroad, the adolescent was considered to have an immigrant background. There are approximately 100 countries from which immigrant adolescents originate, but most immigrant groups are too small for children to have in-group peers in class. Therefore, we do not distinguish between immigrant groups. By this definition, we examine 5,683 native and 3,371 immigrant adolescents.

Dependent Variable

Children's number of out-group friends. Pupils were asked to nominate no more than five best friends in class. From these nominations, we derive the number of immigrant friends for natives and the number of native friends for immigrants.

Mediator Variables

Children's out-group attitudes. Pupils answered the question "Please rate on a scale from 0 (negative) to 100 (positive) how you feel about the following groups." For natives, we use the mean of ratings on all immigrant groups for which they were primed (Turks, Poles, Italians, and Russians in Germany; Turks, Moroccans, Surinamese, and Antilleans in the Netherlands). For immigrants, we took the ratings on Germans and the Dutch in Germany and the Netherlands, respectively. This measure is considered a valid instrument of out-group attitudes because it correlates highly with in-group identification, in-group attitudes, and out-group prejudice (Miller, Smith, & Mackie, 2004; Verkuyten & Thijs, 2010). We combined the immigrants' attitudes toward natives and natives' attitudes toward immigrants into one observed variable.

Children's number of out-group class peers. We counted the number of native peers in class for immigrants and the number of immigrant peers in class for natives.

Parental socioeconomic status. Four items from the parental questionnaire and two items from the adolescent questionnaire are used to measure parental socioeconomic status. First, we use the highest occupational status score (measured by the International Socio-Economic Index [ISEI

08]) from the parent and partner (Ganzeboom, De Graaf, & Treiman, 1992). Because this variable contains missing values, we also added the highest parental occupational status reported by the child as an indicator of the latent concept of parental socioeconomic status. Lastly, we added the highest parental educational status to the scale using four categories from *no degree* to *university degree*. The confirmatory factor analysis (CFA) model of highest parental status reported by the parent, the highest parental status reported by the child, and the highest parental education is a just-identified model. All factor loadings are acceptable ($>.60$). Cronbach's α of the scale is $.60$.

We tested the configural and measurement invariance of parental socioeconomic status between Germany and the Netherlands, boys and girls, natives and immigrants, Turks and Poles (in Germany), and Turks and Germans (in the Netherlands). These analyses (see supporting information for results) show that pooling groups into a single analysis and making group comparisons is possible (Van de Schoot, Lugtig, & Hox, 2012).

Importance of in-group traditions to parents. We combine two items from the parental questionnaire into one variable. For natives, the variable reflects the parent's answer on the item "Natives should do everything to keep their customs and traditions" on a 5-point scale. For immigrants, the variable reflects the same, except that immigrant customs and traditions are evaluated.

Parental out-group friends. We measure how many of the native parents' friends are immigrants and how many of the immigrant parents' friends are natives (*all, many, half, some, or few*). The variable is derived from the parental questionnaire. The variable is very skewed for native parents (very few mention having immigrant friends). Therefore, the variable was recoded into a dummy variable indicating as having many out-group friends (*all, many, and half*) and fewer out-group friends (*some and few*) for both natives and immigrants.

Control Variables

Network size. We include the number of friendship nominations an adolescent makes to control for sociality.

Mixed background. We control for immigrant adolescents having a parent who was born in the host country and a parent who was born abroad, as

these immigrant adolescents are likely more similar to natives than other immigrant adolescents.

Turkish background. We control for immigrant adolescents having at least one parent born in Turkey. In both countries, Turks are the largest immigrant group, and we know from previous research that Turkish parents may be especially intolerant of out-group relations of their children (Munniksma et al., 2012). Because examining ethnic group differences goes beyond the focus of this paper, we decided to at least control for this specific group.

Class-level effects. Lastly, the class-level effect of each individual-level effect is taken into account by assessing the average of individual-level variables of pupils within classes (Preacher, Zhang, & Zyphur, 2011).

Table 1 shows the descriptive statistics of all variables per country and group, which are weighted for the sampling design (see Kalter et al., 2013, for an elaborate discussion of sampling and weights). Table 2 shows the correlation matrix for native adolescents above the diagonal and immigrant adolescents below the diagonal.

Multilevel Structural Equation Modeling

We apply multilevel structural equation modeling (MSEM) using Mplus 7 to test our hypotheses (Muthén & Muthén, 1998–2011). A multilevel framework takes a clustering of pupils within clas-

ses and variables on the class level correctly into account (Snijders & Bosker, 2012). Structural equation modeling allows us to examine multilevel mediation where one of the mediators is measured on a higher level than the other variables in the model (i.e., the opportunity structure) (Preacher et al., 2011). Multilevel structural equation modeling makes use of the full information maximum likelihood (FIML) missing data estimation approach, which uses all observed variables in the model to estimate the means and covariances of item nonresponse. In our data, variables obtained from the pupil questionnaires have relatively few missing values (approximately 2%). Variables constructed from the parental questionnaires have more missing values, as 76% of the parents participated. A method such as FIML outperforms listwise deletion and simpler substitution methods (Little & Rubin, 1987; Roth, 1994; Wothke, 1998).

Analytical Strategy

We build a structural equation model to examine how parental characteristics relate to out-group friendships through children's out-group attitudes and opportunity structure. We model natives and immigrants separately and use a maximum likelihood estimator with robust standard errors (MLR) because it is less sensitive to non-normally distributed data. All independent variables are centered around their means. All control variables are added as predictors of the dependent and mediator variables (except that having a mixed background and being

TABLE 1
Descriptive Statistics per Country and Group

	Germany						The Netherlands					
	Immigrants			Natives			Immigrants			Natives		
	M	SD	Range	M	SD	Range	M	SD	Range	M	SD	Range
Child's no. out-group friends	2.04	1.54	0–5	0.78	0.96	0–5	2.21	1.54	0–5	0.41	0.68	0–5
Child's out-group attitudes	72.33	25.38	0–100	51.79	22.73	0–100	76.30	18.61	0–100	52.76	20.67	0–100
Child's no. out-group peers	12.72	5.72	0–29	4.61	3.58	0–25	16.04	6.40	0–28	3.21	2.58	0–24
Parental ISEI by parent	43.58	15.78	10–89	50.00	15.21	10–89	46.98	17.59	10–89	50.31	15.33	10–89
Parental ISEI by child	42.52	16.95	10–89	49.58	15.24	10–89	47.31	17.80	10–89	48.93	15.45	10–89
Parental education by parent	2.87	0.83	1–4	3.06	0.80	1–4	2.73	0.84	1–4	2.79	0.71	1–4
Parental out-group friends	0.69		0/1	0.06		0/1	0.81		0/1	.02		0/1
Importance of in-group traditions to parent	3.56	0.92	1–5	3.90	0.82	1–5	2.92	0.91	1–5	3.54	0.80	1–5
Network size	3.71	1.34	0–5	3.96	1.19	0–5	3.37	1.36	0–5	3.59	1.27	0–5
Class size	21.29	4.90	10–31	21.33	4.65	10–31	22.57	4.61	10–30	22.45	4.73	10–30
Mixed background	0.38		0/1				0.52		0/1			
Turkish background	0.24		0/1				0.11		0/1			

Note. The values are weighted for the sampling design. ISEI = International Socio-Economic Index (Ganzeboom et al., 1992).

TABLE 2
Bivariate Correlations by Group: Immigrants Below and Natives Above the Diagonal

	1	2	3	4	5	6	7	8	9	10	11
1 Child's no. out-group friends	–	.03	.54*	–.06*	–.07*	–.04*	.08*	.08*	.29*		
2 Child's out-group attitudes	.27*	–	.03	.10*	.09*	.14*	–.03	–.10*	.01		
3 Child's no. out-group peers	.63*	.25*	–	–.03*	–.06*	–.03*	.06*	.07*	–.01		
4 Parental ISEI by parent	.21*	.14*	.22*	–	.62*	.58*	–.14*	–.22*	.02		
5 Parental ISEI by child	.21*	.15*	.26*	.51*	–	.50*	–.08*	–.16*	.05*		
6 Parental education by parent	.17*	.13*	.20*	.48*	.37*	–	–.06*	–.21*	.02		
7 Parental out-group friends	.21*	.21*	.21*	.22*	.21*	.14*	–	–.05*	–.02		
8 Importance of in-group traditions to parent	–.19*	–.19*	–.22*	–.19*	–.21*	–.16*	–.19*	–	.02		
9 Network size	.40*	.08*	.06*	.03	.03	.021	.01	.04	–		
10 Mixed background	.31*	.19*	.30*	.27*	.28*	.14*	.30*	–.23*	.02	–	
11 Turkish background	–.19*	–.12*	–.18*	–.20*	–.16*	–.19*	–.19*	.26*	.03	–.14*	–

* $p < .05$. ISEI = International Socio-Economic Index (Ganzeboom et al., 1992).

Turkish are not included in the model for natives). Correlation is allowed between socioeconomic status and parental attitudes toward in-group traditions, socioeconomic status and parental out-group friends, parental attitudes toward in-group traditions and parental out-group friends, and having a Turkish or mixed background.

We test whether our conclusions are robust across Germany and the Netherlands. Additionally, we run separate models for boys and girls because previous research has shown that parents are less tolerant of their daughters' than their sons' out-group relations (Munniksma et al., 2012; Phalet & Schönpflug, 2001). Lastly, we repeat the analysis for Turkish immigrants and the largest group of immigrants from neighboring countries (Poles in Germany and Germans in the Netherlands) to examine possible group differences. Turks are relatively culturally different from native Germans and Dutch compared to immigrants from neighboring countries (Hofstede, 2001).

RESULTS

Descriptive Results

Table 1 shows that adolescents have more in-group than out-group friendships, as the mean number of out-group friends ($M_{\text{immigrant Germany}} = 2.04$; $M_{\text{native Germany}} = 0.78$; $M_{\text{immigrant Netherlands}} = 2.21$; $M_{\text{native Netherlands}} = 0.41$) is low compared to the mean number of total friends ($M_{\text{immigrant Germany}} = 3.71$; $M_{\text{native Germany}} = 3.96$; $M_{\text{immigrant Netherlands}} = 3.37$; $M_{\text{native Netherlands}} = 3.59$). Immigrants have on average more native friends than vice versa ($t(9,012) = -20.26$, $p < .001$), which is not due to immigrants being more social, as their average

number of friends is lower than that of natives ($t(9,012) = 4.79$, $p < .001$). The finding that immigrants have many native friends has to be interpreted in combination with their high exposure to native peers: 75% of the children in the average classroom are native (weighted percentage). In other words, immigrants have many native friends because they have many opportunities to meet them.

Explanatory Results

Parental influence through preferences. Figure 1 shows that adolescent out-group attitudes are related to adolescents having out-group friends ($\beta_{\text{immigrant}} = 0.078$, $p < .001$; $\beta_{\text{native}} = 0.047$, $p < .01$). The effect for immigrants is marginally stronger than for natives (Wald(1) = 2.923, $p < .1$), but both effect sizes are small. A standard deviation increase of out-group attitudes leads to only a .078 and .047 standard deviation increase in out-group friends for immigrants and natives, respectively. This implies that parental influence through out-group attitudes can only be minor.

We find little evidence for an indirect effect of parental socioeconomic status on a child's number of out-group friends through children's out-group attitudes (H1). There is a marginally significant positive effect of parental socioeconomic status on adolescents' out-group attitudes for natives and immigrants (Figure 1), but there is no indirect effect on out-group friendships for natives and only a small marginally significant indirect effect on socioeconomic status for immigrants (Table 3).

We find that the importance parents attach to maintaining in-group traditions is related to their children having fewer out-group friends because

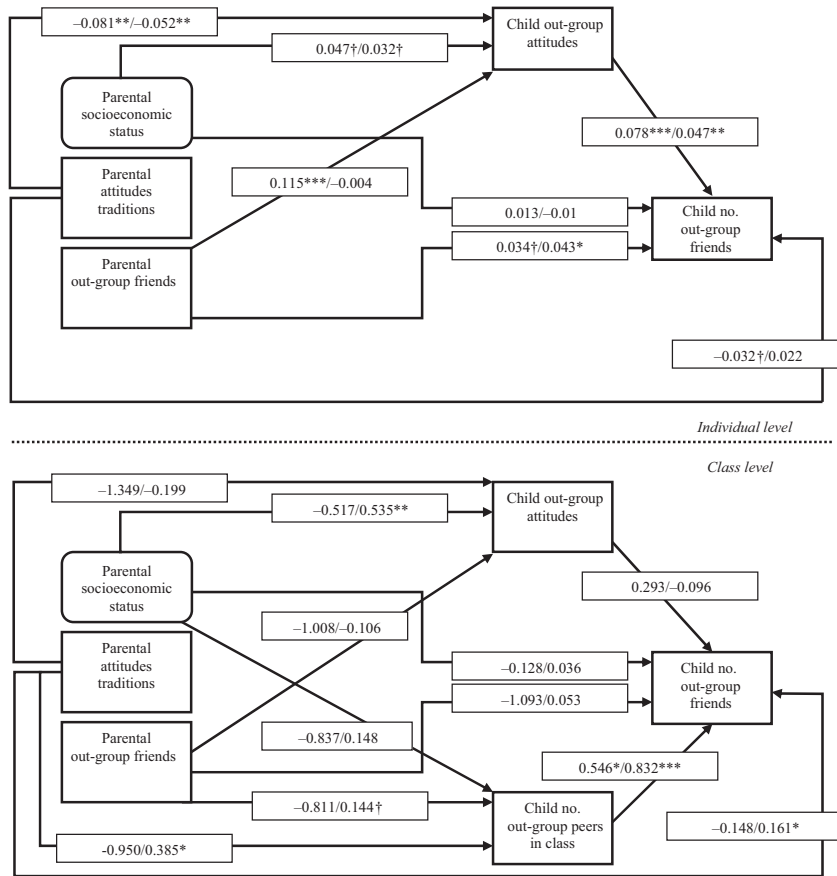


FIGURE 1 Multilevel structural equation modeling (MSEM) results (standardized) for immigrants ($\chi^2(42) = 111.069, p < .001, CFI = .98, TLI = .96, RMSEA = .02$) and natives ($\chi^2(30) = 145.98, p < .001, CFI = .98, TLI .95, RMSEA = .03$). † $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$. Note. The first coefficient is the coefficient for immigrants and the second coefficient is the coefficient for natives.

TABLE 3
Standardized Indirect Effects on Out-Group Friendship

	Immigrants		Natives	
	Through Child's Out-Group Attitudes	Through Child's No. Out-Group peers	Through Child's Out-Group Attitudes	Through Child's No. Out-Group Peers
Individual level				
Parental socioeconomic status	.004†	0	.001	0
Importance of traditions to parent	-.006*	0	-.002†	0
Parental out-group friends	.009**	0	0	0
Class level				
Parental socioeconomic status	0	.457	0	.132
Importance of traditions to parent	-.396	.519	.019	.320*
Parental out-group friends	-.296	.443	.010	.120†

† $p < .10$; * $p < .05$; ** $p < .01$.

their children have less positive out-group attitudes (H2). The more important parents find in-group traditions, the less positive their children's out-group attitudes are, and the less positive children's out-group attitudes are, the fewer out-group

friends they have (Figure 1). Table 3 shows that the indirect effects are (marginally) significant and small, however. The indirect effect of parental attitudes toward in-group traditions is larger for immigrants than natives (Wald(1) = 3.187, $p < .1$),

which is due to a larger effect of out-group attitudes on out-group friendship, as the native and immigrant effects of parental attitudes toward in-group traditions are of similar size (Wald(1) = 1.037; $p = .309$).

We find mixed results for our hypothesis that parents with out-group friends stimulate their children to have out-group friends because they have more positive out-group attitudes (H3). For immigrants, there is a considerable significant positive effect of parents having out-group friends on children's out-group attitudes (Figure 1), and there is a significant and positive indirect path to the number of out-group friends through out-group attitudes, as well (Table 3). The direct effect of parental out-group friends for natives, however, is significantly smaller (Wald(1) = 16.025, $p < .001$) and insignificant (Figure 1). There is also no indirect effect of parental out-group friends on the number of their children's out-group friends (Table 3).

Parental influence through opportunities. There are considerable effects of the number of out-group peers on the number of children's out-group friends ($\beta_{\text{immigrant}} = 0.546$, $p < .01$; $\beta_{\text{native}} = 0.832$, $p < .001$), and the effects for natives are significantly larger (Wald(1) = 21.486, $p < .001$). An increase of one standard deviation in the number of out-group peers in class leads to a .546 and .832 standard deviation increase in out-group friends for immigrants and natives, respectively.

Bivariate correlations show that immigrant parents with a higher socioeconomic status, a weaker inclination to maintain in-group traditions, and with native friends have their children generally go to schools with a higher number of native class peers (see Table 2). On the class level, these bivariate correlations are even stronger (correlations range from $-.281$ to $.417$). However, if we examine these relations in the multivariate MSEM models, they are not significant (see Figure 1). For natives, we find positive (marginally) significant effects of the average degree to which parents of all pupils in a class have out-group friends and the average importance of in-group traditions to parents of all pupils in a class on out-group friendship through out-group peers in class (see Figure 1 and Table 3). Note that the effect of the importance of in-group traditions to parents is in the opposite direction as expected.

We examined whether the null results on the class level were attributable to multicollinearity. We estimated three extra models with one parental effect per model. The results show that parental character-

istics relate to the number of out-group peers in class once we do not control for the other parental characteristics for natives ($\beta_{\text{parental socioeconomic status}} = -0.998$, $p < .001$; $\beta_{\text{parental attitudes traditions}} = -0.232$, $p < 0.05$; $\beta_{\text{parental outgroup friends}} = 0.181$, $p < .05$). As before, the relation between parents' attitudes toward in-group traditions and the number of immigrants in class is positive, which was not expected. For immigrants, the results remain marginally significant or insignificant, and the effect of parental socioeconomic status is in the opposite direction as expected ($\beta_{\text{parental socioeconomic status}} = -0.645$, $p < .1$; $\beta_{\text{parental attitudes traditions}} = -0.372$, $p < .1$; $\beta_{\text{parental outgroup friends}} = 0.887$, $p = .375$). Taking all the results together, we can conclude that parental characteristics influence adolescents' friendship choices by affecting the opportunity structure that adolescents face, most clearly so for natives. Due to multicollinearity, however, we are not able to decide which parental characteristics are most important in producing this result.

Direct effects of parental characteristics. Figure 1 shows a marginally significant direct effect of the importance of in-group traditions to parents on the number of out-group friends for immigrant adolescents, whereas we find an insignificant effect for natives that is also significantly smaller than the effect for immigrants (Wald(1) = 9.941, $p < .01$). In addition, children with parents who have out-group friends themselves have more out-group friends than children whose parents do not or very little show this positive out-group behavior (see Figure 1). The effect sizes are of similar magnitude (Wald(1) = 1.751, $p = .186$). We find no direct effects of parental socioeconomic status.

Models without mediating variables (figure not shown) show no significant effects of parental socioeconomic status ($\beta_{\text{immigrant}} = 0.019$, $p_{\text{immigrant}} = 0.434$; $\beta_{\text{native}} = -0.014$, $p_{\text{native}} = 0.367$), mixed results for the importance of in-group traditions to parents ($\beta_{\text{immigrant}} = -0.042$, $p_{\text{immigrant}} < 0.05$; $\beta_{\text{native}} = 0.021$, $p_{\text{native}} = 0.174$), and positive effects of parental out-group friendship ($\beta_{\text{immigrant}} = 0.044$, $p_{\text{immigrant}} < 0.05$; $\beta_{\text{native}} = 0.044$, $p_{\text{native}} < 0.05$) on out-group friendship.

Additional group analyses. We performed several robustness checks (see online supporting information for figures). The results show significantly different coefficients between Germany and the Netherlands (Wald(18) = 448.699, $p < .001$), boys and girls (Wald(18) = 160.373, $p < .001$) and Turkish and Polish/German immigrants (Wald(13) = 304.928, $p < .001$) with regard to the paths

concerning our hypotheses. The results of the main analysis are largely replicated in these additional analyses: Parental attitudes toward in-group traditions and parental out-group friends are related to adolescent out-group friendship through adolescent out-group attitudes. Likewise, we find less robust evidence that parental socioeconomic status affects out-group attitudes, and the effects of parental characteristics on out-group friendship via the opportunity structure are similarly inconsistent. The effects for Turkish, German, and Polish immigrants are often not as significant as they are in the main analysis, but are in the same direction.

DISCUSSION

Our results show that adolescents have more out-group friends when their parents are less inclined to keep in-group traditions and when their parents have (more) out-group friends themselves. Our findings confirm previous research that relied on respondents' reports of their parents' interethnic behavior and attitudes (Clark-Ibáñez & Felmler, 2004; Edmonds & Killen, 2009). Thus, not only perceptions of parents' attitudes and behavior but also parents' actual attitudes and behavior relate to out-group friendship.

In addition, we find evidence that children's attitudes toward out-group members can explain part of the relation between parental characteristics and adolescent out-group friendship. Hence, our results suggest that parents influence the extent to which their children befriend out-group peers because they affect them with certain out-group attitudes. For natives, we find similar indirect effects via the opportunity structure; that is, the number of immigrant peers in class. Due to multicollinearity issues, however, we cannot decide which of the characteristics of parents are responsible for this effect.

The indirect effects of parental characteristics on children's out-group attitudes and the number of out-group members in their classes are small. A possible explanation is that the friendship choices of the 15-year-olds under study have become more independent from their parents than we expected. Teenagers may have more freedom to socialize without their parents monitoring them in comparison with younger children and may become more influenced by peers instead. Edmonds and Killen (2009), however, find parental influence in a similarly aged sample and Clark-Ibáñez and Felmler (2004) even find parental influence on out-group friendship in a sample of older subjects (college students). More research is necessary on this issue because previous

research on different age groups has only been conducted in the United States. Therefore, it is not clear to what extent country or age differences exist. The fact that this study showed differences in parental effect sizes between natives and immigrants supports the plausibility of country differences.

In addition, a part of parental influence remains unexplained after taking out-group attitudes and the opportunity for out-group friendship into account, and it will require further research to understand *how* parental characteristics affect their children's out-group friendships. For example, future studies could examine whether adolescents hold negative attitudes toward one particular out-group and avoid friendship with its members, while also being more positive about another ethnic out-group and befriending them just as much as their in-group peers. Another interesting line of research is that of ethnic socialization. Parents can have explicit ways of educating their children about ethnicity and out-group relations (Hamm, 2001; Hughes et al., 2006). As such, studies on how parents convey out-group attitudes to their children are recommended.

The parental effects achieved through out-group attitudes are larger for immigrant adolescents than for native adolescents. This is in line with the finding that some immigrant groups in Germany and the Netherlands have a more collectivistic culture than German and Dutch natives (e.g., Turks in both countries) (Hofstede, 2001). In collectivistic cultures, family is more central and its members play more importance in controlling family behavior and following family codes (Hofstede, 2001; Munniksma et al., 2012). Therefore, parents raised in collectivistic cultures may have a stronger incentive to monitor and influence their children's social lives than parents raised in individualistic cultures. Parental influence is also found to be stronger in collectivistic cultures for dating and marriage (Buunk et al., 2012). Future research should therefore focus on different immigrant groups.

Another possible explanation is that parents only discourage friendships when their ethnic identity and community becomes threatened. Because natives are dominant in Germany and the Netherlands, it is plausible that they are less concerned than immigrant parents about out-group friends weakening their children's ethnic identity. In line with this, we find that native traditions become more important to parents with increasing shares of immigrant peers in their children's classes (even though it does not inhibit their children's out-group friendships). For immigrants, the share of native peers in class is not related to the extent to which

parents consider keeping in-group traditions important, most likely because immigrants are exposed to a different culture daily no matter what school their children attend. This may also explain why the parental effects through the opportunity structure are stronger and more consistent for natives than immigrants. For natives, it makes a real difference to be exposed to out-group peers in class, whereas this is a more common practice for immigrants.

STRENGTHS AND LIMITATIONS

This study is among the first to examine parental effects on out-group friendships and how they are explained by their children's preferences and opportunities for out-group friendship using the CILS4EU data of 9,054 adolescents in 446 classes and one of their parents. We focused on friendships within classes, whereas children also have friends outside their classes and schools. Nevertheless, some studies show that friendships cluster within tracks, grades, and/or classes (Goodreau, Handcock, Hunter, Butts, & Morris, 2008; Hallinan & Williams, 1989; Moody, 2001).

Furthermore, our study suggests that parents socialize their children, but the opposite is also possible (Benish-Weisman, Levy, & Knafo, 2013): parents may adjust their attitudes and behavior toward out-group members when children bring home out-group friends. Future research could extend the current study by studying parental influence on out-group friendships with longitudinal data to gain insight into the interdependence and causality of in-group friendship preferences, opportunities, and third-party influence. Because we rely on cross-sectional data, we do not aim to conclude which of these explanations is more plausible. More important is that we showed that parental characteristics relate to adolescent out-group friendship and that we provided insight into how they do so and how they do not.

Lastly, our study encountered multicollinearity issues while examining the multilevel mediation of parental characteristics on out-group friendship through the number of out-group peers in class. A MSEM approach requires the inclusion of all variables of interest at the individual and class levels. Not only do the average parental characteristics of all pupils in a class correlate more than individual parental characteristics, but also adding both levels together limited this study in terms of finding which parental characteristics are responsible for adolescents having more out-group peers and therefore more out-group friends in class.

CONCLUSION

The aim of this article was to examine to what extent and how friendship between native and immigrant adolescents is influenced by their parents. We can conclude from this study that parental characteristics (parental out-group friends and parental attitudes toward in-group traditions) are related to adolescent out-group friendship and can be explained by children's out-group attitudes. We find some evidence that the opportunity structure mediates the relationship between parental characteristics and adolescent out-group friendship as well. As previous research has shown that interethnic friendship contributes to interethnic cohesion in general and increased human and social capital for immigrants specifically, our study suggests that parents have an opportunity to raise a more ethnically integrated generation by creating meeting opportunities and by stimulating positive attitudes toward peers that their children may currently consider out-group members but may become friends later.

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Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

Appendix S1. Measurement Invariance.

Table S1. Model Fit Indices Measurement Invariance Germany and the Netherlands.

Table S2. Model Fit Indices Measurement Invariance Boys and Girls.

Table S3. Model Fit Indices Measurement Invariance Natives and Immigrants.

Table S4. Model Fit Indices Measurement Invariance Turkish and Polish/German Immigrants.

Figure S1. Multilevel structural equation modeling (MSEM) results (standardized) for Germany ($\chi^2(41) = 90.729$, $p < .001$, CFI = .99, TLI = .97, RMSEA = .02) and the Netherlands ($\chi^2(41) = 106.334$, $p < .001$, CFI = .99, TLI = .97, RMSEA = .02).

Figure S2. Multilevel structural equation modeling (MSEM) results (standardized) for boys ($\chi^2(41) = 85.500$, $p < .001$, CFI = 1.00, TLI = .98, RMSEA = .02) and girls ($\chi^2(41) = 127.238$, $p < .001$, CFI = .98, TLI = .96, RMSEA = .02).

Figure S3. Multilevel structural equation modeling (MSEM) results (standardized) for Turks ($\chi^2(5) = 7.011$, $p = .220$, CFI = 1.00, TLI = .98, RMSEA = .02) and Poles (Germany) and Germans (the Netherlands) ($\chi^2(5) = 3.110$, $p = .540$, CFI = 1, TLI = 1, RMSEA = .01).