

The Role of Parents in Interethnic Contact: Do Parental Integration Attitudes Influence the Ethnic Diversity of Their Adolescent Children's Friendship Networks in Class?

Abstract. The purpose of this study is to investigate the effect of parental integration attitudes on the ethnic diversity of their adolescent children's friendship networks in class. Moreover, we are interested in whether this effect is mediated by ethnic classroom diversity. Data for this study were obtained from the Dutch part of the first wave of the Children of Immigrants Longitudinal Survey in Four European Countries [CILS4EU] (Kalter et. al., 2013). The results suggest that for ethnic minority children, a negative relationship between parental adherence to assimilationism and ethnic diversity of friendship networks in class is found. Although no mediating role of ethnic classroom diversity is found, a positive relationship between ethnic classroom diversity and ethnic diversity of friendship networks seems to exist for Dutch respondents.

Bachelor thesis in Sociology (joint thesis, Elise's version)

Date: 17/06/16, Utrecht University

Supervisor: Müge Simsek m.simsek@uu.nl

Students: Elise Schramkowski (4067878) e.c.j.schramkowski@students.uu.nl

& Jeroen van Tessel (4087321) j.vantessel@students.uu.nl

Introduction

Over the last decades, immigration has brought about important demographic changes in North American and Western European societies (Alba & Foner, 2015; Lessard-Phillips, 2016). As it relates to ethnicity, these societies have experienced a rapid growth in diversity, by which they have become 'super-diverse' (Alba & Foner, 2015; Vertovec, 2007). This super-diversity has raised concerns among native populations, questioning whether immigration poses a cultural threat to society. Often, people fear that immigration causes estrangement from society and reduces a sense of community (Stoop, Boelhouwer & Kraaykamp, 2016). Therefore, in recent years, a great deal of attention has been drawn to issues of social integration, not only in public and political debates, but also in social science.

A well-studied research topic in social science concerning social integration has been the question how interethnic contact is established, and what forces encourage or discourage interethnic contact. A considerable amount of research on this has been done in a wide range of settings, concerning different but theoretically related subjects. A rather extensive amount of studies (e.g., Hallinan & Smith, 1985; Moody, 2001) have focused on the influence ethnically diverse classrooms might have on the ethnic composition of children's friendship networks. Also, quite some studies (e.g., Edmonds & Killen, 2009; Smith, Maas & Van Tubergen, 2015) have been directed to the role parents have in shaping their adolescent children's attitudes towards interethnic contact by intergenerational transmission of values (through encouragement or discouragement).

Parental interethnic attitudes can also influence their children's opportunities for interethnic contact. One of the ways in which they can do this is related to school choice (e.g., Karsten, Ledoux, Roeleveld, Felix & Elshof, 2003; Bifulco, Ladd & Ross, 2009). Previous research (e.g., Schelling, 1978; Karsten et al., 2006; Kristen, 2008) has suggested that parents with more ethnocentric orientations are less willing to send their children to ethnically diverse schools. By sending their children to schools with a certain amount of ethnic diversity, parents shape their children's opportunities to engage in interethnic contact. Ethnic school diversity is generally related to ethnic classroom diversity, which has been suggested to be especially important for children's interethnic contacts since children generally interact more frequently with classmates than with other children in school (Thijs & Verkuyten, 2014).

Whereas the above suggests that the relationship between parental attitudes and opportunities for children to meet children of other ethnicities has been studied, it seems like the influence parents might have on the relationship between ethnic classroom diversity and

their children's friendship networks has been subject of little research (Thijs & Verkuyten, 2014). Because parents have been suggested to influence their children's school and classroom ethnic diversity, we suspect that parents affect their children's friendships via school choice. Therefore, in this thesis, we will try to integrate theory and findings from literature on classroom diversity and school choice. The research question we aim to answer is as follows: *Do parents influence the ethnic composition of their adolescent children's friendship networks in class, and if so, how?*. To answer this question, the Dutch part of the first wave of the Children of Immigrants Longitudinal Study in Four European Countries [CILS4EU] (Kalter et al., 2013) is used. Adolescents with native and immigrant backgrounds will be studied separately because several determinants of outgroup contact have been suggested to operate differently for ethnic minority members (Tropp & Pettigrew, 2005).

Studying adolescents' interethnic contact is interesting because ethnic identity formation, which is strongly related to interethnic attitudes and contacts, takes place during adolescence (Erikson, 1968). Having positive interethnic contact in adolescence has, in turn, been associated with positive interethnic contact in adulthood (Jackman & Crane, 1986). Thus, the extent to which adolescents have interethnic friendships might have significant consequences for interethnic cohesion. This study is also relevant from a societal perspective. Its findings could contribute to policy development aimed at tackling school segregation in the Netherlands. The vast majority of school segregation policies in the Netherlands are realized in public-private partnership while taking the roles of municipalities, schools, and social institutions into account (Herweijer, 2008). However, the role of parents is being largely neglected. This study could give new insights in the role parents play in school segregation. Thereby, it could provide information on whether a reorientation of target groups in school segregation policy would be worthwhile. By focusing on parents a range of new policy instruments could arise. Policy initiatives to support interethnic contact between parents of different ethnic backgrounds, for example, could prevent ethnic avoidance behaviour such as white flights (i.e., majority children going to schools which perform better and often have a relatively small proportion of ethnic minority children (Zhang, 2009)) and enhance interethnic cohesion. This may enhance efficiency of existing policies.

Theory and hypotheses

It is widely recognized that parents have an essential influence on their children's social value development (Tam & Lee, 2010). This influence is reflected both by transmission of parents' values to their children, and by several opportunities parents give their children to behave in a certain manner. These two aspects of parental influence will be discussed in the following way. Firstly, we will discuss intergenerational value transmission as a driving force that directly influences interethnic friendship diversity. Secondly, we will discuss how parental school choice mediates the relationship between intergenerational value transmission and interethnic friendships. Thereby, we will initially focus on the relationship between attitudes towards integration and parental school choice, and how this can impact ethnic classroom diversity. Thereafter, we will discuss how ethnic classroom diversity influences children's ethnic friendship diversity. Lastly, we combine these partial relations in order to assess the mediation as a whole.

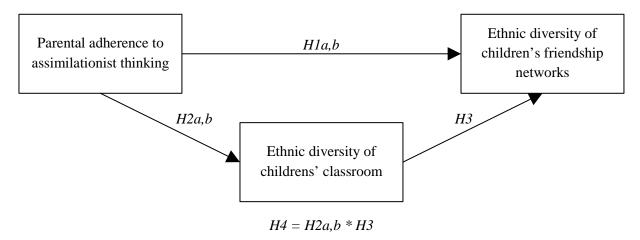


Figure 1. Conceptual model.

Intergenerational transmission of values

Parent-to-child value transmission is a well-studied subject in various fields of research. In sociology, *socialization theory* is often used to explain intergenerational transmission of values. Socialization theory asserts that parents function as socialization agents that model and reinforce their children's values and attitudes (Van de Pol & Van Tubergen, 2013). This role is especially relevant during children's adolescence, when many of their values come into being (Alwin, 1984). Through a process of social learning (i.e., learning by observing parental behavior and attitudes) children adopt and internalize values and attitudes their parents find important (Min, Silverstein, & Lendon, 2012; Miklikowska & Hurme, 2011). By copying their parents' values and attitudes, children receive parental acceptance (Miklikowska, 2016)

which, in turn, gives them satisfaction and an incentive to continue their social learning. It is, therefore, not surprising that a large amount of literature states that a significant positive correlation can be found between social values of parents and their children (e.g. Bandura, 1997; Vollebergh, Iedema & Raaijmakers, 2001). Part of these values concern intergroup attitudes (in this case, attitudes towards other ethnic groups) (Sinclair, Dunn, & Lowery, 2005; Hughes et al., 2006). It therefore seems reasonable to assume that children share their parents' attitudes toward intergroup contact (Degner & Dalege, 2013). In our study, parental attitudes are treated as an approximation for those of their children. Since attitudes function as a cluster of cognitive, affective, and behavioral components, it is also reasonable to assume that attitudes are predictive of social behavior (Olson & Kendrick, 2008 in: Dejaeghere & Hooghe, 2012). Although this relationship between attitudes and actual behavior is not always established, there is some evidence suggesting it exists (Hewstone, Rubin, & Willis, 2002 in: Dejaeghere & Hooghe, 2012). Therefore, we assume that parental intergroup attitudes (passed on from parents to their children) will influence children's interethnic contact. Thereby, we focus on parental attitudes towards integration.

Attitudes towards integration are usually divided into two opposite ways of thinking: assimilationism and multiculturalism. Assimilationist thinking can be defined as a way of thinking about ethnic diversity in which the alleged superiority of the ethnic majority's cultural identity is emphasized (Fredrickson, 1999). Multiculturalist thinking, alternatively, can be defined as a way of thinking about ethnic diversity in which the alleged superiority of the ethnic majority's cultural identity is less strongly emphasized and cultural identities of ethnic minorities are acknowledged and respected (Verkuyten, 2005). In many European countries, including the Netherlands, multiculturalist thinking is often seen as a threat to the majority's cultural identity (Schalk-Soekar, Van de Vijver & Hoogsteder, 2004), because its acknowledgement of ethnic minorities can be perceived as a destabilizing factor for the dominant position of this identity. It therefore seems reasonable to argue that ethnic minorities profit more from multiculturalist thinking (Verkuyten, 2005), which makes it likely that they adhere more to multiculturalism (Berry & Kalin, 1995; Judd, Park, Ryan, Brauer & Kraus, 1995). For the ethnic majority, the opposite is true. The ethnic majority has been suggested to benefit more from assimilationist thinking, which makes the ethnic majority more likely to adhere assimilationism (Tajfel & Turner, 1986; Verkuyten, 2005). Since it has been found that ethnic majority members who adhere more to assimilationist thinking have less positive attitudes towards ethnic outgroups (Verkuyten, 2011), we suspect that the more native Dutch parents adhere to this way of thinking, the less positive attitudes towards outgroups their

adolescent children will have. Less positive attitudes towards outgroups in adolescents have, in turn, been suggested to be related to less (positive) interethnic contacts such as friendships among adolescents (Smith, Maas & Van Tubergen, 2015), and thus, to a less ethnically diverse friendship network. Therefore, we hypothesise the following:

Hypothesis 1a: The more native Dutch parents adhere to assimilationist thinking, the less ethnically diverse friendship networks their adolescent children will have in class.

It has also been argued that ethnic minority members who adhere more to assimilationist thinking will have less negative attitudes towards the ethnic majority (Zick, Wagner, Van Dick & Petzel, 2001). From this, one could expect that minority parents' adolescent children will also have less negative attitudes towards the ethnic majority, and will have more interethnic contacts such as friendships among adolescents. Therefore, we also hypothesise the following:

Hypothesis 1b: The more ethnic minority parents adhere to assimilationist thinking, the more ethnically diverse friendship networks their adolescent children will have in class.

School choice and classroom diversity

Besides intergenerational transmission of values, parents influence their children's interethnic contact through the school to which they choose to send their children (Karsten et al., 2003; Bifulco, Ladd & Ross, 2009). Since Dutch law does not pose legal restrictions on the freedom of school choice, parents have quite some say in the placing of their children in schools. By sending one's children to a school with a certain degree of ethnic diversity, parents can play a role in the degree of school and classroom ethnic diversity (Kristen, 2008). However, although school and classroom diversity are strongly related, they are not the equivalent to each other. If there is a large or full range of educational tracks at a school, it can be expected that many children of different ethnicities will go to the same school. But, because minority group children more often end up doing lower educational tracks than majority group children (see Heath, Rothon & Kilpi, 2008), the ethnic diversity in classrooms (which are usually composed of children of the same educational track) usually ends up being lower than that of the school as a whole. This might also be true for the five ethnic minority groups (Turks,

Moroccans, Surinamese, Indonesians and Dutch Antilleans) taken into account in this study. Ethnic diversity in a school can be expected to positively impact the ethnic diversity of its classrooms to some extent, though; both school and classroom diversity are often found to be related to adolescents' interethnic friendships (see Thijs & Verkuyten, 2014). Therefore, we will assume that school and classroom ethnic diversity are sufficiently comparable for school choice to influence them both.

Several studies (see e.g., Hastings, Kane & Staiger, 2005; Butler & Van Zanten, 2007) have shown that multiple school attributes play a role in parental school choice. Examples of these are distance, location, school performance, and social matching. The latter, social matching, has been suggested to be very important (Jongejan & Thijs, 2010). Social matching is often described as the tendency to choose schools that are socially and ethnically like oneself. By searching for schools that socially and ethnically match, parents can influence their children's interethnic contact opportunities (Kristen, 2008). It has been suggested that the extent to which parents would like their children's schools to be ethnically like themselves depends on the attitudes they have towards ethnic outgroups (Schelling, 1978; Karsten et al., 2006). Therefore, we can assume that parental attitudes towards ethnic outgroups are related to the ethnic diversity of their children's schools (and hence, classrooms). Since it has been suggested that parents in the Netherlands sometimes send their children to ethnically mixed schools out of multiculturalist thinking (Boterman, 2013), we might assume that the same could be true for the opposite concept of assimilationist thinking. Given that assimilationist thinking does not acknowledge cultural identities of ethnic minorities, we expect that parents who adhere more to assimilationist thinking will be more likely to send their children to schools in which are largely composed of children that belong to the ethnic majority (i.e., white schools in which Dutch children are strongly overrepresented). Therefore, we hypothesise the following:

Hypothesis 2a: The more Dutch parents adhere to assimilationist thinking, the less ethnically diverse their adolescent children's classrooms will be.

We believe that this might also be true for ethnic minority parents who strongly adhere to assimilationist thinking. Therefore, we hypothesize the following:

Hypothesis 2b: The more ethnic minority parents adhere to assimilationist thinking, the less ethnically diverse their adolescent children's classrooms will be.

There are some theoretical arguments which suggest that hypothesis 2b will be different in strength for former labor migrants (i.e., Turkish and Moroccan people) and former colonial migrants (i.e., Surinamese, Indonesians and Dutch Antilleans people). One of these arguments, already mentioned, is social matching. Parents might send their children to schools that consist of a large amount of children of the same religious-cultural background. Research suggests that many people of Turkish and Moroccan origin in the Netherlands identify strongly as Muslim (e.g. Phalet & Güngör, 2004). The extent to which their children can get into contact with and learn about aspects of their own culture at school has been suggested to be important for Muslim parents in choosing their children's school. This is generally only possible in schools with a relatively large amount of children of the own ethnic minority (Clark, Dieleman & De Klerk, 1992). It can therefore be expected that Turkish and Moroccan parents, because of their preference to maintain their religious-cultural traditions, are more likely to adhere to multiculturalist thinking, which make them more likely to send their children to highly ethnically diverse schools.

On the other hand, Dutch Antilleans, Surinamese, and Indonesians are religiously and culturally more similar to Dutch natives than Turks and Moroccans are. A recent study (Huijnk, 2015) found that language proficiency, duration of stay, and living in a predominantly Dutch neighborhood increase the likelihood of being assimilated into Dutch society. Given that Dutch Antilleans, Surinamese, and Indonesians often possess more of these characteristics, due to their contact with the Dutch in the colonial period, we expect that these former colonial migrant groups are less strongly focused on maintaining their religious and cultural traditions, and therefore will be less likely to send their children to ethnically diverse schools than former labor migrants (i.e., Turks and Moroccans).

Classroom diversity and children's interethnic friendship networks

As stated before, ethnic classroom diversity influences children's interethnic contact by providing and limiting opportunities. *Contact theory* (Allport, 1954) argues that having (interethnic) contact leads to better (inter)group relations. This would be especially true when four conditions are met: (1) there is an opportunity to get in contact with each other, (2) groups have similar status, (3) there is a culture of cooperation rather than competition, and (4) authoritative institutions (such as teachers) support this contact (Thijs & Verkuyten, 2014). The idea of contact theory is that when these conditions are met, people are able to attain additional information of each other, which, in turn, can lead to more accurate

perceptions and expectations (Schalk-Soekar et al., 2004). These perceptions and expectations could relate to the person himself or his ethnic group identity. In case of the latter, it would reasonable to argue that interethnic contact would foster positive perceptions towards ethnic outgroups, which makes subsequent positive interethnic contact more likely (since, as discussed before, we assume that attitudes towards outgroups are predictive of social behavior). If classrooms are more ethnically diverse, it is likely that there are more opportunities for adolescents to engage in interethnic contact, which leads them to foster positive perceptions of ethnic outgroups. This, in turn, makes it more likely that they will maintain positive interethnic contacts such as friendships. Since, as far as we know, there is no theoretical argument to suggest that the underlying mechanism of contact theory will differ between majority and minority groups, we expect the following for both groups:

Hypothesis 3: The more ethnically diverse classrooms are, the higher the ethnic diversity of their children's friendship networks in class will be.

Since hypotheses 2a, 2b, and 3 only describe parts of the mediation and not the mediation itself, we now turn to the description of the whole mediation. As noted earlier, Boterman (2013) has suggested that parents sometimes send their children to ethnically diverse schools out of multiculturalist thinking. An opposite reasoning could apply to assimilationist thinking. Given that assimilationist thinking does not acknowledge cultural identities of ethnic minorities, we expect that parents who adhere to assimilationist thinking will send their children to schools which are composed largely of children that belong to the ethnic majority. Drawing on contact theory, this would mean that for children of these parents, opportunities to get in contact with adolescent children from ethnic minorities are smaller, and possibilities to attain accurate perceptions of minorities are as well. Consequently, the likelihood of establishment of ethnically diverse friendship networks in class is smaller for these children. Similarly, when minority parents strongly adhere to assimilationist thinking, they may be more likely to send their children to schools in which Dutch children are overrepresented. When they do so, opportunities for their children to establish interethnic contact will be limited, which makes them less likely to engage in interethnic contact. Then, following the logic previously applied to the Dutch, these children are more likely to have less positive attitudes towards outgroups. This, in turn, makes them less likely to have ethnically diverse friendship networks in class. Therefore, we hypothesize the following for both groups:

Hypothesis 4: The more parents adhere to assimilationist thinking, the less ethnically diverse their adolescent children's classrooms will be, and the less ethnically diverse their children's friendship networks in class will be.

Data, Measurements, and Methods

Data

As stated before, we test our hypotheses using the Dutch part of the first wave of the CILS4EU data (Kalter et al., 2013). The CILS4EU project is a panel study established to investigate the causal interplay between structural, social, and cultural integration of adolescents with a migration background in England, Germany, Sweden, and The Netherlands (CILS4EU, 2016). The Dutch part of the first wave was conducted during the school year 2010-2011. The target population consists of 14-15 year old secondary school students with and without an immigrant background. The data were collected using a stratified three-stage sample design. In the first stage, sampling units consisted of schools with 14-15 year old students that were sampled with probabilities tuned to the proportional size of the school (i.e., relatively large schools have a bigger probability of being sampled). Schools for children with learning disabilities were excluded from the sampling frame (6.8% of the total amount of Dutch schools). Subsequently, the sampled schools were assigned to different strata based on their proportion of immigrant students. Eventually a total of N = 100 schools participated. In the second stage, sampling units consisted of classes within sampled schools. Two school classes were randomly selected (taken into account the relevant age group) if more than two classes per school were available. In total N = 222 classes participated. Finally, in the third stage, sampling units consisted of students within sampled classes and these students' parents. In total N = 4363 students participated, including N = 1481 students with an immigrant background and N = 2882 Dutch students. The total student participation rate was 91.1%. In addition, a total number of N=3260 parents participated. Their participation rate was 74.7%. For a more detailed discussion, we refer to CILS4EU (2016).

Dependent variable

Children's classroom friendship ethnic diversity reflects the extent to which adolescent friendship ties in class are ethnically diverse. This variable is measured by a reversed Herfindahl-Hirschman Index (HHI) (Sturgis, Brunton-Smith, Read & Allum, 2011) including

ego which ranges from 0 to 1. '0' depicts a completely ethnically homogeneous friendship network, meaning that there is no ethnic diversity present in a friendship network since every member is of the same ethnic identity. '1' depicts the opposite, i.e., a maximum amount of ethnic diversity in a friendship network, meaning that every member in this network has a different ethnic background. To construct this variable, we first made sure that we created all possible classroom friendship ties for each adolescent in the sample. E.g., when ego is in a classroom which consists of 20 pupils, 20 possible friendship ties (one to each of ego's classmates and one to ego himself) were created for ego. Subsequently, we made one variable containing all friendship nominations by the adolescents from the five separate friendship nominations variables found in the data on classrooms. Then, we ensured that within the friendship variable, a distinction was made between existing friendship ties and ties between classmates who are not friends. Next, we made sure that we included only friendship networks in which the ego included at least one friends. Finally, we constructed a reversed HHI, using the following formula:

$$HHI = 1 - \sum_{i=1}^{n} p_i^2$$

where p_i denotes the proportion of each ethnicity in the friendship network and n the number of friendship nominations. The measure contains 2355 valid and 0 missing values.

Mediator

Classroom ethnic diversity reflects the extent to which classrooms are ethnically diverse. This variable is, again, measured by a reversed HHI (Sturgis et al., 2011) ranging from 0 to 1. '0' depicts a completely ethnically homogeneous classroom composition, meaning that there is no ethnic diversity present in a classroom. '1' depicts the opposite, i.e., a classroom composition with maximum ethnic diversity. The variable has been constructed in the following manner. Firstly, the number of pupils of each ethnicity per class was calculated. Subsequently, we constructed a reversed HHI using the previously mentioned formula. In this case, p_i denotes the proportion of each ethnicity in class and n the number of ethnicities. The measure contains 2355 valid and 0 missing values.

Independent variable

Parental adherence to assimilationism reflects the extent to which parents adhere to assimilationist thinking. The measure is based on the following statement: 'Immigrants should

adapt to Dutch society'. The initial answer categories were combined and reordered into a five-level scale in which '1' depicts strong disagreement with the above statement, thereby reflecting strong adherence to multiculturalist thinking, and '5' depicts strong agreement, thereby reflecting strong adherence to assimilationist thinking. The measure contains 1887 valid and 468 missing values. Since, for H2b, we suspect some difference between former colonial migrants and former labour migrants concerning the above statement, an interaction variable for adherence to assimilationism was created for these two types of immigrant groups. This measure was created using a dummy variable for these groups which coded '0' if a respondent was a former colonial migrant, and '1' if a respondent was a former labour migrant. This dummy variable was then multiplied by the independent variable. The descriptive statistics are given in Table 1.

Control variables

Parental level of education reflects the highest level of education obtained by parents. The variable is derived from the following question: 'What is your highest level of education? If you got your degree outside the Netherland, please select the Dutch level that best matches'. Since the initial response categories could not be arranged in ascending order, we decided to create dummy variables indicating whether parents had had no education, primary education, secondary education (a high school or lower vocational education) or tertiary education (a higher vocational or academic education). Controlling for parents' educational level seems theoretically sound. Verkuyten & Thijs (2002) have reported that there is a positive relationship between education level and multiculturalism for Dutch natives. This relationship is reversed for minority groups in the Netherlands. It has been suggested that for both majority and minority parents in the Netherlands, there is a negative relationship between educational level and the importance adhered to academic performance and social match of a school (Karsten et al., 2003). Hence, parental education level could influence adolescent interethnic friendships directly through attitudes and by shaping opportunities for adolescents to form interethnic friendships.

Children's educational track reflects the educational track adolescent children were following during the first wave. The variable was derived from the following question: 'Which level of education do you attend?'. We recoded the initial response categories into a scale of seven categories: (1) 'vmbo-basis', (2) 'vmbo-kader', (3) 'vmbo-gt', (4) 'vmbo-t', (5) 'havo', (6) 'atheneum', and (7) 'gymnasium'. These categories are hierarchically ordered: the first mentioned is the lowest educational track, the last mentioned the highest education track.

The variable contains 2346 valid and 9 missing values. Controlling for children's educational level seems theoretically sound. Due to tracking in secondary schools, there are often relatively few minority adolescents in higher education tracks compared to majority adolescents (Heath, Rothon & Kilpi, 2008). Therefore, in the lower tracks, ethnic classroom diversity and ethnic diversity of friendship networks in class can be expected to be higher than in the higher ones.

Amount of non-Dutch people in neighbourhood reflects the extent to which the neighborhood a child lives in is populated by people of non-Dutch origin. The variable is derived from the following question: 'How many of the people who live in your neighborhood are Dutch?'. We renamed this question to: 'How many of the people who live in your neighborhood are non-Dutch?' and recoded the initial response categories into a scale of five categories in which higher values indicate a larger amount of non-Dutch people in the neighbourhood: (1) 'none or very few', (2) 'a few', (3) 'about half', (4) 'a lot', and (5) 'almost all or all'. The new variable contains 2338 valid and 17 missing values. Controlling for the ethnic composition of neighborhoods seems theoretically sound, since parents have a tendency to send their children to schools located in the neighbourhoods they live in (Karsten et al., 2003). Thereby, the ethnic diversity of neighbourhoods can influence the ethnic school diversity. In addition, it has also been suggested that people living in neighbourhoods with more ethnic diversity have a higher probability of forming interethnic friendship ties (see e.g., Schlueter, 2012).

Children's adherence to assimilationism reflects the extent to which children adhere to assimilationist thinking. The variable is derived from the following statement: 'Immigrants should adapt to Dutch society'. We recoded the initial response categories into a five-level scale in which '1' depicts strong disagreement with the above statement, thereby reflecting strong adherence to multiculturalist thinking, and '5' depicts strong agreement, thereby reflecting strong adherence to assimilationist thinking. The variable contains 2330 valid and 25 missing values. Controlling for children's integration attitudes seems sound, because it allows us to check for intergenerational value transmission.

Parental religious affiliation reflects whether or not parents have a religious affiliation. The variable is derived from the following question: 'What is your religion?'. We recoded the initial response categories into a dummy variable, where '1' denotes having a religious affiliation and '0' denotes not having a religious affiliation. The variable contains 2343 valid and 12 missing values. Munniksma, Flache & Verkuyten (2012) found that religiosity affects parental acceptance of intimate outgroup contact in the Netherlands, and

thereby influences their children's interethnic and interreligious contact. Since we are interested in whether parents influence their children's interethnic contact, controlling for parental religious affiliation seems sound.

Children's religious affiliation reflects whether children have a religious affiliation or not. The variable is derived from the following question: 'What is your religion?'. We recoded the initial response categories into a dummy variable, where '1' denotes having a religious affiliation and '0' denotes not having a religious affiliation. The variable contains 2329 valid and 26 missing values. Controlling for children's religious affiliation seems sound, because it allows us, again, to check for intergenerational transmission of values.

Children's gender reflects the sex of the child. The variable is derived from the following question: 'Are you a boy or a girl?'. We recode the initial answer categories into a dummy, where '1' denotes female gender and '0' denotes male gender. The variable contains 2349 valid and 6 missing values. Controlling for children's gender seems sound, because previous research has suggested that girls might have less ethnically diverse friendships than boys due to the different kinds of activities that are undertaken among boys and girls. Boys tend to do more activities in large groups. This makes them more likely to interact with and become friends with classmates of another ethnicity than girls, who generally form more exclusive and relatively ethnically homogeneous friendship groups (Kistner, Metzler, Gatlin & Risi, 1993).

Children's Dutch language proficiency reflects the extent to which children can speak and understand Dutch. The variable is derived from the following questions: 'How well do you think you can speak Dutch?' and 'How well do you think you can understand Dutch?'. We recoded the initial response categories for both questions into a scale of five categories: (1) 'not at all', (2) 'not well', (3) 'well', (4) 'very well', and (5) 'excellently'. Subsequently, we calculated the mean score of each individual on both question. The variable contains 2347 valid and 8 missing values. We believe that immigrants who master the Dutch language well can more easily get into contact with Dutch natives, and are therefore are more likely to hold interethnic friendship ties. Therefore, controlling for immigrant children's proficiency of Dutch seems meaningful.

Extra control variables

Beside the just mentioned variables, we also control for two other commonly used personal characteristics, i.e., parent's year of birth and parental gender.

Parents' year of birth reflects the year in which the parent was born. The variable is derived from the following question: 'When were you born?'. This variable is the most direct measure of parents' age in the survey. The discrete variable ranges from 1935 to 1979, and contains 1880 valid and 475 missing values.

Parental gender reflects the sex of the parent. The variable is derived from the following question: 'Are you male or female?'. We recode the initial answer categories into a dummy, where '1' denotes female gender and '0' denotes male gender. The variable contains 2149 valid and 206 missing values.

Method

To test our conceptual model, we use OLS Regression Analyses. In each analysis, two models will be tested for Dutch and ethnic minority children separately. In each first model, only the main variables are taken into account. In each second model, the control variables are also taken into account. For the mediation model, we use the Baron & Kenny (1986) steps. In the first analysis, we will regress our independent variable on our dependent variable. In the second analysis, we will regress our independent variable on our mediator. If the mediator is not significantly related to the independent variable, there is no mediation at play. In the third analysis, we will regress our mediator on our dependent variable. Lastly, if significant relations between the independent variable and mediator and the mediator and dependent variable are found, we will regress our independent variable and mediator and on our dependent variable to assess whether the mediator significantly predicts the dependent variable, controlling for the independent variable. In this way, we can evaluate whether there is full or partial mediation at play.

In the analyses, we use only cases without missing values on any of the variables included in the analyses by applying listwise deletion. This has reduced the number of cases in the analyses to approximately N = 1500 for Dutch respondents and approximately N = 280 for ethnic minority respondents.

Table 1. Descriptive Statistics.

	Total				Dutch			Ethnic minorities							
	N	Min.	Max.	Mean/ % ^a	Std. Dev.	N	Min.	Max.	Mean/ % ^a	Std. Dev.	N	Min.	Max.	Mean/%ª	Std. Dev.
Parental adherence to assimilationism	1887	1	5	4.057	.627	1588	1	5	4.067	.599	299	1	5	4.000	.755
Former labor migrants	2309	0	5	.082	.549						361	0	5	.524	1.304
Former colonial migrants	2323	0	5	.098	.629						375	0	5	.608	1.466
Former labor migrants	2355	0	1	5.3%	.224						407	0	1	30.7%	.462
Former colonial migrants	2355	0	1	12%	.325						407	0	1	69.3%	.462
Children's classroom friendship ethnic diversity	2355	0	.75	.181	.229	1948	0	.75	.128	.201	407	0	.75	.436	.181
Classroom ethnic diversity	2355	.07	.99	.659	.187	1948	.07	.96	.632	.184	407	.36	.99	.784	.144
Parental education															
No education	2332	0	1	1.1%	.105	1927	0	1	0.5%	.068	405	0	1	4.2%	.201
Primary education	2332	0	1	2.4%	.153	1927	0	1	1%	.101	405	0	1	8.9%	.285
Secundary education	2332	0	1	63.1%	.483	1927	0	1	64%	.480	405	0	1	58.8%	.493
Tertiary education	2332	0	1	33.4%	.472	1927	0	1	34.5%	.475	405	0	1	28.2%	.450
Children's educational track	2346	1	7	4.237	1.595	1939	1	7	4.252	1.590	407	1	7	4.162	1.618
Parental religious affiliation	2343	0	1	59.2%	.492	1939	0	1	57.1%	.495	404	0	1	68.8%	.464
Children's religious affiliation	2329	0	1	39.7%	.489	1926	0	1	35.8%	.480	403	0	1	58.3%	.494
Female Gender															
Parents	2149	0	1	79.5%	.404	1782	0	1	80.1%	.400	367	0	1	76.6%	.424
Children	2349	0	1	51.1%	.500	1944	0	1	49.1%	.500	405	0	1	60.7%	.489
Parents' year of birth	1880	1935	1979	1964.254	4.857	1581	1935	1976	1964.104	4.656	299	1950	1979	1965.050	5.749
Ethnic diversity of the neighbourhood	2338	1	5	1.984	1.266	1942	1	5	1.866	1.226	396	1	5	2.561	1.304
Children's adherence to assimilationism	2330	1	5	3.879	.920	1926	1	5	3.950	.844	404	1	5	3.545	1.164
Children's Dutch language proficiency	2347	1	5	4.415	.636	1940	1	5	4.443	.626	407	2.5	5	4.281	.668
Valid N ^b	1759					1488					271				

Note. Source: CILS4EU (2016) Wave 1 – 2010/2011; a valid percentage as a central tendency measure for categorical variables; Number of cases left after listwise deletion

Results

Regression assumptions

Before and during performing the regression analyses, we checked a number of regression assumptions. Some of the variables we treat as continuous were not normally distributed. Also, for each regression analysis, violation of the independent error assumption was found when using the Durbin-Watson (1951) statistic¹. Also, the assumption of zero correlation of the model's predictors is probably violated since it cannot be expected that all predictors in the model are not related to any variables that are not present in the model. Furthermore, some predictors are not normally distributed. Whereas linearity of the residuals was not violated, homoscedasticity and/or normality of residuals was violated in each of our analyses. Multicollinearity was an issue when testing H2b: the statistics of the dummy variable indicating whether a child's interviewed parent is a former labour migrant or an old colonial migrant and the interaction between this variable and the 'parental adherence to assimilationism' variable indicated that they were highly related to each other. Only one outlier, which was found in the parental year of birth variable, was found necessary to remove². Also, the assumption of nonzero variance of predictors was not violated. Following Tabachnick & Fidell's (2006) calculations on required sample size for regression analyses given a certain number of predictors, we concluded that our sample sizes were sufficiently large for each analysis. Therefore, we decided to proceed with our analyses. For more detailed information on assumptions that were violated, we refer to our syntax.

Analysis 1: parental assimilationism and ethnic diversity of friendship networks in class

For testing H1a and H1b, which state that parental adherence to assimilationism decreases the ethnic diversity of children's friendship networks, two models (results shown in Table 2) were performed for both Dutch and minority children. The explained variance of the model for Dutch respondents is negligible, $R^2 = .000$, F(1,1490) = .101, p = .751. Adding the control variables significantly improves the model, $\Delta R^2 = .048$, $\Delta F(11,1479) = 6.781$, p < .001. Combined, the models account for 4.8%, of the variance, $R^2 = .048$, F(12,1479) = 6.225, p < .001. This combined effect can be considered small. In the first model, parental adherence to

_

¹ Tables from Savin & White (1977) were used to determine whether the errors are independent for the sample sizes and number of predictors for each analysis including ethnic minority members. To determine this for the analyses including Dutch people, tables from Stanford University (n.d.) were used because significance levels were not specified by Savin & White for the sample sizes of these analyses.

² This outlier concerned a case of which the year of birth was 1902. This seems a highly improbable value: it is unlikely for one to be interviewed in the year of this survey and to be born in 1902. It is even more unlikely that one is raising a 14 or 15 year old at this age.

assimilationism seems to have a non-significant positive effect on the ethnic diversity of children's friendship networks in class (b = .003, p = .751). This is also true for the second model, (b = .008, p = .333). Thus, H1a cannot be supported. However, there does seem to be a significant difference in the ethnic diversity of friendship networks of children of parents with a religious affiliation and children of parents without a religious affiliation. Children of parents with a religious affiliation have significantly less ethnically diverse friendship networks in class than children of parents without a religious affiliation (b = -.044, p < .001). Also, girls seem to have less ethnically diverse friendship networks in class than boys (b = -.032, p = .002). Finally, children who live in neighbourhoods with a large proportion proportion of Dutch people seem to have more ethnically diverse friendship networks in class (b = .011, p = .009).

The explained variance of the model for ethnic minority respondents is very low, R^2 = .009, F(1,296) = 2.376, p = .124. Adding the control variables significantly improves the model, $\Delta R^2 = .124$, $\Delta F(12,257) = 3.053$, p < .001. Combined, the models lead to an explained variance of 13.2%, $R^2 = .132$, F(13,257) = 3.018, p < .001. This combined effect can be considered medium. In the first model, there seems to be a non-significant negative relation between parental adherence to assimilationism and the ethnic diversity of friendship networks in class, (b = -.022, p = .124). When adding the control variables, this relationship becomes significant and negative, (b = -.037, p = .013). This is in contrast to H1b, which states that the more ethnic minority parents adhere to assimilationist thinking, the more ethnically diverse friendship networks in class their adolescent children will have. Some control variables were significant, though. There seem to be significant differences in ethnic diversity of friendship networks in class between children of parents with a primary education (b = .170, p = .015), children of parents with a secondary education (b = .187, p = .003), and children of parents with a tertiary education (b = .179, p = .006) vis-a-vis children of parents with no education. Thus, the higher the education level of one's parents, the more ethnically diverse one's friendship network in class is vis-a-vis that of a child of parents with no education. Moreover, children's adherence to assimilationism seems to impact the ethnic diversity of their friendship networks in class negatively (b = -.025, p = .009).

Thus, the direction of the effect of parental assimilationism on the ethnic diversity of their children's friendship networks in class is similar rather than different for Dutch and ethnic minority children: it is negative for both. Factors influencing children's friendship networks in class are suggested to be different for Dutch and ethnic minority children.

Table 2. Regression analyses parental adherence to assimilationism on ethnic diversity friendship networks in class for Dutch and ethnic minority children.

		I	Outch	Ethnic minorities					
	Mode	el 1	Mode	el 2	Mode	11	Mod	Model 2	
	b	s.e.	b	s.e.	В	s.e.	b	s.e.	
Constant	.116**	.035	3.786	2.471	.525***	.058	7.152	4.084	
Parental adherence to assimilationism	.003	.009	.008	.009	022	.014	037*	.015	
Parental education									
No education			Ref.	Ref.			Ref.	Ref.	
Primary education			.093	.097			.170*	.07	
Secundary education			.047	.066			.187**	.061	
Tertiary education			.089	.067			.179**	.064	
Children's educational track			.005	.003			.009	.007	
Parents religious affiliation			044***	.012			030	.026	
Children religious affiliation			022	.012			030	.025	
Female gender (parent)			.015	.014			.017	.026	
Female gender (child)			032**	.011			.024	.021	
Parents' year of birth			002	.001			003	.002	
Ethnic diversity of the neighbourhood			.011**	.004			.004	.009	
Children's adherence to assimilationism			002	.007			025**	.009	
Children's Dutch language proficiency							020	.018	
R^2	.000		.048		.009	.009		.132	
R ² Adjusted	00	1	.040	0	.005	5	.08	9	
N	149	2	1492		271		271		

Note. Source: CILS4EU (2016) Wave 1 - 2010/2011; * p < .05 ** p < .01 *** p < .001

Analysis 2: parental assimilationism and classroom ethnic diversity

For testing H2a and H2b, which state that parental adherence to assimilationism decreases the ethnic diversity of children's classrooms, two models (results shown in Table 3) were performed for both Dutch and ethnic minority children. The explained variance of the model for Dutch respondents is negligible, $R^2 = .000$, F(1,1490) = .609, p = .435. Adding the control variables significantly improves the model, $\Delta R^2 = .233$, $\Delta F(11,1479) = 40.892$, p < .001. Combined, the models account for 23.4% of the variance, $R^2 = .234$, F(12,1479) = 37.550, p < .001. In the first model, there seems to be a non-significant positive relationship between parental adherence to assimilationism and ethnic diversity of children's classrooms (b = .006, p = .435). In the second model, the direction of this relationship is negative and non-significant (b = -.005, p = .508). Thus, H2a, which specifies a significant negative relationship between parental assimilationist and classroom ethnic diversity, cannot be supported. Some variables we added in the second model seem to be significant. Children's educational track seems to have a negative effect on the ethnic diversity of their classrooms (b = -.042, p < .001). Also, classroom diversity seems to be negatively impacted by parents having a

religious affiliation (b = -.082, p < .001) and children having a religious affiliation (b = -.036, p = .001). Finally, the proportion of Dutch people in children's neighbourhoods seems to have a positive impact on classroom diversity (b = .029, p < .001).

The explained variance of the model for ethnic minority respondents is low, R^2 = .073, F(3,267) = 7.019, p < .001. Adding the control variables does not significantly improve the model, ΔR^2 = .070, $\Delta F(12,255) = 1.724$, p = .062. Combined, the models account for 14.3% of the variance, R^2 = .143, F(15,255) = 2.828, p < .001. This combined effect can be considered medium. In the first and second model, there seems to be a non-significant positive relationship between parental adherence to assimilationism and ethnic classroom diversity, (Model 1: b = .016, p = .292; Model 2: b = .017, p = .265). Thus, H2b, which states that there is a negative relationship between assimilationism and ethnic classroom diversity for ethnic minority members, cannot be supported. Also, controlling for all other variables in model 2, the relationship between parental adherence to assimilation and the ethnic diversity of children's classrooms does not seem to be significantly stronger for former labour migrant groups than for old colonial migrant groups, (b = .001, p = .981). Only parents' (not) having a religious affiliation seems to have a significant impact on classroom diversity, with classroom diversity being lower for children of parents with a religious affiliation than for children of parents without a religious affiliation (b = .062, p = .007).

Thus, in contrast to H2a and H2b, parental assimilationism does not seem to influence ethnic classroom diversity. However, for both Dutch and ethnic minority respondents, there seems to be a negative relationship between parents having a religious affiliation and ethnic diversity of classrooms.

Because no significant effect of parental adherence to assimilationism on children's ethnic classroom diversity has been found for Dutch and ethnic minority children, there is no mediation effect at play. Therefore, H4a and H4b cannot be confirmed, which means we will not perform the final Baron & Kenny (1986) step (regressing the dependent variable on the mediator and the independent variable). Instead, we will only test whether H3 can be supported.

Table 3. Regression analyses parental adherence to assimilationism on ethnic classroom diversity for Dutch and ethnic minority children.

		Ethnic minorities						
	Mode	1 1	Mode	el 2	Model 1		Mode	el 2
	b	s.e.	В	s.e.	b	s.e.	b	s.e.
Constant	.603***	.034	4.101	2.109	.688***	.062	-4.721	3.663
Parental adherence to assimilationism	.006	.008	005	.007	.016	.015	.017	.016
Former colonial migrants					Ref.	Ref.	Ref.	Ref.
Former labor migrants					006	.028	.001	.031
Former labor migrants					.134	.106	.080	.123
Parental education								
No education			Ref.	Ref.			Ref.	Ref.
Primary education			073	.082			072	.061
Secondary education			020	.057			081	.058
Tertiary education			.018	.057			085	.062
Children's educational track			042***	.003			002	.006
Parental religious affiliation			082***	.010			062**	.023
Children's religious affiliation			036**	.011			.030	.023
Female gender (parent)			.001	.012			.019	.024
Female gender (child)			.016	.009			.007	.019
Parents' year of birth			002	.001			.003	.002
Ethnic diversity of the neighbourhood			.029***	.004			.010	.007
Children's adherence to assimilationism			.008	.006			004	.009
Children's Dutch language proficiency							004	.015
R^2	.000)	.23	4	.073	3	.14	.3
R ² Adjusted	.000)	.22	7	.063		.09	2
N	1499	2	149	2	271		271	

Note. Source: CILS4EU (2016) Wave 1 - 2010/2011; * p < .05 ** p < .01 *** p < .001

Analysis 3: classroom ethnic diversity and ethnic diversity of friendship networks in class

For testing H3, which states that the more ethnically diverse classrooms are, the higher the ethnic diversity of children's friendship networks in class will be, two models (results shown in Table 4) were employed for both Dutch and ethnic minority children. For Dutch children, the first model accounted for a significant 5,3% of the variance, $R^2 = .053$, F(1,1502) = 83.227, p < .001. The second model accounted for an additional 4% of the variance, $\Delta R^2 = .040$, $\Delta F(11,1491) = 5.929$, p < .001. Combined, the models account for a total of 9,2% of the variance, $R^2 = .092$, F(12,1491) = 12.620, p < .001. This combined effect can be considered small. The results of the first model show that there seems to be a significant positive relationship between classroom ethnic diversity and ethnic diversity of friendship networks in class, (b = .241, p < .001). This is also true for the second model, (b = .266, p < .001). Therefore, it seems that we can support H3 for Dutch respondents. In addition, some variables

which we added in the second model seems to be significant. This is the case for children's educational track (b = .016, p < .001) and children's gender (b = -.031, p < .002). For children's educational track, it seems that the ethnic diversity of children's friendship networks in class increases according to an increase in children's educational track. Moreover, it appears that the ethnic diversity of children's friendship networks in class is lower for girls in comparison to boys.

Next, we turn to the results for the analysis for ethnic minority children. The first model accounts for 0% of the variance, $R^2 = .000$, F(1,274) = .128, p = .720. In the second model for ethnic minority parents control variables were added, which accounted for an additional 10% explained variance, $\Delta R^2 = .100$, $\Delta F(12,262) = 2.419$, p = .005. Combined, the models accounted for a total of 10% of the variance, $R^2 = .100$, F(13,262) = 2.244, p = .008. This combined effect can be considered small. The results of the first model show that there seems to be a non-significant negative relationship between classroom ethnic diversity and ethnic diversity of friendship networks in class, (b = -.025, p = .720). In the second model, again, there seems to be a non-significant relationship, but this time positive, relationship, (b = .019, p = .793). Therefore, it seems that we cannot support H3 for ethnic minority respondents. Nevertheless, some variables we added in the second model seem to be significant. Again, there seem to be significant differences in ethnic diversity of friendship networks in class between children of parents with a primary education (b = .159, p = .021), children of parents with a secondary education (b = .164, p = .007), and children of parents with a tertiary education (b = .168, p = .009) vis-a-vis children of parents with no education. Again, the higher the education level of one's parents, the more ethnically diverse one's friendship networks in class are vis-a-vis that of a child of parents with no education. Finally, it seems that children's adherence to assimilationist thinking has a negative effect on ethnic diversity of friendship networks in class.

Table 4. Regression analyses classroom ethnic diversity on ethnic diversity friendship networks in class for Dutch and ethnic minority children.

		utch	Ethnic minorities					
	Mode	1 1	Mode	el 2	Mode	1 1	Mod	el 2
	b	s.e.	b	s.e.	В	s.e.	b	s.e.
Constant	025	.017	2.282	2.406	.459***	.055	5.119	4.113
Classroom ethnic diversity	.241***	.026	.266***	.030	025	.070	.019	.072
Parental education								
No education			Ref.	Ref.			Ref.	Ref.
Primary education			.102	.094			.159*	.069
Secundary education			.047	.065			.164**	.061
Tertiary education			.075	.065			.168**	.064
Children's educational track			.016***	.003			.008	.007
Parental religious affiliation			020	.012			023	.027
Children's religious affiliation			014	.012			021	.026
Female gender (parent)			.010	.014			.017	.027
Female gender (child)			031**	.010			.029	.021
Parents' year of birth			001	.001			002	.002
Ethnic diversity of the neighbourhood			.001	.004			.005	.009
Children's adherence to assimilationism			003	.006			024*	.009
Children's Dutch language proficiency							010	.018
R^2	.053		.092		.000		.100	
R^2 Adjusted	.052	2	.085	5	00	3	.056	
N	1504	1	1504		276		276	

Note. Source: CILS4EU (2016) Wave 1 - 2010/2011; * p < .05 ** p < .01 *** p < .001

Conclusion

In this paper, we have tried to provide some insight into whether (and if so, how) parental adherence to assimilationism influences the ethnic diversity of children's friendship networks in class. Also, we have studied whether parental adherence to assimilationism influences the ethnic diversity of children's friendship networks in class via classroom ethnic diversity. While doing this, we have studied native Dutch and ethnic minority respondents separately.

Our first hypothesis for Dutch respondents, which predicts a positive relationship between parental adherence to assimilationism and ethnic diversity of children's friendship networks in class could, controlling for the other variables in the model, not be confirmed: there seems to be no significant relationship between these concepts. The first hypothesis for ethnic minority respondents was significant, though not in the way we had expected. For this group, parental adherence to assimilationism seems to influence the ethnic diversity of

children's friendship networks in class negatively rather than positively³⁴. Thus, our argument that parental adherence to assimilationism leads to ethnic minority children becoming friends with the Dutch, which makes their friendship networks in class more ethnically diverse than they would have been had their parents adhered less to assimilationism, does not seem to hold. This might be due to the following. It could be that children of parents who adhere less to assimilationism do not have more ethnically homogeneous, but more ethnically heterogeneous networks than children of parents who adhere more to assimilationism. This could be due to these children feeling less forced or willing to interact with the Dutch and feeling more willing to interact with other ethnic minority children due to less assimilationist socialization.

For both Dutch and ethnic minority respondents, Hypothesis 2 was not confirmed. The predicted negative effect of parental adherence to assimilationism on ethnic classroom diversity was not found. Instead, our research suggests that there is no significant relationship between these two variables. This means that the idea that the relationship between parental adherence to assimilationism and ethnic diversity of children's friendship networks in class is mediated by ethnic classroom diversity cannot be confirmed.

Finally, our *contact theory* hypothesis, which states that there is a positive relationship between classroom ethnic diversity and the ethnic diversity of children's friendship networks in class, could only be supported for Dutch respondents⁵. This is consistent with the idea that members of ethnic groups that come across a high proportion of outgroup members in certain settings might be somewhat reluctant to become friends with outgroup members because they perceive them as threatening (Thijs & Verkuyten, 2014). The ethnic minority members in our study generally get into contact with a relatively high proportion of outgroup members in class. This could make them less willing to interact with outgroup members than the Dutch, who come across smaller proportions of outgroup members in class.

³ This relationship was only found when including our control variables. Without our control variables, a non-significant negative relationship was found. While investigating how this came about, we came to the conclusion that this is probably due to the following. By adding control variables, a model becomes more complex, which might lead to variables becoming significant (National Institute of Standards and Technology [NIST] & Semiconductor Manufacturing Technology [SEMATECH], 2016). Also, there seemed to be a suppressor variable present, i.e., a variable which is not related to the dependent variable but whose inclusion in the model makes the relationship between the independent variable and the dependent variable become significant (Ludlow & Klein, 2014). This variable is parental religious affiliation.

⁴ When performing a multivariate regression analysis in which classroom ethnic diversity was controlled for, this relationship remained significant.

⁵ When performing a multivariate regression analysis in which parental adherence to assimilationism was controlled for, this relationship remained significant.

Discussion

Our research has its limitations. Its results should be generalised to the population it tries to capture with caution for two reasons. Firstly, parents seemed less willing to answer survey questions than their children. Regarding the variables from the parents' questionnaire included in our analysis, this was especially the case for the adherence to assimilationism and the year of birth variables (which had 18.5% and 18.8% missing cases for Dutch, and 26.5% missing cases for ethnic minority respondents) and, to a lesser extent, the gender variable (which had 8.5% missing cases for Dutch and 9.8% missing cases for ethnic minority respondents). Due to the use of list wise deletion, inclusion of these variables can be expected to reduce the sample size to such an extent that it is likely that our results are subject to bias and loss of power (Graham, 2009). To prevent such issues, we recommend that researchers use less wasteful ways of dealing with missing data. One way of doing this is using multiple imputation techniques, which allow one to fill in multiple plausible values for missing values. Based on these values, parameters are estimated. These parameters are then pooled into one parameter estimate. In this way, important characteristics of the data are maintained, which leads to parameter estimates being unbiased (Graham, 2009).

Secondly, there seems to be selection bias at play. When comparing the survey data on education level of Dutch and ethnic minority parents to data on education level of Dutch and ethnic minority people from CBS Statline (2016), it seems like there is an overrepresentation of people who obtained a secondary or tertiary education in our sample, and an underrepresentation of people who obtained only a primary education (see Table 5 and 6 in the Appendix). This suggests that the group of parents which responded to the questions included in our analyses is higher educated than are adults in the general population. This means it might be so that we can only draw conclusions about the effect of parental adherence to assimilationism on ethnic classroom diversity and ethnic diversity of children's friendship networks in class for parents with a secondary or tertiary education. However, according to CBS Statline (2016), approximately 60% of ethnic minority adults in the population and approximately 65% of the Dutch adults in the population have such an education level. Therefore, we could still infer about the effect of parental adherence to assimilationism on ethnic classroom diversity and ethnic diversity of children's friendship networks for the majority of parents in the Netherlands.

Parental adherence to assimilationism did not consistently impact classroom ethnic diversity and ethnic diversity of friendship networks in class. In fact, we found only two significant results for this variable in our analyses. This might be due to the following. In both groups, more than 80% of respondents agreed (strongly) with the statement that immigrants should adapt to Dutch society. Among ethnic minority members, 15.4% said not to agree nor disagree with this statement. Among the Dutch, this was 12.5%. Less than 5% of respondents in both groups disagreed (strongly) with the statement. Thus, there is little variation in the responses to the parental adherence to assimilationism question we used. This can make finding significant effects with it relatively unlikely; observing an explanatory variable with little variance makes it more difficult to find a correct regression slope (Hanck, 2015).

The difference in sample size between the analyses for Dutch and ethnic minority respondents might have led to certain variables (such as parental religious affiliation in the testing of the intergenerational transmission of values hypotheses) that are significant for Dutch respondents not being significant for ethnic minority respondents. When one has a smaller sample size, the risk of committing a type II error (finding no significant effect where in reality, there is one) becomes larger. To lower the risk of committing such an error, increasing sample size is recommended (Rubin, 2012). Therefore, we suggest that a larger oversampling of ethnic minority children is used to increase the chance of finding significant effects for this group.

Also, we recommend that further research focuses on assessing parent's and children's characteristics that might be related to outgroup attitudes and (opportunities for) interethnic contact more broadly. A reason for this is that significant effects of control variables may have led to not finding most of the effects we predicted. E.g., a significant effect of classroom ethnic diversity on ethnic diversity of friendship networks in class may not have been found for ethnic minorities due to (among others) the significant positive impact of parental education level on ethnic diversity of friendship networks in class. It seems that for this group, parental education level is a better determinant of the ethnic diversity of children's friendship networks in class than classroom ethnic diversity. Further research into the impact of parental education on diversity of children's friendship networks could therefore be fruitful. In the light of the question of what influences classroom ethnic diversity, it would be advisable to research the impact of several religious affiliations of parents on classroom diversity more in depth, since our research suggests that parents having a religious affiliation negatively impacts classroom diversity for both groups.

Another possible limitation of our research is related to our 'best friends in class' nomination variables. Children could only nominate up to five classmates they consider their best friends in class. It is possible, though, that children consider more than five classmates their best

friends in class. If the ethnic diversity among the (in this case hypothetical) children nominated after the fifth nominated child would differ substantially from the ethnic diversity among the first five nominated children, allowing children to nominate only five classmates could lead to bias in the ethnic diversity of friendship networks in class (Moody, 2001). However, in our case, it seems unlikely that this would be the case. Networks consisting of one to five friends have an average reversed HHI index which ranges from .14 to .20. Thus, it seems there is no substantive relationship between the number of friends one nominates and one's friendship network ethnic diversity. This suggests that the amount of ethnic diversity in friendship networks is probably captured well when allowing children to mention up to five best friends in class. However, we do recommend that researchers keep assessing the possibility of bias due to restrictions on the maximum amount of nominations. Every research is unique, so one cannot know for sure whether a certain amount of nominations is enough for one's research based on previous findings.

Our study suggests that ethnic minority parents' assimilationist thinking is related to the ethnic diversity of their children's friendship networks in class. Thus, there seems to be intergenerational transmission of values at play. It could also be, though, that children's attitudes have an effect on parental adherence to assimilationism. Children have been suggested to be able to transmit their values to their parents (Benish-Weisman, Levy & Knafo, 2013). Because children's attitudes towards outgroups can be influenced by interethnic friendships they have in school (Feddes, Noack & Rutland, 2009), children's interethnic friendships might have an impact on their parents' interethnic attitudes. This could happen due to, e.g., children bringing outgroup classmates home, which leads to new experiences of parents with outgroup members (Smith et al., 2015). This can, in turn, change parents' attitudes about certain outgroups and related attitudes, such as those toward assimilationism. Therefore, we recommend that longitudinal studies be conducted to assess the possible bidirectionality of the relationship between outgroup-related attitudes parents have and the ethnic diversity of their children's friendship networks.

References

- Alba, R., & Foner, N. (2015). Integration's challenges and opportunities in the Wealthy West. *Journal of Ethnic and Migration Studies*, 42(1), 1-20.
- Alwin, D. F. (1984). Trends in parental socialization values: Detroit, 1958–1983. *American Journal of Sociology*, 90, 359–382.
- Bandura, A. (1997). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173-1182.
- Benish-Weisman, M., Levy, S., & Knafo, A. (2013). Parents differentiate between their personal values and their socialization values: the role of adolescents' values. *Journal of Research on Adolescence*, 23(4), 614-620.
- Berry, J. W., & Kalin, R. (1995). Multicultural and ethnic attitudes in Canada: An overview of the 1991 National Survey. *Canadian Journal of Behavioural Science*, 27(3), 301-320.
- Bifulco, R., Ladd, H. F., & Ross, S. L. (2009). Public school choice and integration evidence from Durham, North Carolina. *Social Science Research*, *38*(1), 71-85.
- Boterman, W.R. (2013). Dealing with diversity. Middle-class family households and the issue of 'black' and 'white' schools in Amsterdam. *Urban Studies*, *50*(5), 1130–1147.
- Butler, T., & Van Zanten, A. (2007). School choice: a European perspective. *Journal of education policy*, 22(1), 1-5.
- CILS4EU (2016). *Children of Immigrants Longitudinal Survey in Four European Countries. Technical Report. Wave 1 2010/2011, v1.2.0.* Mannheim: Mannheim University.
- Clark, W. A. V., Dieleman, F. M., & De Klerk, L. (1992). School segregation: managed integration or free choice? *Environment and Planning C: Government and Policy*, 10(1), 91-103.
- Degner, J., & Dalege, J. (2013). The apple does not fall far from the tree, or does it? A meta-analysis of parent–child similarity in intergroup attitudes. *Psychological bulletin*, 139(6), 1270.
- Dejaeghere, Y., & Hooghe, M. (2012). The relationship between ethnocentric attitudes and avoidance behavior among Belgian students. *Social Behavior and Personality: an international journal*, 40(1), 15-29.
- Durbin, J., & Watson, G. S. (1951). Testing for serial correlation in least squares regression. II. *Biometrika*, 38(1), 159-177.
- Edmonds, C., & Killen, M. (2009). Do adolescents' perceptions of parental racial attitudes relate to their outgroup contact and cross-race relationships? *Group Processes and Intergroup Relations*, 12(1), 5–21.
- Erikson, E. H. (1968). *Identity: Youth and Crisis*. New York: Norton & Company.
- Feddes, A. R., Noack, P., & Rutland, A. (2009). Direct and extended friendship effects on minority and majority children's interethnic attitudes: A longitudinal study. *Child development*, 80(2), 377-390.
- Fredrickson, G. M. (1999). Models of American ethnic relations: A historical perspective. In D. A. Prentice & D. T. Miller (Eds.), *Cultural divides: Understanding and overcoming group conflict* (pp. 23–34). New York: Russell Sage Foundation.
- Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual review of psychology*, 60, 549-576.
- Hallinan, M. T., & Smith, S. S. (1985). The Effects of Classroom Racial Composition on Students' Interracial Friendliness. *Social Psychology Quarterly*, 48(1), 3–16.

- Hanck, C. (2015, July 17). There are low variations in the explanatory variables [Msg 2]. Message posted to http://stats.stackexchange.com/questions/161926/there-are-low-variations-in-the-explanatory-variables.
- Hastings, J. S., Kane, T. J., & Staiger, D. O. (2005). *Parental preferences and school competition: Evidence from a public school choice program* (Working Paper No. 11805). Retrieved from National Bureau of Economic Research [NBER]: http://www.nber.org.proxy.library.uu.nl/papers/w11805.
- Heath, A. F., Rothon, C., & Kilpi, E. (2008). The second generation in Western Europe: Education, unemployment, and occupational attainment. *Annual Review of Sociology*, *34*, 11-235.
- Herweijer, Lex (2008). Segregatie in het basis- en voortgezet onderwijs [Segregation in primary and secondary education]. In: P. Schnabel, R. Bijl, & J. de Hart (Eds.) Betrekkelijke betrokkenheid. Sociaal en Cultureel Rapport 2008 [Limited involvement. Social and Cultural report] (p.209-233). The Hague: The Netherlands Institute for Social Research [SCP].
- Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology*, *53*, 575-604. In: Dejaeghere, Y., & Hooghe, M. (2012). The relationship between ethnocentric attitudes and avoidance behavior among Belgian students. *Social Behavior and Personality: an international journal*, *40*(1), 15-29.
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: a review of research and directions for future study. *Developmental psychology*, 42(5), 747-770.
- Huijnk, W. (2015) Sociaal-culturele categorieën: migranten op afstand [Social-cultural categories: migrants at distance]. In: *Werelden van verschil* [Worlds of difference] (pp. 73-108). The Hague: The Netherlands Institute for Social Research [SCP].
- Jackman, M. R., & Crane, M. (1986). "Some of my best friends are black...": Interracial Friendship and Whites' Racial Attitudes. *Public Opinion Quarterly*, 50(4), 459-486.
- Judd, C. M., Park, B., Ryan, C. S., Brauer, M., & Kraus, S. (1995). Stereotypes and ethnocentrism: Diverging interethnic perceptions of African American and White American youth. *Journal of personality and social psychology*, 69(3), 460-481.
- Kalter, F., Heath, A., Hewstone, M., Jonsson, J. O., Kalmijn, M., Kogan, I., Van Tubergen, F. (2013). *Children of Immigrants Longitudinal Survey in Four European Countries (CILS4EU)*. Cologne: GESIS Data Archive.
- Karsten, S., Felix, C., Ledoux, G., Meijnen, W., Roeleveld, J., & Van Schooten, E. (2006). Choosing segregation or integration? The extent and effects of ethnic segregation in Dutch cities. *Education and Urban Society*, 38(2), 228-247.
- Karsten, S., Ledoux, G., Roeleveld, J., Felix, C., & Elshof, D. (2003). School choice and ethnic segregation. *Educational policy*, *17*(4), 452-477.
- Kistner, J., Metzler, A., Gatlin, D., & Risi, S. (1993). Classroom racial proportions and children's peer relations: Race and gender effects. *Journal of Educational Psychology*, 85(3), 446-452.
- Kristen, C. (2008). Primary school choice and ethnic school segregation in German elementary schools. *European Sociological Review*, 24(4), 495-510.
- Lessard-Phillips, L. (2016). Richard Alba and Nancy Foner: Strangers No More: Immigration and the Challenges of Integration in North America and Western Europe. *European Sociological Review*, 2016, 1-3.
- Ludlow, L., & Klein, K. (2014). Suppressor variables: The difference between 'Is' versus 'Acting As'. *Journal of Statistics Education*, 22(2), 1-28.
- Miklikowska, M. (2016). Like parent, like child? Development of prejudice and tolerance towards immigrants. *British Journal of Psychology*, 107(1), 95-116.

- Miklikowska, M., & Hurme, H. (2011). Democracy begins at home: Democratic parenting and adolescents' support for democratic values. *European Journal of Developmental Psychology*, 8(5), 541-557.
- Min, J., Silverstein, M., & Lendon, J. P. (2012). Intergenerational transmission of values over the family life course. *Advances in Life Course Research*, 17(3), 112-120.
- Moody, J. (2001). Race, school integration, and friendship segregation in America. *American Journal of Sociology*, 107(3), 679-716.
- Munniksma, A., Flache, A., Verkuyten, M., & Veenstra, R. (2012). Parental acceptance of children's intimate ethnic outgroup relations: The role of culture, status, and family reputation. *International Journal of Intercultural Relations*, *36*(4), 575-585.
- National Institute of Standards and Technology [NIST] & Semiconductor Manufacturing Technology [SEMATECH] (2016). *Engineering Statistics Handbook*. Retrieved from http://www.itl.nist.gov/div898/handbook/.
- Olson, M. A., & Kendrick, R. V. (2008). *Origins of attitudes*. In: Dejaeghere, Y., & Hooghe, M. (2012). The relationship between ethnocentric attitudes and avoidance behavior among Belgian students. *Social Behavior and Personality: an international journal*, 40(1), 15-29.
- Phalet, K., & Güngör, D. (2004). Religieuze dimensies, etnische relaties en burgerschap: Turken en Marokkanen in Rotterdam [Religious dimensions, ethnic relations and citizenship: Turks and Moroccans in Rotterdam]. In: K. Phalet & J. Ter Wal (Eds.), *Moslims in Nederland* [Muslims in the Netherlands]. The Hague: The Netherlands Institute for Social Research [SCP].
- Rubin, A. (2012). *Statistics for evidence-based practice and evaluation* (3rd ed). Belmont: Cengage Learning.
- Savin, N. E., & White, K. J. (1977). The Durbin-Watson test for serial correlation with extreme sample sizes or many regressors. *Econometrica: Journal of the Econometric Society*, 45(8), 1989-1996.
- Schalk-Soekar, S. R., Van de Vijver, F. J., & Hoogsteder, M. (2004). Attitudes toward multiculturalism of immigrants and majority members in the Netherlands. *International Journal of Intercultural Relations*, 28(6), 533-550.
- Schelling, T. C. (1978). Micromotives and Macrobehaviour. New York: Norton & Company.
- Schlueter, E. (2012). The inter-ethnic friendships of immigrants with host-society members: Revisiting the role of ethnic residential segregation. *Journal of Ethnic and Migration Studies*, 38(1), 77-91.
- Sinclair, S., Dunn, E., & Lowery, B. (2005). The relationship between parental racial attitudes and children's implicit prejudice. *Journal of Experimental Social Psychology*, 41(3), 283-289
- Smith, S., Maas, I., & Van Tubergen, F. (2015). Parental Influence on Friendships Between Native and Immigrant Adolescents. *Journal of Research on Adolescence*, 25(3), 580-591.
- Stanford University (n.d.). *Critical Values for the Durbin-Watson Test: 5% Significance Level*. Retrieved from http://web.stanford.edu/~clint/bench/dw05d.htm.
- Statistics Netherlands (2016). *Bevolking; hoogst behaald onderwijsniveau en onderwijsrichting* [Population; highest achieved level of education and type of education]. Retrieved from http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=82816ned&D1=0&D2=0 &D3=0&D4=1-2&D5=0-1,3-4,7-
 - 11&D6=0&D7=39&HDR=G3,G2,G6,G1&STB=G5,T,G4&VW=T.

- Stoop, I., Boelhouwer, J., & Kraaykamp, G. L. M. (2016). *Trust, life satisfaction and opinions on immigration in 15 European countries*. The Hague: The Netherlands Institute for Social Research [SCP].
- Sturgis, P., Brunton-Smith, I., Read, S., & Allum, N. (2011). Does ethnic diversity erode trust? Putnam's 'hunkering down' thesis reconsidered. *British Journal of Political Science*, 41(1), 57-82.
- Tabachnick, B., & Fidell, L. S., (2006). *Using multivariate statistics* (5th ed.). Harlow: Pearson Education.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In: . S. Worchel & W. G Austin (Eds.), *Psychology of Intergroup Relations* (pp. 7–24). Monterey, CA: Brooks-Cole.
- Tam, K. P., & Lee, S. L. (2010). What values do parents want to socialize in their children? The role of perceived normative values. *Journal of Cross-Cultural Psychology*, 41(2), 175-181.
- Thijs, J., & Verkuyten, M. (2014). School ethnic diversity and students' interethnic relations. *British Journal of Educational Psychology*, 84(1), 1-21.
- Tropp, L. R., & Pettigrew, T. F. (2005). Relationships between intergroup contact and prejudice among minority and majority status groups. *Psychological Science*, *16*(12), 951–957.
- Van de Pol, J., & Van Tubergen, F. (2014). Inheritance of religiosity among Muslim immigrants in a secular society. *Review of Religious Research*, 56(1), 87-106.
- Verkuyten, M. (2005). Ethnic group identification and group evaluation among minority and majority groups: testing the multiculturalism hypothesis. *Journal of personality and social psychology*, 88(1), 121-138.
- Verkuyten, M. (2011). Assimilation ideology and outgroup attitudes among ethnic majority members. *Group Processes & Intergroup Relations*, 14(6), 789-806.
- Verkuyten, M., & Thijs, J. (2002). Multiculturalism among minority and majority adolescents in the Netherlands. *International Journal of Intercultural Relations*, 26(1), 91-108.
- Vertovec, S. (2007). Super-diversity and its implications. *Ethnic and Racial Studies*, 20, 1024–1054.
- Vollebergh, W., Iedema, J., & Raaijmakers, Q. (2001). Intergenerational transmission and formation of cultural orientations in adolescence and young adulthood. *Journal of Marriage and the Family*, 63(4), 1185–1198.
- Zhang, H. (2009). White flight in the context of education: Evidence from South Carolina. *Journal of Geography*, 107(6), 236-245.
- Zick, A., Wagner, U., Van Dick, R., & Petzel, T. (2001). Acculturation and prejudice in Germany: Majority and minority perspectives. *Journal of Social Issues*, *57*(3), 541-557.

Appendix

Table 5. Comparison education level population and parents in analyses (Dutch)

	Popu	lation ¹	Dataset after selection ²		
	Number ³	Percentage	Number	Percentage	
Total	10,795	100	1918	100	
Primary education	3746	34.701	20	1.043	
Secondary education	4232	39.203	1234	64.338	
Tertiary education	2817	26.095	664	34,619	

¹Source: CBS Statline (2016); ²Source: (2016) Wave 1 – 2010/2011; ³All numbers are 1000 times larger in the population

Table 6. Comparison education level population and parents in analyses (ethnic minorities)

	Popu	lation ¹	Dataset aft	er selection ²
	Number ³	Percentage	Number	Percentage
Total	2552	100	388	100
Primary education	1027	40.243	36	9.278
Secondary education	893	34.992	238	61.340
Tertiary education	632	24.765	114	29.381

¹Source: CBS Statline (2016); ²Source: CILS4EU (2016) Wave 1 – 2010/2011; ³All numbers are 1000 times larger in the population