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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.

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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.

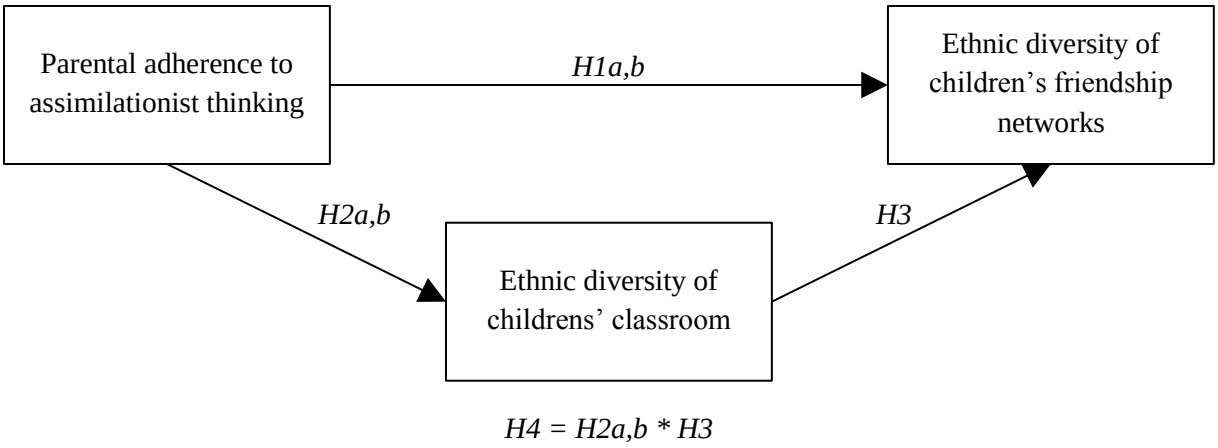

Figure 1. Conceptual model.

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; [b] 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) statistic[1]. 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 remove[2]. 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 assimilationism seems to have a non-significant positive effect on the ethnic diversity of

[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.

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, ΔR^2 = .124, ΔF(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.***

	Dutch				Ethnic minorities			
	Model 1		Model 2		Model 1		Model 2	
	b	*s.e.*	*b*	*s.e.*	*b*	*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		.132	
R^2 Adjusted	-.001		.040		.005		.089	
N	1492		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.***

	Dutch				Ethnic minorities			
	Model 1		Model 2		Model 1		Model 2	
	b	*s.e.*	*b*	*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		.234		.073		.143	
R^2 Adjusted	.000		.227		.063		.092	
N	1492		1492		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, ΔR^2 = .100, ΔF(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.***

	Dutch				Ethnic minorities			
	Model 1		Model 2		Model 1		Model 2	
	b	*s.e.*	*b*	*s.e.*	*b*	*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		.085		-.003		.056	
N	1504		1504		276		276	

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

Conclusion

The purpose of this study was to investigate the effect of parental integration attitudes on the ethnic diversity of their adolescent children's friendship networks in class. More specifically, we were interested in whether parental adherence to assimilationist thinking influences their children's interethnic contact, and if so, whether this effect is mediated by ethnic classroom diversity. The research question we aimed to answer was as follows: '*Do parents influence the ethnic composition of their adolescent children's friendship networks in class, and if so, how?'*. By discussing several theories (i.e., socialization theory, social matching, and contact theory) we grounded our expectations. Now, we will return to these theories by discussing the theoretical implications of the results.

The results of the first analysis showed that both H1a and H1b were not supported. Therefore, we did not find support for the expectation that the more native Dutch parents adhere to assimilationist thinking, the less ethnically diverse friendship networks their adolescent children will have in class (H1a). Nor did we find support for the expectation that

the more ethnic minority parents adhere to assimilationist thinking, the more ethnically diverse friendship networks their adolescent children will have in class (H1b). However, in contrast to H1b, there seems to be a *negative* significant relationship between adherence to assimilationist thinking by minority parents and the ethnic diversity of their adolescent children's friendship networks in class. This suggests that the more minority parents adhere to assimilationist thinking, the less ethnically diverse their children's friendship networks in class will be. Although we did not suspect this relationship to occur, we could explain it with the same theories (i.e., intergenerational value-transmission and socialization theory) we used to ground H1b. The reason for this is that we found a similar relationship for children, as our findings indicate that the ethnic diversity of friendship networks in class significantly decreases according to the extent to which children adhere more to assimilationist thinking when all other predictors (including parental adherence to assimilationist thinking) are held constant. We may argue that this similarity indicates a role of intergenerational transmission of attitudes. However, to expound on this point of view, we did not actually measure whether parental adherence to assimilationist thinking significantly relates to children's adherence to assimilationist thinking. Notice that we do *not* assume that we found a causal relationship. Additionally, the analysis showed that the ethnic diversity of children's friendship networks in class is significantly higher for parents with primary, secondary or tertiary education in comparison to parents with no education. Explaining the role of education is quite difficult as there are several existing theoretical explanations. A frequently used explanation is that education contributes to a more intellectual and sophisticated understanding of social issues (such as integration), which enables people to make better use of subtle statements that are well thought-out and not necessarily based on trivial reasons such as ethnic or racial attitudes (see for a clear theoretical overview: Hello, Scheepers & Sleegers, 2006). In this case it could be that minority parents with higher levels of education are more capable of realizing the benefits of interethnic contact than the parents who lack such a background. Drawing on socialization theory, we may argue that children copy and internalize these statements, which results in more favorable attitudes towards intergroup contact. This may explain the more ethnically diverse friendship networks in class. However, notice again that we did not measure this.

The results of the second analysis showed that both H2a and H2b were not supported. This means that we did not find support for the expectation that parental preferences for schools that are socially and ethnically alike (i.e., the notion of a social match), significantly influences the ethnic diversity of their children's classroom. In addition, there was no

significant difference between former colonial and former labor migrants for H2b. Therefore, these expectations were not supported and a mediating role of classroom ethnic diversity was not taken into account in the analysis.

The results of the third analysis showed that H3 is not supported for ethnic minority parents, but it certainly is for Dutch parents. H3 states that ethnic diversity of classrooms significantly influences the ethnic diversity of friendship networks in class. Therefore, these results indicate that the more classrooms are ethnically diverse, the more Dutch children's friendship networks will be too. To say that we found empirical evidence to support contact theory is far too radical, since we did not take any of Allport's conditions into account, nor did we measure outgroup attitudes. Furthermore, our analysis consists of only one moment of measurement, by which any kind of causal interpretations would be unjust. Therefore, we have to be reluctant about the theoretical implications of these results. We can say that the diversity in classrooms significantly relates to the diversity in friendship networks in class. This implicitly indicates that the opportunity of interethnic contact matters for Dutch children. In addition, the results indicate that the ethnic diversity of children's friendship networks in class appears to be higher when there is an increase in children's educational track. Again, education seems to have influence. To elaborate on previous discussion about education, it could be that education also enables the ability to refine one's perception and expectation of a person or the ethnic group this person belongs to (e.g., Schalk-Soekar et. al., 2004) which in turn will make interethnic contact more likely to occur. Moreover, the ethnic diversity of friendship networks in class appears to be lower for a girl in comparison to a boy. This seems to be consistent with findings of previous research (see e.g., Kistner, Metzler, Gatlin & Risi, 1993).

In sum, H1b, and H3 (for Dutch respondents) are supported, and no mediating role of classroom diversity was taken into account since H2a and H2b were not supported. The answer to our research question is therefore as follows: Based on our analyses, we may conclude that adherence to assimilationist thinking by ethnic minority parents negatively influences the ethnic diversity of their children's friendship networks in class. Although no mediating role of ethnic classroom diversity was found, ethnic diversity in classrooms seems to be positively influenced by the ethnic diversity of friendship networks in class for Dutch respondents.

Discussion

In present study there are four kinds of limitations that deserve attention. Firstly, we made a number of firm statements which influenced the way we interpreted our results. In the theory section we stated that we treat parental attitudes as an approximation for those of their children. However, we did not measure the consistency between parental and children's attitudes towards integration. The theoretical interpretations of the results may therefore somewhat be precarious. We decided not to include such measurement, given that this would make the conceptual model too complicated. By assuming that parental and children attitudes were alike, it was possible to establish our intended theoretical framework. A similar statement was made about the similarity between classroom diversity and school diversity. We assumed that school diversity and classroom diversity are similar to each other. Again, we did not measure this, but given that the first Dutch wave of the CILS4EU data only contains questions on classroom diversity, it was necessary to make such an assumption in order to match our theoretical framework (which only concerned literature on school diversity) with the data we used. Lastly, we stated that attitudes are predictive of social behavior. A considerable amount of research (see e.g., Olson & Kendrick, 2008; Dejaeghere & Hooghe, 2012) established empirical support for this assumption, but it must be mentioned that these studies did not concern attitudes towards integration. Therefore, we cannot be sure whether attitudes towards integration result in actual intergroup behavior. Again, we decided not to include this in the analyses for the same reasons mentioned for the first statement discussed above.

Secondly, the independent variable has fragile construct validity. As stated before, the independent variable was used to measure the extent to which respondents adhere to assimilationist thinking. The measure was derived from the following statement: *'Immigrants should adapt to Dutch society'.* There are two problems concerning this statement's construct validity. The first problem is that the above statement concerns adaptation to a culture rather than adoption of a culture. The former suggests that a person adapts cultural customs originating from another culture, thereby forming a hybrid cultural identity for himself in which his own cultural identity is retained and another cultural identity is formed by shared cultural customs in society. In contrast to the former, the latter suggests that a person would adopt another culture by giving up his own original cultural identity. Adaption strongly refers to multiculturalism, whereas adoption strongly refers to assimilationism. Since the above statement concerns adaptation, it seems from a theoretically perspective that we measured not

what we initially intended. However, it must be noted that we were aware of this of this limitation. Since we considered this statement to be the most neutrally formulated statement on acculturation and integration attitudes in combination with the data we used, we decided to continue working with this variable. Assimilationism and multiculturalism originate from the same construct and, as such, were treated as related concepts which allowed us to fit our theoretical framework in to our (most appropriate) measurement. In addition to this, the second problem with the above statement is the underlying assumption which states that people who strongly agree with adaption to society adhere by default to assimilationist thinking. By assuming so, we did not take the possibility into account that people who favor multiculturalism may also strongly value adaptation to society as well. However, we justify this assumption since we decided, as previously discussed, to treat both concepts as theoretically related components.

Thirdly, we were not able to satisfy all the assumptions underlying OLS Regression Analysis. This may have influenced the results of our study. Since most of the statistical limitations are discussed in detail in the method section and syntax, only the largest statistical limitations will be highlighted. This concerns the violation of the normality assumption in the first instance. It appears that the independent variable was highly left-skewed, meaning that the overall majority of respondents agree with the statement that immigrants should adapt to Dutch society. This seems also true for the control variable, *children's adherence to assimilationist thinking*, which is actually the equivalent for the student questionnaire[3]. Since we violated the normality assumption, the test statistics (especially p-values) in our study may be precarious. Another statistical limitation concerns the fact that we only used one wave of the CILS4EU data, which prevented us from measuring causal or bidirectional relationships. This brings about the difficulty of pointing out whether non-favorable attitudes towards integration (in this case assimilationist thinking) leads to less ethnically diverse friendship networks or vice versa. No certain statements about this can be made.

Lastly, the first Dutch wave of the CILS4EU-data contains some problematic features. To begin with, the data contains high rates of missing values, especially for parents. The response rate for the parental questionnaire in the Dutch version of the first wave accounted for 74.7 percent. Because all missing data were excluded from the analyses using list wise deletion method, the total number of parents significantly decreased. For Dutch respondents

[3] Recall earlier mentioned critique on the possibility that both multiculturalist and assimilationist thinkers could agree with the integration-statement, although they differ in the extent to which they think immigrants should actually adapt to Dutch society. This could have contributed to the skewedness of the distribution.

the number was reduced to approximately *N*= 1500, whereas the number for minority parents was reduced to approximately *N*= 280 (For specifics, see the method section and tables). Although we fitted required samples sizes for both groups following Tabachnick & Fidell's (2006) calculations, the number of minority parents can still be considered to be somewhat small in comparison to Dutch respondents. In this case, we could argue the issue of low statistical power, meaning that our study has a reduced chance in determining accurate test statistics, especially when it comes to accurate p-values. This might be a huge statistical limitation, given that one major finding in our study concerns a significant relationship for minority parents (i.e., the significant negative effect of parental adherence to assimilationist thinking on ethnic diversity of their children's friendship networks in class). It could be that the significance of this effect is misleading, as well as our theoretical interpretations. To confirm whether this is the case, we conducted a retrospective statistical power calculation. The calculation confirmed that the statistical power of this analysis is sufficient enough for us to be confident that our statistically detected effect might exist in reality (i.e., β=.970)[4]. Therefore, while the number of minority parents may be somewhat small, it is enough to stick to our theoretical interpretations. However, this is not to say that we are not cautious; we are aware of the fact that the effect sizes of the models are remarkably small (see tables). Another problematic feature concerns the composition of respondents who filled out the parent's questionnaire. It turns out that most parents are highly educated (both for Dutch and minority parents). In comparison to parents with no education, the amount of parents with secondary or tertiary education is remarkable. Once again, the small amount of parents with no education could have led to a low power issue which may have contributed to misleading significance of the effect which the parental educational level seems to have on ethnic classroom diversity.

Despite these limitations and the fact that most of our hypotheses were not supported, this study still provides useful information. From a scientific perspective, this study contributed by testing a conceptual model in which different theories were integrated in order to explain how parental attitudes towards integration influence the extent to which their children have interethnic friendships. Since there was little research that combined theories on intergenerational transmission and parental strategies to encourage or discourage interethnic contact, as we did, this study was quite different from previous studies. We found no mediating role for classroom diversity. This leaves space for future research and provides sufficient incentive to revalidate our findings as the sample sizes for minority parents were

[4] According to Cohen's (1988) conventions a value of $\beta \geq .80$ is sufficient enough to be confident that detected effects might exist in reality.

somewhat small. Additionally, this study encourages studying other ways in which parents may influence ethnic diversity of schools, given that we did not find support for social matching. This study also provides useful information from a societal perspective. Our study showed that ethnic diversity in classrooms significantly relates to ethnic diversity in friendship networks for Dutch children, which implicitly indicates that opportunities of interethnic contact are influential in having interethnic contact. Although we did not measure the actual causal interplay between these variables, a great amount of research (see for a detailed overview Thijs & Verkuyten, 2014) displays empirical evidence for this expectation. If society or the authorities want to reduce racial or ethnic school-segregation, opportunities to engage in interethnic contact should be further encouraged, not only for children, but also for parents.

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.

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.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. 2nd edn. Hillsdale, New Jersey: L.

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.

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.

Hallinan, M. T., & Smith, S. S. (1985). The Effects of Classroom Racial Composition on Students' Interracial Friendliness. *Social Psychology Quarterly, 48*(1), 3–16.

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: 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.

Hello, E., Scheepers, P., & Sleegers, P. (2006). Why the more educated are less inclined to keep ethnic distance: An empirical test of four explanations. *Ethnic and Racial Studies, 29*(5), 959-985.

Herweijer, Lex (2008). *Segregatie in het basis- en voortgezet onderwijs*. In: P. Schnabel, R. Bijl en J. de Hart (red.) *Betrekkelijke betrokkenheid. Sociaal en Cultureel Rapport 2008* (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 Netherlands Institute for Social Research [SCP]: The Hague.

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.
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.
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: Phalet, K., & Ter Wal, J. (Eds.), *Moslims in Nederland* [Muslims in the Netherlands]. The Hague: The Netherlands Institute for Social Research [SCP].
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.
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: Worchel, S. & Austin, W. G. (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.