I speak, thus I belong?

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Chapter 4

Second language proficiency and interethnic friendships as key factors in the cultural integration of preadolescent ethnic minority children?

Abstract

The current research examined two key factors in immigrants' integration in the host society: *second language proficiency* and *interethnic friendships*. Previously, these factors have not been investigated concurrently among children. This paper presents a longitudinal study (time lag: 9 months), conducted among preadolescent minority children (age 10-13) living in the Netherlands (N=173). The results of the longitudinal analyses indicated that second language proficiency nor interethnic friendships were related to both indicators of cultural integration, which were *attitudes* towards members of the host society and *identification* with the host society. Cross-sectionally, second language proficiency was positively associated with identification with the host society and interethnic friendships was positively associated with attitudes. Second language proficiency did not predict minority children's majority group friendships at a later point in time, nor vice versa. Finally, no mediation effects were found; interethnic friendships did not mediate the relation between second language proficiency and cultural integration, and second language proficiency did not mediate the relation between interethnic friendships and cultural integration. These results suggest that factors which are generally considered important in cultural integration can only partially be applied to integration of minority children.

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4.1 Introduction

In recent decades, the consequences of migration for Western societies have become a subject of intensive public and scientific debate. Millions of people migrate to other countries on a yearly basis for reasons like asylum, work, or family (OECD, 2016a). Immigrants and their children struggle to secure for themselves future opportunities in these countries. Being culturally integrated is seen by many as an important condition for immigrants' success in a host country. Which factors exactly foster or hinder this cultural integration is a question that is still subject to scientific debate. According to many researchers and policy makers, proficiency in the language of the host country plays a key role. It is, however, unclear how the role of language proficiency interacts with another important factor identified in the literature: interethnic friendships between minority and majority members of the host society. Interethnic friendships may both foster language proficiency of immigrants or be facilitated by it, but there is little knowledge about the concurrent effects of these factors. In the current research we examined how these two key factors from the literature on intercultural integration are related to each other and develop simultaneously. In line with earlier research (e.g. Hagendoorn, Veenman, & Vollebergh, 2003), we used attitudes towards members of the host society and identification with the host society as indicators of cultural integration.

Besides providing a deeper understanding of the role of both second language proficiency and interethnic friendships, we moved beyond previous work in a second respect. Most work focusing on the role of host country language proficiency has addressed the adult immigrant population. Yet, increasing proportions of the ethnic minority populations in Western countries are second- or even third-generation children of immigrant parents. Typically, differences in second language proficiency between them and majority children are relatively small compared with adults. This raises the question whether and to what extent previous findings on the effects of language proficiency on cultural integration generalize to ethnic minority children. We addressed this question by focusing on children between the ages of 10 and 13 years.

Researchers who focused on *host country language proficiency* suggest that this is a key factor and even a prerequisite for integration (Clement, Gardner, & Smythe, 1980; Giles & Byrne, 1982; Gordon, 1964; Lambert, 1974; Schumann, 1978). There is a substantial amount of empirical evidence showing that high second language proficiency may be related to a stronger orientation towards the host culture in terms of *identification*, and *attitudes* (e.g. Jiang, Green, Henley, & Masten, 2009; Kang, 2006; Noels, Pon, & Clement, 1996).

However, this research mostly examined adults; but unlike immigrant adults, minority children grow up not only in between the heritage culture of their parent(s) and the host society culture, but also in between the two corresponding languages. Becoming proficient in the second language requires less of a consciously made investment and less active decision-making for them than is the case for adult first-generation immigrants. Accordingly, the link between second language proficiency and cultural integration is less self-evident for minority children.

Interethnic contact is a factor in integration that has arguably received even more attention from researchers than second language proficiency. Findings of many studies support the view that contact of (descendants of) immigrants with natives is associated with more favorable *attitudes* of immigrants towards members of the host society (Pettigrew & Tropp, 2006; Pettigrew, Tropp, Wagner, & Christ, 2011), and stronger *identification* with the host society (e.g. Agirdag, Van Houtte, & Van Avermaet, 2011; Sabatier, 2008). Furthermore, these findings indicate that friendship is an especially powerful form of contact.

Taken together, we addressed four questions in the current study. First, is second language proficiency related to the cultural integration of the children of immigrants? Second, is interethnic contact in the form of friendships with native (majority) children related to cultural integration and what is the relative influence of these friendships compared to second language proficiency? Third, does second language proficiency predict interethnic friendships over time or vice versa? And in line with this, do (a) interethnic friendships mediate the relation between second language proficiency and cultural integration or does (b) second language proficiency mediate the relation between interethnic friendships and cultural integration? The latter questions are particularly of interest in relation to minority children in (pre)adolescence, since this is the life stage in which peers, and friendships in particular, are known to be an important source of influence with regard to emotions, social development, opinions, and behavior (Brechwald & Prinstein, 2011; Corsaro & Eder, 1990).

The current study was aimed at explaining the cultural integration of preadolescent minority children characterized by variation in both second language proficiency and interethnic friendships with the majority group. In line with earlier research (e.g. Hagendoorn et al., 2003), we used *identification* with the host society and *attitudes* towards members of the host society as indicators of cultural integration. Several direct and indirect relations between second language proficiency, majority group friendships, and cultural integration were proposed. These relations were tested using longitudinal data of 173 preadolescent minority children living in the Netherlands. Second language proficiency and

interethnic friendships may not only be both related to cultural integration, but they may also be related to each other. The interdependence and the longitudinal structure of our data led us to analyze the data using Structural Equation Modelling. This method allowed us to test all relations concurrently, including their relative explanatory value for cultural integration.

4.1.1 Second language proficiency and cultural integration

The children of immigrants form a large share of the immigrant population in many societies nowadays. In 2013, 19% of the citizens of the Netherlands who had at least one foreign-born parent were between 0 and 15 years of age (see CBS - Statistics Netherlands, 2016c). These children grow up in between two cultures, and can be oriented towards their (parents') heritage culture, the host culture, or a combination of both (see Berry, 1997). Even though they are raised in the host society, a strong cultural integration is not self-evident.

Moreover, it is not self-evident that research findings which are in line with the idea that second language proficiency facilitates cultural integration (e.g. Jiang et al., 2009; Kang, 2006; Noels et al., 1996), are applicable to minority children.

It still is an open question whether the findings on the relation between second language proficiency and indicators of cultural integration are also applicable to minority children in the Netherlands. A difference in second language learning between adult immigrants and their children is that, for adults, learning the second language is more of a personal choice, while for children who are raised in the host country (and go to school there), learning this language is inevitable. This suggests that their cultural integration in the host country may be less linked to second language acquisition than this is the case for adults. This is particularly true for the Netherlands, the country of our study. While the second language proficiency of minority children in the Netherlands is relatively low compared with majority children (see CBS - Statistics Netherlands, 2014), differences between minority children and majority children are smaller than between first-generation adult immigrants and native adults for two reasons. First, due to Dutch government policy schools prioritize the improvement of minority children's host country language proficiency (VROM, 2007) and (thus) second, minority children grow up in the Netherlands and speak Dutch every day.

School and government policies fostering host country language acquisition of minority children raise the question whether second language proficiency is linked as much to cultural integration as research among adult immigrants showed it to be. There are several reasons to expect that also for minority children there is a link. Children still have a choice in the extent to which they invest in learning the second language, just as they have a choice in

the extent to which they culturally integrate. Moreover, while the differences in the second language proficiency of minority children might be relatively small, this does not necessarily imply that second language proficiency is an unimportant factor in their cultural integration. Expectations of the host society regarding the second language proficiency of minority children are also higher, which can make the small differences in language proficiency relatively important for the degree to which minority children feel that they belong in and are accepted by the host society. Thus, even small differences in second language proficiency might affect cultural integration. To assess this possibility, in this study, we tested the hypothesis that the relationship between second language acquisition and cultural integration also applies to minority children:

H. I In preadolescent minority children, second language proficiency is positively related to cultural integration (cross-sectional and longitudinal).

4.1.2 Majority group friendships and cultural integration

Ever since Williams (1947) and Allport (1954) proposed their contact hypothesis, a lot of research has been conducted to test the relation between intergroup contact and intergroup *attitudes*. A large body of research supports the idea that interpersonal contact between members of different ethnicities is related to more favorable attitudes towards each other's groups (Pettigrew & Tropp, 2006). Furthermore, it was found that this is especially the case when this contact takes the form of friendship (e.g. Davies, Tropp, Aron, Pettigrew, & Wright, 2011; Levin, van Laar, & Sidanius, 2003; Pettigrew et al., 2011).

Interethnic contact can be expected to be related not only to attitudes, but also to *identification*. Based on the social categorization approach to intergroup behavior (Brewer, 1979; Brown & Turner, 1981; Tajfel & Turner, 1979), Gaertner and Dovidio's (2000) Common Ingroup Identity Model asserts that "*intergroup bias and conflict can be reduced by factors that transform members' cognitive representation of the memberships from two groups to one group*" (Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993). Thus, positive intergroup relations are fostered if members of different groups perceive themselves and others as 'we' rather than as 'us' versus 'them'. Intergroup contact is an effective way of creating this perception of a common in-group identity (Dovidio, Gaertner, Saguy, & Halabi, 2008; Gaertner, Dovidio, & Bachman, 1996). This suggests that interethnic contact with the native majority can enhance immigrants' perceptions of belonging to a common group and can thus strengthen identification with the host society. Again, this is specifically expected to be the case when this interethnic contact takes the form of friendship.

Positive effects of interethnic contact with members of the host society on cultural integration can especially be expected for children. Childhood is considered a formative period for interethnic relations (Schofield, 1995). This is because children have relatively many interethnic encounters in school compared with other settings. Moreover, there are indications that interethnic friendships during childhood are associated with positive outcomes in both the short and the long run (e.g. Ellison & Powers, 1994; Jackman & Crane, 1986; Patchen, 1982). Especially during (pre)adolescence, peers, and friends in particular, are an important source of influence (Brechwald & Prinstein, 2011; Corsaro & Eder, 1990). Not surprisingly, therefore, there are indications that during adolescence minority children's friendships with majority children are related to more positive attitudes towards members of the host society and stronger identification with that society (Munniksma, 2013).

In sum, friendships are an especially beneficial form of intergroup contact, and peers and friends appear to be a very important source of influence during (pre)adolescence, also with respect to cultural integration. This leads us to the following expectation:

H. II In preadolescent minority children, majority group friendships are positively related to cultural integration (cross-sectional and longitudinal).

4.1.3 Second language proficiency and majority group friendships

Second language proficiency and interethnic friendships can both be expected to affect cultural integration, but they may also be related to each other. For example, Titzmann and colleagues (2012) linked the notion of 'homophily' in friendship formation to host country language use. Homophily implies that contact, and a friendship relation in particular, is more likely to occur between similar people than between dissimilar people (McPherson, Smith-Lovin, & Cook, 2001). Similar to the findings of research on similarity in opinions among adolescents (Stark & Flache, 2012), Titzmann et al. showed similarity in host country language use to surpass 'ethnic homophily' and thus facilitate friendship formation between people of different ethnicities. Their research among Russian Jewish and ethnic German Diaspora immigrant adolescents living in Germany showed higher levels of German language use to be related to a higher percentage of interethnic friendships. This finding was in line with the reasoning that using the same language can be considered essential for communication and thus for establishing contact and friendships. Hence, it can be reasoned that the second language *proficiency* of minority children (which implies an even higher extent of similarity) is also positively related to their interethnic friendships. We therefore tested the following expectation in our study:

H. III In preadolescent minority children, high second language proficiency fosters majority group friendships.

However, second language proficiency is not only important in the *selection* of majority group friends; it can also be a consequence of having majority group friends and thus be subject to *influence* from friends. The latter is especially likely during (pre)adolescence given the strong influence of peers during this life stage (Brechwald & Prinstein, 2011; Corsaro & Eder, 1990). The language proficiency of majority group friends most probably influences the second language proficiency of minority group children, because having majority friends increases both *exposur*e to the second language (typically at a relatively high level of proficiency) and the *use* of the second language by the immigrant child. This suggests that majority group friendships enhance second language proficiency, an expectation that we tested in our study:

H.IV In preadolescent minority children, majority group friendships foster higher second language proficiency.

4.1.4 Friendships and second language proficiency as mediators

The proposed interplay of second language proficiency and interethnic friendships suggests that there are also indirect ways in which these concepts can be related to cultural integration. First, it was hypothesized that high second language proficiency fosters majority group friendships (Hypothesis III), and that majority group friendships are in turn positively related to cultural integration (Hypothesis II). Hence, a possible direct effect of second language proficiency on cultural integration should be at least partly attributable to interethnic friendships. We assessed this by testing a meditation effect:

H.V In preadolescent minority children, the relation between second language proficiency and cultural integration is mediated by majority group friendships

Second, it was hypothesized that majority group friendships foster higher second language proficiency (Hypothesis IV), and that this is in turn positively related to cultural integration (Hypothesis I). Hence, the effects of interethnic friendships on cultural integration may similarly be attributable to an association with second language acquisition. We tested the following:

H. VI In preadolescent minority children, the relation between majority group friendships and cultural integration is mediated by second language proficiency.

Figure 4.1 presents a schematic representation of the main hypotheses that were tested for both dimensions of cultural integration, i.e., identification with Dutch society and attitudes towards members of Dutch society. All hypotheses were tested concurrently. Doing so, we can also examine the relative influence of Dutch language proficiency compared with having Dutch friends on cultural integration (by checking the Beta coefficients if they appear to be significant). Using data collected at two time points, both the cross-sectional and longitudinal relations of Dutch language proficiency and Dutch friends with each other and with cultural integration were tested. Testing these relations over time also enabled us to examine the causal direction of the proposed relationships.

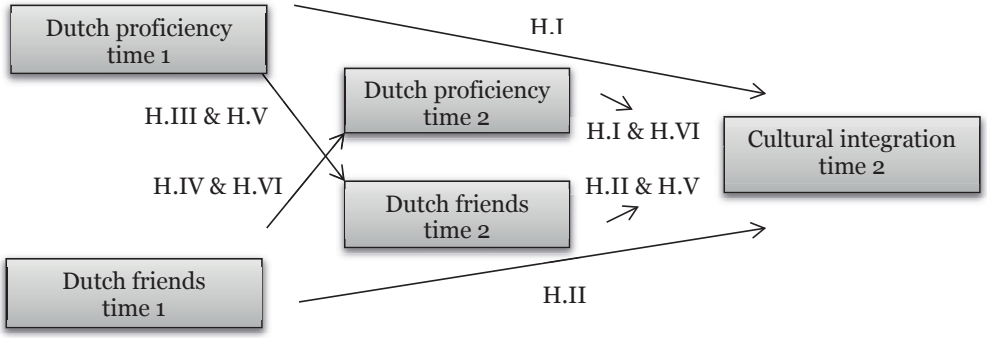

Figure 4.1 Overall research model
Notes:
[a] The concepts in this figure are representing more specific variables which are used in the Structural equation Model, see Table 4.3.
[b] The SEM we eventually tested contains a number of additional effects including stability paths between Dutch language proficiency at time 1 and 2, see Table 4.3.

4.2 Method

4.2.1 Participants

The data originate from the primary school module of The Arnhem School Study, a longitudinal study comprising three data waves among children living in the city of Arnhem in the Netherlands (Stark, Flache, & Veenstra, 2013; Stark & Flache, 2012). Data from two time points were used. The first data wave took place in July 2007 and focused on children at the end of the seventh grade (5th grade in the American system); the second wave was collected in April 2008 and focused on children at the end of the eighth grade (6th grade in

the American system). Given that we were interested in classroom characteristics, like friendships in class, all children who shared a classroom were included in the data collection. As a consequence, in the case of combination classes (with, for example, children from the fifth and sixth grades) children from other grades were also included.
The response rate of 94% per time point resulted in a total of 533 children who participated in all data collections. Children whose parents were both born in the Netherlands and children with only non-Dutch classmates were excluded from the analyses. This resulted in a sample of 173 children from 25 schools and 38 classrooms for the analyses. These children were between 10 and 13 years of age at the first time point and of 36 different ethnicities, the biggest groups being, respectively, Turkish, Moroccan, Surinamese, and Antillean.[1]

4.2.2 Procedure

Before the start of data collection, parents received a letter in which they were offered the opportunity to refuse participation. They were informed about the research and the confidential treatment of the information to be gathered. The participating children filled in a paper and pencil questionnaire at school under the supervision of a researcher or research assistant. Completion took about 30 minutes. The ethics committee of the department of sociology at the University of Groningen approved the procedure of the data collection.

4.2.3 Measures

We used attitudes towards members of the host society and identification with the host society as indicators of cultural integration.
Attitudes were measured at the second time point using three items: "In your opinion, how many Dutch people are (a) honest, (b) friendly, and (c) smart?" (see Feddes, Noack, & Rutland, 2009; Vervoort, Scholte, & Scheepers, 2011). The questions were answered on a five-point Likert scale ranging from "(almost) nobody" to "(almost) everybody" (α=.80). The two negative traits aggressive and disobedient were also assessed in the questionnaire, but excluded from the current study. This was done because the Cronbach's alpha dropped to an unacceptably low level when these items (recoded) were included. This is not surprising, because in line with the 'positive-negative asymmetry in social discrimination' (Mummendey & Otten, 1998), developmental research has shown that children over seven years of age are more likely to differentiate between groups in terms of positive rather than negative trait attributes (Bennett, Lyons, Sani, & Barrett, 1998; Bennett et al., 2004; Bigler, Jones, & Lobliner, 1997; Bigler, Brown, & Markell, 2001; Rutland et al., 2007). This phenomenon has

been attributed to older children's awareness of norms regarding the unacceptability of discrimination involving negative traits (Rutland et al., 2007).

Identification was measured at the second time point by asking the respondent "Do you feel more Dutch or more a member of the culture of your parents (e.g., Turkish, Moroccan)?" Answering categories were "more Dutch", "more other group", and "both". The category "more other group" was coded as 0, while "more Dutch" and "both" were coded as 1. The latter two categories were merged because we were interested in the extent to which the children identified with the host society. Both categories imply that the respondent does identify (to some extent) with the host society, while the remaining category implies that one does not. Moreover, earlier findings indicate that being oriented towards the host society *only* does not necessarily imply a higher orientation towards that society compared with being oriented towards *both* the heritage and the host society (i.e. having a dual identity Dovidio, Gaertner, & Saguy, 2007; Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1994; Verkuyten, 2005).

Dutch language proficiency was measured twice, with one schoolyear in between. This concept was operationalized using the grade a child obtained for the school subject 'Dutch' in the given year. An alternative to these raw grades would be the use of the standardized Z scores of these grades based on the class mean. This would be preferable if raw grades were distorted by teacher-related tendencies, for example when some teachers score their children consistently relatively high while others score them relatively low. We tested for this possibility and found no evidence of such teacher-related tendencies. Despite the fact that the children were in a different class at the second moment of measurement and thus the grades at the two time points were generally given by two different teachers, the correlation between the raw scores was quite high (r=.62 p<.01). This correlation was even higher than the correlation between the Z scores at the two time points (r=.48 p<.01).Thus the raw grading seemed to be quite consistent and reliable. Therefore, use of the raw grades was preferred.

Proportion of Dutch friends in class was also measured at two time points. This variable was based on the sociometric question "Which of your classmates are your best friends?" The names of all classmates were printed on the questionnaire and could be marked as best friend. Knowing the countries of birth of the children's parents (which was also asked in the questionnaire), we calculated the proportion of the total number of friends in the class who were Dutch (both parents born in the Netherlands). Using friends in the class as an indicator of majority group friendships was preferred above using friends outside the class; because we knew the ethnic composition of the class, the former variable enabled us to control for the opportunity to become friends with the ethnic majority (see next two variables in this

section). Furthermore, the proportions of friends in and outside the class appeared to correspond to each other (at time point 2: r=.56 p<.01).

Proportion of Dutch children in class. This variable was again calculated based on the countries of birth of the children's parents. It was included as a control variable (see 'statistical analyses' for further information).

Speaking Dutch with parents was measured at the first time point. Respondents were asked to what extent they agreed with the proposition "I speak Dutch with my parents". The questions were answered on a five-point Likert scale ranging from "absolutely not true" to "absolutely true". Like the above-mentioned variable, this concerns a control variable.

4.2.4 Missing data

For 80 of the 173 respondents information was missing on one or sometimes more variables. In total, the missing data percentage was 8 % (see Table 4.1 for more details). Analyses of only the cases with complete data may lead to biased results because the missing data may occur not at random. To address this problem, we imputed missing data; this is currently considered the best analytical strategy in such a situation (Graham, 2009). Multiple imputation was carried out in Mplus using Bayesian analysis (Rubin, 1987; Schafer, 1997), with the unrestricted H1 model and sequential regression (L. K. Muthén & Muthén, 1998-2012; Van Buuren, 2007). All variables of this study were included in the imputation model to predict the missing values. In addition, several background variables were included for the prediction. These were variables indicating whether the child was of Western or non-Western origin; had one or two non-Dutch parent(s); was a boy or girl. Age and math grade were also included for the prediction of the missing values. The imputation procedure resulted in a dataset containing full information about all 173 respondents.

4.2.5 Statistical analyses

Structural equation modeling in Mplus was used to integratively test all our hypotheses with respect to both indicators of cultural integration: attitudes and identification (L. K. Muthén & Muthén, 1998-2012). Integrative testing of both dependent variables was preferred because the same group of respondents was used to test the hypotheses regarding both dependent variables; therefore, separate testing would have enlarged the chance of type I errors (faulty rejection null hypotheses). The mediation paths were directly included in the overall path model, because both in the absence and in the presence of direct relations, mediating relations can be present (MacKinnon, Fairchild, & Fritz, 2007).

WLSMV (weighted least squares with mean and variance adjustment) served as the estimator in the analyses. Identification was specified as categorical, which causes the program to use logistic regression instead of linear regression to test the direct relations with this specific variable. Furthermore, the 'complex' option was used to control for the nestedness of the respondents in school classes (B. O. Muthén & Satorra, 1995). The latter was preferred above multilevel modeling because the current study contained no hypotheses at classroom level. Moreover, the only class-level variables included in the analyses were control variables, which in fact served to take the classroom-level characteristics into account which we considered most important. The first control variable concerned the proportion of Dutch children in the class, which can assumed to be (positively) related to all main variables of this study. By taking this variable into account, we controlled for the effect of contact by mere exposure to Dutch children on both language proficiency and integration, in order to disentangle this in our test from the additional effects of actual friendship with Dutch classmates. The second control variable concerned the extent to which children speak Dutch with their parents. Most probably, some parents speak Dutch to their children (e.g. parents who are Dutch, Surinamese or Antillean). The Dutch language proficiency of these children is thus partly attributed to the cultural background of the parents. By including the extent to which children speak Dutch with their parents, we control for the possibility that the expected effects between second language proficiency and interethnic friendships and/or cultural integration are due to such parental factors.

4.3 Results

4.3.1 Descriptive results

Descriptive statistics of the original data are shown in Table 4.1, which also includes the means of the imputed data. As can be seen from the table, the difference in the means of Dutch proficiency at time 1 and time 2 is relatively small, indicating that this variable is relatively stable over time. To be able to interpret the findings with respect to second language proficiency correctly, additional analyses were done on the full dataset with both native majority children and minority children, to explore the presumed difference in Dutch language proficiency between the two groups. As expected, at time 1 the minority children (M=6.57, SD=1.26) had significantly lower Dutch proficiency compared with majority children (M=6.93, SD=1.25, $t(668)=3.76$ $p<.001$).

There is considerable variation in Dutch language proficiency among minority children. We explored plausible reasons for this variation. 30% of the children who according

to the official classification (see CBS - Statistics Netherlands, 2016a) are minority children because they have at least one foreign-born parent, (also) had one Dutch parent. Furthermore, 18% of the minority children had a Surinamese or Antillean parent. In line with this, 46% of the participants (fully) agreed with the statement on speaking Dutch at home, while 25% (fully) disagreed with this statement. Thus, it is with good reason that in the main analyses we controlled for the extent to which children speak Dutch with their parents.

Similar to the findings for Dutch language proficiency, the means of the proportion of Dutch friends in the class at time 1 and time 2 were alike (see Table 4.1), indicating that this variable is relatively stable over time. These findings are supported by the bivariate correlations shown in Table 4.2, which signify that the correlations between the same variables measured at two time points are strong and highly significant. The moderate but significant correlation between attitudes and identification suggests that the variables are related but not exactly the same, as can be expected given that they are two different indicators of cultural integration.

Table 4.1 Descriptive statistics for main and control variables

	Original data				Imputed data (*N*=173)
	N	Range	Mean	SD	Mean
Attitudes t2	163	1-5	3.47	.85	3.46
Identification t2	152	0/1	.63	.48	.64
Dutch proficiency t1	143	4-10	6.50	1.16	6.46
Dutch proficiency t2	136	4-9	6.43	1.25	6.47
Proportion Dutch friends in class t1	173	0-1	.42	.33	.42
Proportion Dutch friends in class t2	156	0-1	.40	.32	.40
Proportion Dutch children in class	173	.15-.97	.46	.23	.46
Speaking Dutch with parents	155	1-5	3.42	1.42	3.38

Note: The means of the imputed data are pooled from 10 imputed datasets.

Table 4.2 Correlations for main and control variables (*N*=173)

	1.	2.	3.	4.	5.	6.	7.
1. Attitudes t2							
2. Identification t2	.38***						
3. Dutch proficiency t1	.01	.10					
4. Dutch proficiency t2	.04	.19**	.63***				
5. Proportion Dutch friends in class t1	.17*	.27***	.17*	.16*			
6. Proportion Dutch friends in class t2	.28***	.34***	.13*	.09	.64***		
7. Proportion Dutch children in class	.24***	.32***	.17*	.14*	.66***	.76***	
8 Speaking Dutch with parents	.05	.24***	.05	.13*	.39***	.37***	.30***

*p<.05 **p<.01 ***p<.001 (one tailed). *Note:* Pooled results of 10 imputed datasets.

4.3.2 Main analyses

Table 4.3 presents the results of the structural equation model used to simultaneously test the hypotheses. The model fit indicators show that the model fits the data well ($X^2(1)=.84$, CFI=.999, RMSEA=.018 see Hu & Bentler, 1999).

Results regarding the direct paths to attitudes toward the Dutch show that high Dutch language proficiency does not foster favorable attitudes over time. Also, high Dutch language proficiency is not related to more favorable attitudes when we focus on only one time point. Similarly, having a high proportion of Dutch friends in class does not foster positive attitudes over time. However, having a high proportion of Dutch friends in the class does appear to be significantly related to more favorable attitudes when the focus is on one point in time. The control variables proportion of Dutch children in class and the extent to which children speak Dutch with parents are not related to attitudes.

Results regarding the direct paths to identification with Dutch society show that over time the Dutch language proficiency is not related to identification. Cross-sectionally, however, higher Dutch language proficiency is related to stronger identification. The proportion of Dutch friends in class is not related to identification; not over time and not at one time point. With respect to the control variables, both the proportion of Dutch children in class and the extent to which children speak Dutch with their parents are not significantly related identification with Dutch society.

Focusing on both mediating variables, the stability paths of Dutch language proficiency and proportion of Dutch friends in the class are significant, indicating that the scores on both variables at time point 2 are positively related with the respective scores at time point 1. While the correlations in Table 4.2 indicated a significant but weak relation between proportion of Dutch friends and Dutch language proficiency at one time point, results of the structural equation model indicate that having a high proportion of Dutch friends in the class at the first time point is not significantly related to higher language proficiency at the second time point. This implies that Dutch language proficiency does not mediate the relation between having Dutch friends and the indicators of cultural integration. Results also show that high second language proficiency at the first time point is not related to having a higher proportion of Dutch friends at the second time point, which implies that Dutch friends do not mediate the relation between second language proficiency and cultural integration. With respect to the control variables, both a higher proportion of Dutch children in class and a higher extent of speaking Dutch with parents are related to a higher proportion of Dutch friends.

Table 4.3 Structural equation Model predicting Attitudes and Identification (*N*=173)

	Beta	B	SE
Attitudes t2			
Dutch proficiency t1	.02	.02	.07
Dutch proficiency t2	-.08	-.06	.08
Proportion Dutch friends t1	-.02	-.04	.29
Proportion Dutch friends t2	.27	.70*	.32
Proportion Dutch children in class	.08	.27	.40
Speaking Dutch with parents	-.06	-.04	.06
Identification t2 [b]			
Dutch proficiency t1	-.10	-.10	.12
Dutch proficiency t2	.25	.22*	.11
Proportion Dutch friends t1	.02	.08	.49
Proportion Dutch friends t2	.22	.76	.74
Proportion Dutch children in class	.17	.84	.99
Speaking Dutch with parents	.14	.11	.09
Dutch proficiency t2			
Dutch proficiency t1	.63	.70***	.09
Proportion Dutch friends t1	.01	.03	.39
Proportion Dutch children in class	.00	.00	.79
Speaking Dutch with parents	.10	.09	.09
Dutch friends t2			
Proportion Dutch friends t1	.20	.20**	.07
Dutch proficiency t1	-.03	-.01	.01
Proportion Dutch children in class	.60	.83***	.11
Speaking Dutch with parents	.12	.03*	.01
Attitudes t2 with *identification t2*	.42	.34***	.08
Intercepts			
Attitudes	4.05	3.45***	.42
Dutch proficiency t2	1.31	1.66*	.75
Proportion Dutch friends t2	-.34	-.11	.10

Fit statistics: $X^2(1)=.84$, CFI =.999, RMSEA=.018. *$p<.05$ **$p<.01$ ***$p<.001$ (one tailed).
Notes:
[a] The italic variable is the dependent variable to which the subsequent variables are directed.
[b] The results for the categorical variable identification are logit coefficients(log-odds).
[c] Controlled for clustering in 29 school classes. [d] Pooled results of 10 imputed datasets.

4.4 Conclusion and discussion

In the current research we examined two factors that, in earlier research, have been found to play a key role in cultural integration. These factors can be assumed to be related to each other but until now have not been investigated concurrently: second language proficiency and interethnic friendships. Unlike earlier studies, we focus on ethnic minority children instead of adult immigrants. Ethnic minority children grow up not only between the heritage culture

of their parent(s) and the host society culture, but also with the two corresponding languages. For these children, being proficient in the second language and being acculturated is (also) not self-evident. Given their different circumstances, however, it can be questioned whether the findings in adult immigrants are also applicable to their children.

We examined two indicators of cultural integration: *identification* with the host society and *attitudes* towards members of the host society. Based on the literature, we tested several direct and indirect relations between second language proficiency, majority group friendships, and cultural integration. All relations were examined concurrently and over time using longitudinal data of preadolescent minority children living in the Netherlands.

Surprisingly, for preadolescent minority children we did not find that high second language proficiency was related to more favorable attitudes towards members of the host society at the same time or at a later time. With respect to the other indicator of cultural integration, second language proficiency was only related to identification with the host society at the same time point. Our first hypothesis was therefore partially rejected. Hence, compared to adult immigrants (e.g. Jiang et al., 2009; Kang, 2006; Noels et al., 1996), for preadolescent minority children, the link between second language proficiency and cultural integration appears to be less self-evident.

As expected, we found that among preadolescent minority children, majority group friendships were related to more favorable attitudes towards members of the host society. However, this relation only existed at one time point. What we did not expect was that, in the same group, majority group friendships were not related to identification with the host society at the same point in time or later in time. In consequence, the second hypothesis on the relation between majority group friendships and the two indicators of cultural integration was also partially rejected.

The findings on the relation of majority group friendships with positive attitudes towards members of the host society are consistent with the contact hypothesis (Allport, 1954; Pettigrew & Tropp, 2006; Williams, 1947). Also the finding that mere exposure to majority group classmates, as indicated by the control variable percentage of majority group classmates, is not related to more positive attitudes is in line with some earlier studies. Specifically this concerns research which indicates that friendships (rather than mere contact) are a very important source of influence during (pre)adolescence (Brechwald & Prinstein, 2011; Corsaro & Eder, 1990), also with respect to cultural integration (Munniksma, Stark, Verkuyten, Flache, & Veenstra, 2013).

At the same time, however, in their meta analyses Pettigrew and Tropp (2006) concluded that there was a small but consistent effect of mere exposure on outgroup

attitudes. Given that their conclusion is based on a large number of studies, and that even then the effect was weak, it is also possible that our sample was just too small to detect this relation (if it were there).

A possible explanation for the fact that a relation between majority group friendships and cultural integration was found on only one of the two measured indicators may lie in the specific content of these two aspects of cultural integration. A child's experiences with native majority friends are most probably more easily translated into attitudes to members of the host society, as these are relatively concrete ('I like my Dutch friends so I like the Dutch in general'). In contrast, identification with the host society is a quite abstract concept and might be less suitable for such generalizations ('I like my Dutch friends so I feel a member of the Dutch culture').

Our results indicated that in preadolescent minority children high second language proficiency was unrelated to majority group friendships at a later point in time. Also, in this group, majority group friendships were unrelated to higher second language proficiency at a later point in time. Thus, we did not find support in the present data for the third hypothesis, that similarity in terms of second language proficiency is important in the *selection* of majority group friends, as suggested by the 'homophily' principle (McPherson et al., 2001). Nor did we find support for the fourth hypothesis, that second language proficiency can also be a consequence of having majority group friends and is thus a matter of peer *influence*.

The absence of a relation between second language proficiency and majority group friendships is in contrast with earlier research findings which show a relation between second language *use* and majority group friendships (Titzmann et al., 2012). This discrepancy might be due to the fact that using the same language is a *prerequisite* for communicating with each other (and thus for the opportunity to become friends), while having the same proficiency may be seen as more of a *facilitator* in communication. For children who have grown up in the host country, language proficiency is thus probably less salient than language use and, therefore, less likely to be important in selecting friends or as a consequence of being friends.

Finally, the results lend no support to our hypotheses about possible mediating factors. In the present sample of pre-adolescent minority children, majority group friendships did not mediate a theoretically expected relation between second language proficiency and cultural integration in terms of identification and attitudes. Likewise, second language proficiency did not mediate the expected relation between majority group friendships and cultural integration in terms of identification and attitudes. Hypotheses five and six are thus rejected.

Overall, our findings suggest that factors which are generally considered important in cultural integration are not necessarily relevant to *all* immigrants and thus should not too easily be generalized to samples like, as in this case, minority (pre) adolescents. At the same time, the result that friendships with natives are related with more positive attitudes towards native Dutch in general shows that our study can replicate a central finding of the large body of literature building on contact theory (Pettigrew & Tropp, 2006).

4.4.1 Limitations and future research

In the current study, the grade in Dutch given by the teacher was used as measure of second language proficiency. Grades are possibly to a certain degree subjective because they can be susceptible to characteristics of the individual teacher and the relative levels of classmates. The results of our respective checks did not indicate such subjectivity (see 'method section'), but it cannot be completely ruled out. Future researchers should examine whether the findings from our study can be replicated using more objective measures of second language proficiency which are concerned with other aspects of language proficiency, like lexicon. Because in particular active and passive word knowledge is important in communication of immigrant children with peers, lexicon tests might be more relevant predictors of integration than indicators like grades which usually reflect mainly reading, grammar and spelling abilities.

Identification was measured with a single question (Do you feel more Dutch or more a member of the culture of your parents (e.g., Turkish, Moroccan)?). Although this method is used quite often in social surveys, future research would be well advised to use more questions to measure this complex and multi-dimensional concept (Burton, Nandi, & Platt, 2010).

A specific recommendation for future research that follows from our study is to include both identification with the host society and attitudes towards members of the host society as indicators of cultural integration, instead of focusing on one indicator only like many previous studies did. This recommendation reflects what we see as a strong point in our own study. As the content of the two dimensions of cultural integration suggest, and the current findings show, having a positive perception of members of the host society (attitudes) and a sense of belonging (identification) is related to each other, but both aspects of cultural integration can be related to third variables. Thus, investigating both concepts concurrently gives a more complete picture of factors which are relevant in cultural integration.

A general implication for future research follows from the finding that in preadolescent minority children there is only a limited relation between second language proficiency and cultural integration in terms of attitudes towards members of the host society. Because this contrasts with findings from earlier research among immigrant adults, the applicability of findings from research on cultural integration in first-generation immigrants to the following generations of immigrants can be called into question. This caveat is in line with the recent literature on differences in integration processes between immigrants of different generations (Buijs, Demant, & Hamdy, 2006; van Doorn, Scheepers, & Dagevos, 2013; Verkuyten, 2016)

Another explanation that deserves to be tested is whether the difference in life stages (e.g. pre-adolescent versus middle aged adult) can account for the weak impact of second language proficiency on children's cultural integration. Possibly, the second language proficiency of preadolescent minority children does relate to overall cultural integration, but only at a later life stage.

All in all, the present findings offer insight into the cultural integration of preadolescent ethnic minority children through exploration of the influence of second language proficiency and contact with the native majority on identification with and attitudes towards members of the host society. We also explored to what extent second language proficiency and contact with the majority group are related in their impact on the cultural integration of preadolescent minority children. Importantly, our findings indicate that for this group of immigrants, over time second language proficiency is not related to cultural integration as indicated by attitudes towards members of the host society and identification with the host society. Cross-sectionally second language proficiency is only related to identification but not to attitudes. Friendships with the majority group are only cross-sectionally related to more positive attitudes. Second language proficiency does not seem to influence the presence of majority group friendships at a later point in time, nor vice versa. Together, these findings offer important insights for future research aimed at identifying relevant determinants of the cultural integration and well-being of ethnic minorities in culturally diverse societies.

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Notes

[1] The country of birth of the parents was used to determine ethnicity. If the parents originated from different countries, ethnicity was based on the country of birth of the mother.