# The effectiveness of intergroup contact on different contact levels in reducing Muslim prejudice: A multilevel approach



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## Abstract

The Netherlands are an ethnically diverse society, but interethnic contact between immigrants and the native Dutch is scarce. With the increase of non-western immigrants since 2000, Islamophobia and discrimination against Muslims have increased. Avoidance of contact and increased Muslim prejudice are mutually related problems. A solution is suggested by Allport (1954) who hypothesized that intergroup contact could effectively reduce intergroup prejudice when certain conditions are met. Contact between different groups is likely to occur on different contact-levels, such as the classroom, the neighborhood and on the individual-level in case of intergroup friendship. However, research studying contact in different settings is scarce. The goal of this study is to test in a multilevel model on which level intergroup contact is most negatively related to Muslim prejudice. In contrast with our hypothesis this study found that ethnic diversity in the neighborhood and in the classroom has no significant effect on Muslim prejudice. Furthermore, the number of Muslim classmates is not related to the number of Muslim friends. Consistent with our hypothesis, adolescents with more Islamic friends had less feelings of Muslim prejudice. We therefore advise to alter the Dutch policy on integration and shift the focus to the level of the individual. Interventions can for instance be started at the level of the family or at the level of the classroom using the 'jigsaw' method.

*Keywords*: contact theory, Muslim prejudice, ethnic diversity, classrooms, neighborhoods, intergroup friendship, adolescents.

#### Introduction

Following the terrorist attacks in the United States on 11 September 2001, it has been found that Islamophobia and discrimination against Muslims have increased (Sheridan, 2006). In the European Union, significant increases in Muslim prejudice were reported in all member states (Allen & Nielsen, 2002; Hutchison & Rosenthal, 2010; Sheridan, 2006). Allen and Nielsen (2002) showed that Muslims have experienced increased hostility following the events of September 11, 2001. Although relatively low levels of violent abuse were reported, verbal abuse, harassment and aggression were far more prevalent.

An increase in Muslim prejudice is also reported in the Netherlands (Allen & Nielsen, 2002; Rodrigues & Van Donselaar, 2008). Prejudice against Muslims is found to be more widespread than prejudice against other immigrants (Hutchison & Rosenthal, 2010; Strabac & Listhaug, 2008). Turks and Moroccans are the two groups that are least accepted in the Dutch society (Hagendoorn, 1995). A high percentage of the Dutch population (57 percent) fears tensions between ethnic groups. This percentage is higher than in other European countries where the average is 31 percent (Moors, Balogh, Van Donselaar & De Graaff, 2009). In addition to this, 40 percent of the Dutch population holds the opinion that there are too many immigrants living in the Netherlands. Furthermore, Moroccans in the Netherlands feel more rejected than immigrants in other European countries (Moors et al., 2009).

#### *Living together apart*

The way of life in the Netherlands can be described as 'living together apart' (Moors et al., 2009). Interethnic contact between immigrants and the national population is scarce (Van der Laan Bouma-Doff, 2007). Most of the immigrants predominantly spend their time with people of their own ethnic background (Beekhoven & Dagevos, 2005; Dagevos, Schellingerhout & Vervoort, 2007; Gijsberts & Dagevos, 2005; Moors et al., 2009). Almost 50 percent of the Turkish and Moroccan immigrants even report not having any contact with native Dutch in their free time (Weijters & Scheepers, 2003). However, the national population also reports avoiding intergroup contact. At least for twenty years the national population has been avoiding contact, or is even unfavorably disposed towards immigrant neighbors (Gijsberts & Dagevos, 2005).

Almost 40 percent of the immigrants are living in the urbanized western part of the Netherlands (Latten, Nicolaas & Wittebrood, 2005). Immigrants are often domiciled in specific areas and neighborhoods in cities. Segregation is higher among Turkish and Moroccan immigrants compared to other non-western immigrants (Van der Laan Bouma-Doff, 2007). As a consequence of this residential segregation, there is also segregation in schools (Vedder, 2006). The concentration of immigrants on the level of the neighborhood and residential segregation in schools has increased in the past ten years (CBS, 2010; Gijsberts & Dagevos, 2005).

## Contact theory

The prescribed phenomenon of Muslim prejudice and avoidance of contact is a lasting and considerable problem (Moors et al., 2009). Intensification of tensions between groups in the society and ongoing segregation can result in an increase in prejudice. Allport (1954) hypothesized that intergroup contact could effectively reduce intergroup prejudice. This positive effect would only occur in contact-situations marked by four key conditions: equal group status within the situation, common goals, intergroup cooperation, and the support of authorities, law or custom. In the following section these four key conditions will be discussed.

The first key condition is equal group status within the situation. Allport (1954) emphasized that contact must occur in a situation wherein both groups expect and perceive equal group status. The second key condition is having common goals. An active goal-oriented effort is a requirement for prejudice reduction through intergroup contact. Groups must have shared goals. The third key condition is intergroup cooperation. Achievement of common goals must involve intergroup cooperation. There should be no intergroup competition. Finally, the fourth key condition is support of authorities, law or customs. With the support of relevant institutions and authorities, intergroup contact is more readily accepted and has more positive effects (Allport, 1954).

Allport's intergroup contact theory has inspired many researchers. Meta-analytic reports of Pettigrew and Tropp (2000, 2006) suggest that intergroup contact typically reduces intergroup prejudice. Furthermore, some research is done about the direction of the effect. Instead of contact reducing prejudice, the opposite causal sequence could be at work. Prejudiced people could avoid having contact with the objects of their prejudice. Several studies reveal that prejudiced people indeed avoid intergroup contact (Tropp, 2003). However, the effect of contact on

prejudice appears to be larger than that of prejudice on contact (Brown & Hewstone, 2005; Levin, Van Laar, & Sidanius, 2003; Pettigrew, 1997; Pettigrew & Tropp, 2006).

## Contact situation

There are many studies testing the contact hypothesis (Pettigrew & Tropp, 2000, 2006). Contact between different groups is likely to occur on different levels. For example, intergroup contact can occur on the level of the neighborhood, where different ethnic groups are living together, or on the classroom level, when different ethnic groups attend the same school. Furthermore, intergroup contact can also take place in case of intergroup friendship between two individuals. In the following paragraphs these different levels of intergroup contact will be discussed.

## Neighborhood

Cultural diversity in the neighborhood provides opportunity for interethnic contact. Residential integration is an important predictor of contact for nationals (Sigelman, Bledsoe, Welch, & Combs, 1996; Vermeij, Van Duijn, & Baerveldt, 2009). In addition, immigrants living in ethnically mixed neighborhoods interact more frequently with the national population (Emerson, Kimbro, & Yancey, 2002; Gijsberts & Dagevos, 2005; Martinovic, Van Tubergen, & Maas, 2009).

However, Allport (1954) argued that residential integration creates a condition where intergroup contact can occur, but this contact does not automatically solve the problem of prejudice. According to Allport (1954) contact should be personal in order to reduce prejudice. Casual and superficial contact in large-scale contexts would rather increase hostility and prejudice. Studies on contact in large-scale contexts show that the presence of immigrants correlates positively with prejudice (Coenders, 2001). Since neighborhoods are large-scale contexts wherein intergroup contact is scarce and superficial, it might be that contact in the neighborhood does not decrease Muslim prejudice. Furthermore, it is questionable whether there even is any intergroup contact in the neighborhood, since studies indicate that Muslims tend to concentrate in specific parts of neighborhoods (Bolt, Özüekren, & Philips, 2010; Van der Laan Bouma-Doff, 2007). The increase in ethnic segregation is related to the tendency among the national population to move out of neighborhoods with a large proportion of immigrants (Bolt,

Van Kempen, & Van Ham, 2008; Van Ham & Feiten, 2008). Ethnic concentration can hinder the integration of ethnic groups. As a consequence, intergroup contact does not even occur (Dagevos, 2005; Van der Laan Bouma-Doff, 2007; Vervoort & Dagevos, 2008).

## Classroom

Cultural diversity in classroom also provides opportunity for interethnic contact. Masson and Verkuyten (1993) argue that the classroom is the primary medium for intergroup contact. In contrast with neighborhoods, classrooms are more face-to-face groups rather than large-scale contexts wherein contact is superficial and scarce. Classrooms offer opportunities for interpersonal contact (Vermeij et al., 2009). It has been found that ethnic diversity in the classroom is related to increased interethnic friendliness and lower prejudice (Joyner & Kao, 2000; Khmelkov & Hallinan, 1999; Levin et al., 2003; Van Houtte & Stevens, 2009). In addition, intergroup contact in the classroom serves as a basis for more than friendships alone. Classmates must work together almost every day and can assist each other with homework (Bekhuis, Ruiters, & Coenders, 2009). Contact with more interests and opportunities for interpersonal contact is more influential on the attitudes of students. Consequently, intergroup contact in the classroom may result in a larger decrease in prejudice than intergroup contact on the neighborhood level.

However, the results of studies into the effect of intergroup contact in the classroom in reducing prejudice vary. In contrast with the above studies, some research shows that the ethnic composition of the class and intergroup contact does not seem to affect students' attitudes (Bakker, Denessen, Pelzer, Veneman & Lageweg, 2007). In addition to this, Dutch national students reported that Moroccans and Turks are the least preferred of different ethnic groups (Teunissen, 1988; Verkuyten & Kinket, 2000). Consequently, even in ethnic diverse classrooms intergroup contact might be scarce and might not be related to a decrease in prejudice.

## Intergroup friendship

Several researchers argue that living in a neighborhood or attending the same school as immigrants is not sufficient to improve intergroup relations (DuBois & Hirsch, 1990; Phinney, Ferguson, & Tate, 1997). Allport (1954) argued that the nature of contact can vary. Casual contact does not reduce prejudice, to the contrary, it seems more likely to increase it. Therefore it is the quality of contact which is the most important predictor of attitudes (Islam & Hewstone,

1993). Intergroup contact must be non-superficial in order to reduce prejudice (Allport, 1954). Brown and Hewstone (2005) distinguish three different kinds of out-group contact: 'friends', at 'work' (or school), and in the 'neighborhood'. Friendship is especially influential in reducing prejudice (Pettigrew, 1997). Research has repeatedly found that friendship is significantly related to lower prejudice (Levin, Van Laar, & Sidanius, 2003; Paolini, Hewstone, Cairns, & Voci, 2004; Pettigrew, 1997, 1998, 2008; Turner, Hewstone, & Voci, 2007).

Nevertheless, it can be questioned whether intergroup friendship results in a generalized change in attitudes. Hewstone and Brown (1986) showed that intergroup contact at the group level is more likely to reduce prejudice than interpersonal contact between different ethnicities. To achieve a generalized change in the perception of immigrants and thereby reducing prejudice, favorable contact must be defined as intergroup rather than interpersonal (Dovidio, Gaertner & Kawakami, 2003; Hewstone & Brown, 1986; Islam & Hewstone, 1993).

## Current study

Since these three levels (neighborhood, classroom, intergroup friendship) of intergroup contact can possibly meet the four key contact-situation criteria of Allport, all of these levels are shown to effectively reduce intergroup prejudice. However, research results vary and research studying contact on different levels is scarce (Pettigrew & Tropp, 2000, 2008). Only one study is known wherein the effect of contact on different levels is studied at the same time (Bekhuis et al., 2009). Results of this study show that intergroup prejudice is less when the adolescents evaluate their interethnic contacts both within and outside the school environment as positive. The degree of prejudice is higher when they perceive these contacts as negative. However, this study does not show which contact level is most effective in reducing prejudice.

The goal of this study is to test in a multilevel model on which level intergroup contact is most negatively related to Muslim prejudice. The focus of study is on Islamic immigrants because prejudice against Muslims is found to be more widespread than prejudice against other immigrants (Hutchison & Rosenthal, 2010; Strabac & Listhaug, 2008) and an increase in Muslim prejudice is reported in the Netherlands (Allen & Nielsen, 2002; Rodrigues & Van Donselaar, 2008). The contact theory was originally developed to examine racial and ethnic prejudices (Allport, 1954). This study examines the contact hypothesis for Islamic immigrants, which is a marginalized group in the Netherlands (Hagendoorn, 1995).

To examine which contact level is most negatively related to Muslim prejudice, we first investigate if intergroup contact leads to a decrease in prejudice on each of the three contact levels (neighborhood, classroom, intergroup friendship). As shown in other studies we expect the results to confirm Allport's contact hypothesis for both the neighborhood level, the classroom level and the level of intergroup friendship (Emerson et al., 2002; Gijsberts & Dagevos, 2005; Levin et al., 2003; Martinovic et al., 2009; Masson & Verkuyten, 1993, Paolini et al., 2004; Pettigrew, 1997, 1998, 2008; Van Geel & Vedder, 2010).

For the last hypothesis we test on which level intergroup contact is most negatively related to Muslim prejudice by using multilevel analyses. To test this hypothesis, we controlled for some individual variables, including age, gender, SES, the number of non-Islamic immigrant friends and the number of Islamic friends. Several studies show that living in the same neighborhood or attending the same school is not enough to increase intergroup contact (DuBois & Hirsch, 1990; Phinney et al., 1997). Research showed that the opportunities for intergroup contact in class are insufficient to reduce prejudice (Vervoort, Scholte, & Scheepers, 2011). It is the quality of contact which is the crucial predictor of prejudicee (Islam & Hewstone, 1993). According to this research it is expected that intergroup friendship is most related to Muslim prejudice.

#### Method

## **Participants**

Participants in this study were 706 Dutch national students from lower secondary professional education. Two subsamples of the national sample are used to perform the multilevel analyses. An assumption to perform a multilevel analysis is the '20/20 rule' (Bickel, 2007). This is the presence of at least 20 level-two units consisted each of at least 20 level-one units. However, there were not enough adolescents who fulfill both the conditions of being in a class with enough other level-one units as living in the same neighborhood with enough other level-one units. We therefore choose to perform two multilevel analysis might result in an unstable model. Furthermore, to meet the requirement of at least 20 level-two units, we choose to lower the requisite number of 20 level-one units per level-two unit. For the first subsample, we selected

classes with at least 14 level-one units. For the second subsample we selected neighborhoods with at least 10 level-one units.

The first subsample for performing the multilevel analysis contained data at two levels: the classroom (level 2) and the individual (level 1). We selected classes with at least 14 students. 11 Classes with less than 14 students were removed from the dataset. The students in this subsample were spread out across 10 schools and 31 classrooms. Classroom sizes varied from 14 to 36 students. Most of the participating schools are located in the urbanized western part of the Netherlands, since these schools have the most ethnically diverse student populations. The subsample included 314 female (53 %) and 279 male (47 %). Ages ranged from 11 to 19 years. The mean age of the students was 14.63 (SD = 1.28).

The second subsample for performing the multilevel analysis contained data at the level of the neighborhood (level 2) and at the individual level (level 1). We selected neighborhoods in which at least 10 adolescents were living. 5 Neighborhoods with less than 10 participants were removed from the dataset. The adolescents in this subsample were spread out across 20 neighborhoods. Neighborhoods sizes varied from 11 to to 41 adolescents. The neighborhoods are located in the urbanized western part of the Netherlands, since these neighborhoods have the most ethnically diverse populations. The subsample included 203 females (54.3 %) and 171 males (45.7 %). Ages ranged from 12 to 19 years. The mean age of the adolescents was 14.72 (SD = 1.33).

#### Instruments

A questionnaire consisting of several scales was used in this study. Demographic information about school, classroom, age, gender, religion, the birthplace of respondents' parents and the place of birth of the respondent was collected.

# SES

Socio-economic status was measured using the family affluence scale (FAS) consisting of four items (Currie, Elton, Todd, & Platt, 1997). It has been found that the Family Affluence Scale is a valid measure of adolescents' socio-economic status (Boyce, Torsheim, Currie, & Zambon, 2006). The first items is: 'Do you parents have a car?'. This item is answered with 'no', 'yes, one' or 'yes, two or more'. The second item is 'Do you have your own bedroom?'. This

item is answered with 'yes' or 'no'. The third item is: 'How many computers does your family own?'. This item is answered with 'zero', 'one', 'two' or 'three or more'. The fourth item is: 'How often have you been on vacation with your parents in the last twelve months?'. This item is answered with 'zero', 'one', 'two' or 'three or more'.

## Muslim Prejudice

Prejudice against Muslims was measured with the 'feeling-thermometer' (Gonzalez, Verkuyten, Weesie, & Poppe, 2008). The feeling-thermometer is a validated preference based-instrument (Haddock, Zanna, & Esses, 1993). Participants were asked to use the feeling-thermometer to indicate whether they have positive or negative feelings about Muslims living in the Netherlands. Participants can mark any degree between 0 and 100. Fifty degrees represents neutral feelings about Muslims. Markings above 50 indicate positive or warm feelings, and markings below 50 indicate cold or negative feelings.

## Intergroup contact

Intergroup contact was measured using different means. First, participants were asked to fill in their ZIP code to get an indication of the percentage of non-western immigrants in their neighborhood. This information is acquired by a website of the Census Bureau (www.cbsinuwbuurt.nl; statistics in your neighborhood).

Second, students were asked to report their religion, school and class to get an indication of the percentage Islamic students in their class. The percentage of Islamic students per class is computed by dividing the number of Islamic students by the total number of students in a class.

Third, participants were asked to write down how many immigrant friends they had. The students were asked how many Islamic and non-Islamic immigrant friends they had. To correct for outliers, all number of friends beyond 7 were recoded to 6.

# Procedure

Several schools for secondary lower education were invited by telephone to participate in a study to the relationship between Muslims and national Dutch adolescents. When schools showed interest in the research, further information was given by email or by telephone. Finally, 12 schools decided to participate in the study. During the school visit, questionnaires were administered to the students in the classroom during school hours. Students were informed by the researcher about the goals of the study. The students were also told that their participation was anonymous and that they could ask for clarification. The questionnaires were completed quietly. Students were supervised by their teacher and the researcher. After data analysis, the results were submitted to the participating schools.

## Results

## Data screening

A data check was performed to detect any possible outliers and missing value, to compute the reliability of scales and to examine the distribution of the data. Table 1 shows an overview of the means and standard deviations for the variables used in this study. Table 2 shows an overview of the correlations for the variables. Above the diagnal

# Table 1

	Ν	М	SD
Muslim prejudice	689	4.27	2.38
# non-Islamic immigrant friends	705	6.15	2.03
# Islamic friends	689	2.87	2.90
SES	705	2.74	0.37
Age	700	14.84	3.58
Ethnic Diversity in the classroom	603	9.21	10.45
Ethnic Diversity in the neighborhood	380	10.62	4.48

Means and standard deviations of the variables in this study.

There were a few outliers for age and Muslim prejudice. One respondent reported himself being 38 years old. This value is altered into a missing value instead of removing from the dataset because it seemed that this respondent had seriously filled in the rest of the questionnaire. After a close look to the outliers of Muslim prejudice, it showed up that some respondents placed a cross beyond the range of the Feelings Thermometer continuum. While these respondents were reporting having very positive feelings about Muslims living in the Netherlands, these scores were altered into 100, which is the highest possible score. Concerning outliers on other variables, such as reporting having a very high number of Islamic friends, there were no indications that the answers of these respondents did not correspond with their actual opinion or their everyday reality. These respondents were kept in the dataset.

None of the used variables had missing values above 10 percent. We used listwise deletion procedure for missing data. Finally, we examined whether the distributions of SES, Muslim prejudice, non-Islamic immigrants friends and Islamic friends were normal. The results from the Kolmogorov-Smirnov test in combination with the normal Q-Q plot and the detrended normal Q-Q plot indicated that SES, Muslim prejudice, non-Islamic immigrant friends and Islamic friends are normally distributed. The standardized skewness and standardized kurtosis also indicated that the variables are normally distributed.

# Table 2

Correlation between the used variables in this study. Above the diagonal are the correlations for the variables concerning the first subsample. Under the diagonal are the correlations for the variables concerning the second subsample.

		# non-					
		Islamic					Ethnic
	Muslim	immigrant	# Islamic				diversity in
	prejudice	friends	friends	SES	Gender	Age	the class
Muslim prejudice		.126**	.213**	024	.098*	078	.074
Non-Islamic immigrant friends	.130*		046	.052	098*	037	.069
Islamic friends	.275**	025		046	072	058	.056
SES	019	.063	100		021	135**	072
Gender	.071	137**	061	040		.032	123**
Age	.026	035	.045	122*	.011		266**
Ethnic diversity in	049	.172**	048	.001	047	.125*	
the neighborhood							

\* = significant at .05; \*\* = significant at .01

## Multilevel Analyses

The statistical program MLwiN 2.02 (Goldstein et al., 1998) was used to perform the multilevel analyses. For all analyses we used the Iterative Generalized Least Squares Procedure (IGLS) for model estimation. We performed two multilevel analyses. First, we discuss the multilevel analysis containing data at the level of the classroom (level 2) and the individual level (level 1). Second, we discuss the multilevel analysis containing data at the individual level analysis containing data at the individual level (level 1).

#### Classroom

The first subsample for performing the multilevel analysis contained data at two levels: the classroom (level 2) and the individual (level 1). A model with a fixed intercept was compared to a model with a random intercept to discover if between-class variances were significant. The random intercept model explores if variance in Muslim prejudice can be explained by the classroom context. The results are reported in Table 3. The results showed that the variance between classes was significant, meaning that Muslim prejudice is not only dependent on individual factors but also on the classroom context. The intra class correlation coefficient (class level variance divided by total variance) indicated that 14.57 percent of the variance in Muslim prejudice can be accounted for by the classroom level. This shows that the classroom context explains a significant and substantial part of variance in Muslim prejudice.

In the second model the individual variables were examined. The variables age, gender, SES, number of non-Islamic immigrant friends and number of Islamic friends were included in the model. The deviance difference test indicated that this model fitted the data significantly better than the model with random intercepts. This means that adding individual level variables in the model significantly improved the model fit. Gender was a significant predictor of Muslim prejudice, with boys (M = 4.02, SD = 2.50) having more prejudice against Muslims than girls (M = 4.49, SD = 2.23). The number of non-Islamic immigrants friends and Islamic friends was related to Muslim prejudice. Adolescents with more non-Islamic immigrant friends and adolescents with more Islamic friends had less feelings of Muslim prejudice. Age and SES were not significantly related to Muslim prejudice.

# Table 3

	Model 1	Model 2	Model 3
Individual variables			
Age		-0.141 (0.111)	-0.121 (0.113)
Gender		0.630 (0.181)*	0.640 (0.181)*
SES		-0.230 (0.245)	-0.221 (0.245)
# non-Islamic immigrant friends		0.105 (0.047)*	0.104 (0.047)*
# Islamic friends		0.244 (0.034)*	0.244 (0.034)*
Classroom Variables			
Ethnic diversity in the classroom			0.016 (0.019)
Variance			
Between classes	4.789	4.225	4.224
Between individuals	0.817	0.912	0.886
Df	1	5	1
Deviance difference	51.255*	116*	0.7
Explained Variance	14.57	17.75	17.37

The results of the multilevel analysis for prejudice in the classroom context.

The regression weights are reported with the standard errors between brackets.

In the third model a classroom variable was added to the individual level variables. This will test the hypothesis that ethnic diversity in the classroom is related to Muslim prejudice. The results are reported in Table 3. In contrast with our hypothesis was found that ethnic diversity in the classroom is not related to Muslim prejudice. The deviance difference test indicated that this model does not fit the data significantly better than the model with only the individual level variables.

# Neighborhood

Another multilevel analysis is performed for Muslim prejudice in the neighborhood context. This subsample contained data a two levels: the neighborhood (level 2) and the individual (level 1). A model with a fixed intercept was compared to a model with a random intercept to discover if between-class variances were significant. The random intercept model explores if variance in prejudice can be explained by the classroom context. The results are reported in Table 4.

# Table 4

The results of the multilevel analysis for prejudice in the neighborhood context.

	Model 1	Model 2	Model 3
Individual variables			
Age		-0.104 (0.090)	-0.091 (0.091)
Gender		0.369 (0.228)	0.363 (0.228)
SES		-0.169 (0.322)	-0.161 (0.322)
# non-Islamic immigrant friends		0.134 (0.058)*	0.140 (0.059)*
# Islamic friends		0.259 (0.040)*	0.258 (0.040)*
Neighborhood Variables			
Ethnic diversity in the			
neighborhood			-0.052 (0.048)
Variance			
Between neighborhoods	4.977	4.285	4.281
Between individuals	0.574	0.653	0.617
Df	1	5	1
Deviance difference	18.541*	77.109*	1.146
Explained Variance	10.34	13.22	12.60

The regression weights are reported with the standard errors between brackets.

The results showed that the variance between neighborhoods was significant, meaning that Muslim prejudice is not only dependent on individual factors but also on the neighborhood context. The intra class correlation coefficient (neighborhood level variance divided by total variance) indicated that 10.34 percent of the variance in Muslim prejudice can be accounted for by the neighborhood level. This shows that the neighborhood context explains a significant and substantial part of variance in Muslim prejudice.

In the second model the individual variables were examined. The variables age, gender, SES, number of non-Islamic immigrant friends and number of Islamic friends were included in the model. The deviance difference test indicated that this model fitted the data significantly better than the model with random intercepts. This means that adding individual level variables in the model significantly improved the model fit. The number of non-Islamic immigrant friends and Islamic friends was related to Muslim prejudice. Adolescents with more non-Islamic immigrant friends and adolescents with more Islamic friends had less feelings of Muslim prejudice. Age, gender and SES were not significantly related to Muslim prejudice.

In the third model a neighborhood variable was added to the individual level variables. This will test the hypothesis that ethnic diversity in the neighborhood is related to Muslim prejudice. The results are reported in Table 4. In contrast with our hypothesis was found that ethnic diversity in the neighborhood is not related to Muslim prejudice. The deviance difference test indicated that this model did not fit the data significantly better than the model with only the individual level variables.

# Discussion

The goal of this study was to test which level of intergroup contact is most strongly related to Muslim prejudice. The Netherlands are an ethnically diverse society. One out of five inhabitants is immigrant and the number of non-western immigrants has increased with 32 percent since 2000. Almost 40 percent of these immigrants are concentrated in specific areas and neighborhoods in cities in the urbanized western part of the country (CBS, 2010). Because of this residential segregation, interethnic contact between immigrants and the national population is scarce (Van der Laan Bouma-Doff, 2007). With the increase of immigrants since 2000, Islamophobia and discrimination against Muslims have also increased (Hagendoorn, 1995;

Sheridan, 2006; Strabac & Listhaug, 2008). Avoidance of contact and increased Muslim prejudice are mutually related problems in the Dutch society (Moors et al., 2009). A solution is given by Allport (1954) who hypothesized that intergroup contact on specific conditions could effectively reduce intergroup prejudice. Contact between different groups is likely to occur on different contact levels, such as the classroom, the neighborhood and on the individual level in case of intergroup friendship. However, research studying contact in different settings is scarce (Pettigrew & Tropp, 2006).

# Neighborhood

Although there seems to be a growing consensus about the negative effects of segregation on integration and intergroup contact when examining the policy discourses across Europe, this study showed that the number of non-western immigrants in the neighborhood has no significant effect on Muslim prejudice. In contrast with our hypothesis, we found that ethnic diversity in the neighborhood is not related to Muslim prejudice (Emerson et al., 2002, Gijsberts & Dagevos, 2005; Martinovic et al., 2009; Sigelman et al., 1996, Vermeij et al., 2009). An explanation for this may be that the significance of the neighborhood context is overestimated (Bolt et al. 2010; Van der Laan Bouma-Doff, 2007). Through processes of individualization and globalization, people do not automatically have contact and share their everyday lives with their neighbors. This could be true for Turks and Moroccans as the Census Bureau (2010) showed that nonwestern immigrants feel less safe in their neighborhood than the native Dutch or western immigrants. Feelings of safety are related to the tendency to have intergroup contact (CBS, 2010). This means that - irrespective of ethnic diversity in the neighborhood intergroup contact does not occur since living in an ethnically mixed neighborhood does not automatically result in actually having intergroup contact. Another explanation may be that ethnic mixing does not necessarily lead to more integration. Although different ethnic groups may live in the same neighborhoods, they still move in networks divided by ethnicity (Blokland & Van Eijk, 2010). Several studies indicate that living in the proximity of members of other ethnic groups is insufficient to overcome ethnic divides in social networks (Atkinson, 2006; Butler, 2003).

## Classroom

Several studies showed that the classroom provides opportunity for interethnic contact and this contact is related to a decrease in prejudice (Joyner & Kao, 2000; Khmelkov & Hallinan, 1999; Levin et al., 2003; Masson & Verkuyten, 1993; Van Houtte & Stevens, 2009). The results in this study are in contrast with our hypothesis and showed that the number of Muslim classmates is not related to Muslim prejudice. This finding is in line with the results of Bakker et al. (2007). An explanation for this result is given by Moody (2001). He argued that intergroup contact declines in schools with the highest heterogeneity levels. As already known from former research, people prefer to have friends who are like themselves and specifically prefer relations within their own ethnic group (Hallinan & Williams, 1989; Tuma & Hallinan, 1979). As ingroup size increases, out-group contact decreases (Blau, 1977). Other research showed that being in an ethnicallt diverse class reinforces the ethnic identity of the students (Nesdale, 2005). This intensified ethnic identity of the students results in a stronger orientation on the own ethnic group and the development of negative feelings towards other ethnic groups (Verkuyten & Thijs, 2002). So even in ethnically mixed classes, intergroup contact does not automatically occur because the strengthened ethnic identity may result in the preference for friendships within the own ethnic group and the development of prejudice against other ethnic groups. Furthermore, there are some factors at the school level likely to determine ethnic segregation in the class. School settings meeting the four conditions of Allport's contact theory (1954) are more likely to promote intergroup contact (Moody, 2001). Not only the ethnic diversity of the class is related to intergroup contact and Muslim prejudice, but also the opportunity to work together for collective ends in a setting of relative equality and with support of teacher is essential. However; it is not clear whether the participating schools in this study meet these conditions.

#### Intergroup friendship in the classroom

As intergroup friendship is found to be influential in reducing prejudice, we examine intergroup friendship at the level of the classroom. Classrooms provide the opportunity for interethnic contact and intergroup contact allow the opportunity for friendships to develop (Masson & Verkuyten, 1993; Vermeij et al. 2009). Research showed that ethnic diversity in the classroom is related tot increased interethnic friendliness and a decrease in prejudice (Joyner & Kao, 2000; Khmelkov & Hallinan, 1999; Levin et al., 2003; Van Houtte & Stevens, 2009).

However, our study showed that the number of Muslim classmates is not related to Muslim prejudice. On closer inspection of the correlations we found that the number of Muslim classmates does not correlate with the number of Muslim friends. So the number of Muslim classmates is not related to the number of Muslim friends. Apparently, segregation also exists within the classroom. This phenomenon can be explained by the competition theory (Vermeij et al., 2009; Vervoort, Scholte & Scheepers, 2008). This theory underlines the inherently competitive relations between ethnic groups. It stated that majority members feel threatened more often when the number of minority members is larger. As a consequence, national adolescents tend not to become friends with their Islamic classmates and might have more Muslim prejudice.

#### Intergroup friendship

Consistent with our hypothesis, this study show that the number of non-Islamic immigrant friends and Islamic friends is related to Muslim prejudice. Adolescents with more non-Islamic immigrant friends and adolescents with more Islamic friends had less feelings of Muslim prejudice. In contrast to intergroup contact on the classroom level or on the neighborhood level, intergroup contact on the individual level does reduce prejudice. It therefore seemed that living in a neighborhood or attending the same school as members of the outgroup is not enough to improve intergroup relations and reduce prejudice (DuBois & Hirsch, 1990; Phinney et al., 1997). Rather intergroup friendship is the most influential factor in reducing prejudice (Pettigrew, 1997). Our results contradict the findings of Hewstone and Brown (1986) that intergroup contact at the group level is more likely to reduce prejudice than interethnic interpersonal contact. Apparently, students are capable of achieving a generalized change in their perception of an ethnic group and thereby reducing prejudice through intergroup friendship. We therefore support Pettigrew's (1998) suggestion to add an additional key condition, besides the four situation conditions for reducing prejudice in intergroup contact held by Allport (1954). Pettigrew (1998) argued that the contact situation must allow the opportunity for friendships to develop. Research has repeatedly found that intergroup friendship is negatively and significantly related to prejudice (Levin et al., 2003; Paolini et al., 2004; Pettigrew, 1997, 1998, 2008; Turner et al. 2007).

## Limitations

Although this study has provided support for our main hypothesis that intergroup friendship is effective in reducing Muslim prejudice, the current study has some limitations. The first limitation is that the results in this study are based on the analysis of cross-sectional data, making it difficult to rule out the possibility that prejudiced adolescents may avoid intergroup contact. However, several studies suggest a causal direction from contact to attitudes. The path from intergroup contact to reduced prejudice is generally stronger than the reversed path (Brown & Hewstone, 2005; Levin et al., 2003; Pettigrew, 1997; Pettigrew & Tropp, 2006;).

Another limitation is that this study partly relied on self-report data. Self-report measures contain certain risks, such as measuring values, attitudes and cognitions instead of actual behavior. Furthermore, self-report measures are subject to response biases, are dependent on individual interpretation, and they rely on the honesty and self-insight of research participants which are probably limited. For example; respondents are asked to write down how many outgroup friends they had. The definition of what constitutes 'friends' is left to the respondents (Pettigrew, 1997). However; we used validated questionnaires. When possibele we acquired objective measures, such as the ethnic diversity in the neighborhood by the Census Bureau or the ethnic diversity in class.

A third limitation is that two different subsamples of the total sample were used to perform the multilevel analyses. This choice was made to fulfill the conditions that are needed for performing a multilevel analysis. At least 20 level-two unites consisted each of at least 20 level-one units are required. Too few unites at the second level in the multilevel analysis might result in an unstable model (Bickel, 2007). Furthermore, to meet the requirement of at least 20 level-two units, we choose to lower the requisite number of 20 level-one units per level-two unit. Nevertheless, visual inspecten of the data reveals no significant differences between the demographics of these two subsamples and we did not have valid reasons to assume that these subsamples are different in other aspects.

The last limitation is the reliability of the variable ethnic diversity in the neighborhood. This variable is obtained using the website of the Census Bureau by connection the reported ZIP code to the percentage of non-western immigrants of the corresponding ZIP code. ZIP codes in the Netherlands consist of four numbers followed by two letters. The first two numbers indicate the area, the last two numbers the district. The two letters indicate respectively the neighborhood and the street. However, the percentage non-western immigrants is based on only the four numbers because the Census Bureau only gave information based on the four digits. Furthermore, some neighborhoods were considered as to be one neighborhood if the ZIP codes of these neighborhoods referred to districts close to each other and if the percentages of non-western immigrants were about the same. We choose to do this because otherwise there were too few units at the second level for performing a multilevel analysis.

#### Future research

Notwithstanding the limitations, this study contributes to the research to the contact theory. The results concerning the relation of intergroup friendship to Muslim prejudice are in line with some previous studies (Brown & Hewstone, 2005; Islam & Hewstone, 1993; Levin et al., 2003; Paolini et al., 2004; Pettigrew, 1997, 1998, 2008; Turner et al., 2007). Research studying contact in different settings is scarce (Pettigrew & Tropp, 2000, 2006) so this study provides new insights into the effectiveness of intergroup contact in different settings in reducing Muslim prejudice. Furthermore, this study instigates to future research.

The first implication for future research is to include also the minority group in the sample and perform separate analyses for the Islamic adolescents to examine if it is possible to generalize the results to Muslims. Findings from meta-analysis suggest differences in responses to intergroup contact among members of majority and minority groups (Pettigrew & Tropp, 2000, 2006; Tropp & Pettigrew, 2005). Intergroup contact reduced prejudice for both minority and majority groups, but the effect was significantly smaller for minority groups. It would be interesting to examine if the results concerning the different contact levels are also true for Islamic adolescents.

The second implication is to perform a study to the school factors that affect intergroup contact. Moody (2001) examined which school factors affect intergroup contact. His study agree with former research that cultural mixing within settings that meet the conditions of Allport's contact theory promotes ethnic integration (Epstein, 1985; Schofield & Sagar, 1977). Furthermore, his study showed that school organization affects interethnic friendship segregation by structuring intergroup contact. The strongest effect of school organization on intergroup contact is through extracurricular mixing. At last, within-grade mixing and the structure of tracking in schools also are effective in increasing intergroup contact (Moody, 2001). Taken this

results into account, it can be assumed that intergroup contact on the level of the classroom is only effective in reducing prejudice under specific conditions.

The last implication for future research is to perform this study on a larger scale. The ideal research design is studying intergroup contact with a multilevel model with three levels wherein individuals are nested in classes and classes are nested in neighborhoods. Former research showed that the ethnic diversity in the neighborhood have a strong effect on social discrimination among classmates (Vermeij et al., 2009). Another interesting study design is one wherein individuals are nested in classes and classes are nested in schools, because of the above mentioned possible school factors that influence intergroup contact (Moody, 2001). However, because of practical difficulties to realize such design and fulfill the conditions required for performing a multilevel analysis (Bickel, 2007), it is recommended to perform two multilevel analyses like is done in this study.

# Implications

The current integration policy in the Netherlands is concentrated on residential integration. This policy is based on the assumption that spatial segregation of the population has a negative effect on the integration of ethnic minorities into society (Van der Laan Bouma-Doff, 2007). This study has tested in a multilevel model on which level intergroup contact is most negatively related to muslim prejudice. The results show that neither the number of non-western immigrants in the neighborhood nor the number of Muslim classmates is related to increased intergroup contact or results in reduced Muslim prejudice. Furthermore, the number of Muslim classmates has no significant effect on Muslim prejudice. However, intergroup friendship is effective in reducing Muslim prejudice. It is therefore advisable to alter the policy on integration and shift the focus to the level of the individual. Interventions to encourage intergroup contact and intergroup friendship can however be started at the level of the classroom. When extra efforts are made, the classroom may be an effective level to perform individual-oriented interventions. Former research pointed to the effects of the Jigsaw classroom as method of choice in reducing prejudice at school (Aronson & Patnoe, 1997). In Jigsaw classrooms groups of about six students from different ethnicities are formed. These so-called 'jigsaw-groups' have to cooperate during the lessons. Individual groupmembers are supposed to learn different parts of the curriculum and finally the jigsaw-group have to collaborate by teaching and learning from

each other in order to establish a complete picture, a 'jigsaw'. Each individual student in the jigsaw-group is dependent on all others. This method is effective in reducing prejudice and improving intergroup relations (Aronson & Patnoe, 1997; Stephan & Stephan, 2001). Furthermore, interventions can also be implemented at the level of the family. Allport (1954) proposed that intergroup contact is less important for children than for adults in reducing prejudice. He argued that prejudice in children is not only based on contact, but also on interpersonal learning. Children learn prejudiced attitudes in their social environment, for which family influence is an important factor. Several researchers have shown that the ethnic attitudes of children and adolescents are influenced by the opinions of their parents (Gniewosz & Noack, 2006; Rodriguez-Garcia & Wagner, 2009; Rosenfield & Stephan, 1981). However, adolescents are exposed to more socialization contexts beyond the family (such as the school and the neighborhood), so current policies on spatial integration and school integration must simultaneously be continued.

#### References

- Allen, C., & Nielsen, J. S. (2002). *Summary report on Islamophobia in the EU after 11 September 2001*, Vienna:European Monitoring Centre on Racism and Xenophobia.
- Allport, G. (1954). The nature of prejudice. Garden City, NJ: Doubleday Anchor Books.
- Aronson, E., & Patnoe, S. (1997). *The jigsaw classroom. Building cooperation in the classroom* (2nd ed.). New York: Longman.
- Atkinson, R. (2006). Padding the bunker: strategies of middle-class disaffiliation and colonisation in the city. *Urban Studies*, *43*, 819-831.
- Bakker, J., Denessen, E., Pelzer, B., Veneman, M., & Lageweg, S. (2007). De houding jegens klasgenoten: etnisch gekleurd? Een onderzoek naar de factoren van invloed op de attitude van basisschoolleerlingen jegens klasgenoten van verschillende etnische herkomst. Paper presented at the Onderwijs Research Dagen 2007.
- Beekhoven, S., & Dagevos, J. (2005). Sociaal-culturele integratie. In: SCP/WODC/CBS (Red.), Jaarrapport Integratie 2005 (pp.107-131). Den Haag: Sociaal en Cultureel Planbureau/WODC/Centraal Bureau voor de Statistiek.
- Bekhuis, H., Ruiter, S., & Coenders, M. (2009). Xenofobie onder jongeren: de invloed van interetnisch contact. *Mens & Maatschappij*, 84, 72-102.
- Bickel, R. (2007). Multilevel analysis for applied research: It's just regression! New York, NY: Guilford Press.
- Blau, P. M. (1977). *Inequality and heterogeneity: A primitive theory of social structure*. New York: Free Press.
- Blokland, T., & Van Eijk, G. (2010). Do people who like diversity practice diversity in neighbourhood life? Neighbourhood use and the social networks of "diversityseekers" in a mixed neighbourhood in the Netherlands. *Journal of Ethnic and Migration Studies*, 36, 313-332.
- Bolt, G., Özüekren, A. S., & Philips, D. (2010). Linking integration and residential segregation. *Journal of Ethnic and Migration Studies*, *36*, 169-186.
- Bolt, G., Van Kempen, R., & Ham, M. (2008). Minority ethnic groups in the Dutch housing market: spatial segregation, relocation dynamics and housing policy. *Urban studies*, 45, 1359-1384.

- Boyce, W., Torsheim, T., Currie, C., & Zambon, A. (2006). The Family Affluence Scale as a measure of national wealth: Validation of an adolescent self-report measure. *Social Indicators Research*, 78, 473-487.
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. Advances in Experimental Social Psychology, 37, 255–343.
- Butler, T. (2003). Living in the bubble: gentrification and its 'Others' in North London. *Urban Studies*, 40, 2469-2486.
- CBS, 2010. Jaarrapport Integratie. Centraal Bureau voor de Statistiek, Den Haag.
- Coenders, M., (2001). Nationalistic attitudes and ethnic exclusionism in a comparative perspective: An empirical study of attitudes towards the country and ethnic immigrants in 22 countries. PhD dissertation. Department of Sociology (ICS), University of Nijmegen.
- Currie, C. E., Elton, R. A., Todd, J., & Platt, S. (1997). Indicators of socio-economic status for adolescents: The WHO health behaviour in school-aged survey. *Health Education Research*, 12, 385–397.
- Dagevos, J. (2005). Gescheiden werelden? De etnische signatuur van vrijetijdscontacten van minderheden. *Sociologie*, *1*, 52-69.
- Dovidio, J. F., Gaertner, S. L., & Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes & Intergroup Relations*, 6, 5-21.
- DuBois, D., & Hirsch, B. (1990). School and neighborhood friendship patterns of black and whites in early adolescence. *Child Development*, 61, 524-536.
- Emerson, M. O., Kimbro, R. T., & Yancey, G. (2002). Contact theory extended: the effects of prior racial contact on current social ties. *Social Science Quarterly*, *83*, 745-761.
- Epstein, J. L. (1985). After the bus arrives: Resegregation in desegregated schools. *Journal of Social Issues*, *41*, 23-43.
- Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, 19, 700-710.
- Gijsberts, M. & Dagevos, J. (2009). *Jaarrapport integratie 2009*. Den Haag: Sociaal en Cultureel Planbureau.

- Gijsberts, M. & Dagevos, J. (2005). *Uit elkaars buurt; De invloed van etnische concentratie op integratie en beeldvorming*. The Hague: Sociaal en Cultureel Planbureau.
- Gniewosz, B., & Noack, P. (2006). Intergenerationale Transmissions und Projektionsprozesse intoleranter Einstellungen zu Ausländern in der Familie. Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie, 38, 33-42.
- Goldstein, H., Rasbash, J., Plewis, I., Draper, D., Browne, W., Yang, M., Woodhouse, G., & Healy, M. (1998). A user's guide to MLwiN. London: Institute of Education, University of London.
- Gonzalez, K. V., Verkuyten, M., Weesie, J., & Poppe, E. (2008). Prejudice towards Muslims in the Netherlands: Testing integrated threat theory. *British Journal of Social Psychology*, 47, 667-685.
- Haddock, G., Zanna, M. P., & Esses, M. V. (1993). Assessing the structure of prejudicial attitudes: The case of attitudes towards homosexuals. *Journal of Personality and Social Psychology*, 65, 1105-1118.
- Hagendoorn, L. (1995). Intergroup biases in multiple group systems: The perception of ethnic hierarchies. In W. Stroebe, & M. Hewstone (Eds.), *European review of social psychology* (pp. 199 -228). Chichester, UK: Wiley.
- Hallinan, M. T., & Williams, R. A. (1989). Interracial friendship choices in secondary schools. *American Sociological Review*, 54, 67-78.
- Hewstone, M., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the "contact hypothesis". In M. Hewstone & R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 1-44). Cambridge, MA: Basil Blackwell.
- Hutchison, P., & Rosenthal, H. E. S. (2011). Prejudice against Muslims: Anxiety as a mediator between intergroup contact and attitudes, perceived group variability and behavioural intentions. *Ethnic and Racial Studies*, 34, 40-61
- Islam, M. R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group attitude variability, and out-group attitude: An integrative model. *Personality and Social Psychology Bulletin*, *19*, 700-710.
- Joyner, K., & Kao, G. (2000). School racial composition and adolescent racial homophily. *Social Science Quarterly*, 81, 810-825.

- Khmelkov, V. T., & Hallinan, M. T. (1999). Organizational effects on race relations in schools. *Journal of Social Issues*, 55, 627-645.
- Latten, J., Nicolaas, H., & Wittebrood, K. (2005). Concentratie allochtonen toegenomen. Bevolkingstrends. Statistisch kwartaalblad over de demografie van Nederland, 53, 90-95.
- Levin, S., Van Laar, C., & Sidanius, J. (2003). The effects of ingroup and outgroup friendships on ethnic attitudes in college: A longitudinal study. *Group Processes and Intergroup Relations*, 6, 76-92.
- Martinovic, B., Tubergen, F., & Maas, I. (2009). Dynamics of interethnic contact: a panel study of immigrants in the Netherlands. *European Sociological Review*, 25, 303-318.
- Masson, C. N., & Verkuyten, M. (1993). Prejudice, ethnic identity, contact and ethnic group preferences among Dutch young adolescents. *Journal of Applied Social Psychology*, 23, 156-168.
- Moody, J. (2001). Race, school integration, and friendship segregation in America. American Journal of Sociology, 107, 679-716.
- Moors, H., Balogh, L., Van Donselaar, & De Graaff, B. (2009). *Polarisatie en radicalisering in Nederland. Een verkenning van de stand van zaken in 2009.* Tilburg: Universiteit van Tilburg, IVA.
- Nesdale, D., Durkin, K., Maass, A., & Griffiths, J. (2005). Threat, group identification, and children's ethnic prejudice. *Social Development*, *14*, 189-205.
- Paolini, S., Hewstone, M., Cairns, & Voci, A. (2004). Effects of direct and indirect crossgroup friendships on judgments of Catholics and Protestants in Northern Ireland: The mediating role of an anxiety-reduction mechanism. *Personality and Social Psychology Bulletin*, 30, 770-786.
- Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality* and Social Psychology Bulletin, 23, 173-185.
- Pettigrew, T. F. (1998). Intergroup contact theory. Annual Review of Psychology, 49, 65-85.
- Pettigrew, T. F. (2008). Future directions for intergroup contact theory and research. *International Journal of Intercultural Relations*, *32*, 178-199.

- Pettigrew, T., & Tropp, L. (2000). Does intergroup contact reduce prejudice? Recent metaanalytic findings. In: Oskamp, S. (Eds.), *Reducing prejudice and discrimination* (pp. 93-114). Mahwah, New Jersey: Lawrence Erlbaum Associates, publishers
- Pettigrew, T., & Tropp, L. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751-783.
- Phinney J. S., Ferguson, D. L., & Tate, J. D. (1997). Intergroup attitudes among ethnic minority adolescents: A causal model. *Child Development*, 68, 955-969.
- Rodrigues-Garcia, J. M., & Wagner, U. (2009). Learning to be prejudiced: A test of unidirectional and bidirectional models of parent-offspring socialization. *International Journal of Intercultural Relations*, 36, 516-523.
- Rodrigues, P. R. & Van Donselaar, J. G. (2010). Inleiding. In: Rodrigues, P. R. & Donselaar, J. G., van (Eds.), *Monitor Racisme & Extremisme. Negende rapportage* (pp. 11-15). Amsterdam: Anne Frank Stichting / Amsterdam University Press.
- Rosenfield, D., & Stephan, W. G. (1981). Intergroup relations among children. In S. S. Brehm, S.
  Kassin, & F. X. Gibbons (Eds.), *Developmental Social Psychology: Theories and Research* (pp. 271-297). New York: Oxford University Press.
- Schofield, J. W., & Sagar, H. A. (1977). Peer interaction patterns in an integrated middle school. Sociometry, 40, 130-138.
- Sheridan, L., P. (2006). Islamophobia pre- and post-September 11th, 2001. Journal of Interpersonal Violence, 21, 317-336
- Sigelman, L., Bledsoe, T., Welch, S., & Combs, M. W. (1996). Making contact? Black-white social interaction in an urban setting. *American Journal of Sociology*, *101*, 1306–1332.
- Stephan,W. G., & Stephan, C.W. (2001). *Improving intergroup relations*. Thousand Oaks, CA: Sage Publications.
- Strabac, Z., & Listhaug, O. (2008). Anti-Muslim prejudice in Europe: A multilevel analysis of survey data from 30 countries. *Social Science Research*, 37, 268-286.
- Teunissen, J. (1988). Etnische relaties in het basisonderwijs. 'Witte' en 'zwarte' scholen in de grote steden. Dissertatie Universiteit Utrecht.
- Tropp, L. R. (2003). The psychological impact of prejudice. *Group Processes & Intergroup Relations*, 6, 131-149.

- Tropp, L. R., & Pettigrew, T. F. (2005). Relationships between intergroup contact and prejudice among minority a majority status groups. *Psychological Science*, *16*, 951-957.
- Tuma, N. B., & Hallinan, M. T. (1979). The effects of sex, race, and achievement on school children's friendships. *Social Forces*, 571, 1265-1285.
- Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology*, 93,369-388.
- Van der Laan Bouma-Doff, W. (2007). Confined contact: Residential segregation and ethnic bridges in the Netherlands. *Urban Studies*, 44, 997-1017.
- Van Geel M., & Vedder, P. M. (2010). Multicultural attitudes among adolescents: the role of ethnic diversity in the classroom. *Group processes & Intergroup Relations*, 14, 549-558.
- Van Ham, M., & Feijten, P. (2008). Who wants to leave the neighborhood? The effect on moving wishes of being different from the neighborhood population. *Environment* and Planning, 40, 1151-1170.
- Van Houtte, M., & Stevens, P. A. J. (2009). School ethnic composition and students' integration outside and inside schools in Belgium. *Sociology of Education*, 82, 217-239.
- Vedder, P. H. (2006). Black and white schools in the Netherlands. *European Education*, 38, 36-49.
- Verkuyten, M. & Kinket, B. (2000). Social distances in a multi-ethnic society: The ethnic hierarchy among Dutch pre-adolescents. *Social Psychology Quarterly*, *63*, 77-85.
- Verkuyten, M. & Thijs, J. (2002). Racist victimization among children in The Netherlands: The effect of ethnic group and school. *Ethnic and Racial Studies*, *25*, 310-331.
- Vermeij, L., Van Duijn, M. A. J., & Baerveldt, C. (2009). Ethnic segregation in context: Social discrimination among native Dutch pupils and their ethnic minority classmates. *Social Networks*, 31, 230-239.
- Vervoort, M. H. M., Scholte, R. H. J., & Scheepers, P. L. M. (2008). Allochtonen in de klas: de relatie tussen de proportie allochtonen in de klas, vriendschappen en interetnische attitudes van adolescenten. *Migrantenstudies*, 2, 128-148.
- Vervoort, M. H. M., Scholte, R. H. J., & Scheepers, P. L. M. (2011). Ethnic composition of schoolclasses, majority-minority friendships and adolescents' intergroup attitudes in the Netherlands. *Journal of Adolescence*, 34, 257-267.

- Vervoort, M. H. M., & Dagevos J. (2008). Stagnatie in de sociale integratie. Waarom vrijetijdscontacten tussen allochtonen en autochtonen in de afgelopen jaren niet zijn toegenomen. *Mens & Maatschappij*, 83, 151-167.
- Weijters, G. & Scheepers, P. (2003). Verschillen in sociale integratie tussen etnische groepen: beschrijving en verklaring. *Mens & Maatschappij*, 78, 144-157.