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In-group bias in the classroom: The role of co-ethnic and other-ethnic peers and multiculturalism

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Título: El sesgo endogrupal en el aula: el papel de los compañeros de la misma etnia, de otra etnia y el multiculturalismo.

Resumen: En este estudio se analizó el sesgo endogrupal en 322 holandeses nativos y 193 turco-holandeses, todos preadolescentes, en relación con dos aspectos diferentes del contexto en el aula: las evaluaciones reales (totales) hacia compañeros co-étnicos y de otro grupo étnico, y el clima multicultural en el aula. Los análisis multinivel mostraron que las evaluaciones endogrupales de los iguales co-étnicos estaban relacionadas positivamente con el sesgo endogrupal y que las evaluaciones exogrupales de los iguales co-étnicos tenían un efecto negativo. Este último efecto estuvo mediado por la actitud de los propios niños hacia el exogrupo. Las evaluaciones sobre el endogrupo y el exogrupo de los compañeros del otro grupo étnico no tuvieron efectos únicos sobre el sesgo endogrupal. El clima multicultural tuvo un efecto negativo sobre el sesgo endogrupal en el grupo de holandeses nativos pero no en los turco-holandeses. Los resultados muestran que el sesgo endogrupal estuvo afectado únicamente por los iguales del endogrupo y por el contexto normativo escolar.

Palabras clave: Sesgo endogrupal; aula; niños; actitudes étnicas; multiculturalismo; actitudes grupales.

Introduction

In-group bias is a real-life phenomenon for children. Children often make explicit comparisons and choices and are sometimes forced to compare and choose between in-group and out-group members. In schools, for instance, children select peers to work or to play with and selection typically means favouring one over the other. Thus, although a preference for in-group over out-group members does not necessarily reflect out-group derogation, it does involve comparison, selection, and exclusion which may have important social and psychological consequences (see Hawker & Boulton, 2002; Verkuyten & Thijs, 2006). Arguably, it is these kinds of comparisons and choices that theorists and practitioners alike are trying to understand and reduce.

In the present research we examined the impact of classroom norms on ethnic in-group bias among native Dutch (majority) and Turkish-Dutch (minority) early adolescents (aged 10-14). In-group bias was examined in terms of explicit intergroup comparisons in which children indicate whether particular traits are more typical for the in-group, for the outgroup, or equally typical for both groups. We focused on two normative aspects of children's classroom environment: the actual and separate in-group and out-group evaluations of their (in-group and out-group) classmates and the prevailing multicultural climate.

In addition, our study sought to determine the extent to which similar processes account for the attitudes of majority

* Dirección para correspondencia [Correspondence address]: Jochem Thijs & Maykel Verkuyten, Ercomer, ASW, Faculty of Social and Behavioural Sciences, Utrecht University, Heidelberglaan 2, 3584 CS Utrecht, Netherlands. E-mail: j.t.thijs@uu.nl Abstract: This study among 322 native Dutch and 193 Turkish-Dutch early adolescents examined ethnic in-group bias in relation to two different aspects of the classroom context: the (aggregated) actual group evaluations of co-ethnic and other-ethnic classmates, and the multicultural classroom climate. Multilevel analyses showed that the in-group evaluation of co-ethnic peers was positively related to in-group bias, and that the out-group evaluation of co-ethnic peers had a negative effect. This latter effect was mediated by the children's own out-group attitude. The in- and out-group evaluations of other-ethnic peers had a negative effect on the in-group bias of native Dutch children but not of Turkish-Dutch children. Results show that in-group bias is uniquely affected by in-group peers and by the normative school context.

Key words: In-group bias; classroom; children; ethnic attitudes; multiculturalism; attitude group.

and minority group children. Research on the ethnic attitudes and preferences of minority group children have yielded mixed findings (e.g., Boulton & Smith, 1992; Griffiths & Nesdale, 2006; Margie, Killen, Sinno, & McGlothlin, 2005; Verkuyten & Thijs, 2001). Furthermore, relatively few studies have compared the attitudes of ethnic majority and minority group children towards members of the in-group and out-group in the same study. It is also unclear whether normative aspects of children's classroom environment have similar effects on the in-group bias of both groups of children (Verkuyten & Thijs, 2001).

Group norms and peer influences

Early adolescence (ages 10-14) is an important period for the development of group identities and intergroup attitudes (see Ruble et al., 2004) and for knowledge about the broader social implications of ethnic and racial group differences (Quintana, 1998). Early adolescence is also characterized by increased sensitivity to the norms and ideas of the peer group (Prinstein & Dodge, 2008) and an adequate understanding of in-group bias requires consideration of the social context (Barrett, 2007). In-group members provide important descriptive and prescriptive information about social reality (Turner, 1991; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and according to social identity developmental theory (Nesdale, 2008) and the developmental subjective group dynamics model (Abrams & Rutland, 2008), the extent to which children manifest ethnic prejudice is partly dependent on the norms shared by in-group members (Nesdale, 2008). Reference group theory (Merton, 1957; see also Leach & Vliek, 2008) also argues that the in-group provides

the most important 'frame of reference' and that individuals are more affected by in-group than by out-group members. Psychologically and socially, a distinctive in-group is meaningful and therefore functions as a reference group for one's own evaluations. Zagefka and Brown (2005), for example, showed that ethnic groups in England and in Germany find in-group comparisons more interesting and important than out-group comparisons. Research also suggests that the ethnic in-group can provide a frame of reference outside of awareness (Leach & Smith, 2006).

Previous research among children has considered the impact of group norms by manipulating (e.g., Nesdale, Maass, Durkin, & Griffiths, 2005) or measuring the attitudes and behaviours expected of group members towards outgroups (e.g., Abrams, Rutland, & Cameron, 2003). The present study goes beyond this research by examining the *actual* attitudes held by peers. Our sample included Turkish-Dutch and Dutch peers who evaluated both their own and each other's group. Both ethnic groups attended the same classrooms which makes it possible to obtain independent assessments of the in-group evaluations and of the out-group evaluations held by both in-group (co-ethnic) peers and outgroup (other-ethnic) peers.

The idea that children adopt the group attitudes held by their peers has been prominent among researchers of social development. Yet, research using independent assessments of children's and peers actual beliefs has yielded mixed findings (see Aboud & Doyle, 1996; Aboud & Fenwick, 1999; Kiesner, Maass, Cadinu, & Vallese, 2003; Poteat, 2007; Ritchey & Fishbein, 2001). One reason for this lack of consistent results is that the role of peers may depend on the intergroup context. Ritchey and Fishbein (2001), for example, reported no significant interrelations between the ethnic stereotypes of white adolescent friends, but all their participants attended homogenous white schools.

The present research differs from earlier work on peer influence by taking an intergroup approach. Based upon the normative and informational primacy of the in-group, we anticipated that early adolescents' in-group bias reflects the group evaluations of their co-ethnic classmates. More specifically, it was expected that in-group bias was positively related to co-ethnics' in-group evaluations and negatively to co-ethnic's out-group evaluations¹. Because out-group members are typically not considered to be very informative or normative for one's own attitudes and beliefs (Merton, 1957; Turner, 1991) the evaluations made by other-ethnic peers were not expected to be related to children's bias. We had no reasons to expect that these predicted roles of co-ethnic and other-ethnic classmates would differ between ethnic majority and minority group children. For both groups a normative and informational primacy of the in-group seems likely.

Multicultural classroom climate

For children, the normative school context is multifaceted. Not only does it consists of the attitudes of in-group peers but it also entails the prevailing norms upheld by schools and teachers (Monteiro, de Franca, & Rodrigues, 2009; Rutland, Cameron, Milne, & McGeorge, 2005). In many Western countries multiculturalism is an influential idea and particularly in schools, the value of cultural diversity and cultural recognition is promoted in one way or another (Banks & Banks, 1996; Verkuyten, 2008). Multiculturalism insists that all cultural groups should be treated with respect and as equals. The core idea of 'different but equal' argues against explicit comparisons in which the in-group is considered better than the out-group. In the Netherlands, primary schools have the legal obligation to advance understanding and appreciation of ethnic diversity and to make a contribution to more positive interethnic relations. In practice, however, schools differ considerably in their approach (Onderwijsinspectie, 2006).

In the present study, we assessed the multicultural normative classroom climate by aggregating children's individual perceptions. In principle, multiculturalism fosters respect and appreciation for all cultures and ethnicities. In practice, however, it is predominantly seen in the Netherlands as supporting the identity of minority groups and as a way to address the negative attitudes of Dutch majority group children (Van Oudenhoven, Prins, & Buunk, 1998; Verkuyten, 2005; Verkuyten & Thijs, 2001). Hence, we anticipated that multiculturalism will have a negative impact on in-group bias of the Dutch majority group children and no impact on ingroup bias of Turkish-Dutch early adolescents.

Apart from our goal to study its effect on in-group bias, there was another reason to include the multicultural normative climate in our research. By influencing all children in the same classroom, multiculturalism could cause spurious shared variance between the ethnic attitudes of individual children and those of their classmates. By correcting for multiculturalism in our statistical analyses this 'third variable explanation' can be ruled out.

In summary

We examined in-group bias (explicit comparisons) among ethnic majority and minority early adolescents in relation to the actual in-group evaluations and out-group evaluations of their co-ethnic and other-ethnic classmates and the multicultural classroom climate. Children's in-group bias was expected to be positively predicted by the in-group evaluations of their co-ethnic peers, and negatively by the out-group evaluations of these peers. The evaluations of the otherethnic peers were not expected to be related independently to in-group bias. In addition, we expected that the multicultural classroom climate would be negatively associated with in-group bias among the Dutch children but not to in-group bias among the Turkish-Dutch children.

¹ Note that, throughout this paper, the terms in-group and out-group always apply to the respondents' perspectives.

Method

Participants and Procedure

Participants were 515 students from 35 Grade 5-6 classes in 19 regular primary schools in the Netherlands. All classes contained children from different ethnic groups with no more than 92% of the students being of native Dutch background and more than 7.6% being of Turkish origin ($M_{\%Dutch}$ = 45.5, SD = 20.5; $M_{\%Turkisb} = 30.6$, SD = 14.9). According to their ethnic self-definition and the reported ethnicity of their parents, 322 students were Dutch and 193 were of Turkish origin. Their mean age was 11.57 years (SD = .82) and 254 of them were female. All of them voluntary completed a questionnaire in the classroom and under supervision of their teacher.

For 95% of the cases there were no missing data. For the remaining children, 2% to 9% of the values were missing (Mdn = 2%). These scores were imputed employing the expectation maximization algorithm (EM). This procedure is adequate when values are missing at random (Bernaards & Sijtsma, 1999).

Measures

In-group bias. Following other researchers (e.g., Pfeifer, Ruble, Bachman, Alvarez, Cameron, & Fuligni, 2007; Rutland, Brown, Cameron, Ahmavaara, Arnold, & Samson, 2007), we used stereotypic evaluations to assess students' ethnic attitudes. Students' in-group bias was assessed by means of four trait adjectives. These traits have been successfully used in previous research in the Netherlands and, importantly, have a similar meaning for ethnic majority and minority group children (e.g., Kinket & Verkuyten, 1999; Verkuyten, 2002). The adjectives were 'quarrelsome' (reverse scored), 'honest', 'friendly', and 'smart'. Being our dependent variable, in-group bias was measured last in the questionnaire. The participants were asked to make an explicit comparison and to indicate whether they thought that each adjective applied more to Turkish children, more to Dutch children, or equally well to Turkish and Dutch children. Responses were coded so that a score of '1' represented a preference for the in-group (e.g., as being less quarrelsome, more honest), a score of '0' represented no group preference, and a score of '-1' represented a preference for the out-group. Ingroup bias was computed by averaging the four scores. Cronbach's alpha was .63.

Classmates group evaluations. For measuring in-group and out-group evaluations separately, participants were asked to indicate their own estimates of the numbers of, respectively, Dutch and Turkish children possessing the four traits. For the responses a unipolar scale ranging from 1 (*none*) to 5 (*all*) was used. In-group and out-group scores were computed by taking the mean of the four scores for the appropriate target group. To assess whether it was appropriate to examine

of individual evaluations, we aggregated the scores for each of the four separate in-group and the out-group items across the ethnic groups (Dutch and Turkish-Dutch) in each class and calculated the internal consistencies of these aggregated scores separately for in-group and for out-group targets. Cronbach's alpha was .64 for the aggregated in-group evaluations and .71 for the aggregated out-group evaluations. This indicates that the use of aggregated scores is warranted. Next, we averaged the in-group and out-group evaluations across students' co-ethnic and other-ethnic classmates. This yielded four new variables: co-ethnics' in-group evaluation, co-ethnics' out-group evaluation, other-ethnics' in-group evaluation, and other-ethnics' out-group evaluation. It is important to note that the terms 'in-group', 'out-group', 'coethnic', and 'other-ethnic' are used from the perspective of the individual participant. Thus, for a Turkish-Dutch child the in-group evaluation by other-ethnic classmates is the average evaluation of Turkish children given by his/her Dutch classmates.

classmates' in-group and out-group evaluations as aggregates

Multicultural normative climate. Three items were used to assess students' perceptions of multiculturalism in their classroom. These items have been used in previous studies in the Netherlands (Kinket & Verkuyten, 1999; Verkuyten & Thijs, 2001). The items were, 'Do you ever talk about discrimination and racism during lessons?', 'Imagine that someone from your class is teased because he is from another country. Would your teacher say something about it?', and 'Do you ever talk about the habits of people from different countries during lessons?' Agreement with the items was rated on a scale ranging from 1 (never) to 5 (often). Because we focused on multicultural climate at the level of the class, the individual scores on these items were aggregated across classes (n =35). Subsequently, the mean of the aggregated scores was computed (M = 3.46, SD = .40). This yielded a Cronbach's alpha of .74, and the items loaded on one component explaining 65.8% of the variance. To examine whether the aggregated composite measure provided an adequate measure of the shared classroom climate we estimated its reliability following the procedure provided by O'Brien (1998). The reliability coefficient was satisfactory, r = .77, implying that students agreed on the meaning of this common classroom characteristic².

Data analysis

The data-set had a three level structure. Students (Level 1) were nested within ethnic groups (Level 2) nested within different classes (Level 3). Therefore, data for individual students were likely to be dependent. Analyzing dependent data

² This coefficient involves a different kind of reliability than Cronbach's alpha. Whereas the latter reflects the extent to which the three aggregated items form an internally consistent measure of perceived multicultural classroom climate, the former reflects the extent to which the (composite) scores of individual students can be regarded as parallel items of this measure (see O'Brien, 1998; Snijders & Bosker, 1999).

with conventional statistical tests can lead to an underestimation of standard errors and hence to spuriously significant results (Snijders & Bosker, 1999). To prevent this, and to adequately asses the impact of higher-level variables (i.e. other-ethnic classmates' group evaluations at Level 2, and multicultural climate at Level 3), data were analyzed with multi-level regression analyses in MLwiN version 2.0 (Rasbash, Browne, Healy, Cameron, & Charlton, 2004). To assess changes in model fit, we compared the deviance statistics of nested models. Differences between these statistics follow a chi-square distribution, and degrees of freedom are given by the differences in numbers of parameters (Snijders & Bosker, 1999).

Results

Preliminary analyses

Before we tested our multilevel-models hypotheses, we conducted two sets of preliminary analyses. First, we tested age difference in individual ethnic attitudes by correlating age with ethnic in-group bias, in-group evaluation, and out-group evaluation. None of these correlations were significant, and participants were collapsed across age in the following analyses³.

Table 1: Correlations	between	Contextual	Measures.
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	1	2	3	4
1. Co-ethnics: In-group Evaluation				
2. Co-ethnics: Out-group Evaluation	.26**			
3. Other-ethnics: In-group Evaluation	.04	.41**		
4. Other-ethnics: Out-group Evaluation	.23**	.15**	.25**	
5. Multicultural Climate	.02	.36**	.37**	06
** p < .01				

Second, we examined the correlations between the different contextual predictors (see Table 1). There are similar medium-sized positive correlations (see Cohen, 1998) between co-ethnic classmates' in-group and out-group evaluations, and between the two evaluations of other-ethnic classmates. In addition, there are positive correlations between co-ethnics' in-group evaluation and other-ethnics' outgroup evaluation, and between co-ethnics' out-group evaluation and other-ethnics' in-group evaluation. This means, for instance, that when Dutch classmates have more positive evaluations of Dutch children, the Turkish-Dutch children reported more positive evaluations of Turkish children. And when Dutch classmates reported less positive evaluations of Turkish children, the Turkish-Dutch children reported less positive evaluations of Dutch children. Furthermore, a higher multicultural class climate was associated with a more positive out-group evaluation by co-ethnic classmates and a more positive evaluation of one's own group by other-ethnic classmates. Thus, multiculturalism was positively associated

with out-group evaluations and was not related to in-group evaluations. An additional analysis showed that the significant correlations between classmates' group evaluations remained significant when the covariances with multicultural climate were partialled out.

In-group bias and peer influence

Several multilevel regression models were specified with in-group bias as the dependent variable. First, we examined whether there were systematic differences in in-group bias between ethnic groups within classes. Note that these differences were required for the anticipated impact of co-ethnic or other-ethnic classmates on the bias of individual children. To obtain the variance distribution of in-group bias across the three different levels we tested a so-called intercept-only model (Snijders & Bosker, 1999). Results showed that a significant proportion of the total variance (19.1%, p < .01) could be attributed to differences at Level 2. This means that the different ethnic groups within the classrooms reported different levels of in-group bias. Hence, it was appropriate to consider the impact of in-group and out-group evaluations by co-ethnic and other-ethnic classmates.

Next, and following our hypotheses, we examined to what extent participants' in-group bias depended on their ethnic-group, the separate group evaluations made by their classmates, as well as the multicultural normative climate in the classroom. Ethnic group differences were evaluated with a contrast which was coded '.5' for the Turkish-Dutch students and '-.5' for the native Dutch students. First, we examined the effects of *co-ethnics*' in-group and out-group evaluations, and of multiculturalism. We estimated a full model including the contrast for ethnic group and its interactions with the three predictors. However, because only one of the dummy interactions was significant (the interaction between ethnic group and multicultural climate) the model was reestimated without the other interactions. The results are shown in Model 2 in Table 2. First, there was a negative main effect of the ethnic contrast. Turkish-Dutch children reported less in-group bias than Dutch children (respectively, M = .01, SD = .35, and M = .15, SD = .30). Next, and as expected, for the Dutch and the Turkish-Dutch children alike, there was a positive effect of the co-ethnic classmates' ingroup evaluations and a negative effect of their out-group evaluations. This means that Dutch (Turkish-Dutch) participants had a stronger in-group bias when their Dutch (Turkish-Dutch) classmates evaluated Dutch (Turkish) children more positively and when their co-ethnic classmates evaluated Turkish-Dutch (Dutch) children less positively. In addition, students' aggregated perceptions of the multicultural classroom climate had different effects for the two ethnic groups. Further inspections revealed that the Dutch but not the Turkish-Dutch students reported less in-group bias in multicultural classes, respectively, b = -.113, p < .05, and b =.123, p > .05.

³ In addition, age did not moderate the effect of classmates' evaluations, multicultural climate, or individual evaluations in the following analyses.

In a second step, we examined whether the group evaluations of *other-ethnic* peers uniquely contributed to the prediction of children's in-group bias. We examined the increase in model fit when these group evaluations (and also their interactions with the group dummy) were added as predictors. Results indicated that model improvement was not significant, p > .05. Moreover, additional analysis showed that the group evaluations of other-ethnics had no effect when coethnics' evaluations were not included in the model. Thus, as expected other-ethnics' group evaluations were not related to children's in-group bias.

Participants' separate group evaluations

In an additional model we tested whether the effects of the group evaluations of co-ethnic peers and of multicultural classroom climate on in-group bias remained significant when the participant's own and separate in-group and outgroup evaluations were partialled out. Hence, the two evaluations were added as predictors to the regression model. As shown in Model 3 (Table 2), the effect of co-ethnics' ingroup evaluation remained significant but their out-group evaluation did no longer affect students' in-group bias. The latter finding suggests that participant's own out-group evaluation mediated the impact of the out-group evaluations of their co-ethnic peers. For mediation, the proposed mediator (participants' own out-group evaluation) should not only be related to the dependent variable (bias; see Table 2) but also to the independent variable (co-ethnics' in-group evaluation) (see Baron & Kenny, 1986). The latter condition was fulfilled because there was a positive relation between participants' own in-group evaluation and that of their coethnics peers (r = .20, p < .01).

 Table 2: Multilevel Regressions of Students' In-Group Bias on Classroom

 Variables.

	Model 2	Model 3
Minority vs. Majority ^a	111**	081**
Co-ethnic peers: In-group Evaluation	.234**	.202**
Co-ethnic peers: Out-group Evaluation	136*	094
Multicultural Climate	.001	.063
Minority vs. Majority * Multicultural	.236**	.232**
Climate		
Participant's In-group Evaluation		.142**
Participant's Out-group Evaluation		245**
Variance		
Level 1	.094	.073
Level 2	.003	.003
Level 3	.000	.000
Total	.097 (13%)) .076 (31%)
Deviance	256.344	132.215

Note. In parentheses is the percentage of variance explained.

^a Contrast coded '.5' for the Turkish Dutch and '-.5' for the native Dutch. * p < .05, ** p < .01

To examine the possibility of mediation we conducted a Sobel test for the indirect effect of co-ethnic out-group evaluation through children's own out-group evaluation (see MacKinnon, Warsi, & Dwyer, 1995). Results indicated that the latter carried a significant portion of the effect of the former, z = 2.96, p < .01. There was no significant indirect effect of co-ethnic in-group evaluations through children's own in-group evaluations, as the former had no unique effect on the latter.

Relative group size

In the previous analyses, we did not account for the fact that the different school classes varied in the number of Dutch and of Turkish-Dutch students. In a final set of analyses, we investigated whether the effect of classmates' attitudes depended on numerical positions. That is, we examined whether the effects of co-ethnic and other-ethnic classmates were moderated by their relative group sizes in the classroom. We computed the proportion of co-ethnic students relative to all co-ethnic and other-ethnic students in each classroom (M = .50, SD = .21, N = 70). Next, we added this variable and its interactions with the classmate measures as predictors to the previously tested models. None of the interactions proved to be significant, neither did the fit of each model increased significantly. Thus, the relative number of co-ethnic and of other-ethnic classmates did not affect the impact that these classmates had on the children's in-group bias.

Discussion

The present research tried to make a contribution to the literature by investigating classmates' actual group evaluations and multicultural classroom climate as antecedents of ethnic in-group bias among majority and minority early adolescents. In-group bias was examined in terms of explicit intergroup comparisons that children often make in their everyday life.

By sampling Turkish-Dutch and Dutch children attending the same classrooms, we could make a further contribution to the study of social influences on in-group bias. Previous studies have examined the impact of peer groups (e.g., Kiesner et al., 2003; Poteat, 2007) or examined the influence of perceived in-group norms (e.g., Abrams et al., 2008; Nesdale et al., 2005). We studied the impact of the actual group evaluations held by both in-group (co-ethnic) and out-group (other-ethnic) classmates. Moreover, we controlled for the classroom's multicultural climate, which allowed us to rule out the possibility of artificial relations resulting from classmates' exposure to the same classroom norms about the recognition of cultural diversity. Furthermore, we examined to what extent children's own, separate in-group and out-group evaluations could account for the contributions of their classmates.

Our hypothesis about the influence of *co-ethnic* classmates was supported. Children had stronger in-group bias when co-ethnic peers reported higher in-group evaluation and when these peers reported lower out-group evaluation. These results support reference group theory and self-

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categorization theory which argue that the in-group functions as a normative reference group, providing information on how to evaluate in-group and out-group members (Turner, 1991). Interestingly, it turned out that co-ethnic's ingroup evaluations had a direct effect on in-group bias whereas the impact of co-ethnic's out-group evaluations appeared to be mediated by the children's own out-group evaluations. This pattern of results suggests that different processes are involved in in-group bias and in-group favouritism. A possible explanation is that the promotion of positive in-group attitudes is an important aspect of parental ethnic socialization and occurs relatively early in childhood (see for a review, Hughes et al., 2006). This could mean that early adolescents' in-group evaluations are relatively stable and independent of the in-group evaluations of co-ethnic peers. These peers seem to affect the explicit comparison process that results in ethnic in-group bias but not via early adolescents' own feelings about their ethnic in-group. In contrast and as argued by social identity development theory (Nesdale, 2008), out-group evaluations tend to appear later in life and might depend more on contextual conditions that (de-)emphasize group distinction (Brewer, 2001; Cameron, Alvarez, Ruble & Fuligni, 2001). As a result, what co-ethnic peers think about the out-group seems to have an influence on one's out-group evaluations and thereby on the level of ingroup bias. Future studies should examine this interpretation further because it can improve our understanding of the development of ethnic attitudes.

There was no independent effect of other-ethnic classmates on children's in-group bias. This finding further supports the proposition that in-group members and not out-group members provide the relevant descriptive and prescriptive information about social reality. However, our preliminary analyses at the class level showed a positive association between the average out-group evaluations of co-ethnic and of otherethnic classmates. This means, for instance, that in classes in which Dutch classmates had less positive evaluations of Turkish children, the Turkish-Dutch, in turn, had less positive evaluations of the Dutch. This association was not due to the multicultural context in the class because it remained significant when controlling statistically for this factor. A possible explanation for this finding is that both groups engage in a form of evaluative or symbolic class competition (Tajfel & Turner, 1979). In classes where 'we' (co-ethnics) are relatively negative about the out-group, 'they' (otherethnics) tend to be relatively negative about 'us'. Importantly, these findings show that what happens at the level of the class can differ from individual perceptions and evaluations. Competitive intergroup relations are not only determined by individual characteristics, but independently also by contextual settings and structures (Kinket & Verkuyten, 1999). This result has implications for initiatives that try to address negative ethnic attitudes. These initiatives should not only focus on individual attitudes and beliefs but should also be sensitive to what happens at the level of groups within particular settings.

Multicultural classroom climate was not only included as a covariate but also as an independent normative influence. In agreement with our expectation, this contextual variable worked out differently for the two ethnic groups. Multicultural climate had a significant negative effect on the in-group bias of the Dutch, but not on the in-group bias of Turkish-Dutch participants. This finding is in agreement with the notion that multiculturalism in the Netherlands promotes equality but also, and particularly so, the identity of minority groups (Van Oudenhoven, et al., 1998; Verkuyten, 2005; Verkuyten & Thijs, 2001). The implication for education is that an emphasis on cultural diversity and multicultural recognition can affect majority and minority group children differently.

Apart from a differential effect of multicultural climate, we also found a main difference in in-group bias for ethnic minority versus majority group children. According to social identity theory, minority groups will show less positive intergroup differentiation compared to majority groups. The reason is that their lower status will prevent minority groups from clearly differentiating their group in a positive sense from the majority group (e.g., Ellemers, Van Rijswijk, Roefs, & Simons, 1997). Consistent with this reasoning we found that Turkish-Dutch early adolescents reported less in-group bias than their Dutch peers.

To evaluate the present findings some qualifications should be considered. First, although part of our hypotheses involved social influences, the cross-sectional design does not allow definite causal conclusions. Thus, the possibility of reciprocal influences between classroom norms, classmates' attitudes and individual attitudes should be acknowledged. However, it should be noted that our results were largely consistent with our theoretically-based predictions and with other findings in the literature. Moreover, several reversed causal interpretations are problematic. For instance, it is highly unlikely that less in-group bias among Dutch children evokes a stronger endorsement of multiculturalist norms among teachers, or that children's in-group bias, but not their in-group evaluation, has a direct influence on the ingroup evaluations of co-ethnic classmates.

Second, it should be noted that a limited set of traits was used for assessing the group evaluations. Future studies should use more traits to obtain measures with higher internal consistencies, and they could also focus on other indices of intergroup attitudes. However, the current set of traits has been used in previous studies and have a similar meaning for ethnic majority and minority early adolescents (Kinket & Verkuyten, 1999; Verkuyten, 2002). The use of this set of traits in the different studies, including the current one, has yielded theoretically predicted findings. Moreover, the four trait ratings continued to have acceptable reliability when aggregated at the level of the ethnic groups in each classroom. In addition, although multicultural classroom climate was assessed with three items the aggregated measure appeared to be adequate: the measure was both sufficiently internally consistent and sufficiently agreed upon by the individual students in each class.

Third, data were available for the Dutch and Turkish-Dutch students only. These children were obviously the most important ones as they constituted the two groups of interest and together they formed the majority in 27 of the 35 classes. Still, 80% of the participants also had classmates with other ethnic backgrounds. These other children might be influential as well and future studies could try to examine multiple ethnic groups.

References

- Aboud, F. E., & Doyle, A. (1996). Parental and peer influences on children's racial attitudes. *International Journal of Intercultural Relations*, 20, 371-384.
- Aboud, F. E., & Fenwick, V. (1999). Exploring and evaluating school-based interventions to reduce prejudice. *Journal of Social Issues*, 55, 767-786.
- Abrams, D., & Rutland, A. (2008). The development of subjective group dynamics. In S.R. Levy & M. Killen (Eds.), *Intergroup attitudes and relations in childbood through adulthood* (pp. 47-65). New York: Oxford University Press.
- Abrams, D., Rutland, A., & Cameron, L. (2003). The development of subjective group dynamics: Children's judgments of normative and deviant in-group and out-group individuals. *Child Development*, 74, 1840-1856.
- Banks, J.A. & Banks, C.M. (Ed.) (1995). Handbook of Research on Multicultural Education,
- New York: Macmillan.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Barrett, M. (2007). Children's knowledge, beliefs and feelings about nations and national groups. New York: Psychology Press.
- Bernaards, C. A., & Sijtsma, K. (1999). Factor analysis of multidimensional polytomous item response data suffering from ignorable item nonresponse. *Multivariate Behavioral Research*, 34, 277-313.
- Boulton, M.J., & Smith, P.K. (1992). Ethnic preferences and perceptions among Asian and White British middle school children. *Social Development*, 1, 55-66.
- Brewer, M. B. (2001). Ingroup identification and intergroup conflict: When does ingroup love become outgroup hate? In R. D. Ashmore, L. Jussim, & D. Wilder (Eds.), *Social identity, intergroup conflict, and conflict reduction* (pp.17-41). New York: Oxford University Press.
- Cameron, J. A., Alvarez, J. M., Ruble, D. N., & Fuligni, A. J. (2001). Children's lay theories about ingroups and outgroups: Reconceptualizing research on prejudice. *Personality and Social Psychology Review*, 5, 118-128.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Erlbaum.
- Ellemers, N., van Rijswijk, W., Roefs, M., & Simons, C. (1997). Bias in intergroup
- Perceptions: Balancing group identity with social reality. Personality and Social Psychology Bulletin, 23, 186-198.
- Griffiths, J., &Nesdale, D. (2006). In-group and out-group attitudes of ethnic majority and
- minority children. International Journal of Intercultural Relations, 6, 735-749.
- Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41, 441–455.
- Hughes D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology*, 42, 747-770.

In conclusion, we focused on in-group bias or explicit intergroup comparisons that children often make in their everyday life and that theorists and practitioners alike are trying to understand and reduce. We showed that in-group bias should be examined among ethnic majority and minority group children, and in relation to co-ethnic peers and the normative classroom context. What co-ethnic peers think about the in-group and the out-group has effects on children's biases. In addition, multiculturalism seems to reduce in-group bias among majority group children whereas it tends not to lead to less bias among minority groups.

- Kinket, B., & Verkuyten, M. (1999). Intergroup evaluations and social context: A
- multilevel approach. European Journal of Social Psychology, 29, 219-238.
- Kiesner, J., Maass, A., Cadinu, M., & Vallese, I. (2003). Risk factors for ethnic prejudice during early adolescence. *Social Development*, 12, 288-308.
- Leach, C.W., & Smith, H.J. (2006). By whose standard? The affective implications of ethnic minorities' comparison to ethnic minority and majority referents. *European Journal of Social Psychology*, 36, 747-760.
- Leach, C.W., & Vliek, M.L.W. (2008). Group membership as a 'frame of reference' for interpersonal comparison. Social and Personality Psychology Compass, 2, 539-554.
- MacKinnon, D. P., Warsi, G., & Dwyer, J. H. (1995). A simulation study of mediated effect measures. *Multivariate Behavioral Research*, 30, 41-62.
- Margie, N.G., Killen, M., Sinno, S., & McGlothlin, H. (2005). Minority children's intergroup attitudes about peer relationships. *British Journal of Developmental Psychology*, 23, 251-269.
- Merton, R.K. (1957). Social theory and social structure (2nd ed.). Glencoe: Free Press.
- Monteiro, M. B., de França, D. X., & Rodrigues, R. (2009). The development of intergroup bias in childhood: How social norms can shape children's racial behaviors. *International Journal of Psychology*, 44, 29-39.
- Nesdale, D. (2008). Peer group rejection and children's intergroup prejudice. In S.R. Levy & M. Killen (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 32-46). New York: Oxford University Press.
- Nesdale, D., Maass, A., Durkin, K., & Griffiths, J.(2005). Group norms, threat, and children's racial prejudice. *Child Development*, 76, 652-663.
- O'Brien, R. M. (1998). Correcting measures of relationship between aggregate-level variables for both unreliability and correlated errors: An empirical example. *Social Science Research*, 27, 218-234.
- Pfeifer, J. H., Ruble, D. N., Bachman, M. A., Alvarez, J. M., Cameron, J. A., & Fuligni, A. J. (2007). Social identities and intergroup bias in immigrant and nonimmigrant children. *Developmental Psychology*, 43, 496-507.
- Poteat, V. P. (2007). Peer group socialization of homophobic attitudes and behaviour during adolescence. *Child Development*, 78, 1830-1842.
- Prinstein, M. J., & Dodge, K. A. (2008). Current issues in peer influence research. In M. J. Prinstein & K. A. Dodge (Eds.), Understanding peer influence in children and adolescents. New York: The Guilford Press.
- Quintana, S. M. (1998). Development of children's understanding of ethnicity and race.
- Applied and Preventive Psychology: Current Scientific Perspectives, 7, 27-45.
- Rasbash J., Browne W., Healy M., Cameron B., & Charlton, C. (2004). *MLwiN Version 2.0.* New York: Multilevel Models Project Institute of Education.
- Ritchey, P. N., & Fishbein, H. D. (2001). The lack of association between adolescent friends' prejudices and stereotypes. *Merrill-Palmer Quarterly*, 47, 188-206.
- Ruble, D. N., Alvarez, J., Bachman, M., Cameron, J., Fuligni, A., Garcia Coll, C., et al.

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- (2004). The development of a sense of "we": The emergence and implications of children's collective identity. In M. Bennett & F. Sani (Eds.), *The development of the social self* (pp. 29-76). Hove, UK: Psychology Press.
- Rutland, A., Brown, R.J., Cameron, L., Ahmavaara, A., Arnold, K., & Samson, J. (2007). Development of the positive-negative asymmetry effect: In-group exclusion norm as a mediator of children's evaluations on negative attributes. *European Journal of Social Psychology*, 37, 171-190.
- Rutland, A., Cameron, L., Milne, A., & McGeorge, P. (2005). Social norms and self-presentation: Children's implicit and explicit intergroup attitudes. *Child Development*, 76, 451-466.
- Snijders, T. A. B., & Bosker, R. J. (1999). Multilevel analysis. An introduction to basic and advanced multilevel modeling. London: Sage.
- Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W.G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole.
- Turner, J. C. (1991). Social influence. Milton Keynes: Open University Press.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. (1987). Rediscovering the social group: A self-categorization theory. Oxford: Blackwell.
- Van Oudenhoven, J.P., Prins, K., & Buunk, B.P. (1998). Attitudes of minority and majority members towards adaptation of immigrants. *European Journal of Social Psychology*, 28, 995-1013.

- Verkuyten, M. (2002). Perceptions of ethnic discrimination by minority and majority early adolescents in the Netherlands. *International Journal of Psychology*, 37, 321-332.
- Verkuyten, M. (2005). The puzzle of high self-esteem among ethnic minorities: Comparing explicit and implicit self-esteem. *Self and Identity*, 4, 171-192.
- Verkuyten, M. (2008). Multiculturalism and group evaluations among minority and majority groups. In S. R. Levy & M. Killen (Eds.), *Intergroup attitudes and relations in childbood through adulthood*. Oxford: Oxford University Press.
- Verkuyten, M., & Thijs, J. (2001). Ethnic and gender bias among Dutch and Turkish children in late childhood: The role of social context. *Infant and Child Development*, 10, 203-217.
- Verkuyten, M., & Thijs, J. (2006). Ethnic discrimination and global selfworth in early adolescents: The mediating rol of ethnic self-esteem. International Journal of Behavioral Development, 30, 107-116.
- Zagefka, H., & Brown, R. (2005). Comparisons and perceived deprivation in ethnic minority settings. *Personality and Social Psychology Bulletin*, 31, 467-482.

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