Intergroup contact and prejudice between Dutch majority and Muslim immigrant youth in The Netherlands

Abstract

Objectives: This study deals with three relatively understudied issues in intergroup contact: negative contact, mediating mechanisms, and the minority perspective. Both direct and extended positive and negative contact experiences are included in the design. Intergroup anxiety is tested as a mediator between different forms of contact and prejudice, and status as majority Dutch or Muslim immigrant is used as a moderator.

Method: A sample of 317 majority Dutch (47.6 % female) and 369 Muslim immigrant youths (52.0 % female), ranging in age from 12 to 19 years completed self-reports about contact experiences, intergroup threat and prejudice.

Results: Results show that status as a majority Dutch or Muslim immigrant is a moderator in the relations between contact, intergroup anxiety and prejudice. In the majority sample, all forms of direct and extended contact were related to prejudice and mediated by intergroup anxiety in the expected directions. In the Muslim immigrant sample only positive contact was related to prejudice and mediated by intergroup anxiety in the expected direction.

Conclusions: Our results verify that negative contact, mediation, and majority or minority status are important variables in the study of intergroup contact.

Keywords: contact hypothesis; negative contact; extended contact; Muslim immigrant youth; intergroup attitude
Introduction

Allport’s contact hypothesis (Allport, 1954) states that contacts with individual members of an outgroup result in an emerging or steady positive attitude toward outgroup members. This paper deals with three challenges that have been identified regarding the contact hypothesis (Barlow et al., 2012; Hewstone & Swart, 2011; Techakesari, 2015; Pettigrew, 2008): a positivity bias, or the lack of attention for the role of negative intergroup contact experiences, a majority bias, or the dominant attention for the majority group with a lack of studies studying the role of intergroup contacts in minority groups, and the challenge of understanding the processes that underlie the relationship between intergroup contact experiences and intergroup attitudes. We consider both direct and extended contact in this study, and focus on a sample of Dutch majority and Muslim immigrant youth, who have been previously found to be prejudiced towards one another (Vedder, Wenink, & Van Geel, 2016; Velasco González, Verkuyten, Weesie, & Poppe, 2008)

Positive and Negative Contact Effects; Direct and Extended

Few studies have included the potential effects of negative intergroup contact (Hewstone & Swart, 2011). A study by Schmid, Tausch, Hewstone, Hughes, and Cairns (2008) considered the consequences of living in either religiously segregated or mixed areas in Northern Ireland. Here we focus on the findings in the mixed areas. Exposure to violence, i.e., negative contacts seemed to occur less than positive intergroup contact and did not overshadow the positive effects of contact. The positive contact experiences corresponded to positive outgroup attitudes (Schmid et al., 2008). More recently, opposite results were obtained by Barlow et al. (2012). In an Australian majority sample they found negatively valenced contact to be a stronger and more consistent predictor of race-based attitudes than positively valenced contact. Australians who experienced any positive contact with Black or
Muslim Australians or with asylum seekers appeared to be less prejudiced toward those outgroups, and the amount of positive contact actually seemed to matter less (Barlow et al., 2012). In a sample of White Americans Barlow et al. (2012) found that negative contact with Black Americans occurred less frequently than positive contact and was again more strongly linked to intergroup attitudes than positive contact. These findings were largely confirmed by Graf et al. (2014) who found that frequently reported positive contact was only weakly related with outgroup attitudes and scant negative contacts were more strongly related to outgroup attitudes. Techakesari et al. (2015) replicated the finding on the relative weight of positive and negative contact experiences in young adult samples in the US, Hong Kong, and Thailand.

Bekhuis, Ruiters, and Coenders (2013) measured positive and negative interethnic contact between ethnic minority and majority adolescent students in secondary schools in the Netherlands and found equally strong relations between contact experience, either positive or negative, and intergroup attitudes. Overall, though not many studies have been performed yet. Negative contact may at least be as important as positive contact in explaining prejudice, and further studies are warranted.

The concept of negative contact also deserves attention. It is a concept akin to perceived ethnic discrimination and racism (Jasinskaja-Lahtti, Mähönen, & Liebkind, 2011). Elsewhere (Vedder, et al., 2016) we argued that perceived discrimination in the Dutch context is mostly linked to derogation of immigrant and other minority groups. This considerably lowers its value for use in a study analyzing the role of mutual contact experiences between Dutch majority youth and immigrant youth. For the current study we decided to use a scale enquiring a broad variety of negative experiences that can be as easily applied with immigrant youth as it can with majority youth.
Another argument for clearly distinguishing between negative contact and perceived discrimination is that other scholars (Kanas, Scheepers, & Sterkens, 2015; Thomsen & Rafiqi, 2016) conceptualized person focused perceived discrimination as a moderator of the covariation between positive contact and intergroup attitudes. It might be confusing to use an operationalization of negative contact that can be interpreted as mere perceived discrimination.

Besides their own mix of positive and negative experiences with outgroup members people hear about the experiences of others. Being aware of an ingroup member having a close relationship with an outgroup member can lead to more positive outgroup attitudes (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Wright et al. (1997) demonstrated positive effects of extended contact experimentally, by creating cross-group friendships following a laboratory constructed intergroup conflict and by having participants assigned to minimal groups observe intergroup interactions. These results have been replicated in many contexts (Cameron & Rutland, 2006; Christ et al., 2010; Eller, Abrams, & Zimmermann, 2011; Gómez, Tropp, & Fernández, 2011; Paolini, Hewstone, Cairns, & Voci, 2004; Pettigrew, Christ, Wagner, & Stellmacher, 2007; Tausch, Hewstone, Schmid, Hughes, & Cairns, 2011; Turner, Hewstone, & Voci, 2007; Turner, Hewstone, Voci, & Vonofakou, 2008), so that overall, the effectiveness of extended contact for ameliorating intergroup attitudes is now well established (Dovidio, Eller, & Hewstone, 2011).

Pettigrew et al. (2007) explored the relationship between direct and indirect positive contact and showed that the two forms of contact are highly positively correlated. They are both negatively related to intergroup attitudes and together enhance the prediction of intergroup attitudes. However, there is evidence that direct contact with outgroup members has greater influence on outgroup attitudes (Gomez et al., 2011; Paolini et al., 2004, 2007).
and on the strength of those attitudes (Christ et al., 2010, study 1) than extended contact. Nevertheless, extended contact has many advantages. It makes improvements in intergroup relations less reliant on personal proximity. In some situations actual contact is too hard to establish due to, for instance, ethnic segregation between streets or neighborhoods. In those contexts extended contact may be very useful (Feddes et al., 2009; Tausch et al., 2011). Moreover, some forms of extended contact effects can be realized in a familiar setting like book stories or movies about intergroup friendships (e.g., Cameron & Rutland, 2006; Vezzali, Stathi, Giovannini, Capozza, & Trifiletti, 2015) and, hence, have good potential for prejudice reduction interventions.

Scant research is available on the possible disadvantageous effects of negative extended contact. Being aware of an in-group member having had a negative experience with an outgroup member may influence outgroup attitudes, in the same way the awareness of an indirect positive outgroup contact experience does. Observing or knowing about unfriendly or even hostile intergroup interactions between majority and immigrant Muslims is far from uncommon in the Netherlands (Boog, 2014; Savelkoul et al., 2011). The current study includes positive, negative, direct as well as extended intergroup contact experiences and aims to investigate their relationship with adolescents’ intergroup attitude.

**Majority and Minority Perspective**

In their meta-analytic study Tropp and Pettigrew (2005) reported 72.4% of the samples to include only measures among majorities, thereby demonstrating the relative scarcity of contact research on minorities. Comparing the findings for studies focusing on majority groups and those focusing on minority groups they concluded that effects of direct outgroup contact on prejudice are generally weaker for minorities than for majorities. Since then, this
difference has been replicated repeatedly (Binder et al., 2009; Feddes et al., 2009; Gomez et al., 2011). Because of their lower status in society, members of minority groups are more likely to anticipate and perceive prejudice and discrimination against them from members of majority groups, which may inhibit positive outcomes of intergroup contact (Tropp & Pettigrew, 2005).

Just as the relationship between positive intergroup contact and intergroup attitudes is not equally strong for minorities and majorities, the predictive value of negative intergroup contact for intergroup attitudes might differ between minorities and majorities (Barlow et al., 2012). The few studies that have investigated potential differences in effects of extended outgroup contact on outgroup attitudes suggest that there are equal effects across minority and majority groups (Feddes et al., 2009; Gomez et al., 2011; Wright et al., 1997). Hence, while direct contact effects are likely to diverge for minorities and majorities, extended contact effects seem to be comparable across minority and majority groups. A possible reason for the absence of or less pronounced divergence in explanatory power of extended contact experiences for the intergroup attitude between minority and majority members may be that second hand information about contacts is generally perceived as less trustworthy than information from personal, direct contacts (Fazio, Zanna, & Cooper, 1978; Gomez et al., 2011; Paolini et al., 2004, 2007).

**Explaining the Link between Intergroup Contacts and Intergroup Attitudes**

We already referred to Barlow and colleagues (2012) who suggested that positive as well as negative contact experiences may impact members of minority and majority groups differently. Contact may impact not only on intergroup attitudes, but also on possible mediators (Techakesari et al., 2015). Studies on positive contact suggest that the path from
contact to intergroup attitudes leads through intergroup anxiety: positive contact experiences predict a reduction in intergroup anxiety and an improved intergroup attitude (Kanas et al., 2015; MacInnis & Page-Gould, 2015). Similarly it can be expected that negative contact corresponds to more intergroup anxiety, which is predictive of worsening intergroup attitudes. Techakesari et al. (2015) actually replicated the mediating role of intergroup anxiety for both positive and negative contact experiences. We also try to replicate these findings and extend them in that the current study not only simultaneously focusses on positive and negative contact experiences, allowing a direct comparison of the role of anxiety as a mediator and its strength, but also compares direct contact with extended contact. In addition we study the moderating role of minority versus majority group. Perhaps minority groups are less than the majority group inclined to convert their negative experiences into negative attitudes toward the majority, because they are more experienced and have developed more skills in coping with negative intergroup experiences than majority group members (Vedder et al., 2016). It could also be that minority youths react more strongly on negative intergroup experiences, because they experience these as evidence for the prevailing negative attitude towards ethnic minority groups in Western societies (Kanas et al., 2015, Tropp, 2007; Velasco González et al., 2008).

**Current Study**

The current study focusses on the relationship between both positive and negative contact and intergroup attitudes and studies intergroup anxiety as a mediator between contact and intergroup attitudes. In addition it focuses on both direct and indirect contact and analyzes a sample of majority Dutch and Muslim immigrant adolescents. We hypothesize that positive and extended positive contact are negatively related to prejudice while negative contact and extended negative contact are positively related to prejudice (hyp.1). We expect
that intergroup anxiety will mediate the relations between (extended) negative or positive contact and prejudice (hyp. 2). Status as either a majority or Muslim immigrant is expected to moderate the relations for both the direct effects and the mediated effects; otherwise stated, we expect moderation and moderated mediation with stronger relations for the majority group than for the Muslim minority group (hyp. 3). The model of moderated mediation that we test in this study is depicted in Figure 1. All hypotheses will be tested simultaneously by testing this model.

Method

Participants

Participants were 840 students from 41 classes at six secondary schools in different parts of The Netherlands. Dutch majority adolescents completed questionnaires concerning their contact experiences with and attitudes toward Muslims, and Muslim immigrant adolescents completed similar questionnaires concerning the majority group. Students self-identified religion. For distinguishing immigrants from nonimmigrants they reported their country of birth and their parents’ country of birth. If one parent or the participant was born abroad the participant was considered an immigrant. Thirteen participants have been removed: one because the respondent identified as Muslim but was born in the Netherlands, as were the parents, one identified as both Christian and Muslim, four respondents completed the majority questionnaire but identified as immigrants, five students completed the Muslim questionnaire, but did not self-identify as Muslims, and two students wrote on the questionnaire that they had not completed the questions seriously. From the remaining 827, 141 students were removed who were neither majority, nor Islamic immigrant. Analyses have been conducted on data from 686 participants; 317 majority (age 12-19, \( M = 14.89 \) years, \( SD \)
= 1.39, 47.6 % female) and 369 Muslim immigrant youths (age 12-18, \( M = 14.63 \) years, \( SD = 1.43, 52.0 \% \) female). Most adolescents in the Muslim immigrant sample were born in The Netherlands (88.9%), and most often reported Turkish (54.5% of the fathers and 51.8% of the mothers) or Moroccan (29.0% of the fathers and 27.6% of the mothers) parents. For the Muslim sample, between 1.4 to 3.0 percent of the data was missing on dependent and independent variables, and for the Dutch sample between 0.6 and 3.2 percent of the data was missing on dependent and independent variables. Because missing data was limited, we used listwise deletion to deal with missing data (Allison, 2002), which led to the exclusion of 5.0 percent of the majority respondents and 4.1 percent of the Muslim immigrant respondents.

**Measures**

All the scales used in this study, except the extended positive and negative contact scales, had been used in a study to explain Dutch adolescents’ attitudes toward Roma (Ljubic, Vedder, Dekker, & Van Geel, 2013), and in a study to explain the reciprocal attitudes between Dutch majority and Muslim immigrant youth (Vedder et al., 2016). The original English scales were translated and linguistically adapted from English to Dutch using a translation – back translation protocol. In the Ljubic et al. (2013) study the scales were found to be unidimensional and reliable. Scalar measurement invariance for these scales was supported for both Dutch majority and Muslim immigrant youth (Vedder et al., 2016). The extended positive and negative contact scales have been developed for the purposes of this study, because we knew of no validated extended contact scales translated in Dutch. The Cronbach’s alphas for the current study are reported in Table 1.
**Positive contact.** Participants were asked how often they had had eight possible positive experiences with outgroup members (been treated friendly, complimented, greeted nicely, treated with respect, helped, treated as equals, accepted, invited) on a 4-point scale ranging from 1 (*never*) to 4 (*often*). Higher values represent more positive contact.

**Extended positive contact.** Extended positive contact was measured in the same way as positive contact, except that the question was how often other ingroup members (family, acquaintances, neighbors, friends, children in their school or (sports) club, etc.) had had those positive experiences with members of the outgroup.

**Negative contact.** Participants were asked how often they had had nine possible negative experiences with outgroup members (been unjustly criticized, rejected, harassed, treated as inferior, verbally insulted, threatened with violence, physically attacked, ridiculed and discriminated against) on a 4-point scale ranging from 1 (*never*) to 4 (*often*). Higher values indicate more negative contact.

**Extended negative contact.** Extended negative contact was measured in the same way as negative contact, except that the question was how often other ingroup members surrounding the participant (family, acquaintances, neighbors, friends, children in their school or (sports) club, etc.) had had those negative experiences.

**Intergroup anxiety.** Participants were asked how they would feel when interacting with a member of the other group and were presented 12 possible anxiety related feelings (apprehensive, friendly, uncertain, comfortable, worried, trusting, threatened, confident, awkward, safe, anxious, and at ease), response options ranged from 1 (*not at all*) to 5
These items were reverse scored when necessary and then averaged in order to form an intergroup anxiety index.

**Negative outgroup attitude.** Participants were asked to indicate the degree to which they felt 12 different evaluative or emotional reactions toward the outgroup (acceptance, admiration, disliking, sympathy, superiority, warmth, disdain, hatred, hostility, affection, rejection and approval) on a 5-point scale from 1 (not at all) to 5 (very much). Positive items were reverse scored and then all items were averaged. Higher values indicated a more negative attitude.

**Procedure**

Schools were recruited by email and phone. Data collection took place between November 2012 and March 2013 during regular school hours. A teacher and two research assistants were present in the classrooms. Prior to data collection children’s parents were sent a letter in which they had the opportunity to exclude their child from the study. Students were asked about their ethnicity and religion to decide which version of the questionnaire they should receive. Participants were assured that participation was voluntary and anonymous. They were told that they would take part in a study on intergroup relations and were asked to read the instructions carefully. It took respondents 30 to 40 minutes to complete the questionnaire. Participants received candy for participating.

**Results**

The means and standard deviations for the variables in this study are reported in Table 1. In Table 2, the Pearson correlations between the variables are reported. To test if reported intergroup contact differs between the majority and the Muslim immigrant sample, a
MANOVA was performed. The MANOVA revealed that group distinction was related to contact experiences and negative outgroup attitudes \( [\text{Wilks’ lambda } F(6, 629) = 25.359, p < .001, \eta^2 = .195] \). Majority youths scored higher on negative outgroup attitudes \( [F(1, 634) = 7.472, p = .006, \eta^2 = .01] \) and intergroup anxiety \( [F(1, 634) = 74.795, p < .001, \eta^2 = .106] \) than Muslim immigrants. Positive direct contact with the other group was reported significantly more in the Muslim sample than in the majority sample, \( [F(1, 634) = 101.073, p < .001, \eta^2 = .14] \). Positive extended contact with the other group was reported significantly more in the Muslim sample than in the majority sample, \( [F(1, 634) = 64.335, p < .001, \eta^2 = .09] \). Opposite results were found for negative direct and negative extended intergroup contact. Both were reported significantly more in the majority sample than in the Muslim sample, respectively \( [F(1, 634) = 38.140, p < .001, \eta^2 = .06] \) and \( [F(1, 634) = 11.362, p = .001, \eta^2 = .02] \).

**Testing for Moderated Mediation**

The model for moderated mediation that we tested is depicted in Figure 1. In this model, positive contact, extended positive contact, negative contact and extended negative contact were independent variables, status as majority Dutch or Muslim was a moderator variable, intergroup anxiety was the mediator and negative intergroup attitude was the dependent variable. All analyses were performed with PROCESS version 2.16 (Hayes, 2013). We tested for moderated mediation while including all independent variables simultaneously; as suggested by Hayes (2013), we used a common seed so that on each run the confidence intervals would be best on the same set of resamples. Bootstrapping was set to 10,000 resamples. We controlled for age and gender in the analyses.

We found significant indexes of moderated mediation for all independent variables; positive contact \( (b = .056, 95\% \text{ CI} = .015, .101) \), extended positive contact \( (b = .050, 95\% \text{ CI} = .020, .087) \), negative contact \( (b = -.060, 95\% \text{ CI} = -.101, -.027) \) and extended negative
contact \( (b = -0.050, 95\% \text{ CI} = -0.084, -0.025) \); this suggests that there is a conditional indirect
effect of intergroup anxiety on prejudice for each independent variable. Further probing of
conditional effects for positive contact revealed that intergroup anxiety was a stronger
mediator in the majority \( (b = -0.084, 95\% \text{ CI} = -0.131, -0.048) \) than in the Muslim \( (b = -0.028, 
95\% \text{ CI} = -0.059, -0.008) \) sample. With regard to positive contact, direct effects were significant
in both the majority \( (b = -0.266, 95\% \text{ CI} = -0.355, -0.177) \) and in the Muslim sample \( (b = -0.252, 
95\% \text{ CI} = -0.334, -0.171) \). The strength of the relationship was comparable between the two
groups. Further probing of the conditional effects for extended positive contact revealed that
intergroup anxiety was a mediator for the majority \( (b = -0.056, 95\% \text{ CI} = -0.093, -0.029) \) but not
for the Muslim adolescents \( (b = -0.006, 95\% \text{ CI} = -0.029, .015) \). The direct effects of extended
positive contact on negative intergroup attitude were significant in neither the majority \( (b = -0.048, 
95\% \text{ CI} = -0.131, .036) \) nor in the Muslim \( (b = -0.019, 95\% \text{ CI} = -0.096, .058) \) sample.
Further probing of the conditional effects for negative contact revealed that intergroup
anxiety was a mediator for the majority \( (b = 0.077, 95\% \text{ CI} = 0.045, .120) \) but not for the
Muslim adolescents \( (b =0.016, 95\% \text{ CI} = .004, .043) \). The direct effects of negative contact on
negative intergroup attitude were significant in neither the majority \( (b = 0.047, 95\% \text{ CI} = -0.036, .130) \) nor in the Muslim \( (b = 0.034, 95\% \text{ CI} = -0.048, .116) \) sample. Further probing of the
conditional effects for extended negative contact revealed that intergroup anxiety was a
positive mediator for the majority \( (b = 0.030, 95\% \text{ CI} = 0.008, .062) \) but a negative mediator for
the Muslim adolescents \( (b = -0.020, 95\% \text{ CI} = -0.046, -0.004) \). The direct effects of extended
negative contact on negative intergroup attitude were significant in neither the majority \( (b = 
0.054, 95\% \text{ CI} = -0.022, .130) \) nor in the Muslim \( (b = -0.045, 95\% \text{ CI} = -0.025, .116) \) sample.

High correlations between some of the study’s independent variables (see Table 2)
suggest that multicollinearity may have influenced the results. PROCESS does not provide
multicollinearity diagnostics. We therefore decided to run multiple regressions in SPSS in the majority and Muslim subsamples, and in a combination of both subsamples, using positive and negative contact, extended positive and negative contact, and intergroup anxiety as independent variables and negative outgroup attitude as dependent variable. In all analyses and for all included variables the VIF was lower than 3.00, and the tolerance was higher than .30, which suggests no problems with multicollinearity in our results. To re-establish the validity of the results we ran the analyses in PROCESS in which positive and extended positive contact were combined into a single variable, and wherein negative contact and extended negative contact where combined into a single variable. The results of this analysis again supported moderated mediation for both positive ($b = .072$, 95% CI = .016, .128) and negative contact ($b = -.068$, 95% CI = -.108, -.034); direct effects of positive and negative contact on negative outgroup attitude were similar between majority and Muslim adolescents, but for positive contact intergroup anxiety was a stronger mediator in the majority group, and for negative contact intergroup anxiety was only a significant mediator for the majority group. Overall these results were very similar to the results reported above wherein direct and extended contact effects were separated (see Table 3).

Taken together, our hypotheses were only partially supported. We only found a direct effect for direct positive contact (hyp 1), but we neither found direct effects for extended positive contact, nor for direct or extended negative contact. We also found no evidence for moderation by majority/minority status for the direct effect. In line with our hypotheses, intergroup anxiety mediated between any contact variable and negative intergroup attitude (hyp 2). We also hypothesized that all relations would be moderated, the direct as well as the mediated relations (hyp. 3). For the direct relations this hypothesis was rejected, but we indeed found evidence for mediated moderation. For positive contact, we found that
intergroup anxiety is a stronger mediator for the majority Dutch than for the Muslim minority. For extended positive contact and negative contact, the hypothesis of moderated mediation was supported. Intergroup anxiety was a significant mediator in the majority group, whereas in the Muslim sample the mediation was non-significant. For extended negative contact we found moderated mediation, but contrary to our expectations the mediated effect was positive in the Dutch sample, and negative in the Muslim sample.

**Discussion**

In this study we addressed three challenges to Allport’s contact hypothesis: a positivity bias, or the lack of attention for the role of negative intergroup contact experiences, a majority bias, or the dominant attention for the majority group with a lack of studies studying the role of intergroup contacts in minority groups and the comparability between majority and minority groups of the process that underlies the relationship between intergroup contact experiences and intergroup attitudes. Moreover, we looked at direct contacts and at extended contacts. We studied intergroup relationships between Dutch majority secondary school students and their classmates belonging to the Muslim minority in the Netherlands.

We hypothesized negative relations between direct and extended positive contact and negative intergroup attitude, and positive relations between direct and extended negative contact and negative intergroup attitude. We expected these relations to be mediated by intergroup anxiety. In the majority group, we found that positive contact was both directly related to negative intergroup attitude, and that the mediated pathway through intergroup anxiety was also significant. This suggests that for majority adolescents, reduced intergroup anxiety provides an explanation of why positive contact is related to lower negative intergroup attitude towards Muslims. For negative contact, and extended positive and
negative contact we found no direct effects between contact and negative intergroup attitude, but we did find that for all three forms of contact intergroup anxiety was a mediator between contact and negative intergroup attitude; all effects were in the expected direction. For these forms of contact, relations with negative intergroup attitude can be explained through higher (for direct and extended negative contact) or lower intergroup anxiety. Taken together, these results suggest that for the Dutch majority youth all forms of contact, positive, negative, direct, and extended, are uniquely related to negative intergroup attitude, and intergroup anxiety is a mediator for each form of contact. Mostly, this is well in line with what we already know; both positive and negative contacts have previously been found related to negative intergroup attitude (Barlow et al., 2012; Bekhuis et al., 2013; Graf et al., 2014; Techakesari et al., 2015). Our results add to a growing body of literature that points to the importance of also including negatively valenced contact (Christ et al., 2010, study 1; Gomez et al., 2011; Paolini et al., 2004, 2007).

A significant index of moderated mediation suggested that relations between variables were different between the two groups, and indeed, for the Muslim subsample the analyses showed different relations between contact, intergroup anxiety and negative intergroup attitude. In line with our hypotheses, positive contact was related to lower negative intergroup attitude in both the majority and the immigrant group and the strength of the direct relationship was comparable. This concurs with some studies (Thomsen & Rafiqi, 2016), but the fact that the direct relationship was comparably strong seems to conflict with studies that show that the direct relationship between positive contact and negative intergroup attitude is weaker in minority groups (Kanas et al., 2015). It is suggested that the strength of the relationship is weakened by experiences of group discrimination or widely spread negativity in society as regards the Muslim minority (Kanas, et al., 2016; Thomsen & Rafiqi, 2016;
Vedder et al., 2016). Moreover, in both groups intergroup anxiety was a mediator. The mediation, however, was stronger in the majority than in the Muslim immigrant group. The relatively high threat levels expressed by majority youth, may be easier to change by positive contacts with Muslim minority youth than vice versa. Other processes than threat reduction may play a more important role for the Muslim minority youth. We can but speculate about the type of processes, but likely candidates involve the actual improvement of their chances in society and change to the better in the Zeitgeist.

Negative contact and extended positive contact were not related to negative intergroup attitude in the Muslim sample, neither directly nor mediated through intergroup anxiety. This is not in line with our hypotheses, and stands in contrast to the results for the Dutch majority adolescents. A possible explanation may be related to the circumstance that interethnic friendships and casual contacts are more prominent in immigrant minority youths than in majority adolescents (Baerveldt, Zijlstra, De Wolf, Van Rossem, & Van Duijn, 2007). A negative contact for a Muslim adolescent could therefore perhaps be evaluated in the light of positive contacts with majority Dutch, cushioning or compensating the negative experience’s impact. A similar argument had been presented by Graf et al. (2014) who argued that the strength of negative contacts may be attenuated by the sheer abundance and availability of positive contacts. For a Dutch majority youth, however, the relatively rare (negative) contacts with Muslims, may have an important validating value for the overwhelming negativity about Muslims in the news media that we alluded to earlier. This would mean that a negative contact experience may have a relatively strong impact on majority youth’s intergroup anxiety and subsequently on their negative intergroup attitude. The weaker relationships in the Muslim immigrant sample may also be linked to a coping strategy in which minority youths do not blame themselves for negative intergroup
experiences, but blame others for being perpetrators and hence, feel less affected (Seaton, Caldwell, Sellers, & Jackson, 2010). To understand the findings on extended positive contact that did not explain variance in intergroup anxiety in the Muslim group, it seems important to realize that in the Netherlands, like in other parts of the Western world, Muslims are the focus of political debate and negative media attention. They are perceived negatively by a large percentage of the majority population (Vedder et al., 2016; Velasco Gonzalez et al., 2008). This overwhelming influence, by other scholars referred to as group discrimination (Dixon et al., 2010; Tropp, 2007) is so strong that extended positive contacts get overlaid by it. Thomsen and Rafiqi (2016) refer to this phenomenon as the constrained contact hypothesis. Moreover, the finding concurs with the suggestion by Fazio et al. (1978) that information based on extended contact experience is generally perceived as less trustworthy, thereby leading to weaker attitudes (cf., Christ et al., 2010, study 1; Gomez et al., 2011).

Extended negative contact was mediated by intergroup anxiety in relation to negative intergroup attitude, but in the Muslim immigrant sample the direction of the effect was negative. This was not in line with our hypothesis. We expected negative extended contacts to correspond to more intergroup anxiety and subsequently to a more negative intergroup attitude. Actually we found a weak correlation between extended negative contact and intergroup anxiety suggesting that the extended contact experience does not add much, if at all to the adolescents’ intergroup anxiety. We may repeat what we contended before that extended negative contact, adds little to the huge heap of negativity in the surrounding Zeitgeist. However this does not explain the negative effect; it would explain just a null effect. For the negative effect we need to take a further step. The negative relation could be due to a desensitization or flooding effect: the Zeitgeist is overwhelmingly filled with negativity and an incident of extended negative contact will not change this. It may just
signal that there is no direct threat. This allows Muslim immigrant youth to get used to the negative extended contact, hence, less anxiety and subsequently a less negative intergroup attitude. Another possibility is that the finding is caused by a third variable not included in our design, i.e., multiculturalism.

Multiculturalism combines the recognition of distinctiveness of cultures, national unity or social cohesion, and non-discrimination (Boog, 2014). Multiculturalism is supported stronger by immigrant youth than by Dutch majority youth (Van Geel & Vedder, 2011; Verkuyten & Martinovic, 2006). Verkuyten (2005) found that in the Netherlands immigrant minority adolescents’ preference for multiculturalism goes along with a stronger orientation and positive evaluation of the in-group. Multiculturalism is seen by these youths as a principle granting the right to cherish and celebrate the own group. Extended negative contacts perhaps are experienced as not painful but as an enticement or justification of a strong orientation toward the own group and as a reinforcement of the sense of multiculturalism. Multiculturalism becomes in this process a type of religion that is an emotional resource diminishing intergroup anxiety.

Our study has several limitations. We used self-reports to gather data. Paluck and Green (2009) have stressed the importance of considering behavioral measures of contact. A second limitation is that our study is cross-sectional, and thus we cannot draw conclusions about cause-and-effect. A third limitation is that our Muslim sample is quite varied in terms of ethnicity and generational status, including first and second generation immigrants, and among others children with Turkish, Moroccan, Afghan, and Iraqi backgrounds. All these children self-identified as Muslim, and it is a reasonable assumption that all these children feel to some extent the negative attitudes many majority members hold toward Muslims. However, these children are also from distinct cultural groups, and should preferably have
been studied separately. Another limitation becomes apparent when comparing the current study with designs used in other studies and with the findings in those studies. For instance, Stark, Flache, and Veenstra (2013) clarified that institutional settings like school classes have a leveling effect on respondents’ intensity of experiences and judgements when it comes to intergroup contacts and attitudes. This makes generalization of findings beyond the institutional setting problematic (cf., Graf et al., 2014).

We stated several challenges for the contact hypotheses, and tried to address these in our study. Even though not all of our hypotheses were supported, our results emphasize the importance of these challenges. Our study shows that what we know about contact among majority groups does not necessarily generalize towards a minority group. Because societies are becoming increasingly ethnically diverse knowledge about negative intergroup attitudes and its predictors among minority groups (Van Geel & Vedder 2009; Vedder & Phinney, 2014) will become increasingly important. Our study suggests that important conditions for intergroup contact vary between majority and minority groups. For instance, the positivity and intensity of contact is likely to be dampened for minorities, particularly Muslims by negativity toward minorities in the Zeitgeist. As a consequence such conditions are likely to be less effective for negative intergroup attitude reduction (Tropp & Pettigrew, 2005).
References


Gomez, A., Tropp, L. R., & Fernandez, S. (2011). When extended contact opens the door to future contact: testing the effects of extended contact on attitudes and intergroup


780. doi: 10.1002/(sici)1099-0992(199908/09)29:5/6<765::aid-ejsp958>3.0.co;2-j


Figure 1. Model of moderated mediation with intergroup anxiety as mediator of the relationship between contact and intergroup attitudes, and group as moderator.
### Table 1

*Means and Standard Deviations for the variables included in this study, as well as Cronbach’s alphas for the scales used*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Majority</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>positive direct outgroup contact</td>
<td>2.76</td>
<td>0.85</td>
<td>.91</td>
</tr>
<tr>
<td>negative direct outgroup contact</td>
<td>2.40</td>
<td>0.95</td>
<td>.93</td>
</tr>
<tr>
<td>positive extended outgroup contact</td>
<td>2.72</td>
<td>0.85</td>
<td>.93</td>
</tr>
<tr>
<td>negative extended outgroup contact</td>
<td>2.40</td>
<td>0.98</td>
<td>.95</td>
</tr>
<tr>
<td>Intergroup anxiety</td>
<td>2.62</td>
<td>0.81</td>
<td>.91</td>
</tr>
<tr>
<td>negative outgroup attitude</td>
<td>2.76</td>
<td>0.63</td>
<td>.84</td>
</tr>
<tr>
<td><strong>Muslim</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>positive direct outgroup contact</td>
<td>3.41</td>
<td>0.83</td>
<td>.91</td>
</tr>
<tr>
<td>negative direct outgroup contact</td>
<td>1.97</td>
<td>0.77</td>
<td>.89</td>
</tr>
<tr>
<td>positive extended outgroup contact</td>
<td>3.25</td>
<td>0.83</td>
<td>.93</td>
</tr>
<tr>
<td>negative extended outgroup contact</td>
<td>2.14</td>
<td>0.87</td>
<td>.93</td>
</tr>
<tr>
<td>Intergroup anxiety</td>
<td>2.12</td>
<td>0.71</td>
<td>.86</td>
</tr>
<tr>
<td>negative outgroup attitude</td>
<td>2.62</td>
<td>0.62</td>
<td>.77</td>
</tr>
</tbody>
</table>
Table 2

*Pearson correlations between the variables in the analyses. Correlations for the majority Dutch youth are reported under the diagonal, and correlations for the Muslim youth are reported over the diagonal.*

<table>
<thead>
<tr>
<th></th>
<th>1. positive contact</th>
<th>2. extended positive contact</th>
<th>3. negative contact</th>
<th>4. extended negative contact</th>
<th>5. intergroup anxiety</th>
<th>6. negative intergroup attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. positive contact</td>
<td></td>
<td>.677***</td>
<td>-.370***</td>
<td>-.254***</td>
<td>-.409***</td>
<td>-.493***</td>
</tr>
<tr>
<td>2. extended positive contact</td>
<td></td>
<td>.706***</td>
<td>-.257***</td>
<td>-.240***</td>
<td>-.320***</td>
<td>-.361***</td>
</tr>
<tr>
<td>3. negative contact</td>
<td></td>
<td>-.480***</td>
<td>-.394***</td>
<td>.611***</td>
<td>.233***</td>
<td>.266***</td>
</tr>
<tr>
<td>4. extended negative contact</td>
<td></td>
<td>-.391***</td>
<td>-.341***</td>
<td>.778***</td>
<td>.151***</td>
<td>.238***</td>
</tr>
<tr>
<td>5. intergroup anxiety</td>
<td></td>
<td>-.579***</td>
<td>-.531***</td>
<td>.558***</td>
<td>.477***</td>
<td>.386***</td>
</tr>
<tr>
<td>6. negative intergroup attitude</td>
<td></td>
<td>-.638***</td>
<td>-.537***</td>
<td>.504***</td>
<td>.465***</td>
<td>.622***</td>
</tr>
</tbody>
</table>

***p < .001
### Table 3

Regression coefficients and standard errors for the regression analyses

<table>
<thead>
<tr>
<th></th>
<th>Intergroup Anxiety</th>
<th>Negative Outgroup Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
</tr>
<tr>
<td>POSCONT</td>
<td>-.584***</td>
<td>.412</td>
</tr>
<tr>
<td>EXTPOSCONT</td>
<td>-.473***</td>
<td>.102</td>
</tr>
<tr>
<td>NEGCONT</td>
<td>.586***</td>
<td>.098</td>
</tr>
<tr>
<td>EXTNEGCONT</td>
<td>.374***</td>
<td>.093</td>
</tr>
<tr>
<td>INTGRANX</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Group x POSCONT</td>
<td>.214***</td>
<td>.062</td>
</tr>
<tr>
<td>Group x EXTPOSCONT</td>
<td>.221***</td>
<td>.061</td>
</tr>
<tr>
<td>Group x NEGCONT</td>
<td>-.247***</td>
<td>.059</td>
</tr>
<tr>
<td>Group x EXTNEGCONT</td>
<td>-.244***</td>
<td>.056</td>
</tr>
<tr>
<td>Group x INTGRANX</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note.* POSCONT = positive contact; EXTPOSCONT = extended positive contact; NEGCONT = Negative Contact; EXTNEGCONT = extended negative contact; INTGRANX = intergroup anxiety.

**$p < .01$. ***$p < .001$.**