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### Crossing Ethnic Boundaries: Parental Resistance to and Consequences of Adolescents' Cross-Ethnic Friendships

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# **Crossing Ethnic Boundaries**

Parental Resistance to and Consequences of  
Adolescents' Cross-Ethnic Peer Relations

Anke Munniksma

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CROSS-ETHNIC FRIENDSHIPS

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# Chapter 1

## Introduction: Crossing Ethnic Boundaries

### 1.1 Introduction

The last decades of the 20<sup>th</sup> century have been marked by a growth of the ethnic diversity in many Western countries, and this growth still continues. Even in the first ten years of the 21<sup>st</sup> century, ethnic diversity increased in the United States as well as in many European countries such as the Netherlands. Whereas the United States has a history of immigration starting in the 17<sup>th</sup> century, the racial and ethnic minority population<sup>1</sup> still grew from 31% to 36% between 2000 and 2010 (US Census, 2011). In the Netherlands, a country with a more recent immigration history, the ethnic minority population (including Eastern Europeans) grew from 20% to 22% between 2000 and 2010 (Statistics Netherlands, 2010). The recent growth of the ethnic minority population in the Netherlands is largely due to an increasing number of second-generation immigrants (SCP, 2012a). As a result of the increasing ethnic diversity, many Western countries have a more ethnically diverse school population than ever before. Currently in the United States, 46% of the persons under 18 have an ethnic or racial minority background (Logan & Stults, 2011), and in the Netherlands, 23% of the persons under 18 have an ethnic minority background (Statistics Netherlands, 2011). This societal development asks for insights into how ethnic diversity affects the lives of youth.

Regardless of the country in which children are born, children of parents who moved to a new country often grow up with two cultures (Sabatier, 2008; Zhou, 1997). On the one hand, the ethnic background culture is mainly practiced in the family context. On the other hand, the culture of the host society is practiced in public spheres like the school context. Given the rise in ethnic diversity of the school population, there is a growing body of elementary and middle school students with different ethnic backgrounds. This creates opportunities and challenges for societal ethnic majority and minority children and adolescents. Students in multi-ethnic schools can learn about different cultures and religions, and what it means to be part of a societal ethnic majority or minority group, but might also have to handle ethnic discrimination, intergroup conflict, or negative intergroup attitudes.

Whereas demographic trends show that societies as well as schools have become more ethnically diverse over time, research in the United States (Currarini, Jackson, & Pin, 2010; Moody, 2001; Quillian & Campbell, 2003), and in European countries (e.g., Titzmann, Silbereisen, & Schmitt-Rodermund, 2007), such as the Netherlands (Vermeij, van Duijn, & Baerveldt, 2009), shows that students tend to select same-ethnic peers as friends. To know whether this affects adolescents' social

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<sup>1</sup> American citizens other than non-Hispanic Whites are referred to as the racial and ethnic minority population.

development and wellbeing negatively or positively, an understanding of the (potential) role of cross-ethnic friendships in the lives of adolescents is important.

In what follows I discuss reasons for why same-ethnic friendships are more common than cross-ethnic friendships, and how (the lack of) cross-ethnic friendships may affect the psychosocial development of children and adolescents. Adding to this knowledge, this dissertation gives insight in the resistance of parents to their children's cross-ethnic peer relations, and on whether and how cross-ethnic friendships affect outgroup attitudes and psychosocial wellbeing of adolescents. First, to put the reasons for a lack of cross-ethnic friendships in a broader perspective, I discuss how whether adolescents have cross-ethnic friendships depends on their own preferences and to what extent this is affected by the social environment.

### **Resistance to Cross-Ethnic Peer Interaction**

To explain why adolescents tend to have more same-ethnic than cross-ethnic friendships at school, I use the framework of opportunities, preferences, and third parties, which was proposed by Kalmijn (1998) to identify potential predictors of cross-ethnic contact. First, whether students have cross-ethnic friends depends on the *opportunity structure*. In order to have cross-ethnic friends, cross-ethnic others should be available (Blau, 1977). This means that in order to engage in cross-ethnic friendships at school, ethnic diversity of the school is a prerequisite. Second, students often have a *preference* to affiliate with similar others (Byrne, 1971; McPherson, Smith-Lovin, & Cook, 2001) which makes same-ethnic friendship more likely than cross-ethnic friendship (Vermeij et al., 2009). The third element of the framework concerns *third parties* who are not directly part of the contact situation, but who affect the selection of same- or cross-ethnic friends. In the following I discuss how governments, schools, parents, and peers are important third parties who can affect opportunities, preferences or friendship selection.

Governments can affect students' opportunity structure for cross-ethnic friendships, for example by desegregation policies. In the United States these policies started in 1964 with the Civil Rights Act by which racial discrimination became illegal (Coleman et al., 1966; Logan, Oakley, & Stowell, 2006). Examples of school desegregation policies in the United States are bussing and admission quotas (termed 'controlled choice'). In the Netherlands, school desegregation policies were supported by the government in the first decade of the 21<sup>st</sup> century but limited to a few ethnically diverse municipalities (Bakker, 2012). The main strategies in those municipalities were admission quotas (controlled choice) and agreements between municipalities and schools to distribute students with different ethnic backgrounds equally across schools (Onderwijsraad, 2005). However, due to the absence of scientific support for a positive effect of ethnically mixed schooling on school performance, the Dutch government decided in 2011 that school desegregation was not a priority anymore. Hence, no more money was invested in new forms of desegregation policies (Bakker, 2012).

Additionally, schools can affect whether students have cross-ethnic friendships in several ways. First, schools can affect the opportunity structure by selective student admission and by class composition. Selective student admission of schools is one of the causes of ethnic segregation between schools (Bakker, 2012). Ethnically diverse schools can also affect cross-ethnic contact opportunities by ethnic class composition. If schools assign students to school classes so that the ethnic groups within school classes are most equal in size, they create the highest opportunities for cross-ethnic friendships. Second, how schools deal with ethnic diversity can affect the ethnic integration of the school population. This has been studied widely by researchers in the field of intergroup contact. One of the pioneers in this field, Allport (1954), formulated four conditions that facilitate the positive impact of intergroup contact on intergroup attitudes: (1) status equality; (2) intergroup cooperation; (3) sharing common goals; and, (4) authority support (Pettigrew, 1998). Pettigrew and Tropp (2006) showed with a meta-analysis that these conditions indeed facilitate, but are not essential for a positive effect of intergroup contact on outgroup attitudes. Regarding cross-ethnic friendships, Moody (2001) showed that in schools that create the optimal intergroup contact conditions, ethnic segregation within friendship networks was less pronounced.

Parents are also third parties who can affect whether their children have cross-ethnic friendships. First, parental school choice affects opportunities for cross-ethnic friendships. Studies on school choice in the United States (Bifulco, Ladd, & Ross, 2009), and in the Netherlands (Karsten, Ledoux, Roeleveld, Felix, & Elshof, 2003), show that majority group parents often choose white schools for their children. Additionally, studies on intermarriage (Tolsma, Lubbers, & Coenders, 2008) and peer relations (Updegraff, Kim, Killoren, & Thayer, 2010) indicate that some parents prefer their children to affiliate with same-ethnic peers. These parental preferences have been shown to affect their children's cross-ethnic friendships by the messages parents send to their children (Edmonds & Killen, 2009). Hence, parents seem important parties who can influence the extent to which adolescents meet and form friendships with cross-ethnic peers.

Peers can also be third parties that affect whether adolescents have cross-ethnic friendships. Studies on peer influence show that peers set norms for behaviors and opinions like the expression of (anti-)racist opinions and of prejudice (Blanchard, Lilly, & Vaughn, 1991; Crandall, Eshleman, & O'Brien, 2002). Regarding cross-ethnic friendships, it has been shown that peers also set norms for same- or cross-ethnic friendships. For example, cross-ethnic friendships of ingroup friends (extended contact) tend to improve students' outgroup attitudes (Turner, Hewstone, Voci, Paolini, & Christ, 2007) and leads to more positive intentions toward future outgroup contact (Cameron, Rutland, Hossain, & Petley, 2011).

Thus, governments, schools, parents and peers can have an influence on whether adolescents have more same-ethnic or cross-ethnic friendships at school. When the government decides not to invest in desegregation strategies, and majority

group parents have a resistance to ethnically diverse schools, this might result in ethnic school segregation. Additionally, school policies and parental preference for same-ethnic peer relations may affect whether students have same- or cross-ethnic friendships. Given the discussion in for example the Netherlands about whether governments should invest in desegregation policies and given that some parents feel a resistance to cross-ethnic friendships, it seems important to know what the role of cross-ethnic friendships are in the lives of children and adolescents that grow up in ethnically diverse societies to further our understanding of the consequences of ethnic diversity. If cross-ethnic friendships positively affect the development of adolescents, then there are reasons for governments, schools and parents to encourage (instead of discourage) adolescents' peer relations that cross ethnic boundaries.

## **1.2 This Dissertation**

This dissertation focuses on parental resistance to cross-ethnic friendships, and the significance of cross-ethnic friendships in the lives of adolescents. The different chapters aim to address different gaps in the literature regarding the current state of knowledge and theory formation. Based on the three strands of literature to which the chapters contribute, the dissertation can be divided in three parts. The first part focuses on parental resistance to cross-ethnic relations. It is investigated why some parents have a resistance to cross-ethnic relations of their children during adolescence. The second part of this dissertation focuses on cross-ethnic friendships and outgroup attitudes. Adding to the social identity and the intergroup contact literature, the role of group identification in the relation between same- and cross-ethnic friendships and outgroup attitudes is examined. Next, adding to research on extended intergroup contact, conditions are studied under which (next to direct cross-ethnic friendships also) cross-ethnic friendships of ingroup friends (extended contact) improve outgroup attitudes. The third part of the dissertation focuses on cross-ethnic friendships and psychosocial wellbeing. Adding to the intergroup contact literature that mainly focused on whether and how intergroup contact improves outgroup attitudes, it is investigated whether cross-ethnic friendships are associated with greater sense of social-emotional safety for societal minority and majority students. Furthermore, it is examined whether classroom ethnic diversity affects feelings of vulnerability through cross-ethnic friendships at the individual and at the classroom level, and whether there are unique effects of same- and cross-ethnic friendships on students' psychosocial wellbeing.

In the remainder of this introductory chapter I discuss how the different parts of this dissertation add to the current knowledge regarding these three topics. In this overview I will point out unresolved problems in the literature that will be addressed in this dissertation. Last, I present the data sources that are utilized in this dissertation and give an outline of how the research is presented in the different chapters in this book.

## **1.3 Parental Resistance to Cross-Ethnic Relations**

Studies that looked into parental resistance of cross-ethnic contact showed that par-

ents prefer same-ethnic marriage partners for their children. This has been observed among majority (Huijnk, Verkuyten, & Coenders, 2012; Tolsma et al., 2008) as well as minority groups (Hegar & Greif, 1994). Furthermore, it has been documented among Mexican-American families that parents are in particular supportive of their children's friendships with peers who are, like themselves, involved in the Mexican culture (Updegraff et al., 2010). This indicates that parents often prefer same-ethnic to cross-ethnic peer relations.

Previous research found that parents have an influence on friendship selection of adolescents (Knoester, Haynie, & Stephens, 2006; Warr, 2005) in relation to deviant behavior, academic performance, and prosocial behavior of friends. Regarding cross-ethnic contact, studies on school choice (and the white flight phenomenon) show that ethnic majority group parents restrict cross-ethnic friendship opportunities of their children by choosing ethnically homogeneous schools for their children (Karsten et al., 2003). Furthermore, Edmonds and Killen (2009) showed that parental messages about cross-ethnic contact were related to students' cross-ethnic friendship and dating experiences. Less is known about *why* parents have a resistance to their children's cross-ethnic peer relations. Studies on parental acceptance of interethnic marriage found that economic competition, religiosity (Tolsma et al., 2008), and also concerns about how culturally dissimilar others might undermine family cohesion and family functioning affect parental ingroup preference (Huijnk et al., 2012). In addition, Updegraff and colleagues (2010) found that parents prefer that their children spend time with peers who are culturally similar to their own family, indicating that cultural similarity plays a role in parental acceptance of cross-ethnic friendships. Whereas there is evidence of parents' resistance to their children's cross-ethnic peer relations, relatively little is known about differences between groups in parental resistance to cross-ethnic relations, and little is known about the underlying reasons for this resistance. Hence, Chapter 2 examines why parents may show resistance to cross-ethnic friendships and how this may differ between different cultural groups. In what follows, I discuss whether the (presumably) good intentions of parents, regarding same- and cross-ethnic contact, are in favor of the wellbeing of adolescents or whether a lack of cross-ethnic contact and friendships might, instead, have adverse effects.

#### **1.4 Cross-Ethnic Friendships and Outgroup Attitudes**

The intergroup contact literature, stemming largely from the work of Allport (1954), has shown that contact with members of other ethnic groups improves outgroup attitudes (Pettigrew & Tropp, 2008). Intergroup contact has been examined in various ways ranging from the mere exposure to ethnic outgroup members in terms of ethnic diversity of contact situations to actual positive relationships like cross-ethnic friendships. Whereas the effect of ethnic diversity on outgroup attitudes has been shown to be absent or weak in some studies (Pettigrew & Tropp, 2006) more intimate forms of contact improve attitudes toward outgroups more strongly (Davies, Tropp, Aron, Pettigrew, & Wright, 2011).

The theoretical account behind the intergroup contact hypothesis (Allport, 1954; Pettigrew, 1998) is that contact with other ethnic groups provides individuals with information that disconfirms their stereotypes about those groups, which leads to more positive outgroup attitudes and behaviors. Additionally, it has been shown that contact with outgroup members improves outgroup attitudes because it reduces intergroup anxiety, and increases empathy and perspective taking (Pettigrew & Tropp, 2008). According to social identity theory (Tajfel & Turner, 1979) group identification also affects outgroup attitudes. When people identify with a certain group they will think more positively about the ingroup than about outgroups on dimensions that mark group differences in favor of the ingroup. Based on social identity theory, Gaertner and colleagues (1993) proposed the common ingroup identity model. According to this model, more inclusive group representations in which members of subgroups identify with a superordinate category, lead to more positive intergroup attitudes.

Ethnic minority members can identify with their ethnic ingroup as well as with the wider society. These group identifications reflect what has been theorized in the common ingroup identity model. Although this is theoretically as well as societally relevant in light of the integration debate, it has not been investigated whether cross-ethnic friendships with majority group members improve outgroup attitudes through host society identification among minority group members. Hence, the study presented in Chapter 3 adds to the previous studies that examined cognitive and affective mediators of the relationship between intergroup contacts and outgroup attitudes (Pettigrew & Tropp, 2006; Swart, Hewstone, Christ, & Voci, 2011) by proposing identification with the host society as an additional mediator of this relation. Next to examining, in line with previous studies, how cross-ethnic friendships affect outgroup attitudes, Chapter 3 also examines whether same-ethnic friendships affect outgroup attitudes. People with an immigrant background are confronted with bicultural worlds (Ryder, Alden, & Paulhus, 2000) in which they can socialize and identify with the ethnic ingroup as well as with the host society (Berry, 1997; Ryder et al., 2000; Verkuyten & Yildiz, 2007). Accordingly, in Chapter 3, pathways of how same-ethnic and cross-ethnic friendships affect group identifications and outgroup attitudes are proposed and examined among adolescents with an ethnic minority background in the Netherlands.

Building on intergroup contact theory (Allport, 1954; Pettigrew, 1998) which states that intergroup contact affects outgroup attitudes, the extended contact hypothesis (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997) states that even knowing an ingroup member who has outgroup contact (that is, extended intergroup contact) can improve outgroup attitudes. Extended cross-ethnic contact can lead to more positive outgroup attitudes, even among students without direct cross-ethnic friendships (Feddes, Noack, & Rutland, 2009; Turner et al., 2007). Several studies have addressed the questions of whether and why extended cross-ethnic friendships improve outgroup attitudes, and a smaller number of studies examined individual characteristics that

moderate extended cross-ethnic contact effects (Christ et al., 2010; Paolini, Hewstone, & Cairns, 2007; Tausch, Hewstone, Schmid, Hughes, & Cairns, 2011). To expand the knowledge about the conditions under which extended cross-ethnic contact improves outgroup attitudes, Chapter 4 examines whether initial outgroup attitudes (when students enter middle school) and direct cross-ethnic friendships moderate the effect of extended cross-ethnic friendships on outgroup attitudes. Additionally, taking a social network perspective, Chapter 4 elaborates upon existing measurements of extended cross-ethnic friendships. Previous studies that investigated extended cross-ethnic friendships within social settings by use of survey measures might have misclassified situations where extended cross-ethnic friendships were not truly extended, because individuals who have extended cross-ethnic friendships are often also friends with the cross-ethnic friend of their ingroup friend. Based on this notion it is argued that a more sophisticated measure is needed to measure extended intergroup friendships within small social settings like school classes. Additionally, from a social network perspective an alternative extended contact hypothesis is proposed about extended cross-ethnic friendships having adverse effects within small social settings. In Chapter 4, the effects of direct and extended cross-ethnic friendships on outgroup attitudes are studied among native Dutch students who attend ethnically diverse middle schools in the Netherlands.

### **1.5 Cross-Ethnic Friendships and Psychosocial Wellbeing**

The intergroup contact literature mainly focuses on how intergroup contact affects outgroup attitudes among ethnic majority groups. Additionally, Tropp and Pettigrew (2005b) as well as Swart and colleagues (2011) show that the effect of intergroup contact on outgroup attitudes is stronger for majority groups than for minority groups. Research on ethnic hierarchies in the Netherlands indicates that the Dutch feel a larger distance to Turks, than Turks feel toward the Dutch (Verkuyten & Kinket, 2000). This might indicate that cross-ethnic friendships between minority and majority group members have different meanings for both groups. Tropp and Pettigrew (2005b) argued that, because minority members are more often stigmatized by the majority group than the other way around, friendships between the two groups reduce stereotypes among majority group members in particular. Following this argumentation, it is investigated in the third part of this dissertation (Chapter 5 and 6) whether ethnic diversity and cross-ethnic friendships might in particular reduce feelings of being stigmatized and feeling vulnerable for minority as opposed to majority group members.

To relate to the intergroup contact literature, and the varying levels of intimacy of cross-ethnic contact that have been examined, I first discuss consequences of ethnic diversity and thereafter I discuss how cross-ethnic friendships might be related to aspects of psychosocial wellbeing. Whereas there has been a long tradition of research on whether and how ethnic diversity affects outgroup attitudes, more recently scholars started to look at how ethnic diversity is related to other aspects of life. For

example, ethnic diversity has been shown to be related to academic performance in some schools (Konan, Chatard, Selimbegović, & Mugny, 2010). Higher proportion of majority group members at Dutch elementary schools has been shown to be related to fewer experiences with ethnic victimization among majority group members but to more experiences among ethnic minority students (Verkuyten & Thijs, 2002). Higher proportions of minority students in Belgian (Flemish) elementary schools were related to less peer victimization among minority but not among majority students (Agirdag, Demanet, Van Houtte, & Van Avermaet, 2011). Furthermore, ethnic diversity of middle schools in the United States has been documented to be related to lower reports of feeling vulnerable among Latino and African-American students (Juvonen, Nishina, & Graham, 2006). When more groups were more equal in size, as measured by the Simpson (1949) diversity index, students indicated to feel safer, to feel less lonely and to be less peer victimized. Juvonen, Nishina, and Graham (2006) argued that when groups were more equal in size, there would be a balance in power that would be related to a stronger sense of safety and social satisfaction at school among ethnic minority groups. Stark (2011) argued that in order to examine the effect of classroom ethnic composition on outgroup attitudes, interpersonal relations within this context need to be taken into account. Also, when there are more groups, and when those groups are more equal in size, the chances of cross-ethnic friendships are more likely (when not taking into account students' preferences and the influence of for example parents). This raises the question whether the effect of ethnic diversity on psychosocial wellbeing could actually be explained by the existence of cross-ethnic friendships.

There is an emerging body of research that looked into the psychosocial outcomes of cross-ethnic friendships. It has been demonstrated that cross-ethnic friendships are associated with improved academic motivation and performance (Hallinan & Williams, 1989; Newgent, Lee, & Daniel, 2007), with decreased intergroup anxiety among college students (Levin, van Laar, & Sidanius, 2003; Page-Gould, Mendoza-Denton, & Tropp, 2008; Turner et al., 2007) better social skills among ethnically diverse elementary school children (Hunter & Elias, 1999; Kawabata & Crick, 2008; Lease & Blake, 2005) less relational victimization and higher peer support over time at elementary school among varying ethnic groups (Kawabata & Crick, 2011).

Whereas research on the effects of intergroup contact on outgroup attitudes showed differences in this relation between minority and majority members (Pettigrew & Tropp, 2006), studies on the relation between cross-ethnic friendships and psychosocial wellbeing has not studied these group differences. Hence, adding to the emerging body of research on the psychosocial benefits of ethnic diversity and cross-ethnic friendships, Chapter 5 examines whether cross-ethnic friendships are related to decreased vulnerability in terms of sense of social-emotional safety among minority and majority group members.

Adding to the findings of Chapter 5, Chapter 6 examined whether the existence of cross-ethnic friendships explains why classroom ethnic diversity is related to a

decrease in feelings of vulnerability among minority group members. Juvonen and colleagues (2006) found that higher classroom ethnic diversity was related to decreased feelings of vulnerability for Latino and African-American students. Higher classroom ethnic diversity, in terms of more ethnic groups being balanced in size, also provides increased opportunities for cross-ethnic friendships. Hence, it could be that higher ethnic diversity is related to more cross-ethnic friendships, which in turn is related to decreased feelings of vulnerability. Whereas there are several studies on the psychosocial correlates of cross-ethnic friendships, there is a lack of research that examined the longitudinal affects (two exceptions: Kawabata & Crick, 2011; McGill, Way, & Hughes, 2012). Chapter 6 examines whether cross-ethnic friendships are related to a decline in feelings of vulnerability with a lagged longitudinal design. Furthermore, previous studies on cross-ethnic friendships have not distinguished individual versus classroom effects. Hence Chapter 6 investigates whether friendships that cross ethnic boundaries are associated with reduced feelings of vulnerability for the whole classroom or in particular for those students who take up those friendships.

### **1.6 Data**

The empirical chapters in this dissertation are based on four different data sources. Table 1.1 gives an overview of the data that are utilized to examine the research questions. To answer the research questions in Chapter 2 regarding parental acceptance of their children's cross-ethnic friendships, I designed The Arnhem Parents Project. Chapters 3 to 6 focus on cross-ethnic friendships of adolescents in multi-ethnic middle schools and make use of data from The Arnhem School Study in the Netherlands (Stark, 2011; Stark & Flache, 2012), and the Santa Monica School Study and the UCLA Peer Relations Project (Bellmore, Witkow, Graham, & Juvonen, 2004) in the United States.

Chapter 2 aimed to investigate parental acceptance of their children's cross-ethnic friendships among Turkish and Dutch parents. Because no dataset was available to examine the research questions of this study, I designed The Arnhem Parents Project as a component of The Arnhem School Study (discussed below). Parents ( $N = 150$ ) who had children (age 12-13) in their first year of middle school were selected for an interviews. Their children were part of The Arnhem School Study and the parents were asked questions about their views on their children's cross-ethnic peer relations. To examine the role of family reputation in parental acceptance of their children's cross-ethnic contact I developed a measure for family reputation (described in Chapter 2). To compare parental acceptance of their children's cross-ethnic relations between two ethnic groups, Turkish-Dutch and native Dutch parents were selected for the analyses in Chapter 2.

Chapters 3, 4, 5, and 6 rely on data gathered among adolescents during their first years of middle school. This is a relevant time period to examine the research questions because the transition to middle school involves meeting new peers who have an influence on outgroup attitudes (Raabe & Beelmann, 2011) and it involves

making new friends (Hardy, Bukowski, & Sippola, 2002) who are likely to affect outgroup attitudes (Poteat, 2007; Raabe & Beelmann, 2011) and identity formation (Meeus, 2011). Next to the focus on the first middle school years, the datasets all made use of peer nominations within the school class or within the grade to assess friendships. Because their peers at school also filled out questionnaires, I was able to identify whether friendships were same-ethnic or cross-ethnic. This was essential to examine the effects of same- and cross-ethnic friendships. Next, I will discuss per chapter what the additional reasons were for choosing the different datasets.

Chapters 3 and 4 aimed to examine whether and how same-ethnic and (extended) cross-ethnic friendships affected outgroup attitudes. The Arnhem School Study was used for this. The Arnhem School Study (TASS: Stark, 2011; Stark & Flache, 2012) is a four-year longitudinal study that followed pre-adolescents during their last two years of elementary school (3 waves,  $N \approx 750$ , ages 11 to 12) and their first two years of middle school (four waves,  $N \approx 1200$ , ages 12 to 14). The goal of TASS was to get insight in the ethnic integration of pre-adolescents in the city of Arnhem in the Netherlands. The middle school data of TASS was selected to examine the research questions of Chapter 3 and 4 because it offered longitudinal data on full friendship networks, outgroup attitudes and group identification during the first year of middle school. These data allowed us to test our research questions in Chapters 3 and 4 with lagged designs to examine the causality of hypothesized relations.

Chapter 5 aimed to examine whether cross-ethnic friendships are related to social-emotional safety for minority but not for majority students. The Santa Monica School Study ( $N \approx 328$ ) offered data to explore this. The goal of this short-term longitudinal study was to examine how pro- and anti-social relations at school affect psychosocial wellbeing of students (age 11-12). This dataset was suitable to examine the research questions in Chapter 5 because of the ethnic distribution of this specific school in which Latino (47%) and White (34%) students represent the two numerical majority groups with similar representation. Hence, the relative size of the groups within the school is not a confounder in the comparisons between a numerical societal majority (Whites) and a societal minority group (Latinos). Also, to examine the hypotheses of Chapter 5 this dataset offered data on friendships and perceived sense of social-emotional safety.

Chapter 6 aimed to study effects of classroom ethnic diversity and same- versus cross-ethnic friendships on psychosocial wellbeing among ethnic minority students during their first year of middle school. The UCLA Peer Relations Project offered suitable data for this. The UCLA Peer Relations Project is a three-year longitudinal study that followed 2300 middle school students (ages 11-13) from 99 school classes of 11 middle schools in Greater Los Angeles. The goal of the UCLA Peer Relations Project was to study peer relationships among middle school students from 6<sup>th</sup> through 8<sup>th</sup> grade. This data set was used in Chapter 6 because it offered measures of psychosocial wellbeing and because it was highly suitable to examine the ethnic diversity effects because the school classes ranged from very low to very high diversity.

**1.7 Outline of the Book**

This dissertation sheds light on why some parents show resistance to their children's outgroup relations in Chapter 2. Next, adding to the literature on intergroup contact and outgroup attitudes Chapter 3 adds to the current knowledge on the mechanisms underlying the relation between cross-ethnic friendships and outgroup attitudes. Also, adding to the more recent extended intergroup contact literature, Chapter 4 adds to the knowledge on conditions under which extended intergroup friendships affect outgroup attitudes. Next to consequences of cross-ethnic friendships in terms of improved outgroup attitudes, this dissertation adds to the current knowledge on whether cross-ethnic friendships is related to psychosocial wellbeing in Chapter 5 and 6. Taken together, this dissertation gives insight into the resistance to and the significance of cross-ethnic friendships in the lives of adolescents. In the last chapter I summarize the new insights of this dissertation. This last chapter will give an overview of the main findings, the implications for practice and future studies, and future ideas for research.

**Table 1.** Overview of the Empirical Chapters

Chapter	Main Research Questions	Data and Analyses	Ethnic distribution
2	<p>Do ethnic groups differ in parental acceptance of their children's intimate cross-ethnic relations?</p> <p>What is the role of perceived family reputation vulnerability and religiosity in parental acceptance of their children's cross-ethnic relations?</p> <p>Does parental acceptance of their children's cross-ethnic relations differ for different outgroups?</p>	<p>The Arnhem Parent Project, the Netherlands</p> <p>First year middle school</p> <p>Multiple regression analyses</p>	<p>Sample: 49% Dutch, 33% Turkish, 19% other</p> <p>Selected subsample: Dutch and Turkish parents</p>
3	<p>Does identification with the host society mediate the relation between majority group friendships and outgroup attitudes?</p> <p>Does ethnic ingroup identification mediate the relation between ethnic ingroup friendships and outgroup attitudes?</p>	<p>The Arnhem School Study, the Netherlands</p> <p>First year middle school</p> <p>Structural equation modeling</p>	<p>Sample: 68% Dutch, 9% Turkish, 3% Moroccan, 20% other</p> <p>Selected subsample: Students with both parents born in another country than the Netherlands</p>
4	<p>Is the extended contact effect stronger for those who initially have a relatively unfavorable outgroup attitude?</p> <p>Do extended cross-ethnic friendships improve outgroup attitudes in particular for students who do not have direct cross-ethnic friendships?</p> <p>Can contact that takes place <i>within</i> a social setting also be associated with <i>less</i> favorable outgroup attitudes instead of more positive attitudes?</p>	<p>The Arnhem School Study, the Netherlands</p> <p>First year middle school</p> <p>Multilevel analyses</p>	<p>Sample: 68% Dutch, 9% Turkish, 3% Moroccan, 20% other</p> <p>Selected subsample: Dutch students</p>
5	<p>Are cross-ethnic friendships (and not same-ethnic friendships) associated with greater sense of social-emotional safety in multi-ethnic middle schools?</p> <p>Are cross-ethnic friendships related to sense of social-emotional safety among ethnic minorities but not among ethnic majority students?</p>	<p>The Santa Monica School Study, the United States</p> <p>First two years middle school</p> <p>Regression analyses</p>	<p>Sample: 41% Latino, 32% White, 8% African-American, 6% Asian, 3% other, 11% multiracial</p> <p>Selected subsample: Latino and White students</p>
6	<p>Are same- versus cross-ethnic friendships uniquely related to aspects of psychosocial wellbeing of minority students in multi-ethnic schools?</p> <p>Do cross-ethnic friendships explain why ethnic diversity is related to decreased feelings of vulnerability?</p> <p>Do cross-ethnic friendships decrease feelings of vulnerability for the whole classroom or only for students who have cross-ethnic friendships?</p>	<p>The UCLA Peer Relations Project, the United States</p> <p>First year middle school</p> <p>Multilevel structural equation modeling</p>	<p>Sample: 46% Latino, 29% African-American, 9% Asian, 9% Caucasian, 7% multiracial</p> <p>Selected subsample: Latino and African-American students</p>

## Chapter 2

### Parental Acceptance of Children's Cross-ethnic Relations: The Role of Culture, Status, and Family Reputation

Research on adolescents' cross-ethnic relations indicates that there are parents who have a resistance to their children's cross-ethnic relations. However, there is little insight into the underlying reasons for this. This chapter examines how ethnic groups differ in parental acceptance of their children's cross-ethnic relations, and it examines the role of perceived family reputation vulnerability as well as parents' religiosity. In addition, it was investigated whether parental acceptance of cross-ethnic relations differs for different outgroups. This was studied among Turkish ( $n = 49$ ) and Dutch ( $n = 73$ ) parents of first grade middle school students. Parental acceptance of cross-ethnic relations was lower among Turkish-Dutch than among Dutch parents. This difference was explained by group differences in perceived family reputation vulnerability and religiosity. It is concluded that concerns about culture transmission and family reputation are related to parental acceptance of cross-ethnic relations, which explains differences in parental acceptance between cultural groups. In addition, status considerations seem to explain differences in parental acceptance of their children's close contacts with different outgroups.

A slightly different version of this chapter is published as: Munniksma, A., Flache, A., Verkuyten, M., & Veenstra, R. (2012). Parental acceptance of children's intimate ethnic outgroup relations: The role of culture, status, and family reputation. *International Journal of Intercultural Relations*, 36, 575-585.

## **2.1 Introduction**

Although multi-ethnic schools are an important arena for adolescents' cross-ethnic peer relations, research typically found ethnic segregation in friendship networks in these schools (Baerveldt, Van Duijn, Vermeij, & Van Hemert, 2004; Moody, 2001; Quillian & Campbell, 2003). Ethnic school composition and school policies affect cross-ethnic relations within school classes (Goldsmith, 2004; Moody, 2001; Stearns, 2004). In addition, parents might have an influence on their children's outgroup attitudes and on close peer relations in particular (Edmonds & Killen, 2009). Research on school choice (Bifulco et al., 2009; Karsten et al., 2003), outgroup marriage (Tolsma et al., 2008), and dating (Miller, Olson, & Fazio, 2004) shows that parents often resist the idea of their children having intimate relations with peers of other ethnic groups. In addition, Edmonds and Killen (2009) found that perceived parental attitudes toward cross-ethnic contacts affect adolescents' friendships and dating behavior.

Whereas there is evidence of parents' resistance to their children's relations with ethnic outgroup peers, there is relatively little understanding of the underlying reasons why some parents show more resistance than others. The current study examines ethnic group- differences in parental acceptance of close and intimate cross-ethnic relations, and whether these differences can be explained by parents' perceived family reputation vulnerability and religiosity. Family reputation vulnerability refers to the degree to which parents perceive that the reputation of their family is affected negatively when their children deviate from ingroup norms. Religiosity captures the extent to which parents practice their religion in daily life. To assess parental acceptance of their children's cross-ethnic relations and the role of family reputation and religion, we compare Turkish-Dutch and native Dutch parents in the Netherlands. Native Dutch parents belong to the ethnic majority group, whereas the Turkish-Dutch are the largest non-western ethnic minority group in the Netherlands. In addition, we assess whether acceptance of cross-ethnic contact differs depending on the target group. For the native Dutch parents in our study the ethnic outgroups are peers of Turkish and Moroccan origin, and for the Turkish-Dutch parents the outgroups are native Dutch and Moroccan peers.

### **2.1.1 Parental Acceptance of Intimate Cross-Ethnic Relations**

Perceptions of cultural differences between ethnic groups can be a reason for parents to prefer same-ethnic over cross-ethnic contacts for their children. This is in line with the homophily principle (Lazarsfeld & Merton, 1954) and the similarity attraction hypothesis (Byrne, 1971) which both state that people prefer similar others to affiliate with. Research showing parental resistance to ethnically mixed schools (Karsten et al., 2003) suggests that the homophily principle generalizes to parents' preferences for their children's cross-ethnic relations. In addition, Kwak (2003) showed that parents typically try to transmit their ethnocultural norms and values to their children. Children's intimate cross-ethnic relations can be perceived as undermining this transmis-

sion process because the values that adolescents endorse are influenced by their peers (Vedder, Berry, Sabatier, & Sam, 2009).

Studies in the United States have shown that ethnic groups differ in the extent to which they endorse collectivist versus individualist values (e.g., Ayçiçeği-Dinn & Caldwell-Harris, 2011; Coon & Kimmelmeier, 2001). Ethnic groups in the Netherlands also differ in their value orientations. For example, immigrant parents often think that the Dutch society is too liberal (Pels, Distelbrink, Postma, & Geense, 2009). Furthermore, values like obedience, respect for parents, and norm conformity are more strongly endorsed in the Turkish culture and among Turkish-Dutch people than in West-European cultures and among the native Dutch (Pels et al., 2009). Conversely, values like independence, assertiveness, and individual success are endorsed more in individualistic cultures (Harwood, Schoelmerich, Schulze, & Gonzalez, 1999) and among the native Dutch. Thus, both Turkish-Dutch and native Dutch parents might perceive the cultural values of peers from other ethnic groups as somewhat incompatible or contradictory to the culture they want to transmit to their children.

In addition, parents might be concerned about the related behavior of ethnic outgroup peers. Dutch parents might perceive peers from immigrant backgrounds to engage more in deviant and criminal behaviors, in part because that is what is reported in the media (Lubbers, Scheepers, & Wester, 1998; Marcel Lubbers, Peer Scheepers, Maurice Vergeer, 2000). And Turkish-Dutch parents might be concerned about the ‘dangers of the Dutch society’. That is, they might worry about the behavior of Dutch children, because of the permissive socialization styles of Dutch parents (Pels et al., 2009) and the liberties in Dutch society towards, for example, sexuality and the use of drugs. Thus, parents might be less accepting of cross-ethnic relations because they are concerned about their children adopting the different values and behaviors of ethnic outgroup peers.

Parental resistance to intimate cross-ethnic relations is likely to exist in many ethnic groups, but not necessarily to the same extent. Particularly in cultures that put high value on conformity and family integrity it is more important for parents that their children do not deviate from ingroup norms. Several studies have shown that conformity and family integrity are more strongly endorsed among the Turkish-Dutch than the native Dutch (e.g., Phalet & Schönplflug, 2001b; Verkuyten, 2001). In addition, as an ethnic minority group, Turkish-Dutch parents may be concerned that their children will ‘Dutchify’ (i.e. “acting White”) and lose their culture (Nijsten, 1998; Verkuyten, 2003). Therefore we expect that parental acceptance of intimate cross-ethnic relations will be lower among Turkish-Dutch parents than among native Dutch parents (*cultural background hypothesis*).

An additional argument for the cultural background hypothesis is that ethnic groups may differ in the relative feeling of control over their children when it comes to friendship or partner choices. For Turkish-Dutch parents it generally is more important that their children defer to parental wishes regarding friendship or partner choices compared to native Dutch parents. Native Dutch parents, however, expect

their children to be more independent (Huiberts, Oosterwegel, Vandervalk, Vollebergh, & Meeus, 2006) and to choose their own friends and partners.

Studies on interethnic marriage argue that social influence from third parties affects the preferences for ingroup versus outgroup marriages (e.g., Kalmijn, 1998). More generally, significant others in the ethnic community can set the norms for behavior, and individuals who do not follow those norms tend to face sanctions. This is in line with the theory of reasoned action (Ajzen, 1985) and the theory of planned behavior (Ajzen & Fishbein, 1980) that both argue that preferences and behavior are influenced by group norms and the perceived pressure to conform.

Following the idea that the ethnic community reinforces ingroup norms, we argue that *family reputation vulnerability* may be related to the parental acceptance of their children's cross-ethnic contacts. Family reputation vulnerability refers to the extent to which parents think that the behavior of their child affects the reputation of the family within their ethnic community. We expect that parental acceptance of intimate cross-ethnic relations will be lower when parents perceive their family reputation as depending more on their children's actions. That is, if parents have the idea that the behavior of their child affects the family reputation, they might be more concerned with their children's peer relations. For example, they might prefer that their children affiliate with ethnic ingroup peers rather than with ethnic outgroup peers who can undermine the continuation of their ingroup values and norms.

Whereas it can be expected that within all cultural groups those parents who perceive relatively higher family reputation vulnerability are more resistant to intimate cross-ethnic contact, it can also be assumed that ethnic groups differ in the extent to which children are perceived to affect the family reputation. Reflecting the view that the native Dutch culture is more characterized by individualistic values, and the Turkish culture endorses more collectivist values, the Dutch and the Turkish culture have been classified as dignity and honor cultures, respectively (e.g. IJzerman & Cohen, 2011). In dignity cultures, self-worth is based on self-evaluation (inalienable worth), and in honor cultures self-worth is based more on the views of others (socially conferred worth). As a result, in dignity cultures one's individual opinion is an important determinant of behavior, whereas in honor cultures opinions of others (social recognition) are more important (see Leung & Cohen, 2011 for an overview). This suggests that vulnerability of the family reputation is less important in the Dutch (dignity) culture than in the Turkish (honor) culture, which can lead to group differences in parental acceptance of their children's outgroup contacts. Hence, we hypothesize that the difference between Turkish-Dutch and Dutch parental acceptance of their children's intimate cross-ethnic relations is (partly) explained by differences in family reputation vulnerability between both groups of parents (*family reputation vulnerability hypothesis*).

Another ethnocultural aspect that can affect parental acceptance of their children's close cross-ethnic relations is religiosity. In the Netherlands, people of Turkish and Moroccan origin are predominantly Muslim and the native Dutch are typically not

religious or of Christian faith (Driessen, 2007). Hence, cross-ethnic contact between these ethnic minority groups and the Dutch also means interreligious contact. Parents might be concerned about intimate cross-ethnic relations affecting their children's religiosity and the related Islamic or Christian values and practices. Thus, more religious parents can be expected to be less accepting of their children's intimate cross-ethnic contacts. For example, Tolsma et al. (2008) found that stronger religiosity was related to more opposition to ethnic outgroup marriages. Accordingly, we expect that parents who practice their religion more will be less accepting of their children having intimate contacts with ethnic outgroup peers. Similar to family reputation vulnerability, we expect that higher religiosity is associated with more parental resistance among Dutch and Turkish-Dutch parents. However, previous research indicates that Turkish-Dutch people are generally more religious than the native Dutch (Driessen, 2007). Accordingly, we expect that religiosity (partly) explains the expected difference between Turkish-Dutch and Dutch parents' acceptance of their children's cross-ethnic relations (*religiosity hypothesis*).

### **2.1.2 Parental Acceptance of Contact with Different Outgroups**

Next to differences between ethnic groups, the degree of parental resistance against close peer relations may differ depending on the outgroup (Tolsma et al., 2008). This can be expected based on perceived cultural or status differences between groups. For Dutch parents, the collectivist and Islamic background of Turkish-Dutch and Moroccan-Dutch people might be perceived as equally different to their ingroup. Hence, based on cultural (dis)similarities, we hypothesize Dutch parents to be equally accepting of intimate relations of their children with Turkish-Dutch and Moroccan-Dutch peers (*cultural distance hypothesis for Dutch parents*).

For Turkish-Dutch parents the culture of the Dutch might be perceived as being more different from their own than the Moroccan culture because the latter is more similar in the endorsement of collectivistic values and its Islamic traditions. Hence, based on cultural (dis)similarities, it can be argued that Turkish-Dutch parents will be more accepting of relations with Moroccan-Dutch peers than with Dutch peers (*cultural distance hypothesis for Turkish-Dutch parents*).

Differences in parental acceptance of close contacts with different outgroups could also be due to differences in the perceived status of the outgroups. Research on social dominance and ethnic hierarchies shows that people want to maintain unequal social distances to different ethnic groups (Hagendoorn, 1995). Regarding Dutch parents, research on ethnic hierarchies and opposition to children's interethnic marriage shows that the native Dutch want to maintain more social distance toward people of Moroccan descent than toward people of Turkish origin (Tolsma et al., 2008). Hence, based on the theory of ethnic hierarchies, we hypothesize that Dutch parents will be more accepting of cross-ethnic relations with Turkish-Dutch peers than with Moroccan-Dutch peers (*ethnic hierarchy hypothesis for Dutch parents*).

Regarding Turkish-Dutch parents, research on ethnic hierarchies shows that minority groups tend to maintain less social distance toward majority members than to other minority groups (Hagendoorn, 1995; Snellman & Ekehammar, 2005). Hagendoorn (1995) explained this by the need of ethnic minority members to differentiate themselves from other minority groups in order to establish a positive social identity. Turkish parents can be expected to be concerned about their group status and close contact with Dutch people might be perceived to improve the status of Turkish families. In contrast, the Moroccans are at the bottom of the ethnic hierarchy in the Netherlands (Hagendoorn, 1995) and therefore contacts with Moroccans can be perceived as lowering one's social status. Thus, based on ethnic hierarchies, we hypothesize that Turkish-Dutch parents will be more accepting of their children's cross-ethnic relations with Dutch peers than with Moroccan-Dutch peers (*ethnic hierarchy hypothesis for Turkish-Dutch parents*).

According to the religiosity hypothesis, parents' religiosity explains (partly) why Dutch and Turkish-Dutch parents might differ in their reluctance to accept outgroup contacts of their children. Regarding the different target groups, however, contact between native Dutch and Turkish-Dutch people is inter-religious, whereas contact between people of Turkish and Moroccan origin is intra-religious. Hence, for Turkish parents, religion might be less important for their acceptance of intimate relations with Moroccans. Thus although religion plays an important role in the lives of Turkish-Dutch parents, we do not expect that differences in religiosity can explain why parental acceptance is lower among Turkish-Dutch than among Dutch parents as hypothesized in the religiosity hypothesis when the target group is Moroccans.

In testing the hypotheses, we control for gender of the child and for parents' Socio-Economic Status (SES). It has been shown that parental lenience differs between daughters and sons (e.g. Phalet & Schönplflug, 2001a) and that parents are particularly protective of daughters. Effects of family reputation and religion might also differ for daughters and sons. For example because Islam prohibits women to marry outside of their religious group, but does not prohibit men to do so. Also, studies have shown that the protection of family honor is particularly important when it comes to intimate relations of daughters (Akpinar, 2003). Therefore, we control for gender and we will also test whether the direct effects that we hypothesize are moderated by gender. Furthermore, we control for SES because research on parental resistance to ethnically mixed schools (Sikkink & Emerson, 2008) and to interethnic marriage (Tolsma et al., 2008) has found that parental resistance toward cross-ethnic contact is related to socio-economic background.

## **2.2 Method**

### **2.2.1 Sample**

For the current analysis, a subsample was selected from data collected for the Arnhem Parents Project: a study on the role of parents ( $N = 150$ ) in the acculturation of their children. All parents in the sample had at least one adolescent daughter (47%) or son

(53%) in the first grade of middle school. The subsample consisted of parents who were both native Dutch ( $n = 73$ ) or both of Turkish origin ( $n = 49$ ). The Turkish-Dutch participants were predominantly first generation immigrants (only two were born in the Netherlands). Of all parents in the analysis, 73% was married and still living together, 7% was not married but lived together, 13% separated, 3% had never been married and did not live with the other parent, and 4% was widow(er). All Turkish-Dutch parents self-reported to be Muslim. Of the Dutch participants, 56% indicated not to be religious and 44% reported to be Christian (Catholic, Dutch reformed, reformed).

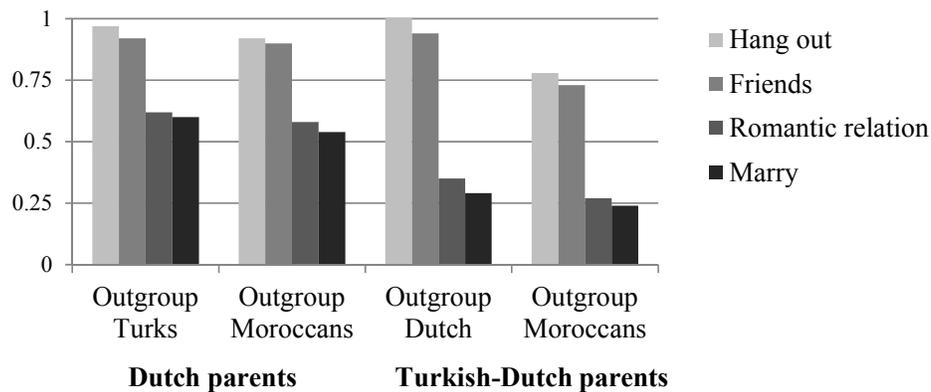
### 2.2.2 Procedure

Parents were recruited at four ethnically diverse middle schools in Arnhem, a medium sized city in the east of the Netherlands. The ethnic distribution of these four schools approximated 54% Dutch students, 17% Turkish, 5% Moroccan, and 25% of the students had another ethnic minority background. Two weeks before the beginning of the data collection parents received an information letter about the Arnhem Parents Project. Parents who did not object to being approached were contacted by a Dutch or Turkish interviewer for a phone interview. Similar to previous studies (e.g. Durgel, Leyendecker, Yagmurlu, & Harwood, 2009) preferably the mother was interviewed (in the Turkish subsample 80% and in the Dutch subsample 93%) and otherwise the father. Considering the balance of anonymity and response rate, and given that Turkish-Dutch mothers can be hard to motivate to participate in a study, we chose for phone interviews with Turkish interviewers rather than paper-and-pencil questionnaires. The questionnaire was translated into Turkish by one of the interviewers, and checked and corrected by a professional translator. Participants who could not be reached by phone were visited at home ( $n = 7$ ). Of the Dutch parents, 4% objected to being approached beforehand, and of the Dutch parents approached ( $n = 106$ ) 13% could not be reached, 14% did not agree to participate, and 73% completed the interview. Of the Turkish parents, 15% objected beforehand, and of the parents approached ( $n = 66$ ) 18% could not be reached, 6% did not agree to participate, and 76% completed the interview. This resulted in a response rate of 69% among the Dutch and 63% among the Turkish-Dutch parents.

### 2.2.3 Measures

**Parental acceptance of children's cross-ethnic relations.** An adapted Bogardus (1925) social distance scale was used to measure parents' acceptance of increasingly intimate cross-ethnic contacts of their children. Per ethnic target group, the questions were: What do you think about your child: hanging out with classmates at school that are [target group]; becoming friends with someone who is [target group]; having a romantic relationship with someone who is [target group]; later marrying someone who is [target group]. Ethnic target groups were 'Dutch' and 'Moroccan' for the Turkish-Dutch parents, and 'Turkish' and 'Moroccan' for the native Dutch parents. Parents answered on a scale from *That would be*, 1, *no problem at all*,

2, *a bit of a problem*, 3, *a problem*, or 4, *a big problem*. Because there was not enough variance on the first item (see Figure 2.1), this item was left out of the analyses. The other three items (Dutch or Turks) formed a strong and reliable Mokken scale (Loevinger's  $H = .78$ ,  $Rho = .87$ ), and the scale was internally consistent for Dutch, (Cronbach's  $\alpha = .69$ ), and for Turkish-Dutch parents ( $\alpha = .80$ ). This was also the case for the items on contact with Moroccans as the outgroup (Loevinger's  $H = .76$ ,  $Rho = .88$ , Cronbach's  $\alpha = .78$  for Dutch parents, and  $.80$  for Turkish-Dutch parents). The scale was reverse coded so that higher scores indicate higher acceptance of cross-ethnic contact.



**Figure 2.1.** Proportion of parents who indicated types of relations to be no problem at all

**Family reputation vulnerability.** A three-item scale was developed to measure the parents' belief that their family reputation is affected by their child's behavior. The three items were: People who are important to me will think badly about our family if my son/ daughter: would not follow the rules of our religion; would marry someone with another culture; would not follow the habits of our culture. Parents answered on a scale from 1, *not true at all*, to 5, *totally true*. The internal consistency (Cronbach's  $\alpha$ ) of the scale was in aggregate  $.84$ . For the Dutch parents alpha was  $.65$ , and for the Turkish-Dutch  $.80$ .

Multigroup factor analyses were performed to examine measurement invariance between the two groups (Cheung & Rensvold, 2002; Lubke, Dolan, Kelderman, & Mellenbergh, 2003). The model in which factor loadings were allowed to differ between the two groups ( $\chi^2(2) = 2.78$ ,  $p < .05$ ,  $CFI = .99$ ,  $TLI = .97$ ,  $RMSEA = .08$ ) had better model fit than the model in which factor loadings were specified to be equal across groups ( $\chi^2(5) = 10.46$ ,  $p < .10$ ,  $CFI = .92$ ,  $TLI = .91$ ,  $RMSEA = .13$ ). The model fit improved marginally by allowing factor loadings to be different for the two groups ( $\chi^2$  difference (3) = 7.68,  $p < .10$ ), which indicates that the factor variance

does not differ clearly between the two groups. However, we will present the regression results aggregated as well as for the two groups separately.

**Religiosity parents.** Religiosity was measured by two questions: How often do you do something that has to do with your religion (excluding praying)? And, how often does your partner do something that has to do with religion (excluding praying)? Praying was excluded because in Islam followers are expected to pray more often than in Christianity. Respondents answered on a scale from 1, *at least once a week*, to 4, *never*. Items were reverse coded such that higher scores indicated stronger religiosity. The Pearson correlation between the two items was .78. For the Dutch parents the correlation was .84, and for the Turkish-Dutch parents it was .53 which indicates that there was less difference in (non-) religiosity between Dutch parents than between Turkish-Dutch parents.

**Background variables.** Sex of the child (male = 0, female = 1), parents' ethnicity (Dutch = 0, Turkish-Dutch = 1), and Socio-Economic Status (SES) were included as background variables. SES was constructed based on the educational and occupational level of both parents and on family income. Educational level was asked using seven categories from 1, *no education completed*, to the highest 7, *university completed*. Reported occupations were translated into occupational level based on the International Standard Classification of Occupations (Ganzeboom & Treiman, 1996). Family income was asked using nine categories ranging from the lowest, *less than €800 per month*, to the highest of *more than €4000 per month*. The five items were coded so that higher scores indicated higher SES. Subsequently, these scores were standardized and the mean of the five items was taken. Internal consistency of the scale was .79 in aggregate, and for the Dutch it was .75, and for the Turkish-Dutch .64.

#### 2.2.4 Analyses

First, descriptive statistics for all variables are presented and differences between the Turkish-Dutch and the Dutch parents are examined. Second, the hypothesis for parental acceptance of cross-ethnic contact was tested with hierarchical regression analyses. Third, the bootstrapping procedure of Preacher and Hayes (2008) was used to test the hypothesized indirect effects, of differences in family reputation vulnerability and religiosity explaining the difference in parental acceptance between Dutch and Turkish-Dutch parents. With this bootstrapping procedure multiple indirect paths are tested simultaneously in a single model. Fourth, to disentangle the relations of religiosity and family status vulnerability on acceptance of cross-ethnic contact for Dutch and Turkish-Dutch parents, we provide regression results for the two groups separately.

### 2.3 Results

#### 2.3.1 Descriptive Findings

*t*-Tests showed that, compared to the native Dutch parents, the Turkish-Dutch parents had a significantly lower SES, were more concerned about their family reputation and

were more religious (see Table 2.1). *t*-Tests also showed that even though both Turkish-Dutch ( $M = 3.25$ ) and Dutch ( $M = 3.63$ ) parents scored relatively high on parental acceptance of intimate cross-ethnic relations, acceptance of these peer relations was significantly higher among the Dutch than the Turkish-Dutch parents,  $t(118) = 3.57, p < .01$ . This was also the case for contact with Moroccan peers,  $t(119) = 4.27, p < .01$ . Overall, most parents gave answers that on average corresponded to perceiving cross-ethnic relations of their children being “no problem at all” or “a bit of a problem” as opposed to “a problem” or “a big problem”. Thus, most parents were quite accepting of their children’s close contacts with ethnic outgroup peers but there were also parents who indicated to be less accepting of cross-ethnic contact. However, Figure 1 shows that for both Dutch and Turkish-Dutch parents the acceptance of cross-ethnic contact decreases for more intimate forms of cross-ethnic contact.

Table 2.2 shows the bivariate correlations between the main variables for the two ethnic groups separately. None of the correlations of the predictor variables with the acceptance of intimate cross-ethnic relations differed significantly between the Turkish-Dutch and the Dutch parents. However, the correlations between parental acceptance of the different target groups was stronger for the Dutch ( $r = .88, p < .01$ ) than for the Turkish-Dutch parents ( $r = .65, p < .01$ ), Fisher’s  $z = 3.16, p < .01$ . This suggests that Dutch parents distinguished less between intimate relations with the two target groups of Turks and Moroccans, compared to the distinction that the Turkish-Dutch parents made between intimate relations with Dutch and Moroccan peers.

**Table 2.1** Descriptive Statistics for the Study Variables

Variable	Dutch parents ( $N = 73$ )		Turkish parents ( $N = 49$ )		Difference <i>T-test</i>	Effect Size Cohen’s <i>D</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>r</i>	<i>D</i>
SES	0.45	0.85	-0.67	0.82	$p < .01$	0.56	1.34
Religiosity parents	1.51	0.91	2.50	0.86	$p < .01$	-0.49	-1.12
Reputation vulnerability	1.87	0.59	3.03	0.86	$p < .01$	-0.62	-1.57
Acceptance relations with Dutch / Turkish-Dutch	3.63	0.56	3.25	0.59	$p < .01$	0.31	0.66
Acceptance relations with Moroccans	3.56	0.58	3.06	0.70	$p < .01$	0.36	0.78

**Table 2.2** Correlations of the Study variables for Dutch Parents (below) and Turkish Parents (above the diagonal)

	1.	2.	3.	4.	5.
1. SES		-.01	-.20	.03	-.14
2. Religiosity parents	.24*		.07	-.34*	-.13
3. Reputation vulnerability	-.04	.04		-.31*	-.28†
4. Acceptance relations with Turkish/ Dutch	.18	-.17	-.39**		.65**
5. Acceptance relations with Moroccans	.11	-.18	-.28**	.88**	

Note. † $p < .10$ , \* $p < .05$ , \*\* $p < .01$ .

### 2.3.2 Acceptance of Cross-Ethnic Relations with Dutch or Turkish Peers

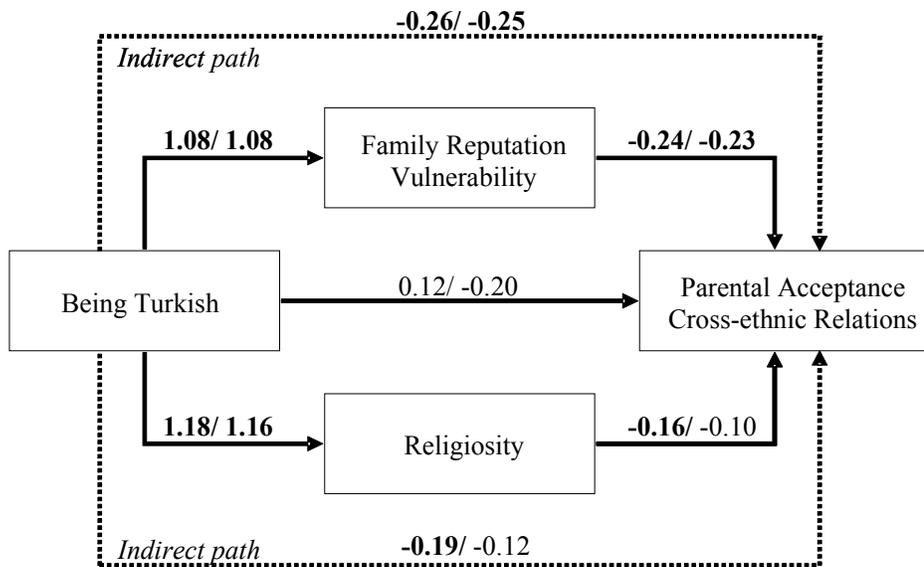
Hierarchical regression analyses were performed to examine the hypotheses. Because the score for parental acceptance of intimate cross-ethnic relations was skewed toward high acceptance we logarithmically transformed this variable to better approximate a normal distribution. In support of the cultural background hypothesis, the results in model 1a (Table 2.3) show that the Turkish-Dutch parents were somewhat less accepting of their children's cross-ethnic relations than the Dutch parents. In addition, it was hypothesized that the difference in parental acceptance between Turkish-Dutch and Dutch parents is explained by family reputation vulnerability and religiosity.

Consistent with the family reputation hypothesis the findings in model 2a show that parents who perceived relatively high family reputation vulnerability were less accepting of their children's intimate cross-ethnic relations. Also, higher religiosity was related to lower parental acceptance of cross-ethnic relations. The ethnic group difference in acceptance was no longer significant after family reputation vulnerability and religion were added to the regression equation.

**Table 2.3** Multiple Regression Analyses Predicting Parents' Acceptance of Children's Cross-Ethnic Relations (N=122)

	Outgroup: Dutch / Turks				Outgroup: Moroccans			
	Model 1a		Model 2a		Model 1b		Model 2b	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Female child	-.04**	.02	-.04**	.02	-.06**	.02	-.05**	.02
Being Turkish	-.04*	.02	.03	.02	-.08**	.02	-.02	.03
SES	.01	.01	.02†	.01	.00	.01	.00	.01
Reputation vuln.			-.03**	.01			-.03**	.01
Religiosity			-.03**	.01			-.02†	.01
Adjusted R <sup>2</sup>	12%		26%		17%		24%	

Note. † $p < .10$ , \* $p < .05$ , \*\* $p < .01$ .



**Figure 2.2.** Graphical representation of the indirect paths explaining parental acceptance of cross-ethnic relations. The first coefficient is for cross-ethnic relations with Dutch/Turks, the second coefficient is for cross-ethnic relations with Moroccans. Significant coefficients ( $p < .05$ ) are given in bold. Dashed lines indicate the indirect effects through Religiosity and Family Reputation Vulnerability. Included control variables are Sex of the Child and Family SES.

The indirect paths of ethnic group (native Dutch or Turkish-Dutch) on parental acceptance through family reputation vulnerability and religiosity were tested simultaneously by the bootstrap procedure (see Figure 2.2). Because a bootstrap analysis is robust to non-normality we did not transform the skewed dependent variable for this analysis. The bootstrap analysis showed that, controlling for gender of the child and SES, both family reputation vulnerability (-.26; 95% CI between -.46 and -.14) and religiosity (-.19; 95% CI between -.42 and -.04) explained a significant and independent part of the difference in the acceptance of their children's intimate cross-ethnic relations among Turkish-Dutch and Dutch parents. This is consistent with the *family reputation vulnerability hypothesis* and the *religiosity hypothesis*.

Regarding gender differences, all models show that parental acceptance of intimate cross-ethnic relations is lower for girls than for boys. The effects of perceived family reputation (outgroups Turks/ Dutch:  $b = -.01$ ,  $SE = .02$ ,  $p = .42$ , and outgroup Moroccans:  $b = -.03$ ,  $SE = .02$ ,  $p = .15$ ) and religiosity were not significantly moderated by gender (outgroups Turks/ Dutch:  $b = -.03$ ,  $SE = .01$ ,  $p = .06$ , and outgroup Moroccans:  $b = -.03$ ,  $SE = .02$ ,  $p = .14$ ). That is, the effects were not significantly different depending on whether the child was male or female.

### 2.3.3 Acceptance of Intimate Relations with Moroccan Peers

As expected, the findings for parental acceptance of intimate relations with Moroccans (models 2a and 2b in Table 2.3) were by and large the same as the findings discussed above. One difference was the role of religiosity. For intimate cross-ethnic relations with Moroccans, the bootstrapping method showed that family reputation vulnerability (-.25; 95% CI between -.43 and -.09) but not religiosity (-.12; 95% CI between -.37 and .02) explained part of the differences in acceptance between Turkish-Dutch and Dutch parents. Thus, as expected, the religiosity hypothesis, stating that religiosity in part explains the ethnic difference in parental acceptance, did not hold for parental acceptance of contact with Moroccan peers.

### 2.3.4 Acceptance of Intimate Relations with Different Target Groups

Based on parents' cultural considerations we hypothesized that Dutch parents would be equally accepting of their children's intimate relations with Turkish-Dutch and Moroccan-Dutch peers (*cultural distance hypothesis for Dutch parents*). Based on parents' status considerations we hypothesized that Dutch parents would be more accepting of intimate relations with Turkish-Dutch than Moroccan-Dutch peers (*ethnic hierarchy hypothesis for Dutch parents*). Paired sample t-test showed that Dutch parents showed higher parental acceptance of intimate relations with Turkish-Dutch than with Moroccan-Dutch peers,  $t(70) = 2.07, p = .04$ . This finding is in line with the ethnic hierarchy hypothesis.

Furthermore, we hypothesized that, based on cultural considerations, Turkish-Dutch parents would be more accepting of their children's intimate cross-ethnic relations with Moroccans than with Dutch peers (*cultural distance hypothesis for Turkish-Dutch parents*). In contrast, based on status considerations it was hypothesized that Turkish-Dutch parents would be more accepting of intimate relations with Dutch than with Moroccan peers (*ethnic hierarchy hypothesis for Turkish-Dutch parents*). Paired sample t-test showed that Turkish-Dutch parents' acceptance of intimate cross-ethnic relations was higher toward Dutch than toward Moroccan peers,  $t(48) = 2.43, p < .01$ . These findings also are consistent with the ethnic hierarchy hypothesis.

### 2.3.5 Analyses for Dutch and Turkish-Dutch Parents Separately

Because the measurement invariance test for family reputation vulnerability showed that the meaning of the family reputation measure differed somewhat (marginally) between Dutch and Turkish-Dutch parents, and in order to examine the independent effects for the two groups, separate regressions were conducted for Dutch and Turkish-Dutch parents (see Table 2.4). The results are similar to the results obtained by the combined regression analyses. Regarding the religiosity effect, the results show that religiosity does not play a role in Turkish-Dutch parents' acceptance of cross-ethnic relations with Moroccans. For Dutch parents religiosity was related to lower parental acceptance of their children's contact with Turkish-Dutch as well as Moroccan peers.

**Table 2.4** Multiple Regression Analyses Predicting Acceptance of Cross-Ethnic Relations per Ethnic Group

	Native Dutch parents				Turkish-Dutch parents			
	Outgroup Turks		Outgroup Moroccans		Outgroup Dutch		Outgroup Moroccans	
	<i>b</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Female child	-.03	.02	-.03	.02	-.07*	.02	-.10**	.03
SES	.03*	.01	.02	.01	-.01	.01	-.03†	.02
Reputation vuln.	-.05**	.02	-.04†	.02	-.03**	.01	-.03**	.01
Religiosity	-.03*	.01	-.03*	.01	-.03*	.01	-.01	.02
Adjusted R <sup>2</sup>	20%		29%		12%		27%	

Note. † $p < .10$ , \* $p < .05$ , \*\* $p < .01$ .

## 2.4 Discussion

Past research shows that parents sometimes resist the idea of their children having close contacts with peers of other ethnic groups (Bifulco et al., 2009; Tolsma et al., 2008) and this resistance can affect children's cross-ethnic relations (Edmonds & Killen, 2009). However, little is known about the underlying reasons for parental resistance to their children's cross-ethnic relations. The current study examined ethnic group differences in parental acceptance of their children's intimate cross-ethnic relations, and the role of perceived family reputation vulnerability and religiosity in this.

Based on cultural differences in family integrity, norm conformity, and community orientation, we hypothesized that Dutch compared to Turkish-Dutch parents would be more accepting of intimate cross-ethnic relations. The findings show that the Dutch parents were indeed more accepting of their children's close cross-ethnic relations with Turkish and Moroccan peers, than Turkish-Dutch parents were of their children's close relations with Dutch and Moroccan peers. Family integrity, norm conformity, and community orientation are more strongly endorsed among Turkish-Dutch than among Dutch people (Verkuyten, 2001) and this may be the reason why Turkish parents are less accepting of their children having intimate relations with ethnic outgroup peers.

To further examine ethnic group differences in parental acceptance of cross-ethnic relations, we examined the role of family reputation vulnerability. We followed the argument that in the Dutch dignity culture personal evaluations are important for attitudes and behavior, whereas in the Turkish honor culture evaluations of others are more important for attitudes and behavior (IJzerman & Cohen, 2011). In line with this, we found that family reputation vulnerability was stronger among Turkish-Dutch than Dutch parents. Turkish-Dutch parents appear to be more concerned about their children harming the family's reputation within their ethnic community. This could

explain differences in parental resistance between the groups. Because intimate cross-ethnic relations can undermine the transmission and maintenance of ethnocultural values and practices, parents who perceive higher family reputation vulnerability might be less accepting of intimate cross-ethnic relations. Whereas the current study shows that this is true for Turkish-Dutch as well as Dutch parents, it also shows that the former group of parents perceives stronger family reputation vulnerability and therefore is less accepting of their children's intimate cross-ethnic relations. Thus, family status vulnerability partly explains why Turkish-Dutch parents are less accepting of intimate cross-ethnic relations than Dutch parents.

This suggests that Turkish-Dutch parents are concerned about intimate relations with ethnic outgroup peers leading to a loss of religious values, beliefs and practices among their children. This is in line with other studies that show that Turkish-Dutch parents are sometimes afraid that their children 'Dutchify' too much by adopting Western liberal values (Nijsten, 1998). As expected, religiosity did not significantly explain why Turkish-Dutch parents were more opposed to relations with Moroccan peers who are also predominantly Muslim. This indicates that, among Turkish-Dutch parents, religion plays a role in their acceptance of close inter-religious relations. For Dutch parents, even though less religious, religiosity was also related to parental acceptance of contact with Turkish-Dutch as well as Moroccan-Dutch peers.

Cultural and status considerations yielded contrasting hypotheses regarding parental acceptance of intimate relations with different ethnic outgroups. Based on cultural (dis)similarities it was hypothesized that Dutch parents would be equally accepting of intimate relations with Turkish-Dutch and Moroccan-Dutch peers. Based on status considerations we hypothesized Dutch parents to be more accepting of intimate cross-ethnic relations with Turkish-Dutch than Moroccan-Dutch peers. The findings were in line with the latter hypothesis and, thus, confirmed the status explanation.

Based on cultural (dis)similarities it was hypothesized that Turkish-Dutch parents would be more open to their children having contacts with Moroccan-Dutch than with Dutch peers. In contrast, based on status hierarchies it was hypothesized that Turkish-Dutch parents would be more accepting of cross-ethnic relations with Dutch peers than with the low status group of Moroccan-Dutch peers. It turned out that the acceptance of relations with Moroccan peers was lower. This is in line with previous research on status hierarchies and indicates that also for Turkish-Dutch parents status considerations were related to the acceptance of their children's intimate relations with different outgroups.

This study shows that parental resistance is higher for more intimate relations. For none of the parents 'hanging out with outgroup classmates' was a problem, but the more intimate the relations were, the more parents evaluated this as problematic. This tolerance towards relatively low intimate relations appears to be inconsistent with some of the literature on school choice, which shows that at least some parents resist multi-ethnic schools (Bifulco et al., 2009; Karsten et al., 2003). A reason for not finding parental resistance to less intimate forms of cross-ethnic contact might be that

in contrast to Bifulco and colleagues (2009) and Karsten and colleagues (2003) we interviewed parents of students who already attended multi-ethnic schools. Thus, children of parents that have a strong resistance to multi-ethnic schools most likely were not attending the multi-ethnic schools through which we recruited the parents for this study.

Furthermore, most parents in this study indicated to be quite accepting of their children having close relations with ethnic outgroup peers. However, studies in the Netherlands show that adolescents' friendship networks are often segregated by ethnicity (Baerveldt et al., 2004; Stark & Flache, 2012). This suggests that the lack of cross-ethnic friendships is not only due to parents not allowing their children to have cross-ethnic relations. Future studies should explore (the lack of) parental influence on cross-ethnic relations in more detail. For example, it may be that parents of students at multi-ethnic schools might have become more open to cross-ethnic relations because they learned about the outgroup through their children. This would be in line with the extended contact hypothesis (Wright et al., 1997) which states that the knowledge of ingroup members (in this case their child) having cross-ethnic friends improves outgroup attitudes. It is also possible that the high level of acceptance is in part due to parents giving socially desirable responses in the interviews, a problem that may have been more prevalent due to our use of interviews rather than an anonymous questionnaire. However, we found considerable variation in parents' resistance to intimate cross-ethnic relations. This suggests that social desirability concerns did not dominate parents' answers. Furthermore, it is not very likely that social desirable responding accounts for the ethnic group differences and the different associations found.

The current study showed that the meaning of the measure of family reputation vulnerability was (marginally) different for Dutch and Turkish-Dutch parents. Future studies on family reputation vulnerability should develop items that are more strongly invariant across cultural groups. Also, whereas the current study shows that religiosity affects parental acceptance of cross-ethnic relations, the limitations of the religiosity measure should be taken into account. Many Dutch people do not adhere to a religion, and in Islam orthopraxis is more central than in Christianity. However, the regression results for Dutch and Turkish-Dutch separately show that family reputation vulnerability as well as religiosity plays a role in parental acceptance of their children's cross-ethnic peer relations.

This study provides novel findings on how perceived cultural differences and perceived social pressure from the ethnic ingroup may play a role in parental acceptance of their children's intimate cross-ethnic relations. Future studies should examine whether the current findings replicate in larger samples, across other cultural groups, and in other countries. In addition, because we used a cross-sectional design, the proposed causal directions cannot be established. Also, when interpreting the results it should be taken into account that the findings are based on interviews with mainly mothers. Future studies including both parents have to assess whether there

are differences between fathers and mothers. For example, it might be that fathers are more protective of their children and are, hence, less open to cross-ethnic relations than mothers. Furthermore, future studies should examine in more detail to which extent family reputation vulnerability and parental acceptance differ when it concerns sons and daughters. It might be that for daughters perceived family reputation vulnerability is stronger and consequently that parental acceptance of cross-ethnic relations is lower for daughters than for sons. We did not find such differences in the current study, but this may be due to the relatively limited power of our statistical tests.

The current study measured parental acceptance of intimate cross-ethnic relations but did not assess parental acceptance of such intimate relations with ingroup members. It could be argued that some parents would object to any form of intimate contact, even with the ingroup. However, it seems reasonable to assume that in most cases parents would not have strong objections to close peer relations. In addition, research on ethnic hierarchies (e.g. Hagendoorn, 1995) consistently shows that the social distance is lowest toward the ethnic ingroup, followed by different outgroups. Yet, a more stringent test of parental acceptance of cross-ethnic relations should consider parental acceptance of ingroup contact as well.

In conclusion, this study shows that perceived cultural differences between ethnic groups can raise parents' concerns about close cross-ethnic contacts of their children because these contacts might hamper or undermine the transmission of ethnocultural values, norms, and behaviors. This appears to be more important in ethnic groups that are more strongly concerned with family reputation and the ways in which the behavior of their children might affect this. In this sense not only the parents but also the wider ethnic community can have an influence on the social integration of adolescents. Therefore, to encourage ethnic integration of adolescents it may be important to target not only the school and the parents but also the ethnic community. The current study sheds light on the question why parents might be less or more accepting of their children having intimate cross-ethnic relations with ethnic outgroup peers. An interesting topic for future studies is to examine whether parental acceptance of their children's cross-ethnic contacts contributes to or interferes with the attempts of schools to improve cross-ethnic relations. Furthermore, the transition to middle school and the entry in such a school might make parents particularly concerned about the peers with whom their child affiliates and the related peer differences and pressures. Future studies should examine the parental attitudes to cross-ethnic contact of children of different ages.



## Chapter 3

### **Cross-Ethnic Friendships and Outgroup Attitudes among Ethnic Minority Youth: The Mediating Role of Ethnic and Host Society Identification**

This study investigates among ethnic minority adolescents how same-ethnic friendships and cross-ethnic friendships with majority group members affect attitudes towards the majority group. Host society identification is proposed as a mediator between cross-ethnic friendships with majority group members and outgroup attitudes, and ethnic ingroup identification is proposed as a mediator between same-ethnic friendships and attitudes toward the societal majority group. Hypotheses were tested longitudinally among ethnic minority group adolescents ( $n = 244$ ) who recently entered middle schools in the Netherlands. Lagged structural equation models showed that the effect of cross-ethnic friendships on attitudes toward the majority group was mediated by identification with the host society. No support was found for ethnic identification as a mediator between same-ethnic friendships and outgroup attitudes. Additional analyses indicated that the relation between host society identification and majority group friendships is bidirectional.

This chapter is co-authored by Maykel Verkuyten, Andreas Flache, Tobias Stark, and René Veenstra and a slightly different version is submitted for publication at an international journal.

### 3.1 Introduction

With many societies becoming more ethnically diverse it is increasingly important to understand the determinants of intergroup attitudes. The great majority of studies focus on the attitudes of native majority group members towards immigrants and ethnic minorities. However, there is also the question about the conditions that stimulate or hamper the host society identification of minority group members and the consequences of this identification for their attitude towards the majority group. Studies on contact between different ethnic groups have convincingly shown that positive intergroup contacts and friendships in particular, are related to more favorable attitudes (Allport, 1954; Davies et al., 2011; Pettigrew & Tropp, 2006). Intergroup contact improves outgroup attitudes because it enhances knowledge about outgroup members, reduces intergroup anxiety, and increases empathy and perspective taking (Pettigrew & Tropp, 2008). In addition, the common ingroup identity model (Dovidio, Gaertner, & Saguy, 2007) suggests that intergroup contact affects representations of group boundaries that subsequently have an impact on outgroup attitudes. In line with this model it has been shown that intergroup contact affects group identifications (Maliepaard & Phalet, 2012), and that group identifications in turn are related to intergroup attitudes (Gaertner & Dovidio, 2000).

Ethnic minority members can identify with their ethnic ingroup as well as with the host society. From an acculturation perspective these two identifications correspond to two central questions (Berry, 1997). First, is maintaining one's ethnic heritage culture and identity considered to be important? And second, is developing relationships and commitments with the larger society of value? This study relates these two aspects of acculturation to how ethnic minority adolescents in the Netherlands view the societal majority group. Using panel data, we investigate whether same-ethnic and cross-ethnic friendships with majority outgroup members are associated with ethnic ingroup and host society identification, and whether these group identifications in turn affect attitudes towards the majority group.

This study adds to previous research on intergroup contact and outgroup attitudes in three ways. First, whereas previous studies examined cognitive and affective mediators of the relationship between intergroup contact and outgroup attitudes (Pettigrew & Tropp, 2006; Swart et al., 2011), it has not been investigated whether cross-ethnic friendships improve outgroup attitudes through host society identification. Second, whereas most previous studies examined how cross-ethnic friendships affect outgroup attitudes, the current study also examines whether same-ethnic friendships affect outgroup attitudes. People with an immigrant background are confronted with bicultural worlds (Ryder et al., 2000) and they can socialize and identify with their ethnic ingroup as well as with the host society (Berry, 1997; Ryder et al., 2000; Verkuyten & Yildiz, 2007). To get insight in how this affects their attitudes toward the societal majority group, we propose and examine (two pathways of) how same-ethnic and cross-ethnic friendships with majority group members affect ethnic

ingroup and host society identification. Third, whereas most of the intergroup contact literature investigated contact effects among majority group members, this research adds to the few studies (e.g. Binder et al., 2009; Tropp & Pettigrew, 2005b) that examined intergroup contact effects among minority group members. An understanding of the role of group identifications in the relation between intergroup contact (cross-ethnic friendships) and attitudes towards the majority group sheds further light on the acculturation process of immigrant youth.

### **Majority Group Friends and Host Society Identification**

Peers are an important source of influence during adolescence (see Brechwald & Prinstein, 2011), and play an important role in identity formation (Meeus & Dekovic, 1995; Meeus, 2011). Friends convey social norms that are regulated through processes of social control which lead to similarities in opinions and behaviors over time. Cross-ethnic friendships of ethnic minority students with majority group peers are therefore likely to lead to similarities (reduced differences) in behaviors and opinions between members of these groups (Stark & Flache, 2012). Reduced differences between groups may make group boundaries less salient leading to more inclusive ingroups. If this is the case, then friendships with ethnic majority members are likely to strengthen minority students' identification with the host society.

In turn, based on social identity theory (Tajfel & Turner, 1979) and the common ingroup identification model (Gaertner et al., 1993), it can be expected that identification with the host society improves attitudes toward the majority group. Social identity research has shown that group identification affects intergroup attitudes such that higher identifiers tend to view the ingroup more favorably (Brown & Hewstone, 2005). Gaertner and colleagues (1993) argued that if the ingroup becomes more inclusive, former subgroups become part of one superordinate ingroup, which will lead to more positive attitudes toward members of those subgroups. Accordingly, *the common ingroup identity model* (Dovidio et al., 2007; Gaertner et al., 1993; Gaertner, Dovidio, & Bachman, 1996) proposes that for contact to reduce prejudice it needs to be structured in such a way that it leads to identification with an inclusive superordinate category. This implies that identification with the host society will improve the attitudes of ethnic minority youth towards majority group members. In line with this reasoning, experimental and empirical studies showed that superordinate identities improve outgroup attitudes among minority as well as majority group members (Nier et al., 2001; Pfeifer et al., 2007).

In sum, we expect that cross-ethnic friendships of ethnic minority students with majority group peers lead to identification with the host society. Furthermore, based on the common ingroup identity model (Gaertner et al., 1993) we expect that identification with the host society improves attitudes toward the majority group. Therefore, we hypothesize that cross-ethnic friendships with majority group members lead to stronger identification with the host society, which in turn leads to more positive outgroup attitudes (*Superordinate Group Identification Hypothesis*). Some cross-

sectional support for this hypothesis was found by Eller and Abrams (2004) who showed that if Mexican employees' had friendships with American co-workers (in Mexico) they were more likely to say that they belonged to the same ingroup which in turn was related to more positive attitudes towards Americans. We will add to this finding by testing the superordinate group hypothesis longitudinally among adolescents with an immigration background.

In contrast, identification with the majority group has also been argued to be a predictor of preference of friendships (Rutland et al., 2012) and religious group identification has been shown to be bidirectionally related to ethnic outgroup friendships (Maliepaard & Phalet, 2012). This indicates that next to majority group friendships leading to stronger identification with the host society, host society identification might also make it more likely for minority group adolescents to select majority group friends. Therefore, we will also examine the reversed causality between host society identification and majority group friendships.

### **Ethnic Ingroup Friends and Ethnic Ingroup Identification**

Festinger (1954) theorized that social comparison with valued reference groups is important for the development of abilities or opinions. Group members that do not comply with the behavior or opinions of the ingroup will be sanctioned, in particular when the behavior or opinions are relevant to the group's identity. Whereas studies on peer influence mainly focused on opinions and behaviors, peers are also important role models for what it means to be an ethnic group member (Noels, Leavitt, & Clément, 2010). In particular ethnic ingroup peers are likely to be important reference group members. In support of this view, Syed and Juan (in press) showed among college students that ethnic identity exploration and commitment to the ethnic ingroup was more similar among same-ethnic friends than among cross-ethnic friends, indicating that especially same-ethnic friends are of importance for ethnic identity formation. Furthermore, more frequent interactions with same-ethnic peers have been shown to be related to stronger ethnic identities among Armenian, Vietnamese, and Mexican adolescents in the United States (Phinney, Romero, Nava, & Huang, 2001). In addition, same-ethnic friendships of African-American and Latino middle school students in the United States have been found to be related to stronger ethnic identity (this dissertation, Chapter 5). Thus, in particular same-ethnic friends seem to strengthen ethnic identification of minority adolescents.

The literature offers two opposing explanations for the subsequent influence of ethnic identification on outgroup attitudes. First, based on social identity theory (Tajfel & Turner, 1979) it could be argued that ethnic identification goes together with a stronger in-group orientation and thereby leads to a less positive outgroup attitude. Second, based on the developmental theory of ethnic identity (Phinney, Jacoby, & Silva, 2007) it can be argued that a strong ethnic identity is the basis for openness and greater acceptance of outgroups. Those two explanations lead to two different *Ingroup Identification Hypotheses*.

Social identity theory (Tajfel & Turner, 1979) proposes that people want to positively differentiate their ingroup from outgroups which typically leads to ingroup bias. Whereas a positive differentiation can be attained by more favorable ingroup attitudes without changing outgroup attitudes, it can also be attained by less favorable outgroup attitudes (see for example Brewer, 1999). In support of this view, several studies have shown that ingroup identification is related to less positive outgroup attitudes (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950; Mummendey, Klink, & Brown, 2001). Thus, based on this reasoning we could expect that same-ethnic friendships are related to stronger ethnic ingroup identification which in turn leads to less positive outgroup attitudes (*Ingroup Identification Hypothesis 1*). However, there are also scholars who argue for a positive effect of ingroup identification on outgroup attitudes: Based on the developmental theory of ethnic identity, Phinney, Jacoby, and Silva (2007) argued and showed that in particular a strong ethnic identity allows for more tolerant attitudes towards outgroups. That is, when adolescents feel confident about their ethnic identity they consider other groups less of a threat to their identity and therefore they can be more open and tolerant toward outgroups (Nesdale, Durkin, Maass, & Griffiths, 2005). Hence, based on peer influence and the developmental theory of ethnic identity we hypothesize that same-ethnic friendships are related to stronger ethnic ingroup identification which in turn improves outgroup attitudes (*Ingroup Identification Hypothesis 2*).

Regarding the relation between same-ethnic friendships and ethnic identification, we expected that same-ethnic friendships strengthen ethnic identification. But similar to identification with the host society and cross-ethnic friendships with majority group members, the relation between same-ethnic friendships and ingroup identification might also be reversed (Rutland et al., 2012) or bidirectional (Maliepaard & Phalet, 2012). Hence, the possibility of reversed causality or a bidirectional process between ethnic identification and ingroup friendships will also be examined.

### **3.2 Present Study**

The main goal of this study is to investigate the indirect effects of ethnic minority adolescent's same-ethnic and cross-ethnic friendships (with majority group members) on their attitude towards the majority group through ethnic and host society identification. Hypotheses will be tested longitudinally among ethnic minority students during their first year of middle school in the Netherlands. The transition to middle school is characterized by a complete re-location of students to school-classes, which means that many students encounter their new classmates for the first time. During this first year at middle school new friendships are formed (Hardy et al., 2002) that in turn are likely to affect identity formation (Meeus, 2011) and outgroup attitudes (Poteat, 2007). To examine causal relations, a lagged design is used in which same-ethnic and cross-ethnic friendships (with native Dutch) formed three months after entering middle school predict outgroup attitudes (towards the Dutch) at the end of the first school year, controlling for earlier attitudes.

### 3.3 Method

#### Participants

This study is based on a subsample The Arnhem School Study, a Dutch longitudinal survey in which 1197 students, within 61 classrooms of 12 middle schools, were followed during their first two middle school years (age 12-13). Three waves of data collection took place during this first year of middle school. The first wave (T1) was right after the transition to middle school in September, the second wave (T2) took place three months later in December and the third wave (T3) at the end of the school year in June (for details see Stark and Flache, 2012).

Students of whom both parents were born in a country outside the Netherlands ( $n = 244$ , from 49 different school classes, at 12 schools) were selected for the current study. This removed the risk that identification with the host society was affected by one of the parents being born in the Netherlands. The ethnic background of this subsample was 44% Turkish, 12% Moroccan, 9% Afghani, 7% Surinamese, 5% Dutch-Antillean, and 23% other backgrounds. Students in this subsample were part of classrooms with different levels of ethnic diversity (8% to 93% Dutch,  $m = 50\%$ ). Dutch classmates were not selected for the analyses but were included in the computations of classroom ethnic diversity and in the coding of cross-ethnic friendships with majority group members.

**Procedure.** After schools agreed to participate, parents were given the possibility to deny consent for their children to participate in the study. In addition, participating students were assured confidentiality and were informed that they were free to discontinue participation. Per school class, students simultaneously completed online questionnaires in their school's computer lab. Teachers read instructions to the students and supervised the completion of the questionnaires, which took 30 minutes on average.

#### Measures

**Ethnicity.** Ethnic background was based on the reported countries of birth of both the parents. If parents were born in different countries, the country of the mother was assigned. Because nearly half of the sample (44%) were of Turkish origin, and all other groups were small ( $\leq 12\%$ ), we created a dummy for Turkish (1) versus other (0) to control for ethnic group differences in the dependent variables. For the coding of cross-ethnic friendships with majority group peers, classmates were assigned the Dutch ethnicity if both of their parents were born in the Netherlands.

**Same- and cross-ethnic friendships (T2, T3).** At all waves participants were asked "Who of your classmates are your best friends?" Students could nominate an unlimited number of best friends on a list showing names of all their classmates. Based on ethnicity data of the nominator and the nominee, the number of unidirectional friendships with majority group (Dutch) classmates and with ethnic ingroup classmates were counted. Friendships at T2, three months after the transition to mid-

dle school, were selected to predict outgroup attitudes because friendships are likely to have been formed by this time (Hardy et al., 2002).

**Ethnic Ingroup and Host Society Identification (T3).** Ethnic identification was measured at T3 using two items: ‘Do you feel [ethnic group father]?’ and ‘How proud are you to be [ethnic group father]?’ The same two items were used for identification with the host society: ‘Do you feel Dutch?’ and ‘How proud are you to be Dutch?’ Because Dutch people form the majority group in the Netherlands (SCP, 2012b), which defines the culture of the country, we argue that if ethnic minority students indicate to feel Dutch this means that they feel that they are a member of the Dutch society (i.e., not ethnic Dutch). Students could answer on a scale from 1, *absolutely not*, to 5, *very strong*. The correlation between the two items for ethnic ingroup identification was  $r = .73$ , and for identification with the host society,  $r = .69$ .

**Outgroup Attitudes Toward the Majority Group (T2, T3).** A four-item social stereotyping scale was used to measure students’ outgroup attitude toward the Dutch majority group. Students indicated on a scale from 1, *totally disagree*, to 7, *totally agree*, how much they agreed with the statements: “All Dutch are (a) honest, (b) friendly, (c) smart, (d) helpful” (c.f. Vervoort, Scholte, & Scheepers, 2011). Only positive traits were included in this scale because children older than 7 have been shown to be less willing to differentiate between social groups on negative traits than on positive traits (Bigler, Brown, & Markell, 2001; Rutland et al., 2007). Higher scores indicate a more positive attitude toward the majority group. The scales were internally consistent at T2 (Cronbach’s  $\alpha = .97$ ), and at T3 (Cronbach’s  $\alpha = .97$ ).

**Background Variables.** Gender was measured by self-report and coded as zero for boys, and one for girls (47%). Because the Dutch middle school system is tracked, we controlled for whether students were in the lower (69% VMBO, preparatory secondary vocational education) the middle (22% HAVO, senior general secondary education), or the higher (9% VWO, pre-university education) educational track. This was dummy coded into 0, *lower track*, and 1, *middle or higher track*. To control for cross-ethnic friendship opportunities the proportion of Dutch classmates was included as a control variable (range = .08 - .93,  $M = .50$ ,  $SD = .19$ ).

### Attrition Analyses

Of the 244 minority students (with both parents born outside the Netherlands) that participated in the study during the first year of middle school, 232 students participated at T1, 235 at T2, and 216 at T3. Of the students who participated at T2 ( $n = 235$ ), 89% also participated in T3 ( $n = 209$ ). Attrition analyses showed that the number of Dutch friends at T2 did not differ from T3 ( $F(1, 233) = .21$ ,  $p = .65$ ), but attitudes toward the Dutch at T2 differed significantly between students that did ( $M = 4.07$ ,  $SD = 1.75$ ) and students that did not participate ( $M = 4.84$ ,  $SD = 1.71$ ) at T3,  $F(1, 223) = 4.74$ ,  $p = .03$ .

Missings occurred mainly for variables at T3. We considered using an imputation approach but given that cases with missing data on dependent variables should be

omitted from final analyses even when using imputed data (Graham, 2009), this approach would only add 7 additional cases to the final model (that is, the number of students with data on the dependent but missing values on independent variables). Given this small number of added cases we decided not to use an imputation approach.

### **Analytical Strategy**

To test the hypothesized indirect effects we made use of structural equation modeling in Mplus (Muthén & Muthén, 1998-2010). Due to sample size restrictions not all hypothesized effects were modeled simultaneously. Preliminary models examined the relationships between same-ethnic and cross-ethnic friendships and group identifications, and subsequently the relationships between group identifications and outgroup attitude were examined. Based on these preliminary findings one final model was constructed. Indirect effects were tested using the ‘model indirect’ command in Mplus, which uses the Delta method (described in MacKinnon, 2008) that is a Sobel test with an added covariance term between the two path estimates.

Because the students were part of school classes ( $N = 49$ ), multilevel structural equation models were considered. However, because many school classes only had a low number of minority students (31 out of 49 school classes consisted of 5 minority students or less), and the Intra Class Correlation (ICC) of attitudes towards the Dutch was zero ( $\tau^2 = 2.66$ ,  $\sigma^2 = .00$ ,  $ICC = .00$ ), the classroom structure was not taken into account in the current study.

The latent factors outgroup attitudes at T2 and T3 (4 items), ethnic identification (2 items) and host society identification (2 items), were constructed in the structural equation models. The measurement model including all latent variables indicated that the different indicators fitted the latent factors well. Indicator loadings ranged from .78 to .97 and were all statistically significant at  $p < .05$ , and the model fitted the data ( $\chi^2(73) = 144.29$ ,  $p < .01$ ,  $CFI = .97$ ,  $TLI = .97$ ,  $RMSEA = .06$ ,  $RMSEA CI: .05-.08$ ,  $SRMR = .06$ ).

To control for baseline differences in the dependent variables based on personal and school class characteristics, dependent variable(s) were initially regressed on the control variables gender, ethnic background, percentage Dutch classmates, and education level. Non-significant controls ( $p > .05$ ) were excluded from the final models for reasons of parsimony. Standardized parameter estimates are reported.

Preliminary analyses showed that ethnic ingroup identification was highly skewed toward strong ethnic identification. Hence, Maximum Likelihood Estimation with Robust Standard Errors (MLR) was used in the structural equation models, which reduces the bias in standard errors that non-normal data are prone to. Analyses including ethnic identification were also performed with ethnic ingroup identification dummy coded by using a split at the first quartile to distinguish moderate (lowest 25%) and high (highest 75%) ethnic ingroup identifiers.

### 3.4 Results

#### Descriptive Analyses

Descriptive statistics of the main variables are presented in Table 3.1. A paired sample *t*-test showed that ethnic identification ( $M = 4.49$ ,  $SD = .89$ ) was stronger than host society identification ( $M = 2.45$ ,  $SD = 1.12$ ),  $t(207) = 17.29$ ,  $p < .001$ . Regarding same-ethnic and cross-ethnic friendships with majority group members at T2, we examined whether students had more same-ethnic than cross-ethnic friends than could be expected from availability. Paired sample *t*-tests showed that the friendship ratio of ingroup versus outgroup friends ( $M = 63\%$  Dutch friends) was significantly lower than the availability ratio of ingroup versus outgroup classmates ( $M = 80\%$  Dutch classmates),  $t(210) = -7.86$ ,  $p < .001$ . This indicates that students tended to have less cross-ethnic friends compared to same-ethnic friendships than would be expected based on availability.

**Table 3.1** Descriptive Statistics for Main Study Variables

	<i>N</i>	<i>M</i>	<i>SD</i>	Range
Percentage Dutch classmates	244	.50	.19	.08-.93
Same-ethnic friendships T2	235	1.02	1.60	0-10
Cross-ethnic friendships T2	235	2.42	3.13	0-23
Ethnic ingroup identification T3	208	4.49	0.89	1-5
Host society identification T3	218	2.43	1.20	1-5
Attitude toward majority group T2	226	4.16	1.66	1-7
Attitude toward majority group T3	218	4.20	1.63	1-7

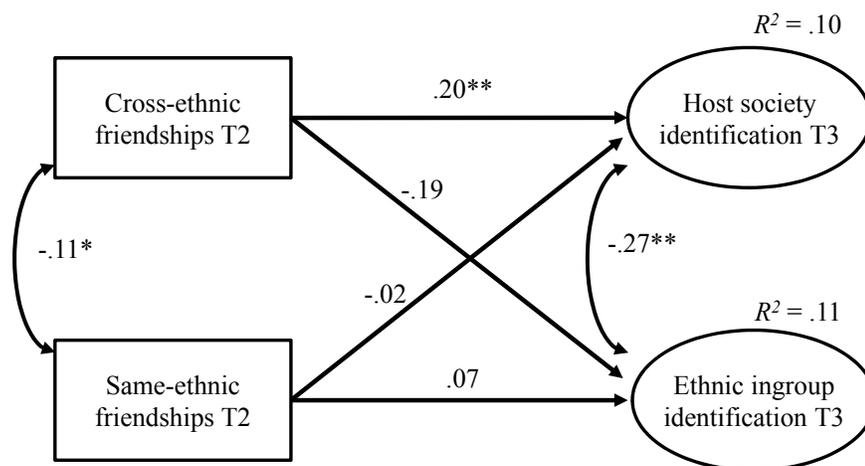
**Table 3.2** Bivariate Correlations between Study Variables

	1.	2.	3.	4.	5.	6.
1. Percentage Dutch classmates						
2. Same-ethnic friendships T2	-.43**					
3. Cross-ethnic friendships T2	.36**	-.11				
4. Ingroup identification T3	-.22**	.18**	-.22**			
5. Host society identification T3	.14*	-.16*	.21**	.29**		
6. Attitude toward majority group T2	.10	.02	.19**	-.13†	.24**	
7. Attitude toward majority group T3	.11	-.04	.13†	-.20**	.33**	.38**

For the change in outgroup attitudes from T2 to T3, a paired sample *t*-test showed that even though outgroup attitudes improved somewhat over time, this difference was not significant ( $t(202) = -0.66, p = 0.51$ ). Table 3.2 shows that the correlation between attitudes at T2 and T3 was significant but moderate, which indicates that the outgroup attitude was not very stable within students over time. Furthermore, the correlations indicate that same-ethnic and cross-ethnic friendships were related to group identifications, and that the group identifications were related to outgroup attitudes.

### Friendships and Group Identifications

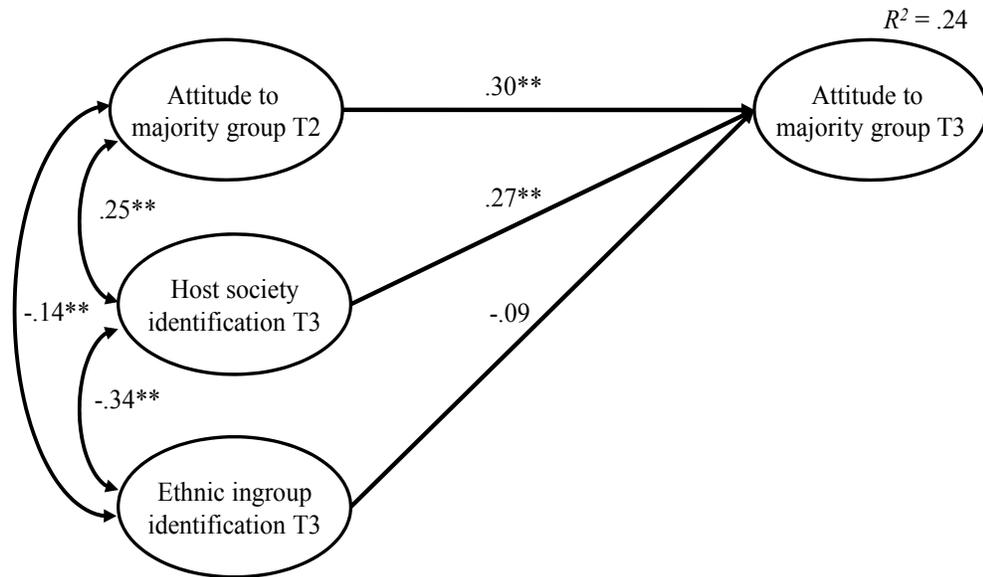
The first structural equation model is the *friendships-identification model* (Figure 3.1). This model examined whether same-ethnic and cross-ethnic friendships were related to ethnic identification and host society identification. The model (see Figure 3.1) fit the data well ( $\chi^2(7) = 73.62, p = .76, CFI = 1.00, TLI = 1.03, RMSEA = .00, RMSEA CI: .00 - .06, SRMR = .01$ ). Minority students' cross-ethnic friendships with Dutch peers were related to stronger identification with the host society ( $B = .20, SE = .07, p < .01$ ), but not to ethnic identification ( $B = -.19, SE = .12, p = .11$ ). Same-ethnic friendships were not significantly related to identification with the host society ( $B = -.02, SE = .09, p = .84$ ) and also not with ingroup identification ( $B = .07, SE = .10, p = .47$ ). Thus, only cross-ethnic friendships were related to stronger identification with the host society. Of the controls, only ethnic background was a significant predictor of host society identification ( $B = -.21, SE = .08, p < .05$ ) and ethnic ingroup identification ( $B = .19, SE = .09, p < .05$ ). Turkish students identified less with the host society and more with their ethnic ingroup than students from other ethnic minority groups. A model in which ethnic identification was dummy coded showed similar results with only cross-ethnic friendships being related to stronger host society identification,  $B = .18, p < .05$ , estimator: WLSMV,  $\chi^2(3) = 3.48, p = .32, CFI = .99, TLI = .97, RMSEA = .03$ .



**Figure 3.1.** Structural Equation Model Predicting Ingroup and Host Society Identification by Same-Ethnic and Cross-Ethnic friendships. \*  $p < .05$ ; \*\*  $p < .01$ .

**Group Identifications and Attitudes Towards the Majority Group**

Using a lagged structural equation model we next examined whether ethnic identification and host society identification were related to outgroup attitude change during the first year of middle school. That is, we controlled for attitudes at T2 in the prediction of attitudes at T3. This *identification-attitude model* (see Figure 3.2) fit the data well ( $\chi^2(48) = 57.80, p = .16, CFI = .99, TLI = .99, RMSEA = .03, RMSEA CI: .00-.05, SRMR = .03$ ). Identification with the host society ( $B = .27, SE = .08, p < .01$ ) but not ethnic identification ( $B = -.09, SE = .09, p = .32$ ) improved outgroup attitudes. None of the controls predicted outgroup attitudes.

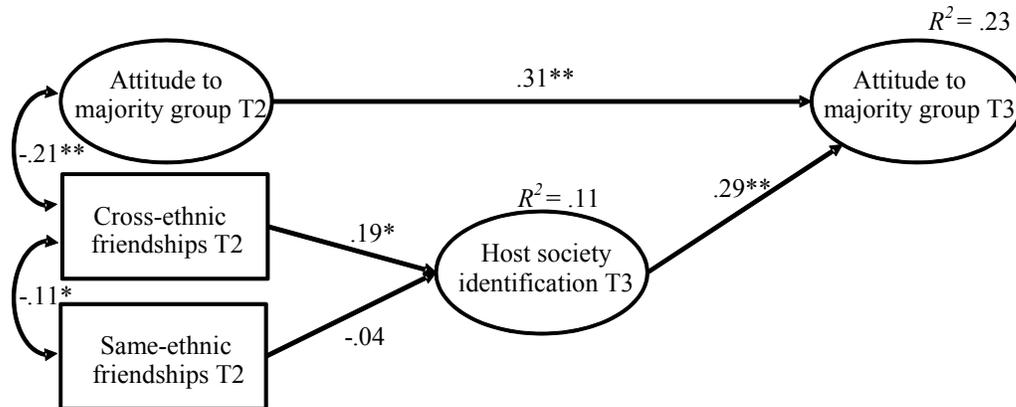


**Figure 3.2.** Lagged structural equation model predicting outgroup attitudes at T3 by ethnic ingroup and identification with the host society. \* $p < .05$ ; \*\*  $p < .01$ .

**Indirect Effect through Host Society Identification**

The first two structural equation models showed that ingroup friendships did not affect ethnic identification, and ethnic identification did not affect students’ outgroup attitudes. Hence, we only examined a *host society (superordinate) identification model* (Figure 3.3) which tests the indirect effect of majority group friendships on outgroup attitudes through host society identification. This model fit the data well (estimator MLR:  $\chi^2(47) = 59.19, p = .11, CFI = .99, TLI = .99, RMSEA = .03, RMSEA CI: .00-.06, SRMR = .06$ ). The indirect effect of outgroup friendships on outgroup attitudes through host society identification was significant ( $B = .06, Delta$  indirect test:  $z = 2.04, p = .04$ ). Thus, in support of the superordinate identification hypothesis, we found that majority group friendships were related to higher identification with the host society which in turn was related to more positive outgroup attitudes.

This mediation was also significant when controlling for outgroup attitudes at T1 instead of T2 ( $B = .06$ , Delta indirect test:  $z = 2.05$ ,  $p < .05$ )<sup>2</sup>.



**Figure 3.3.** Lagged structural equation models to examine the direct and indirect pathways predicting outgroup attitude toward Dutch at T3. The path between attitudes at T2 and ethnic ingroup friends, and the path between ethnic ingroup and majority group friends and attitudes at T3 were not significant and therefore not presented in this model. \*  $p < .05$ ; \*\*  $p < .01$ .

### Additional Analyses

To investigate whether the influence between ingroup and outgroup friendships and group identifications is reversed or bidirectional, we additionally estimated a model in which ingroup and outgroup friendships at T2 predict host society identification at T3, which in turn was modeled to predict ingroup and outgroup friendships at T3. In doing so, stability paths from ingroup versus outgroup friendships at T2 to friendships at T3 were included. Group identification and friendships are both measured at T3, but this is the best possible design with the data at hand. Ethnic identification was excluded from the model, because it was not related to ingroup and outgroup friendships. The final model showed that outgroup friendships at T2 were related to stronger identification with the host society at T3 ( $B = .18$ ,  $SE = .07$ ,  $p < .05$ ) which in turn was related to more outgroup friendships at T3 ( $B = .17$ ,  $SE = .07$ ,  $p < .01$ ). Ethnic ingroup friendships were not related to identification with the host society. This model fit the data well ( $\chi^2(8) = 8.81$ ,  $p = .36$ ,  $CFI = 1.00$ ,  $TLI = .99$ ,  $RMSEA = .02$ ,  $RMSEA CI: .00 - .08$ ,  $SRMR = .01$ ).

Second, we added ingroup and outgroup friendships at T3 to the superordinate identification model. The resulting model predicted, next to change in outgroup atti-

<sup>2</sup> The preliminary models and the superordinate identification model were also examined with an alternative measure, which combined the number of same-ethnic and cross-ethnic friendships with majority group members into a ratio score. The analyses with this alternative measure gave the same results and can be found in appendix A.

tudes, the change in the number of outgroup friends. The bidirectional model also fit the data well ( $\chi^2(75) = 108.75, p = .01, CFI = .98, TLI = .97, RMSEA = .04, RMSEA CI: .02-.06, SRMR = .04$ ) and shows that having Dutch friends at T2 was related to stronger identification with the host society at T3 ( $B = .18, SE = .08, p < .05$ ), which in turn was related to an increase in the number of Dutch friends at T3 ( $B = .18, SE = .07, p < .01$ ). Although the paths stay significant, the indirect path in this model changed to being marginally significant ( $B = .05, \text{Delta indirect test: } z = 1.88, p = .06$ ). These findings indicate that the relation between host society identification and attitude toward the majority group is bidirectional.

### 3.5 Discussion

Using longitudinal data, we examined among ethnic minority adolescents whether identification with the ethnic ingroup and with the host society mediate the relationship between same-ethnic and cross-ethnic friendships with majority group members, on the one hand, and the attitude towards the majority, on the other hand. We proposed two pathways which reflect the bicultural world of ethnic minority adolescents. Related to their orientation towards the host society, we argued for identification with the host society as a mediator between majority group friendships and attitudes toward the majority group. Related to their ethnic ingroup orientation, we proposed ethnic ingroup identification as a mediator between same-ethnic friendships and attitudes toward the majority group. The hypotheses were tested among ethnic minority adolescents during their first year of middle school.

Regarding minority students' orientation towards the host society, we hypothesized based on peer influence and the common ingroup identity theory (Gaertner et al., 1994) that friendships with the majority group would affect identification with the host society, which in turn would improve attitudes towards the majority group (*Superordinate Group Identification Hypothesis*). Our findings were in line with this hypothesis. Thus, for ethnic minority adolescents, host society identification mediates the link between majority group friendships and attitudes toward the majority group. This indicates that intergroup contact (like cross-ethnic friendship) is important to create a superordinate identity, which in turn improves attitudes toward former subgroups.

Whereas we theorized and examined friendships as predictors of identification with the host society, reverse (Rutland et al., 2012) and bidirectional causality (Maliepaard & Phalet, 2012) between intergroup contact and group identification has also been argued and found. Additional analyses to test the direction of the relation showed that majority group friendships were related to stronger identification with the host society, and identification with the host society was related to more friendships with majority group peers. These findings suggest, in line with Maliepaard and Phalet (2012), that the relation between identification with the host society and attitudes toward the majority group might be bidirectional.

Regarding minority students' orientation toward their ethnic ingroup, we expected based on peer influence that friendships with ethnic ingroup members would be related to stronger ethnic identification. Based on social identity theory (Tajfel & Turner, 1979) versus the developmental theory of ethnic identity (Phinney et al., 2007), ethnic ingroup identification was theorized to subsequently lead to either less positive or more positive attitudes toward the majority group. There was no support for the relationship between same-ethnic friendships and ethnic ingroup identification, and no support for the relation between ethnic identification and change in outgroup attitude. One explanation for the lack of these findings could be that ethnic identification was generally quite strong among most of the students. Hence, for many students it was not possible to further increase their ethnic identification.

It might also be that the ethnic ingroup pathway follows a different sequence than the superordinate identification pathway. Namely, it might be that if students identify more strongly with their ethnic ingroup, this leads to more ethnic ingroup friendships, which in turn may affect their attitudes toward the majority group. Additional analyses however, in which we examined the causality between ethnic identification and friendships, showed that ethnic ingroup identification did not predict ethnic ingroup friendships. One other explanation for the lack of a relation between same-ethnic friendships and ethnic ingroup identification could be that both proposed effects based on social identity theory (negative effect) and based on the developmental theory of ethnic identity (positive effect) take place simultaneously, which then cancel each other out. Future studies should examine this in more detail.

Next to the separate effects of identification with the ethnic ingroup and with the host society, dual identity theory (e.g. Gaertner et al., 1996; Hornsey & Hogg, 2000) builds on the common ingroup identity model and argues that identification with the superordinate group (host society) leads to more positive outgroup attitudes when it goes together with identification with the subgroup (ethnic minority group) (González & Brown, 2006). Namely, in order for people to generalize positive intergroup encounters to a more favorable attitude to the entire outgroup, group boundaries should be somewhat salient. In other words, if within the superordinate category subgroup boundaries are not salient then positive intergroup experiences will not generalize to the outgroup. Hence, according to dual identity theory, in particular identification with the superordinate group while maintaining the ingroup-outgroup distinction leads to more positive outgroup attitudes. Because nearly all students in this study indicated to identify to some extent with their ethnic ingroup (indicating salient subgroup boundaries) we were not able to examine the dual identity hypothesis (for which we would need students among whom ethnic identification was low). However, given that the students in our sample generally identified with their ethnic ingroup indicates that our findings are in line with dual identity theory in the sense that it is not necessary that students let go of their ethnic identity for a positive effect of host society identification on outgroup attitudes. Thus, whereas early formulations of the common ingroup identity model (Gaertner et al., 1993) suggested that the superordi-

nate identification should replace subgroup identification, the current study showed in line with more recent formulations of the theory that it is not necessary that people relinquish their subgroup identity (Dovidio et al., 2007).

The current study adds to previous studies in several ways. This study distinguished between the effects of both same- and cross-ethnic friendships, as well as ethnic and host society identification. This reflects the bicultural world of immigrant youth, and it also reflects the group identification structure of the common ingroup identity model. Whereas most previous studies on the ingroup identity model focused on group boundaries within social settings (see for an overview Dovidio et al., 2007), minority members' ethnic ingroup versus host society identification creates a relevant test case for the common ingroup identity model in society. By doing so the current study indicates that in particular the orientation toward the host society in terms of friendships and group identification are related to changes in attitudes toward the majority group.

This study also adds to previous research because it is one of the few studies that examined the common ingroup identity model longitudinally. Even when controlling for earlier outgroup attitudes, identification with the host society improved outgroup attitudes at the end of the school year. Also, whereas most previous studies examined intergroup contact effects and its mediators among majority group students, this study adds to our understanding of same-ethnic and cross-ethnic friendships of immigrant youth and shows that identification with the host society is an additional mediator of the effect between intergroup contact and outgroup attitudes. Research on intergroup contact among minority youth is important because it sheds light on how integration processes affect the positive social development of societal minority youth.

Despite its contributions the current study has some limitations. We only considered friendships within school classes, but it is possible that students have same- and cross-ethnic friendships outside the school class as well. However, a recent study on in and out of school networks of students with an immigration background in Sweden (Svensson, Stattin, & Kerr, 2011) showed that the relative numbers of same- and cross-ethnic friendships were similar across contexts. Whether this is also the case in our sample we do not know. Nevertheless, even given students' friendships outside the school class, we found that friendships with majority group members within school classes affect identification with the host society which in turn affects outgroup attitudes over time.

A second limitation concerns the causality of our findings. In the mediation model, identification with the host society was modeled as a mediator measured at the same time (T3) as the dependent variable (outgroup attitudes). Even though analyses showed that identification with the host society was related to change in outgroup attitudes from T2 to T3, the current study did not offer a stringent test of the causal relationship between cross-ethnic friendships and identification with the host society. Hence, a stronger test to examine causality of the relations would need to examine

this mediation with cross-ethnic friendships, superordinate identification, and outgroup attitudes measured at three time points.

### **3.6 Conclusion**

Regarding the desirability of ethnic minority students having same- or cross-ethnic friendships and of their identification with their own ethnic group versus the host society, this study showed that same-ethnic friendships and ingroup identification do not improve but also do not harm the attitudes of ethnic minority group members toward the majority group. Whereas early work on ethnocentrism argued that ingroup identification would be related to less favorable outgroup attitudes (Adorno et al., 1950; Sumner, 1906), later work on integration recognized that ingroup identification could go together with positive intergroup relations (Berry, 1997; Berry, 2001). In line with this later work the current study showed that among students who identified with their ethnic ingroup, there were students who also had relations with majority group members and identified with the host society. Regardless of their ethnic ingroup identification, identification with the host society was related to more positive attitudes toward the host society.

Whereas same-ethnic friendships did not affect outgroup attitudes, cross-ethnic friendships did. This study showed that cross-ethnic friendships improve attitudes toward the majority group through identification with the host society. Theoretically, this study supports the common ingroup identity model in the sense that, among ethnic minority members, identification with a superordinate group improved attitudes toward a former subgroup (societal majority group members). In addition, ethnic minority students' cross-ethnic friendships with majority group members can help to attain this superordinate identification. Thus, among ethnic minority group members, identification with the host society seems to be a mediator between cross-ethnic friendships and outgroup attitudes.

In conclusion, this study underscores the significance of cross-ethnic friendships in multicultural contexts. For the integration of minority students, friendships with the majority group seem to be of importance. Given that both majority and minority students have to take part in those friendships, students with an ethnic minority background as well as their native majority peers play a role in making minority group students feel part of the host society and to develop a positive attitude towards majority group members.

## Appendix

### Analyses with Ratio Score

In the current study we theorized and tested how the number of ethnic ingroup and majority group friendships separately have effects on group identifications and outgroup attitudes. It might also be that not so much the number of friendships, but in particular the ratio of ethnic ingroup and majority group friendships affects with which group students identify.

Including the ratio of ingroup versus majority group friends to the model was considered but the number of majority group friends and the friendship ratio were strongly correlated ( $r(235) = .54, p < .001$ ) which gives problems with collinearity. To examine whether the ratio is particularly important for ethnic ingroup and outgroup identification, additional analyses were performed with the ratio measure instead of the separate numbers of ingroup and majority group friends.

The friendships-identification model showed that a higher ratio of majority group friends was related to stronger identification with the host society ( $B = .21, SE = .08, p < .01$ ) but not to ethnic identification ( $B = -.13, SE = .09, p = .14$ ) and fit the data well ( $\chi^2(5) = 1.58, p = .90, CFI = 1.00, TLI = 1.05, RMSEA = .00, RMSEA CI: .00 - .04, SRMR = .01$ ). The superordinate identification model, which tested the indirect effect, also gave similar results: A higher ratio of Dutch friends was related to a stronger identification with the host society ( $B = .20, SE = .08, p < .05$ ) which was in turn related to outgroup attitudes ( $B = .31, SE = .08, p < .01$ ). The indirect effect was also significant ( $B = .06, z = 2.11, p < .05$ ) and the model fit the data well ( $\chi^2(47) = 58.24, p = .13, CFI = .99, TLI = .99, RMSEA = .03, RMSEA CI: .00 - .06, SRMR = .03$ ). Whereas these models give insight in how the ratio of ingroup and majority group friendships affect identification, the main models give more insight in the separate effects of ethnic ingroup and majority group friendships.



## Chapter 4

### **Extended Cross-Ethnic Friendships within Social Settings: The Moderating Role of Initial Outgroup Attitudes**

In this chapter it was hypothesized that extended cross-ethnic friendships (outgroup friends of ingroup friends) lead to more favorable outgroup attitudes in particular for people with initially unfavorable outgroup attitudes, and for those without direct cross-ethnic friendships. In contrast, building on structural balance theory, it was hypothesized that extended cross-ethnic friendships in small social settings may lead to *less* favorable outgroup attitudes. Hypotheses were tested longitudinally among Dutch students ( $n = 661$ ) who just entered multi-ethnic middle schools. Adopting concepts from social network analysis, an extended cross-ethnic friendships measure was proposed which excludes direct cross-ethnic friendships. Multilevel panel analyses showed that the effect of extended cross-ethnic friendships with Turkish peers did not depend on whether adolescents also had Turkish friends. Extended cross-ethnic friendships improved outgroup attitudes only for students with relatively unfavorable outgroup attitudes. In line with structural balance theory, extended cross-ethnic friendships within the classroom setting negatively affected outgroup attitudes for students with favorable initial attitudes.

This chapter is co-authored by Tobias Stark, Maykel Verkuyten, Andreas Flache, and René Veenstra. A slightly different version of this chapter has been invited for resubmission at an international journal.

#### 4.1 Introduction

Research on intergroup contact (Allport, 1954) repeatedly found that positive contact with members of a different group is related to more favorable outgroup attitudes (Pettigrew & Tropp, 2006). This relation appears to be stronger for more intimate forms of intergroup contact, like cross-ethnic friendships (Davies et al., 2011). The potential of cross-ethnic friendships to improve outgroup attitudes raises concerns about the lack of cross-ethnic friendships that is typically found in school friendship networks (Baerveldt et al., 2004; Moody, 2001). However, research on extended intergroup contact (Wright et al., 1997)<sup>3</sup> indicates that direct cross-ethnic friendships are not necessary for the reduction of prejudice. Even people who do not have cross-ethnic friendships themselves may develop more favorable outgroup attitudes as a result of the mere knowledge that their ingroup friends have outgroup friends (Feddes et al., 2009; Turner et al., 2007).

The current study adds to previous research on extended intergroup contact in four ways. First, this study gives more insight into the conditions under which extended cross-ethnic friendships improve outgroup attitudes. Whereas several studies have been devoted to the questions of whether and why extended cross-ethnic friendships improve outgroup attitudes, a smaller number of studies examined individual characteristics that moderate extended cross-ethnic friendship effects (Christ et al., 2010; Paolini et al., 2007; Tausch et al., 2011). The current study contributes to this emerging body of research by examining whether initial outgroup attitudes and having direct cross-ethnic friendships, moderate the effect of extended cross-ethnic friendships on outgroup attitudes at a later point in time. Second, taking a social network perspective, this study elaborates upon existing measurements of extended cross-ethnic friendships. We assess the entire social network in which extended cross-ethnic friendships take place. This enables avoiding misclassification of situations where extended cross-ethnic friendship is not truly extended, because individuals who have an extended cross-ethnic friendship are also directly friends with their ingroup friends' outgroup friend. Previously used measures do not exclude this possibility. Third, the network perspective also suggests that the effect of extended cross-ethnic friendships might be context dependent. We argue that extended cross-ethnic friendships in a small social setting can increase prejudice rather than reduce it. Fourth, whereas most studies have tested the extended cross-ethnic friendship effect with a cross-sectional design, the current study tests the effects of direct and extended cross-ethnic friendships with a longitudinal panel design. To this end, we investigate, among Dutch adolescents, the effects of extended cross-ethnic friendships with Turkish origin classmates when they have just entered middle school.

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<sup>3</sup>The extended intergroup contact literature uses the term extended intergroup friendships but in favor of consistency between the chapters I refer to this type of contact as extended cross-ethnic contact and extended cross-ethnic friendships in this book.

### **Extended Intergroup Contact Theory**

Wright and colleagues (1997) proposed that the mere knowledge of an ingroup member having a close relationship with an outgroup member improves outgroup attitudes. Extended cross-ethnic contact would have positive effects because it reduces intergroup anxiety, signals positive ingroup and outgroup norms regarding intergroup relations, and leads to the inclusion of the outgroup in the self (Turner et al., 2008). Thus, extended cross-ethnic contact provides new information about (interaction with) the outgroup, by which students adapt their attitudes.

The literature on direct intergroup contact as well as on extended intergroup contact examined different levels of cross-ethnic (intergroup) contact, ranging from sharing the same social context to more intimate cross-ethnic relations like friendships. Pettigrew (1998) argued that particularly more intimate interpersonal relationships (like friendships) are effective in reducing prejudice because they are more likely than superficial contacts to promote the processes that underlie prejudice reduction, namely learning about the outgroup, changing behavior, generating affective ties, and ingroup reappraisal. Like studies on direct intergroup contact, the extended contact literature examined extended intergroup contact in terms of the number of ingroup members *one knows* who have outgroup friends (Turner, Hewstone, Voci, & Vonofakou, 2008) and in terms of the number of ingroup *friends* who have outgroup friends (Feddes et al., 2009; Turner et al., 2007). In line with Pettigrew (1998) it can be argued that in particular if friends have cross-ethnic friendships, rather than acquaintances, the new information about the outgroup is salient and convincing. Also, within small social settings where everyone knows each other, almost all cross-ethnic friendships are extended cross-ethnic contacts, but a smaller number of students have extended cross-ethnic contact through ingroup friends. Hence, the current study focusses on extended cross-ethnic friendships.

Whereas many studies found support for the extended contact effect (see for an overview Dovidio, Eller, & Hewstone, 2011), there are also exceptions (e.g. Feddes et al., 2009; Paolini et al., 2007 study 1 and 2). For example, Paolini and colleagues (2007), when controlling for direct friendships, did not find an additional effect of having extended intergroup friendships with three outgroups to which prejudice was relatively low (elderly people, mature-aged students and vegetarians). Yet, they did find an effect of extended intergroup friendships with an outgroup to which prejudice was higher (engineering students). To explain this finding, Paolini and colleagues (2007) argued that the attitude towards this latter outgroup was more cognitively (as opposed to affectively) based and cognitively based attitudes are more likely to be improved by indirect forms of contact (e.g., extended contact). Thus, whereas direct friendships might be more effective at improving affectively based attitudes (Tropp & Pettigrew, 2005a), extended (indirect) friendships seems more effective at improving cognition based attitudes.

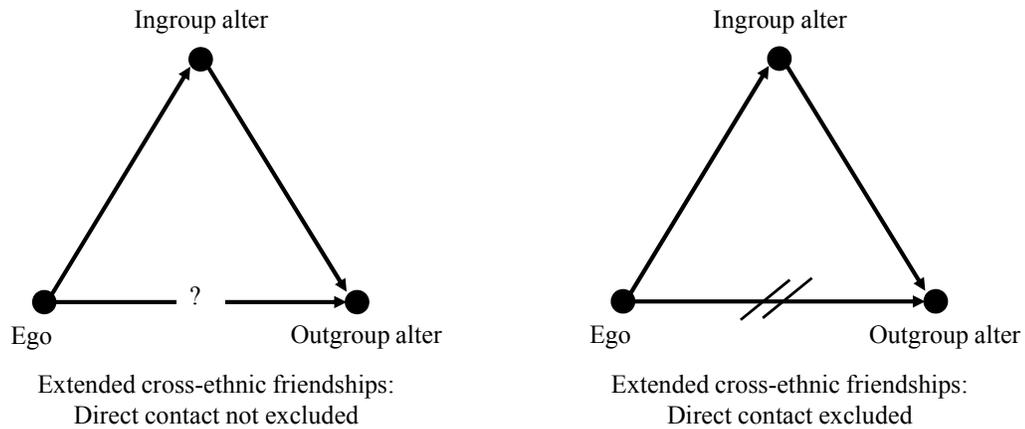
The findings of Paolini and colleagues (2007) also indicate that extended cross-ethnic friendships might be of particular importance for people who initially

hold unfavorable outgroup attitudes. For a positive effect of extended cross-ethnic friendships on outgroup attitudes, the information about the outgroup gained through ingroup friends needs to be more positive than the information that is already available. This implies that in particular for people who initially hold unfavorable outgroup attitudes additional information from extended cross-ethnic friendships should improve their outgroup attitudes. Consistent with this interpretation, direct cross-ethnic contact effects have been shown to be strongest among people with initially intolerant attitudes (see for an overview: Hodson, 2011). If people already have a favorable outgroup attitude, additional positive information about an ingroup friends' cross-ethnic friendships is not likely to change one's outgroup attitudes. Based on this, we expect that the degree to which an individuals' outgroup attitude is positive prior to acquiring information through extended cross-ethnic friendships moderates the effect of extended cross-ethnic friendships on the outgroup attitudes. Accordingly, we hypothesize not only that extended cross-ethnic friendships improve outgroup attitudes (*Hypothesis 1*) but also that this effect is stronger for those who initially have a relatively unfavorable outgroup attitude compared to those who initially have a relatively favorable outgroup attitude (*Hypothesis 2*).

Moreover, existing direct friendships with outgroup members may moderate the effect of extended cross-ethnic friendships. When people already have cross-ethnic friendship experiences, extended cross-ethnic friendships might not provide them with new (positive) information about the outgroup. Therefore, we expect extended cross-ethnic friendships to improve outgroup attitudes in particular for those who do not have direct cross-ethnic friendships (*Hypothesis 3*). This expectation is in line with a recent quasi-experimental study among 6 to 11 year old children. Cameron, Rutland, Hossain, and Petley (2011) found that an extended outgroup contact story intervention improved cross-ethnic friendship intentions in particular for those children who had fewer direct cross-ethnic friendships. Similarly, a cross-sectional study among Dutch adults showed that the effect of extended contact on outgroup prejudice, trust, and threat was only significant for those who did not have direct outgroup contact (Dhont & Van Hiel, 2011). Furthermore, Christ and colleagues (2010) showed with a cross-sectional study among German adults that direct cross-ethnic friendships moderated the effect of extended intergroup friendships on prejudice. In addition, they showed in a longitudinal study among Irish adults that direct interreligious contact moderated the effect of extended interreligious contact on outgroup attitudes. Yet, to our knowledge, the moderating effect of direct contact has not been examined longitudinally among adolescents.

### **The extended intergroup contact measure**

To measure extended intergroup friendships, previous studies (e.g. Dhont & Van Hiel, 2011; Tausch et al., 2011) relied on survey questions like “how many of your



**Figure 4.1.** Configurations of extended cross-ethnic friendship measures. Dots represent people in a social network, arrows depict unidirectional friendship relationships.

[ingroup] friends have [outgroup] friends?” Figure 4.1 depicts the basic triadic configuration in a social network that this conventional measurement taps into. Extended cross-ethnic friendships are measured as the number of times that an individual (ego) has a distinct ingroup friend (ingroup alter) who in turn has one or more outgroup friend(s). What is not explicitly excluded by this conventional measure is whether ego also has a direct friendship with the same outgroup alter. However, for extended cross-ethnic friendships to be truly “extended”, that is, to have the potential to add new positive information about the outgroup, there should be no direct friendship with the outgroup alter. Otherwise an effect of a larger number of extended cross-ethnic friendships might actually be an effect of the number of direct cross-ethnic friendships that the respondent has with outgroup alters (within these triads). Thus, to examine the effect of extended cross-ethnic friendships it is important to disentangle the effects of direct and extended cross-ethnic friendships.

Previous studies on extended intergroup friendships acknowledge that it is necessary to control for direct contact because these two constructs are related (Cameron et al., 2011; Pettigrew, Christ, Wagner, & Stellmacher, 2007). However, controlling for the number of direct friendships in a linear statistical model (such as linear regression) is not sufficient to examine the separate effects of direct and extended friendships. The problem is that the number of direct cross-ethnic relationships can largely consist of the number of extended contacts to the exact same outgroup members. If this is the case the effect of direct cross-ethnic friendships in regression results can wrongly be attributed to extended cross-ethnic friendships, or vice versa. Pettigrew, Christ, Wagner, & Stellmacher (2007) addressed this issue with additional analyses on two subgroups: the first subgroup without direct cross-ethnic friendship(s) but with extended cross-ethnic friendship(s), the second subgroup with direct cross-ethnic friendship(s) but without extended cross-ethnic friendship(s). Although this is informative to partial out the specific effects, comparing groups that only have direct

or only extended cross-ethnic friendships neglects contact effects for those who have both direct and extended cross-ethnic friendships.

Another way to disentangle direct versus extended intergroup contact effects was proposed by Tausch and colleagues (2011). They examined extended contact across contexts by asking respondents how many of their ingroup colleagues at work, close ingroup friends, and family members had outgroup contacts in other contexts (outgroup neighbors/ work colleagues/ close friends/ marriage partners). Outgroup contacts of the ingroup member in the same context (e.g., whether ingroup colleagues had outgroup colleagues) were not included in the measurement of extended contact because these extended outgroup contacts would likely also be direct contacts of the respondents (Tausch et al., 2011). This method, which focuses on direct and extended contact in different contexts, is another approach to disentangle effects of direct and extended contact but is limited in its ecological validity. It cannot be used, for example, to examine extended friendships *within* contact situations, like work organizations or schools. However, because people are likely to have both direct and extended cross-ethnic friendships *within* the same everyday social setting, it is necessary to disentangle their effects also here. To our knowledge there is no measurement of extended intergroup friendships that explicitly excludes direct intergroup friendship and can be used to measure extended intergroup friendships within a particular social context. That is, there is no measure of extended intergroup friendships in which triads (see Figure 4.1) including a direct relation with the outgroup alter are excluded.

### **Extended Contact from a Network Perspective**

Research on social networks suggests that extended cross-ethnic friendships within small social settings (like school classes) is likely to include, or result in, direct cross-ethnic friendship as well. Members of a social network share the same social context and are directly, indirectly, or not at all linked to one another (e.g. Knoke & Yang, 2008). If such a social setting is sufficiently small, people are likely to meet and know each other directly, even if they are not intimately related. This means that intergroup friendships of ingroup friends within the same social context (i.e., extended intergroup friendships) can be observed, and that it is possible to establish direct friendships to the intergroup friends of ingroup friends.

Particularly in small social contexts, the concept of extended cross-ethnic friendships can be related to balance theory (see also Turner et al., 2007). Heiders' (1946) original formulation of balance theory states that people strive for cognitive balance in their attitudes and interpersonal relationships. That is, if two people like each other, they should agree on their attitude toward a third entity. When a triad is imbalanced, for example if two people who like each other do not agree in their attitude, they will try to (re)instate balance by changing their attitude or their relationship. Extended cross-ethnic friendship can be interpreted as a triad that is in an unbalanced state. A person has an ingroup friend who is friends with an outgroup member. Due to the direct cross-ethnic friendship of the friend, it is likely that the ingroup

friend also has positive attitudes towards the outgroup. Yet, the first person (ego) has no direct friendship with his or her friend's outgroup friend (outgroup alter). Original balance theory would suggest that cognitive balance within an extended friendship triad could be restored if the person develops favorable attitudes towards the outgroup. The positive affect the person holds toward the ingroup friend will then match the positive attitude that both friends hold toward the outgroup.

Whereas Heider originally focused on cognitive balance in terms of attitudes and relations, later scholars extended this idea to structural balance according to which people avoid imbalanced friendship triads in which they are not friends with their friends' friends (Cartwright & Harary, 1956; Heider, 1958; T. M. Newcomb, 1956) or not foes of the foes of their friends, or friends of the foes of their friends. Based on structural balance theory (Cartwright & Harary, 1956), balance in an extended contact situation can also be restored if a person closes the open triad by forming a direct friendship with the outgroup friend of his or her ingroup friend. In fact, research on social networks repeatedly showed that friendship networks are typically characterized by "transitivity", the tendency of people to close "open triads" (Davies et al., 2011; Stark & Flache, 2012; Wimmer & Lewis, 2010).

The latter implies that extended cross-ethnic friendships within a social setting are likely to be accompanied by direct cross-ethnic friendships between a focal individual and indirectly connected outgroup members. From this perspective, it is not surprising that many of the previous studies on extended contact, which used measures that did not specifically exclude direct contact from extended contact triads, found that direct and extended intergroup friendships are strongly related (Paolini, Hewstone, Cairns, & Voci, 2004; Turner & Brown, 2008). When examining extended cross-ethnic friendships within a social setting, an extended cross-ethnic friendships measure should be used that separates direct and indirect cross-ethnic friendships.

We propose to assess the entire social network in a given setting to infer an individual's number of extended friendship relationships that are not simultaneously include direct cross-ethnic friendships. This approach is particularly suitable to study extended intergroup friendships in relatively small social settings in which all individuals are aware of each other. Here, people can be asked who their direct friends are. It is not necessary to ask for their friends' friends because this information can be obtained from the answers of the friends. Because the friends of the friends are known in a complete network, it is also possible to determine whether the first person is really only indirectly related to an ingroup friend's outgroup friend or whether the first person also has a direct friendship with this outgroup member. That is, this approach allows identification of the number of "true" extended cross-ethnic friendships a person has.

### **Negative Effects of Extended Contact**

Taking a social network perspective also allows a less intuitive prediction for the consequences of extended cross-ethnic friendships within a social setting. Since structural

balance theory predicts that people close open triads (Cartwright & Harary, 1956; Heider, 1958), the question arises why extended intergroup friendships would exist at all in small social settings. After all, everybody knows each other and could easily establish direct friendships. One possible explanation for an ‘unbalanced’ extended intergroup friendship triad may be that this is a deliberate choice of the individuals involved. The fact that a person does not close the triad and thus accepts a state of cognitive dissonance might be an indication of a (very) negative relationship between the person and the outgroup friend of his or her ingroup friend. In other words, in small contexts extended intergroup friendships might in fact signal interpersonal rejection between ingroup and outgroup members. This rejection may subsequently be generalized into more unfavorable attitudes towards the outgroup as a whole because negative intergroup relations have been shown to lead to less favorable outgroup attitudes (Stark, 2001). Accordingly, extended cross-ethnic friendships that exist *within* a social setting may result in *less* favorable outgroup attitudes instead of more positive attitudes (*Hypothesis 4*).

The network perspective suggests that extended cross-ethnic friendships may be context dependent and have different meanings in different contexts. When extended cross-ethnic friendships cross the boundaries of social settings, a person may gain new (positive) information about an outgroup. The person may also alter his or her attitude toward the outgroup to match the attitudes of his or her friends who have direct friendships with outgroup members in order to avoid cognitive dissonance. However, extended cross-ethnic friendships within a social setting (like a classroom or a work group) may also indicate negative interpersonal relationships between members of different groups. In such a context, extended cross-ethnic friendships may have the opposite effect and lead to less favorable outgroup attitudes.

#### **4.2 The Present Study**

Building on the original extended contact hypothesis, the current study hypothesizes that extended cross-ethnic friendships improve outgroup attitudes and that this is particularly strong for students who held relatively unfavorable initial outgroup attitudes, and for students who do not have direct cross-ethnic friendships. However, building on a network perspective, it was hypothesized that extended cross-ethnic friendships within a social setting is associated with less positive outgroup attitudes instead of more positive ones. Using a newly developed measure of extended cross-ethnic friendships, these hypotheses are tested longitudinally among Dutch students who just entered ethnically diverse middle schools. We use a lagged design in which direct and extended cross-ethnic friendships three months after the transition to middle school predict outgroup attitudes at the end of the first middle school year, controlling for initial outgroup attitudes right after the transition to middle school. This school transition was accompanied by a complete re-allocation of students to school classes, which means that most students encountered their classmates for the first time. For many students this meant new or first time encounters with students from other ethnic

groups. Also, at the beginning of middle school many new friendships are formed (Hardy et al., 2002) which is likely to affect outgroup attitudes (Potteat, 2007). The hypotheses are tested for Dutch majority group students' friendships with and attitudes toward Turks, because people of Turkish origin form the largest (Statistics Netherlands, 2010) and one of the least liked immigrant groups in the Netherlands, also among adolescents (Verkuyten & Kinket, 2000).

### 4.3 Method

**Participants.** Data for this study come from The Arnhem School Study (TASS: see for more information Stark & Flache, 2012). This is a Dutch longitudinal study in which 1197 students, within 61 classrooms of 12 middle schools, filled out questionnaires at the beginning of the first school year (T1: September 2008), three months later at Winter (T2: December 2008), and then six months later at the end of the first school year (T3: June 2009). The total sample consisted of 68% Dutch, 9% Turkish, 3% Moroccan, and 20% of students with other ethnic backgrounds and students' age was 12-13. Students who participated in all three waves and of whom both parents were born in the Netherlands were selected for the current study. Of the Dutch students who participated at T1 ( $n = 807$ ), 82% also participated in T2 and T3 ( $n = 661$ ). Attrition analyses showed that outgroup attitudes at T1 did not differ significantly between students that did and students that did not participate in the study at T2 and T3,  $F(1, 783) = .003, p = .95$ . The ethnicities of classmates who were not selected for the analyses were taken into account in the calculations of classroom ethnic diversity and the coding of (extended) intergroup friendships.

**Procedure.** After schools agreed to participate, parents were given the possibility to deny consent for their children to participate in the study. In addition, participating students were assured confidentiality and were informed that they were free to discontinue participation. Per school class, students simultaneously completed online questionnaires in their school's computer lab. Teachers read instructions to the students and supervised the completion of the questionnaires, which took on average 30 minutes.

### Measures

**Ethnicity.** Ethnic background was based on the reported countries of birth of both their parents. Following the definition of Statistics Netherlands (Statistics Netherlands, 2010) students were classified as Dutch when both parents were born in the Netherlands. If at least one parent was born outside the Netherlands, the student was assigned the ethnicity of this parent. If both parents were born outside the Netherlands, the student was assigned the ethnicity of the mother. This data was used to code (extended) contact and the number of Turkish classmates.

**Direct cross-ethnic friendships at T2.** At all waves participants were asked "Who of your classmates are your best friends?" Students nominated their best friends on a list showing names of all their classmates. Based on the ethnicity of the nominator and the nominee, the number of unidirectional friendships with Turkish classmates

was coded. Friendships at T2, three months after entering the new contact situation, were selected because friendships are likely to have developed by this time (Hardy et al., 2002). The number of direct cross-ethnic friendships was dummy coded (0 = no Turkish friends, 1 = at least one Turkish friend) for the model in which we test the interaction of having direct cross-ethnic friendships with extended cross-ethnic friendships (Hypothesis 2).

**Extended cross-ethnic friendships at T2.** Whereas previous studies measured extended cross-ethnic contact (Paolini et al., 2007; Turner et al., 2008; Wright et al., 1997) by asking how many of the respondents' ingroup friends have intergroup friendships, the current study used peer nominations to measure extended cross-ethnic friendships. To disentangle direct and extended cross-ethnic friendships only triads in which direct friendship between ego and the outgroup alter was not present were counted as extended cross-ethnic friendships (see the right hand configuration in Figure 4.1). Thus, extended cross-ethnic friendships are the number of ego's ingroup (Dutch) friends who nominated Turkish friends that were not nominated by ego. In our descriptive analyses we compare this measure of extended cross-ethnic friendships with the measure including triads with direct cross-ethnic friendships. We refer to the latter as the "conventional measure" because it is based on the extended contact configuration that is assessed with the typically used survey questions. We distinguish these measures as "conventional cross-ethnic friendships T2" and "network cross-ethnic friendship T2".

**Ethnic outgroup attitudes at T1 and T3.** A four-item social stereotyping scale was used to measure students' outgroup attitudes toward Turks. Students indicated on a scale from 1, *totally disagree*, to 7, *totally agree*, how much they agreed with the statements: "All Turks are [(a) honest, (b) friendly, (c) smart, (d) helpful]". (c.f. Vervoort, Scholte, & Scheepers, 2011). Only positive traits were included in this scale because children older than 7 tend not to discriminate between groups with negative traits, but are more inclined to do so with positive traits (Bigler et al., 2001; Rutland et al., 2007). Higher scores indicate a more positive outgroup attitude. The scales were internally consistent with a Cronbach's  $\alpha = .95$  at T1, and at T3 ( $\alpha = .97$ ).

**Background variables.** Gender was assessed by self-report and coded as zero for boys, and one for girls. Because the Dutch middle school system is tracked, we controlled for whether students were in the lower (35%: VMBO, preparatory secondary vocational education), the middle (38%: HAVO, senior general secondary education), or the higher (27%: VWO, pre-university education) educational track. Dummies were created for the middle and the lower educational track (coded as 1), and the lower track served as the reference category. Last, to control for intergroup friendship opportunities, the number of Turkish classmates was included as a control variable.

#### 4.4 Analytical Strategy

To test the hypotheses we performed lagged multilevel regression analysis in MLwiN 2.23 (Rasbash, Browne, Healy, Cameron, & Charlton, 2011). This allowed us to con-

trol for the fact that students (Level 1) were nested within classrooms (Level 2) (Snijders & Bosker, 1999). Classroom level variables included in the models were the number of Turkish classmates and education level of the school class. All other variables were measured at the individual level. All metric variables were standardized (Snijders & Bosker, 1999).

The lagged multilevel analyses were built up in three steps (see Table 4.3). The first model included the control variables at the classroom and the individual level, as well as individual level outgroup attitudes at T1 to predict outgroup attitudes at T3. In the second model we tested the main effects of having direct and extended cross-ethnic friendships with Turkish classmates at T2 on outgroup attitudes at T3. In the third model we tested the interaction effects of extended cross-ethnic friendships with outgroup attitudes (Model 3.1), and of extended cross-ethnic friendships with (dummy coded) direct cross-ethnic friendships at T2 (Model 3.2). All regression models presented in Table 4.3 were computed using our new measure of network extended cross-ethnic friendships. We replicated these models also with the conventional measure and will discuss the differences between the findings for the two measures.

## 4.5 Results

### Preliminary Analyses

Descriptive statistics on all main variables are presented in Table 4.1. The number of direct cross-ethnic friendships with Turkish classmates was rather low ( $M = 0.18$ ,  $SD = 0.56$ ), in part reflecting the low number of Turkish classmates for the Dutch students in our sample ( $M = 1.38$ ,  $SD = 2.15$ ). Regarding the extended cross-ethnic friendships measure, Table 4.1 shows that the average number of extended cross-ethnic friendships was higher when triads with direct cross-ethnic friendships were included (conventional measure;  $M = 0.39$ ,  $SD = 0.85$ ), than when triads with direct cross-ethnic friendships were excluded (network measure;  $M = .23$ ,  $SD = .85$ ). Paired sample  $t$ -tests show that this difference was statistically significant,  $t(660) = 6.56$ ,  $p < .001$ .

Furthermore, bivariate correlations (Table 4.2) show that having Turkish friends (T2) was strongly related to the conventional measure of extended cross-ethnic friendships  $r(661) = .55$ ,  $p < .01$ , but not to our new network extended cross-ethnic friendships measure,  $r(661) = .03$ ,  $p = .44$ . This indicates that the conventional measure of extended cross-ethnic friendships, which does not exclude direct cross-ethnic friendship, overlapped with direct cross-ethnic friendships. Hence, an effect on outgroup attitude could be due to direct or extended cross-ethnic friendships. Our new measure of network extended cross-ethnic friendships avoids this problem and showed no overlap with direct cross-ethnic friendships.

**Table 4.1** Descriptive Statistics for Main Study Variables

	<i>n</i>	Range	Mean	SD
Turkish classmates	661	0-16	1.38	2.15
Direct cross-ethnic friendships T2	661	0-5	0.18	0.56
Conventional extended friendships T2	661	0-5	0.39	0.85
Network extended friendships T2	661	0-3	0.23	0.58
Outgroup attitudes at T1	645	1.00-7.00	3.97	1.21
Outgroup attitudes at T3	649	1.00-7.00	3.96	1.20

*Note.* The conventional extended friendships measure does not exclude triads with direct intergroup friendships. These triads are excluded in the network extended friendship measure.

**Table 4.2** Bivariate Correlations between Main Study Variables

	1.	2.	3.	4.	5.
1. Turkish classmates					
2. Direct cross-ethnic friendships T2	.39**				
3. Conventional extended friendships T2	.35**	.55**			
4. Network extended friendships T2	.34**	.03	.66**		
5. Outgroup attitude T1	.09*	.08*	.01	-.03	
6. Outgroup attitude T3	.06	.15**	.05	.01	.34**

*Note.* In the conventional extended friendship measure, triads with direct friendships are not excluded. In the network measure, triads with direct friendships are excluded. \*  $p < .05$ ; \*\*  $p < .01$

Regarding the relation between direct cross-ethnic friendships and outgroup attitudes, bivariate correlations show that students who had direct friendships with Turkish classmates at T2, had more positive outgroup attitudes at T1 and at T3. Direct cross-ethnic friendships with Turks were more strongly related to outgroup attitudes at T3 ( $r = .15, p < .001$ ), than to outgroup attitudes at T1 ( $r = .08, p = .04$ ). The number of extended cross-ethnic friendships with Turks was for none of the two measures correlated with outgroup attitudes. In addition, outgroup attitudes at T1 and T3 correlated only at  $r(661) = .34, p < .01$ . This indicates that the attitude toward the Turkish outgroup was not stable over the first middle school year.

### Multilevel Regression Results Predicting Outgroup Attitudes

In line with previous studies on intergroup contact, the multilevel regression results (Table 4.3) show that direct cross-ethnic friendships with Turkish peers at T2 improved outgroup attitudes at T3 ( $B = .15, SE = .04, p < .01$ ), controlled for students' attitudes at T1. None of the control variables were significant predictors of attitude

change. Moreover, we did not find a significant main effect of (network) extended cross-ethnic friendships at T2 on outgroup attitudes at T3 ( $B = .02, SE = .04, p = .54$ ) in Model 2. Accordingly, having same-ethnic friends who had cross-ethnic friends was not related to more positive attitudes. This result shows that we neither found support for the positive extended cross-ethnic friendships effect (Hypothesis 1) nor for the possible negative association of extended cross-ethnic friendships with outgroup attitudes (Hypothesis 4).

It was furthermore hypothesized that in particular for students who had relatively unfavorable outgroup attitudes at T1, extended cross-ethnic friendships would lead to more favorable attitudes at T3 (Hypothesis 2). This hypothesis was tested by including an interaction effect (Attitudes T1 \* Extended cross-ethnic friendships) in Model 3.1. Consistent with Hypothesis 2, the results (Model 3.1) show that the effect of extended cross-ethnic friendships at T2 was moderated by the attitude at T1,  $B = -.09, SE = .04, p = .02$ .

To facilitate interpretation of the significant interaction effect, we calculated simple slopes (Aiken & West, 1991) for the effects of extended friendships for students who had relatively unfavorable outgroup attitudes at T1 (that is, one standard deviation below the mean), for students with average outgroup attitudes at T1, and for students who had relatively favorable attitudes at T1 (that is, one standard deviation above the mean). Supporting Hypothesis 2, the simple slope analyses showed that the net-effect of extended cross-ethnic friendships on outgroup attitudes was significant and positive for students who had unfavorable attitudes at T1 (simple slope:  $B = .10, SE = .05, p = .04$ ), but there was no significant net-effect of extended cross-ethnic friendships for students who had average outgroup attitudes at T1 (simple slope:  $B = .02, SE = .04, p = .58$ ), or held favorable outgroup attitudes at T1 (simple slope:  $B = -.08, SE = .06, p = .19$ )<sup>4</sup>. Figure 4.2 illustrates these findings.

We also hypothesized that extended cross-ethnic friendships would improve outgroup attitudes in particular of students who did not have cross-ethnic friendships themselves (Hypothesis 3). This was tested by including an interaction effect (“Direct cross-ethnic friendships\*Extended friendships”) in Model 3.2. Because we were interested in whether extended cross-ethnic friendships affected students without direct cross-ethnic friends more than students with direct cross-ethnic friendships, the variable direct cross-ethnic friendships was dummy coded (0 = no Turkish friends, 1 = at least one Turkish friend). Model 3.2 shows that this interaction effect was not statistically significant ( $B = -.07, SE = .10, p = .46$ ). This indicates that the effect of extended cross-ethnic friendships was not different for those who did or did not have direct cross-ethnic friendships.

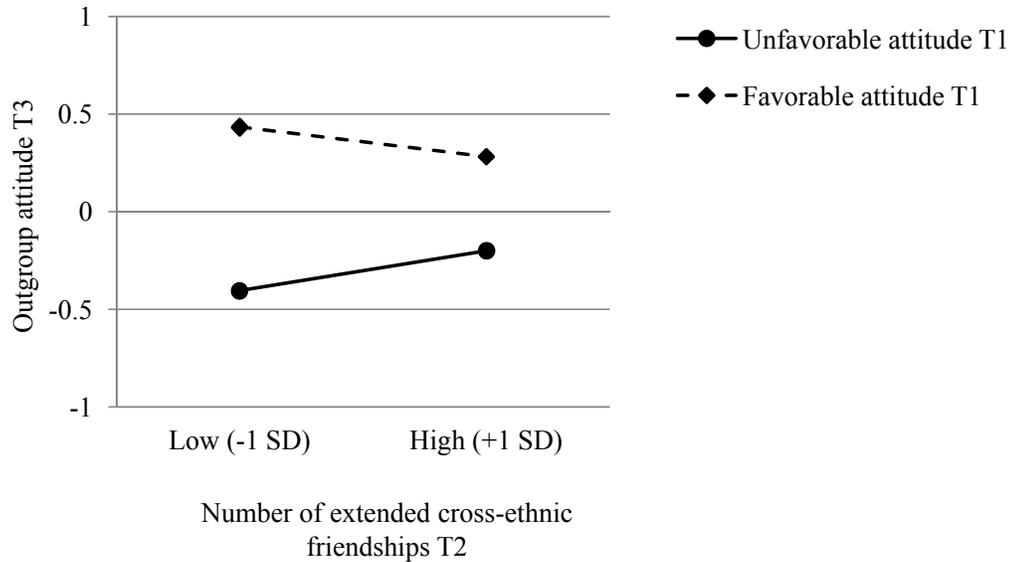
<sup>4</sup> Additional simple slope analyses with extreme scores (2 SD's below and above the mean) show that among students with more extreme unfavorable attitudes at T1, extended intergroup friendships improved outgroup attitudes positively (simple slope:  $B = .19, SE = .08, p = .02$ ) and among students with more extreme favorable attitudes at T2 extended intergroup friendships was marginally related to less favorable outgroup attitudes (simple slope:  $B = -.16, SE = .09, p = .06$ ).

**Table 4.3** Standardized Coefficients of Lagged Multilevel Analyses Predicting Outgroup Attitudes toward Turks at T3

	Model 1	Model 2	Model 3.1	Model 3.2
	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>
Constant	-.02 (.07)	-.06 (.07)	-.06 (.07)	-.11 (.08)
<b>Level 1</b>				
<i>Control variables</i>				
Girl	-.07 (.08)	-.06 (.07)	-.05 (.07)	-.07 (.08)
Outgroup attitudes T1	.34 (.04)**	.33 (.04)**	.33 (.04)**	.33 (.04)**
<i>Contact variables</i>				
Direct cross-ethnic friends T2 <sup>a</sup>		.15 (.04)**	.15 (.04)**	.43 (.13)**
Extended cross-ethnic friends T2		.02 (.04)	.01 (.04)	.03 (.04)
<i>Interactions</i>				
Attitudes T1 * extended friends T2			-.09 (.04)**	
Direct friendships T2 * extended friends T2				-.07 (.10)
<b>Level 2 controls</b>				
Middle educational track (ref = lower track)	.09 (.10)	.14 (.10)	.14 (.10)	.15 (.10)
Higher educational track	.09 (.10)	.14 (.10)	.14 (.10)	.15 (.10)
Nr. of Turkish classmates	.06 (.04)	.001 (.05)	.00 (.05)	.02 (.05)
Explained variance level 1	13%	14%	15%	14%
Explained variance level 2	21%	23%	24%	23%
$\chi^2$ deviance difference	129.5**	13.1**	5.7*	12.01**

Note. *n* classes = 58, *n* students = 632

<sup>a</sup>The variable direct cross-ethnic friendships was dummy coded in model 3.2. Hence, model comparison ( $\chi^2$ ) in this case was done between Model 1 and Model 3.2. \*  $p < .05$ ; \*\*  $p < .01$



**Figure 4.2.** Simple slopes for students with relative unfavorable (sign.) versus favorable (not sign.) outgroup attitudes at T1.

#### Analyses with the Conventional Extended Friendships Measure

To examine whether the network measure and the conventional way of measuring extended cross-ethnic friendships yielded different results, we replicated the regression analysis with the conventional measure of extended cross-ethnic friendships (not excluding triads with direct contact). The results of the analyses did not differ from the ones presented in Table 4.3 in terms of direction and significance, except for one difference. The moderation effect of extended cross-ethnic friendships with attitudes at T1 was not statistically significant,  $B = -.07$ ,  $SE = .04$ ,  $p = .10$ . Thus, when using the conventional extended cross-ethnic friendships measure, the results did not support our hypothesis that extended cross-ethnic friendships had a stronger effect on outgroup attitudes for those students who held negative attitudes at the beginning of the school year.

#### Additional Analyses

The moderating effect of initial outgroup attitudes might occur not only for extended cross-ethnic friendships but also for direct cross-ethnic friendships. To test this possibility, we included an interaction effect of the variable direct cross-ethnic friendships with outgroup attitudes at the beginning of the school year. This interaction effect was not significant (and is not presented in Table 4.3). Thus, direct friendships with Turks improved outgroup attitudes of students regardless of their (positive or negative) initial outgroup attitudes.

To test the robustness of the causal relations between (extended) cross-ethnic friendships and outgroup attitudes, we repeated the regression analyses with attitudes at T2 as an independent variable replacing attitudes at T1. These analyses yielded

similar results. That is, when controlling for attitudes at T2, having Turkish friends at T2 improved attitudes towards Turks at T3 ( $B = .13, SE = .04, p < .01$ ), and extended cross-ethnic friendships at T2 improved outgroup attitudes in particular for students who held negative outgroup attitudes at T2 (interaction:  $B = -.10, SE = .03, p < .01$ ). Different from the analyses with initial attitudes at T1, the simple slope of students who had favorable outgroup attitudes at T2 was also significant. For students who had favorable attitudes at T2, extended cross-ethnic friendships at T2 was related to less favorable outgroup attitudes at T3 (simple slope:  $B = -.10, SE = .05, p = .04$ ), and for students who had less favorable attitudes at T2 extended intergroup friendships at T2 was related to more favorable attitudes at T3 (simple slope:  $B = .11, SE = .05, p = .04$ ). These alternative analyses point to partial support of Hypothesis 4. Extended cross-ethnic friendships had a negative effect on outgroup attitudes, but only for students who had more favorable attitudes at T2.

#### **4.6 Discussion**

The present study examined conditions under which extended cross-ethnic friendships improve outgroup attitudes. It was hypothesized that these friendships improve outgroup attitudes particularly for individuals who hold initially relatively unfavorable outgroup attitudes, and for individuals who do not have direct cross-ethnic friendships themselves. Moreover, taking a network perspective, we presented a measure for extended cross-ethnic friendships that avoids misclassification of cross-ethnic friendship as extended when it is in fact direct, and we tested potential negative effects of extended cross-ethnic friendships in small social settings. This was examined among Dutch students who just entered multi-ethnic middle schools.

#### **Main Findings**

In line with intergroup contact theory (Allport, 1954), our study showed that direct cross-ethnic friendships with Turkish peers led to more positive attitudes toward Turks amongst native Dutch students. In contrast to the extended contact hypothesis (Wright et al., 1997), we did not find support for Hypothesis 1, that extended cross-ethnic friendships within school classes had a positive main effect on outgroup attitudes. This is in line with some earlier findings in school classes (e.g. Feddes et al., 2009). Moreover, the absence of an effect of extended cross-ethnic friendship meant that we also had to reject Hypothesis 4, stating that extended cross-ethnic friendships in small social settings may be related to more negative attitudes.

To add to the extended intergroup contact literature, this study investigated conditions that could affect whether extended cross-ethnic friendships improves outgroup attitudes. We expected that effects of extended cross-ethnic friendships would be moderated by outgroup attitudes that students initially held when they entered middle school. In line with Hypothesis 2, we found that extended cross-ethnic friendships improved outgroup attitudes particularly for students who initially held unfavorable attitudes. In addition, we found a negative (non- to marginally significant) trend for students with initially favorable outgroup attitudes showing that ex-

tended cross-ethnic friendships were related to less favorable attitudes among this group at the end of the school year. This negative trend was a significant effect when we controlled for attitudes at T2 instead of attitudes at T1. Thus, among students with positive outgroup attitudes three months after they entered middle school, extended cross-ethnic friendship was related to a less favorable outgroup attitude.

In sum, extended cross-ethnic friendships improved intergroup attitudes among students with unfavorable attitudes, but had a counterproductive effect among students with favorable initial outgroup attitudes. These opposite findings might point to two different implications of extended cross-ethnic friendships. On the one hand, these friendships improved outgroup attitudes, like originally suggested (Wright et al., 1997), but only among respondents who initially held negative outgroup attitudes. This was in line with the study of Paolini and colleagues (2007) who found that extended friendships in particular reduced prejudice to more highly prejudiced groups. Individuals who hold unfavorable outgroup attitudes might refrain from forming a direct friendship with an outgroup member because of their unfavorable attitude (Binder et al., 2009; Swart et al., 2011). However, they gain new information through the intergroup friendships of their friends, which can improve their own attitude. As argued in the introduction, for students who already hold positive outgroup attitudes, new information might not change their already positive attitudes. Additionally, next to this cognitive explanation, the social network perspective offers an affective explanation. It might be that students with extended cross-ethnic friendship (unbalanced triads) reduce cognitive dissonance through adjusting their negative attitude. However, when students already have a positive outgroup attitude, they do not need to change it in order to restore balance.

On the other hand, extended cross-ethnic friendships led to less favorable outgroup attitudes, like we theorized based on structural balance theory, but only among individuals with initially favorable outgroup attitudes. These adolescents had the possibility to close the unbalanced triad and become direct friends with the outgroup friends of their ingroup friends. Structural balance theory even predicts that they would do so to avoid cognitive dissonance (Cartwright & Harary, 1956; Heider, 1958) and their positive outgroup attitude should not prevent them from doing so. Yet, the existence of an extended cross-ethnic friendship (excluding the direct outgroup friendship) indicates that people chose *not* to close the triad. This continuation of an unbalanced situation with its associated cognitive dissonance might indicate a negative relationship with the ethnic outgroup member. Such negative cross-ethnic relations may disconfirm initially positive attitudes and hence lead to less favorable outgroup attitudes. Previous research has shown that negative interpersonal relationships lead to more unfavorable outgroup attitudes in the long run (Stark, 2011). Thus, our findings for the subgroup of students who initially held positive outgroup attitudes were consistent with Hypothesis 4. On average, extended cross-ethnic friendships did not have an effect on attitude change because the positive effect among the group with

initially negative attitudes and the negative effect among those with initially positive attitudes counterbalanced each other.

Furthermore, while the initial outgroup attitude moderated the effect of extended cross-ethnic friendships on attitude change, additional analyses showed that this attitude did not moderate the effect of direct cross-ethnic friendships on attitude change. This is a surprising finding given that previous studies found that direct cross-ethnic friendships were more strongly related to outgroup attitudes among people high on right-wing authoritarianism (Dhont & van Hiel, 2010) and social dominance orientation (Hodson, 2011). However, Dhont and Van Hiel (2010) also found a weaker moderation effect of authoritarianism for direct cross-ethnic friendships than for extended cross-ethnic contact. Furthermore, different from these previous studies, the current study focused on (mostly) new friendships of students who just entered middle school, used earlier outgroup attitudes as a moderator, and examined cross-ethnic friendships within the classroom context. This may explain why results differ from previous studies. In addition, a moderation of the cross-ethnic friendship effect could either be caused by a negative effect for those with initially positive attitudes, or by a stronger effect for those with initially negative attitudes, or both. The former is in the case of cross-ethnic friendships rather unlikely, however. That is, whereas extended cross-ethnic friendships might mean that there is a negative outgroup relation, this is not the case for direct cross-ethnic friendships. Furthermore, a stronger effect for those with initially negative attitudes may be caused by a ceiling effect because students with positive attitudes cannot improve their attitude as strongly as those with negative attitudes. The fact that we did not find such a moderation may thus indicate that there was still sufficient room for more positive attitudes among students that already had relatively favorable attitudes.

As another moderating condition, we tested whether extended cross-ethnic friendships would improve outgroup attitudes among people who did not have direct cross-ethnic friendships themselves (Hypothesis 3). This was expected because extended cross-ethnic contact should provide new information and adolescents with cross-ethnic friendships already possess (positive) information from their own outgroup contact experiences. Whereas several studies found this association (Cameron et al., 2011; Christ et al., 2010; Dhont & Van Hiel, 2011), we did not find support for the hypothesis in our sample. Next to the difference in study designs and age groups between our study and this earlier research, we focused on friendships within classrooms. As described above, extended cross-ethnic friendships within a social setting like a school class may have another meaning than in other social settings. Accordingly, not having direct cross-ethnic friends but only extended cross-ethnic friendships may be a consequence of negative attitudes, rather than an impetus for developing more positive attitudes. Moreover, it might be that students have direct cross-ethnic friendships outside the school that we could not account for in our analyses.

The current study adds to previous research by providing a new measure for extended intergroup friendship that excludes triads with a direct outgroup friendship. Whereas most previous studies made use of survey questions (e.g., Tausch et al., 2011) to measure extended intergroup friendship, we proposed a new measure using ‘best friend’ peer nominations. Because the Arnhem School Study has data on complete social networks within school classes, we were able to examine extended cross-ethnic friendships using concepts from social network analysis. By comparing our new measurement with analyses based on the extended cross-ethnic friendships measure that included direct friendship between ego and the outgroup alter, and thus resembled the conventional survey questions, the current study showed that excluding direct contact gives somewhat different results. The conventional extended cross-ethnic friendships measure correlated highly with direct cross-ethnic friendships contact. This was not the case for the network measurement of extended cross-ethnic friendships. Moreover, the effect of the conventional measure was not moderated by respondents’ initial outgroup attitudes.

The extended intergroup contact hypothesis addresses situations in which a person has no direct contact with an outgroup contact of his or her ingroup friends (Wright et al., 1997) and our study shows that researchers can derive different conclusions depending on whether a direct intergroup friendship in an extended friendship triad is taken into account or not. In our view, this makes a strong point for employing a measure of extended intergroup friendships based on peer nominations to assess “truly” extended contact. Given the recent increase in the number and quality of studies that collect network data on intergroup relations, we believe that this can be a fruitful avenue for future research on extended contact within small social settings like school classes, work groups, or sport clubs.

This study also adds to previous research because it is one of the few studies that tested the extended contact hypothesis longitudinally. Even though reverse effects (of attitude on extended contact) might be unlikely, there are few studies that have put this through the test. In particular with the traditional measures of extended intergroup friendships which might in part tap into direct cross-ethnic friendships, those extended friendship triads including direct cross-ethnic friendships might be the result instead of the cause of positive outgroup attitudes. Thus, adding to previous studies, the current study shows that extended cross-ethnic friendships are causally related to attitude change during the first middle school year.

### **Limitations and Further Research**

Paolini and colleagues (2007) argued that direct intergroup friendships particularly affect affection based attitudes and extended intergroup friendships are more effective at improving cognition based attitudes. In line with Turner and colleagues (2007), the current study argued for the importance of cognitive as well as affective processes for understanding how extended intergroup friendships may affect outgroup attitudes in small social settings. Cognitively, extended intergroup contact could provide new

information (in- and outgroup norms) which may change intergroup attitudes. Affectively, structural balance theory argues that in order to avoid cognitive dissonance, people will adjust their outgroup attitude in the direction of to the attitude of their ingroup friend. Whether the processes that underlie extended contact effects are predominantly affective or cognitive might differ between small and larger social settings. Hence, it seems important for future research to examine affective versus cognitive mediators of extended intergroup contact in more detail and whether this differs between small and large settings.

The social network measure of extended intergroup friendships has important advantages. First, by excluding triads in which there is a direct friendship between ego and the outgroup alter, the separate effects of direct and extended intergroup friendships can be disentangled. Second, the new measure is suitable for measuring extended cross-ethnic friendships within ethnically diverse contact situations in which many people operate in their daily lives. Third, the social network measure gives more detailed information about the amount of extended cross-ethnic friendships than traditional survey questions that commonly work with survey scales. Furthermore, it is not very demanding for respondents because they only have to name their friends and do not have to recall the friends of their friends. Fourth, the social network measure can be used with different types of social relations. For example, negative extended intergroup contact effects can be examined with peer rejection and bullying nomination data. However, the social network measure also has some limitations. Foremost, full social network data is needed which means that most social network studies are limited to one context. Extended and direct intergroup relations outside this context are not taken into account. Furthermore, the absence of a direct intergroup friendship within the extended contact triad does not mean that ego does not know the outgroup alter. There might still be a positive or a negative relation with the outgroup alter which is not labeled as friendship.

In the current study we examined the effect of extended cross-ethnic friendships within classrooms. On the one hand this meant that we could reasonably assume that students knew about the cross-ethnic friendships of their ingroup friends. Moreover, the focus on extended cross-ethnic friendships within classrooms is relevant for extended contact interventions which are often targeted at restricted settings like school classes (e.g. Cameron, Rutland, & Brown, 2007). On the other hand, due to our focus on extended cross-ethnic friendships within the classroom, we did not take students' direct and extended cross-ethnic friendships outside the classroom into account. The absence of a friendship with a Turkish classmate does not necessarily mean that a Dutch student does not have Turkish friends at all. This could interfere with the processes within the school class. Also, to examine extended cross-ethnic friendship effects in a small setting, the current study focused on the ecology of the classroom. Future studies should examine whether findings replicate in other small social settings like for example work organizations or sport clubs.

A potential concern about our study could be that the findings reflect regression of outgroup attitudes to the mean. For students with initially unfavorable outgroup attitudes extended cross-ethnic friendships are related to less unfavorable attitudes, and students with initially favorable attitudes show a trend to less favorable attitudes. However, the absence of a reduction of the standard deviation of outgroup attitudes shows that not all students become more similar to the mean over time. Further, the interaction of direct cross-ethnic friendships with initial outgroup attitudes was not significant, indicating that it is really extended cross-ethnic friendships that affects attitudes of students who initially held relatively favorable or unfavorable outgroup attitudes.

A related concern is that the moderation that we found may reflect a ceiling effect; for students who already have favorable attitudes towards the outgroup further improvement of their attitudes is unlikely, whether due to extended cross-ethnic friendships or other factors. However, we believe that such a ceiling effect did not drive the results in the current study because students generally did not score at the extreme ends of the scale. Additionally, direct cross-ethnic friendships affected students with negative and positive attitudes similarly, which shows that there is room for more positive attitudes even for students who were already relatively positive. Students with negative attitudes have most room for improvement, but, as Hodson (2011) argues, this does not make improvement among this group inevitable. In particular the negative group might be less open to contact or improving their attitudes. In a review paper, Hodson (2011) argued that effects of intergroup contact on outgroup attitudes may be particularly strong for intolerant people. Our result that extended cross-ethnic friendships particularly improve outgroup attitudes of students with unfavorable outgroup attitudes, is in agreement with this finding.

The amount of (extended) cross-ethnic friendships in our study was quite low because the number of students with an immigrant background was relatively low. Hence, studies on more ethnically diverse samples are needed to replicate the current results. Future studies should also investigate more in-depth the reasons for why extended cross-ethnic friendship triads, that is, multi-ethnic unbalanced triads, are unbalanced and how this affects outgroup attitudes. In addition, it would be interesting to see how those extended intergroup friendship triads develop over time and how they develop in relation to outgroup attitudes.

#### **4.7 Conclusion**

This study contributes to the growing body of research on extended intergroup contact theory. We demonstrated that the focus on the entire friendship network within a class can give new and important insights. Extended cross-ethnic friendships within social settings lead to more positive outgroup attitudes but in some cases also lead to less positive outgroup attitudes. To examine the negative or positive processes underlying extended contact effects, it is important to disentangle the effects of direct cross-ethnic friendships and extended cross-ethnic friendships.

This study also indicates that ‘extended contact prejudice-reduction interventions’ as developed by Cameron and colleagues (2007) are particularly of importance for students who have unfavorable outgroup attitudes. In particular students with less favorable outgroup attitudes improve those attitudes when their direct same-ethnic friends have cross-ethnic friendships. Because students with direct cross-ethnic friendships improve the attitudes of their friends who might not have such friendships, interventions to promote positive outgroup attitudes should not only target students with unfavorable outgroup attitudes but should target the entire school class.

## Chapter 5

### **Cross-ethnic Friendships and Sense of Social-Emotional Safety in a Multi-Ethnic Middle School**

This chapter examined whether cross-ethnic friendships are related to students' sense of social-emotional safety in a multi-ethnic middle school. The analysis sample ( $n = 227$ ) consisted of Latino (57%) and White (43%) sixth and seventh grade students. Although a strong preference for same-ethnic friendships was found for both ethnic groups, Latino students felt safer than their White schoolmates. Even though the two groups did not differ in the number of cross-ethnic friendships, a greater number of cross-ethnic friendships was associated with a stronger sense of safety only among Latino students both concurrently and over time. The implications of current findings are discussed in terms of improving sense of school safety for societal ethnic minority students.

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### 5.1 Introduction

As the school population is becoming increasingly ethnically diverse in the United States (US Census, 2011), it is important to understand whether these demographic changes affect students' school-based social affiliations and perceptions of their school environments. Although many schools remain racially and ethnically segregated, today's "mixed" schools are often more ethnically diverse than ever before (Orfield & Lee, 2007). The question is whether the increased number of different ethnic groups may make schools more divisive and elevate students' sense of vulnerability or whether diversity can unite youth across racial and ethnic boundaries in ways that facilitate sense of safety and social connectedness.

Examining sense of safety in urban middle schools, Juvonen, Nishina, and Graham (2006) found that the ethnic diversity of the student body, both at the school and classroom level, was associated with stronger sense of safety among African-American and Latino students. Specifically, greater diversity (i.e., larger number of ethnic groups similar in size) was associated with lower reports of peer victimization and loneliness as well as higher ratings of school safety in 88 sixth-grade classrooms across 11 urban middle schools. The authors presumed that a greater balance of power (Olweus, 1993) across many different groups contributes to sense of safety and social satisfaction at school among these two societal ethnic minority groups.

It is possible that the above described findings could also be explained by students' personal friendships. Although students prefer same-ethnicity friends even in multi-ethnic schools (Baerveldt et al., 2004; Hallinan & Williams, 1989; Moody, 2001; Quillian & Campbell, 2003), diverse environments provide increased opportunities for students to form cross-ethnic friendships. Social ties that cross racial or ethnic boundaries are, in turn, related to decreased prejudice among children (Aboud, Mendelson, & Purdy, 2003; Damico, Bellnathaniel, & Green, 1981; Pettigrew, 1998; Powers & Ellison, 1995). Moreover, research on college students demonstrates that cross-ethnic friendships are specifically related to reduced intergroup anxiety (Levin et al., 2003; Page-Gould et al., 2008; Turner et al., 2007). Assuming that cross-ethnic friendships can reduce intergroup anxiety also among school-age students, we expect that cross-ethnic friendships will be associated with greater sense of social-emotional safety (i.e., lack of threat and sense of connectedness) in multi-ethnic middle schools.

Recent research on elementary school students demonstrates that cross-ethnic friendships are associated with positive social adjustment (Hunter & Elias, 1999; Kawabata & Crick, 2008; Lease & Blake, 2005). Comparing numerical majority students with and without a numerical minority friend, Lease and Blake (2005) showed that ethnic majority students (either African-American or White) with a minority friend were generally better at listening to others, more liked by their peers, and more socially satisfied than those who did not have any cross-ethnic ties in grades 4-6. Kawabata and Crick (2008), in turn, found that when controlling for classroom ethnic composition, reciprocated cross-ethnic friendships were associated with socially inclusive

behaviors and greater leadership skills within a predominately African-American and White 4<sup>th</sup> grade sample. Whereas the analyses by Lease and Blake (2005) revealed some differences between African-American boys and the other three groups (African-American girls, and White girls and boys), little is known about possible moderator effects of ethnicity.

When examining the association between cross-ethnic friendships and sense of social-emotional safety in school, it is not clear whether the same interpersonal mechanisms apply to both societal (or numerical) majority (Whites) and minority students (e.g., Latinos). Friendships that cross ethnic boundaries might be particularly important in reducing intergroup anxiety and concerns about discrimination among ethnic minorities (see Plant & Devine, 2003; Plant, 2004). Consistent with this view, Mendoza-Denton and Page-Gould (2008) found that although sensitivity to race-based exclusion was related to lack of institutional belonging and satisfaction among African-American students in a predominately White university (and among Latino, but not White students in an ethnically diverse university), cross-ethnic friendships buffered this effect. These findings suggest that cross-ethnic friendships are especially beneficial for students who might feel stigmatized or excluded based on their racial or ethnic background. Hence, cross-ethnic friendships are likely to be related to sense of social-emotional safety among ethnic minorities but not among ethnic majority students.

While there are good conceptual reasons to expect that among ethnic minority youth cross-ethnic friendships are associated with feelings of safety at school, the role of *same*-ethnicity friendships should also be explored. After all, greater number of relationships with in-group members is likely to make youth feel more secure about who they are in terms of their social or ethnic identity (Bigler, Jones, & Lobliner, 1997; Hamm, 2000; Phinney et al., 2001; Tajfel & Turner, 1979), and stronger sense of ethnic identity is related to higher self-esteem (Phinney, Cantu, & Kurtz, 1997; Umana-Taylor, 2004). However, social identities boosted by relationships with in-group members are unlikely to facilitate feelings of safety in ethnically mixed schools. If lack of safety is at least partly due to intergroup divisions or threat from out-group members in a multi-ethnic school, then friendships that do not cross ethnic boundaries are unlikely to alleviate such concerns. It is nevertheless important to test this assumption.

## 5.2 Present Study

The main goal of this study is to examine whether the number of cross-ethnic (versus same-ethnic) friendship choices in the fall of the school year is related to greater sense of social-emotional safety concurrently and across the school year among students in a multiethnic urban middle school. We focus on middle grades (6-7) because little is known about cross-ethnic friendships during this potentially formative developmental period compared to elementary school or college years. We focus on a school in which Latino and White students represent the two majority groups with similar pro-

portions. Hence, the relative size of the groups in school is not a confound in our comparisons between a societal majority and minority group.

We first examine group differences in sense of safety and number of cross-ethnic (and same-ethnic) friendship choices. Competing hypotheses can be posed on the relative sense of safety of the two groups. Based on their societal minority status (i.e., greater likelihood for discrimination), Latino students may feel less safe in school than do their White peers. However, given the numerical representation of the two groups in the school, they may not differ from one another. Based on the similarity attraction hypothesis (Byrne, 1971; Lazarsfeld & Merton, 1954) and in line with prior findings (e.g., Baerveldt et al., 2004; Mouw & Entwisle, 2006; Quillian & Campbell, 2003) we expect both ethnic groups to demonstrate a greater preference for same-ethnicity friends than cross-ethnicity friends. Regarding our main goal, we hypothesize that compared to same-ethnic friendship choices, cross-ethnic friendship choices matter more in terms of sense of safety. Specifically, greater numbers of cross-ethnic (but not same-ethnic) friendship nominations were expected to be positively related to concurrent and subsequent reports of social-emotional safety for Latino students.

In sum, the current study expands on previous research in four main ways. First, extending research documenting the link between cross-ethnic friendships and intergroup attitudes (e.g., Aboud et al., 2003; Damico et al., 1981; Powers & Ellison, 1995) and social competencies (Hunter & Elias, 1999; Kawabata & Crick, 2008; Lease & Blake, 2005), we examine the relation between cross-ethnic friendship choices and sense of social-emotional safety. Sense of safety is fundamental to students, not only as it is related to psychosocial adjustment (Juvonen et al., 2006), but also because it is associated with school functioning both concurrently and over time (Juvonen, Wang, & Espinoza, 2011; Schwartz, Gorman, Nakamoto, & Toblin, 2005). Second, we extend past analyses by comparing a societal ethnic minority (Latino) group to a majority (White) group in a school where their numerical representation is similar. Third, we focus on a middle school not only because cross-ethnic friendships have been least studied during this developmental phase, but also because opportunities for cross-ethnic friendships are likely to increase as several elementary schools (that are likely to be less diverse) feed into one much larger middle school. Fourth, we expand on prior research that examines the concurrent psychosocial correlates of cross-ethnic friendships by analyzing the associations between cross-ethnic friendship choices and sense of social-emotional safety also over time. The longitudinal analyses provide some insights into whether cross-ethnic friendships in the fall might have any lasting associations with sense of safety by the end of the school year.

### **5.3 Method**

#### **Procedure**

Data for this study were collected in the greater Los Angeles area at an urban public middle school. This school was selected because of its ethnic composition: Latino

(47%) and White (34%) students were the two largest groups with similar representation. All sixth and seventh grade students of this middle school were invited to take part in the study. After teachers of the advisory classrooms (i.e., 20 minute non-academic period used for data collection) agreed to participate, parents were asked to consent for their children to participate in the study. For sixth grade, 65% of the parents returned the consent form with 91% granting permission, and for seventh grade 58% returned the consent form with 89% granting permission for their child to participate in the study.

All students with parental consent agreed to complete paper and pencil questionnaires in their classroom setting in the fall (Wave 1) and spring (Wave 2) of the school year for this short-term longitudinal study. Overall attrition at Wave 2 was 8% (8% among Whites and 7% among Latinos). This did not significantly change the ethnic distribution of the sample ( $\chi^2(5, N = 302) = 0.36, p > .01$ ). Attrition analyses among the Latinos and White sample showed that sense of social-emotional safety ( $F(1, 232) = .73, p > .05$ ), the number of cross-ethnic friendships ( $F(1, 232) = .17, p > .05$ ), and same-ethnic friendships ( $F(1, 232) = 3.51, p > .05$ ), at Wave 1 did not differ significantly between students that did and students that did not participate in the study at Wave 2.

### Analysis Sample

Of the 328 students who took part in the study 41% were Latino, 32% White, 8% African-American, 6% Asian, 3% other (and 11% mixed). The ethnic breakdown of the sample approximates the official school statistics (47% Latino, 34% White, 13% African-American, 3% Asian, and 3% other; California Department of Education, 2010). Although our analyses focus on Latino ( $n = 129$ ) and White ( $n = 98$ ) students, the multi-ethnic context of the school was considered in our analyses. That is, we included friendship nominations given to African-American ( $n = 30$ ), Asian ( $n = 18$ ), and the category “other” ( $n = 12$ ). Only nominations given to students who reported multiple ethnicities ( $n = 39$ ), and two respondents who did not report their ethnicity, were excluded because we could not determine whether their friendships choices were same- or cross-ethnic.

Of the Latino and White students ( $n = 227$ ), participants who completed questionnaires in both waves were included in the analyses. This resulted in 124 sixth grade students ( $M_{age} = 11.13$ ), and 103 seventh grade students ( $M_{age} = 12.11$ ), of whom 54% were boys. Whereas, the Latino group (64%) was larger than the White group (36%) in sixth grade ( $\chi^2(1, N = 124) = 9.32, p = .002$ ), the size of the two groups at seventh grade (48% and 52%, respectively Latino and White) did not statistically differ from one another,  $\chi^2(1, N = 103) = .09, p = .77$ .

### Measures

**Friendship choices.** Students nominated peers in their grade for several items. To measure the number of best friends in the fall, students were asked “who are your best friends in your grade?” To indicate who were their best friends, respondents were

allowed to nominate up to seven same- or cross-sex peers. Friendships were coded by connecting the nominations to the ethnic (and gender) data of the nominator and the nominee. Of the nominations, 29% were cross-ethnic and only 9% were cross-gender. Same-ethnic friendship choices ranged from zero to five, and the number of cross-ethnic friendship choices ranged from zero to four.

We chose to examine friendships *choices* operationalized as peer nominations made by the participants rather than mutual nominations that are presumed to capture reciprocal friendships for two reasons. First, when predicting students' sense of social-emotional safety in school, the subjective views of friendships should matter as much as (and possibly even more so than) reciprocated nominations. The second reason was more pragmatic: Only 24% of all the friendship choices were reciprocated. This is somewhat lower than in other studies (see for example Chapter 6) because nominations were limited to a maximum of 7 nominations, and students could nominate across grade instead of only within the classroom. Given our goal to further differentiate subjective perceptions of cross-ethnic and same-ethnicity friendships, most youth would have been excluded from the analyses of cross-ethnic ties. Although we report descriptive statistics on the same- and cross-ethnic friendship choices as raw scores for each ethnic group, for subsequent analyses (i.e., regressions) we rely on nominations scores that are standardized within each ethnic group and within the two grades to account for different availability of same- and cross-ethnic peers within each grade.

**Sense of social-emotional safety.** A seven-item scale was used to measure sense of social-emotional safety at school in the beginning (fall) and in the end (spring) of the school year. The first four of the following items were reverse coded: I feel unsafe in my school; Students at my school are prejudiced; I feel that others make fun of me; I worry about being teased; I feel valued and respected at school; I feel I belong in my school; Students at my school are kind and helpful. Participants responded on a scale from 1, *not at all*, to 5, *all the time*. Higher scores on the scale indicate greater social-emotional safety (Cronbach's alpha's were .70 at fall and .73 at spring for Latinos, and .82 and .90 for Whites)

**Demographic variables.** Self-reported sex and ethnicity were included as background variables. Each of these variables was dummy-coded: Boys and White students were used as the comparison groups (i.e., coded as zero).

## 5.4 Results

The result section is divided into two main sections. First, we provide comparisons between Latino and White students' friendship choices in the fall of the school year and sense of safety both in the fall and spring of the school year. Second, the relations between same- versus cross-ethnic friendships and concurrent as well as subsequent sense of social-emotional safety are presented.

### Latino and White Student Comparisons

**Friendship nominations.** Univariate analysis of variance showed that the total number of friends nominated did not differ between Latino and White students,  $F(1, 226) = .21, p = .65$ . The mean number of best friend nominations that could be coded as either cross- or same-ethnic was 1.60 ( $SD = 1.22$ ). In line with our expectations, a 2 (type of friendship) x 2 (ethnicity) x 2 (grade) mixed model ANOVA showed that students selected significantly more same-ethnic than cross-ethnic friends,  $F(1, 225) = 43.54, p < .001$ , as shown in Table 5.1. Latino and White students did not differ in the mean number of same-ethnic or cross-ethnic friendship nominations at either 6<sup>th</sup> or 7<sup>th</sup> grade. Further analyses of the cross-ethnic nominations (not displayed in Table 5.1) showed no significant difference in Latino students nominating White grade mates ( $M = .28$ ) vs. White students nominating Latino grade mates ( $M = .33$ ) in this school.

**Table 5.1** Same- and Cross-Ethnic Friendships across Grades and Ethnicities

	Friendship choices	
	Same-ethnicity <i>M (SD)</i>	Cross-ethnicity <i>M(SD)</i>
<i>Grade 6</i>		
White	1.04 (1.13)	0.49 (0.63)
Latino	1.08 (1.01)	0.56 (0.92)
<i>Grade 7</i>		
White	1.28 (1.27)	0.42 (0.60)
Latino	1.06 (0.91)	0.46 (0.79)

*Note.* The number of same- versus cross-ethnic friendships did not differ significantly between the two grades or the two ethnic groups.

**Sense of Safety.** To compare the Latino and White students in terms of sense of safety across fall and spring, 2 (ethnicity) x 2 (grade) x time (fall, spring) mixed model ANOVAs were conducted. Only a significant main effect of ethnicity,  $F(1, 209) = 4.81, p = .03$  was obtained. Contrary to our expectations, Latino students felt safer than did White students during both fall and spring (see Table 5.2).

In sum, although Latino students reported feeling safer in school than their White school mates, there were no differences between the two ethnic groups in either cross-ethnic or same-ethnic friendship choices. The question then is whether the friendship choices are related to sense of social-emotional safety in a similar fashion among both Latino and White students.

**Table 5.2** Sense of Social-Emotional Safety across Time, Grade and Ethnicities

	Sense of social-emotional safety	
	Fall <i>M (SD)</i>	Spring <i>M (SD)</i>
<i>Grade 6</i>		
White	3.87 (.64) <sup>b</sup>	3.75 (.90) <sup>b</sup>
Latino	3.93 (.65) <sup>b</sup>	3.90 (.64) <sup>b</sup>
<i>Grade 7</i>		
White	3.72 (.73) <sup>a</sup>	3.72 (.74) <sup>b</sup>
Latino	4.06 (.64) <sup>a</sup>	3.95 (.64) <sup>b</sup>

*Note.* Superscripts should be read by column and within grade. Values sharing superscripts *a* differ significantly ( $p < .05$ ), and values sharing superscript *b* do not significantly differ.

### Same- versus Cross-Ethnic Friendship Choices and Sense of Safety

The relations between the type of friendships in the fall and sense of social-emotional safety at fall and spring were analyzed via multiple regression analyses. It should be noted that, although the data collection took place during non-academic advisory (cf. homeroom) periods, the class compositions varied across various periods. Hence, in this school, like in most middle schools in the US, we could not identify a meaningful classroom level for the analyses. To account for the availability of same-and cross-ethnic peers, the absolute values of friendship nominations were standardized within each ethnic group and grade. In the regression model, the demographic variables were entered at Step 1, same- and cross-ethnic friendships at Step 2, and the interaction terms between the friendship choices and ethnicity were included in the final step of the analyses to test whether ethnicity moderated the associations between cross-ethnic friendships and sense of social-emotional safety. (Interactions of cross-ethnic friendships by gender, and by gender and ethnicity were also explored. However, those interactions were not significant and were therefore left out of the final analyses.) The findings of final regression analyses are reported in Table 5.3.

Consistent with the previously reported descriptive findings, the regression findings in Table 5.3 show that Latino students rated their sense of social-emotional safety higher than did White students in the fall ( $B = .23, p = .02$ ) and spring, ( $B = .22, p = .03$ ). Although neither the number of same-ethnic friendship choices nor the number of cross-ethnic choices were related to sense of safety in the fall or spring,<sup>5</sup> the

<sup>5</sup> When controlling for fall ratings of social-emotional safety, cross-ethnic friendship nominations did not predict sense of social-emotional safety in the spring. This finding is not surprising given the high stability ( $r = .67$ ) of the safety ratings across the two time points.

interaction terms indicated differences in the effects of cross-ethnic friendships between the two ethnic groups. The interaction revealed that for Latino students' cross-ethnic friendships were related to higher sense of safety both concurrently in the fall ( $B = .24, p = .03$ ) and subsequently in the spring ( $B = .27, p = .02$ ). Thus, support was obtained for our hypothesis that cross-ethnic friendships are related to greater sense of safety among Latino students but not among White students.

**Table 5.3** Multiple Regression Analyses Predicting Sense of Social-Emotional Safety Concurrently (Fall) and Over Time (Spring)

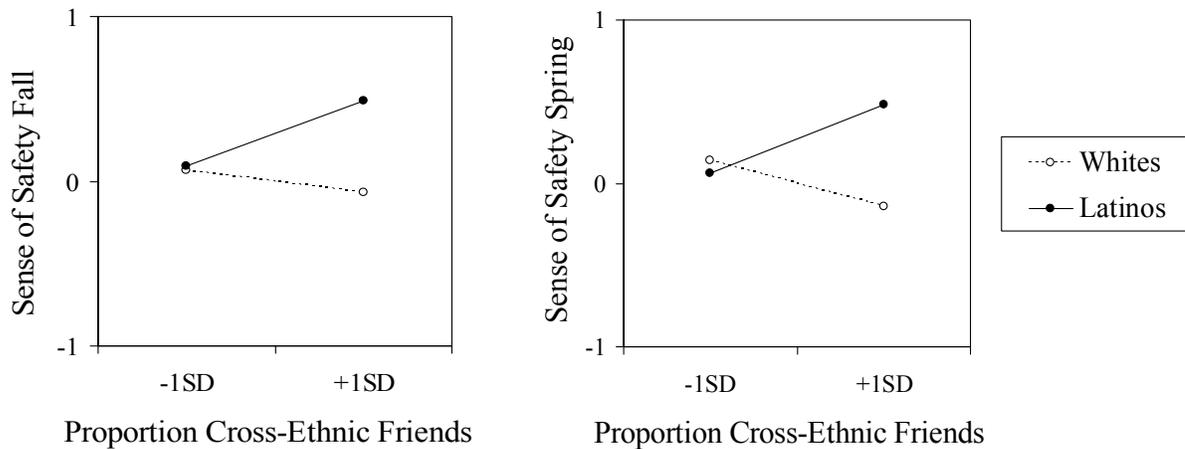
	Sense of Safety Fall			Sense of Safety Spring		
	B	SE	$\Delta R^2$	B	SE	$\Delta R^2$
<i>Step 1: Background Variables</i>						
Constant (reference = White)			.02			
Latino/a	.23*	.09		.22*	.10	
Sex	-.00	.09		-.07	.10	
Grade at school	.04	.09		.01	.10	
<i>Step 2: Friendships</i>						
Same-ethnic friends			.01			
Same-ethnic friends	.04	.04		-.01	.05	
Cross-ethnic friends	-.09	.09		-.11	.10	
<i>Step 3: Interaction</i>						
Cross-ethnic friends * Latino			.02			
Cross-ethnic friends * Latino	.24*	.11		.27*	.12	

Note. \* $p < .05$

Based on the recommendations by Aiken and West (1991), we plotted the simple slopes of the relation between cross-ethnic friendships and sense of safety for the two groups to understand the ethnic group differences (see Figure 5.1). To ease interpretation of the coefficients in the plot, social-emotional safety was standardized to  $M = 0$  and  $SD = 1$ . The regression analyses for the simple slopes of the relation between cross-ethnic friendships and sense of safety showed that only for Latinos the slope was significant in the fall ( $B = .23, SE = .09, t(224) = 2.55, p = .01$ ) and spring ( $B = .22, SE = .09, t(214) = 2.42, p = .02$ ). Thus, the number of cross-ethnic friendships was related to increased sense of safety both concurrently and over time for Latino students only.

To understand this finding further, additional analyses with the Latino students were carried out to examine whether *any* cross-ethnic friendships or specifically friendships with White students were related to sense of safety. Latino students nominated significantly more White classmates than other ethnicity classmates as friends  $F(1, 127) = 4.17, p = .04$ . This is not surprising given the greater availability of White peers. Yet, multiple regression analyses showed that cross-ethnic friendships specifi-

cally with White peers were significantly related to higher sense of safety by spring ( $B = .13$ ,  $SE = .06$ ,  $t(122) = 2.15$ ,  $p = .03$ ). This effect was only marginally significant during fall ( $B = .11$ ,  $SE = .06$ ,  $t(126) = 1.92$ ,  $p = .057$ ). These findings suggest that friendships with White students in the beginning of the school year were particularly important for the sense of safety of Latino youth by the end of the school year in this middle school.



**Figure 5.1** Proportion of cross-ethnic friendships predicting sense of social-emotional safety in the fall and spring among Latino and White students.

### 5.5 Discussion

Much of the past research on cross-ethnic and inter-racial friendships has focused on conditions that promote or constrain the formation of such friendships (e.g., Hallinan & Williams, 1989; Hamm, Brown, & Heck, 2005; Moody, 2001) or on how interracial friendships are related to attitudes toward other ethnic groups (e.g., Aberson, Shoemaker, & Tomolillo, 2004; Powers & Ellison, 1995). A smaller body of developmental research documents that cross-ethnic friendships are associated with important social competencies in elementary school (Hunter & Elias, 1999; Kawabata & Crick, 2008). The current study builds on and complements these bodies of research on intergroup attitudes and social competencies. By focusing on perceptions of social-emotional safety in an urban middle school setting both concurrently and over time, the present findings provide new insights about the significance of cross-ethnic friends.

The specific demographic composition of the middle school in this study allowed us to compare the effects of a societal minority group (Latinos) and a societal majority group (Whites) in a setting where they comprised the two predominant groups. Drawing on previous research demonstrating that cross-ethnic friendships were related to more positive outgroup attitudes (e.g., Pettigrew & Tropp, 2006), less

intergroup anxiety (e.g., Levin et al., 2003) and better social adjustment (e.g., Kawabata & Crick, 2008), we found that cross-ethnic friendship choices were related to a stronger sense of social-emotional safety among Latino youth in the multiethnic school context. Based on the finding that cross-ethnic friendships can buffer the effect of race based rejection sensitivity of minority-group students on institutional belonging and satisfaction among college students (Mendoza-Denton & Page-Gould, 2008), the current results further suggest how personal relationships are linked with lack of threat and sense of connectedness within the larger social collective.

Why are cross-ethnic friendship choices related to sense of social-emotional safety for Latino but not for White students? We presumed that cross-ethnic ties might be particularly important for societal minority students in alleviating potential sense of discrimination or vulnerability. Consistent with this idea, the Latino students felt safer than did their White peers in this multiethnic school where they were one of the larger ethnic groups. Because the Latino and White students did not differ in terms of the number of cross-ethnic (or same-ethnic) friendships, the lower sense of safety among White youth cannot be attributed to lack of cross-ethnic ties (or to greater self-segregation). Thus, it is not just the quantity, but apparently also *the meaning*, of the friends from other ethnic groups that varies between Latino and White students in a multi-ethnic school.

In contrast to cross-ethnic friendships, same-ethnic friendship choices were unrelated to sense of social-emotional safety among both Latino and White students. This finding does not mean that same-ethnic friendships are unimportant. Several studies have shown that friendships in general improve social and emotional development (Hartup, 1996; A. F. Newcomb & Bagwell, 1995) and in-group ties might be particularly important for validation of one's ethnic identity, cultural background (Phinney et al., 2001), and self-esteem (Phinney et al., 2007; Umana-Taylor, 2004). However, the current findings suggest that in-group ties bear no relation to sense of social-emotional safety in a multi-ethnic school.

Neither Latino nor White students reported feeling more safe across the school year. One would expect that especially sixth grade students would feel more comfortable (i.e., connected and less threatened) in their school by spring. One explanation for the absence of an increase in sense of safety is that student perceive behavioral problems (e.g., bullying) to increase over the school year for sixth graders (Espelage, Bosworth, & Simon, 2001; Galvan, Spatzier, & Juvonen, 2011). Therefore, elevated levels of disorderly behavior during spring may counter the effects of familiarity.

Although our analyses provide novel insights regarding the importance of cross-ethnic friendships, the study is limited in its scope: we examined friendships in only one middle school with a particular ethnic composition. Although the specific ethnic composition of the current study served our analyses, it is vital to assess the generalizability of our findings across different types of schools and across different ethnic groups. Not only do our main analyses comparing White and Latino students need to be replicated, but also our additional analyses of specific cross-ethnic ties

must be examined across various groups and school ethnic composition. For example, given the ethnic composition of the school, we do not know whether Latino students' friendship choices with White classmates may reflect their sense of equality stemming from the numerical representation of the school (i.e., that the two groups were the two largest and similar in size). Whether it is more important to form ties with members of any (other) majority group rather than members of the societal majority group is not clear.

Unlike most developmental research on cross-ethnic friendships (Kawabata & Crick, 2008; Lease & Blake, 2005) we relied on unidirectional friend nominations in this study. Our assumption was that subjective perceptions of (cross-ethnic) friendships are most meaningful when relating them to perceptions of safety of the social environment. Because of the limited number of reciprocated nominations (due to restricted number of nominations used to capture friendships), we could not test this assumption, however. Therefore, unidirectional and reciprocated friendship nominations should be compared in future research that relates friendships with perceptions of safety.

Finally, future studies with larger samples (i.e., more power) should also examine the causal links by relying on cross-lagged panel designs. Cross-lagged panel analyses would enable researchers to test the directionality of effects: i.e., whether subjective perceptions of cross-ethnic ties foster sense of safety or whether safe settings encourage formation of cross-ethnic ties. For this study the cross-lagged panel analyses would have required almost twice the size of the Latino group (Hoe, 2008; Hoelter, 1983). Thus, the directionality of effects needs to be tested with large samples.

Although future research is needed to replicate current findings, our results show that, next to previous studies that showed that cross-ethnic friendships improve outgroup attitudes, cross-ethnic friendships are related to greater sense of safety. The current results also may explain why Latino youth feel safer in more (as opposed to less) diverse educational settings (Juvonen et al., 2006). Subsequent studies should be designed to test whether cross-ethnic friendships mediate the relation between ethnic diversity and sense of social-emotional safety (see Chapter 6). Another interesting question for future research with larger samples is whether cross-ethnic friendships become more important for White students in schools or classrooms where they are one of the numerical minority groups.

Presuming that our results replicate across different samples, the findings have policy implications on how to improve sense of safety in multi-ethnic schools. Promoting cross-ethnic ties to make students feel safe is a vastly different approach to school safety than what most educators would normally consider. However, the mere presence of an ethnically diverse student body may not result in cross-ethnic friendships especially if different ethnic groups are segregated by educational practices (e.g., academic tracking) in ways that highlight inequalities. Based on contact theory (Allport, 1954; Pettigrew, 1998), equality and close contact among individuals repre-

senting different groups is important. The ideal conditions for intergroup acceptance may be accomplished best by relying on cooperative practices (e.g., cooperative learning methods and extracurricular activities) where teachers encourage students of different ethnic backgrounds work together toward common goals. Although it is probably impossible to abolish in-group favoritism, the value of relationships across groups may be attained best when students can equally contribute toward shared goals, such as when they play on the same sports teams, play instruments, sing, or act together in the same performance or when they work collaboratively on school projects.

In sum, this exploratory study suggests that ethnic diversity, which is often presumed to cause conflict within schools, can have benefits not only for how students relate to one another across ethnic groups, but also for the ways in which students feel at school over time. We believe that ethnic diversity provides opportunities for cross-ethnic friendships, which in turn, are related to better sense of social-emotional safety in school. Thus, by “taking advantage” of the ethnic diversity by forming (and maintaining) cross-ethnic friendships, at least some students can have a more positive school experience in large urban middle schools.



## Chapter 6

### **Psychosocial Benefits of Ethnic Diversity and Cross-Ethnic Friendships among Ethnic Minority Students**

This chapter aimed to examine the unique functions of cross-ethnic friendships in the lives of early adolescents. This was investigated among African-American ( $n = 536$ ) and Latino ( $n = 396$ ) students from 66 middle school classes in 10 schools that varied in ethnic diversity. Using multilevel path models, this study showed that next to classroom ethnic diversity, cross-ethnic friendships were related to an increase in feelings of safety, and a decrease in perceived peer victimization over the first middle school year. Both same- and cross-ethnic friendships were related to a decrease in feelings of loneliness during the first middle school year. Regarding individual versus classroom level effects, this study showed that the existence of cross-ethnic friendships did not decrease feelings of vulnerability of the whole classroom, but it decreased vulnerability in particular for students who engaged in cross-ethnic friendships. Cross-ethnic friendships did not explain why ethnic diversity was related to lower feelings of vulnerability.

A different version of this chapter is invited for resubmission at an international journal, and is co-authored with Sandra Graham and Jaana Juvonen of the University of California, Los Angeles.

## 6.1 Introduction

With an increasing ethnically diverse school population in many Western countries, it is important to know how ethnic diversity affects the lives of youth. Many scholars have investigated how ethnic diversity and cross-ethnic friendships affect outgroup attitudes. More recently there is also attention to how ethnic diversity (e.g., Agirdag et al., 2011; Juvonen et al., 2006) and cross-ethnic friendships (e.g., Kawabata & Crick, 2011; Munniksma & Juvonen, 2012) affect the psychosocial wellbeing of youth. Knowledge about the developmental functions of cross-ethnic friendships is essential given that even though students attend ethnically diverse schools, they mainly choose same-ethnic peers to be friends with (Baerveldt et al., 2004; Moody, 2001; Quillian & Campbell, 2003). This study expands on previous research on the functions of friendships to shed light on whether cross-ethnic friendships are uniquely related to different aspects of psychosocial wellbeing among ethnic minority students during the first year of middle school.

This study adds to previous research in several ways. First, even though several studies examined whether cross-ethnic friendships are associated with aspects of psychosocial wellbeing, there is a lack of studies that tested this longitudinally (two exceptions: Kawabata & Crick, 2011; McGill, Way, & Hughes, 2012). Hence, to be able to make conclusions about causation we examine the effects of cross-ethnic friendships with a longitudinal panel design. Second, whereas classroom ethnic diversity has been shown to be related to reduced vulnerability (reduced peer victimization, reduced feelings of loneliness, and increased sense of safety) (Juvonen et al., 2006), we add to this work by examining whether this association could be explained by an increased number of cross-ethnic friendships in ethnically diverse school classes. Third, adding to previous studies that examined the effects of cross-ethnic friendships at the individual level (e.g., Kawabata & Crick, 2011) or the classroom level only (e.g., Agirdag et al., 2011), this study examines the effects of cross-ethnic friendships on feelings of vulnerability at the individual level and at the classroom level simultaneously. This sheds light on whether cross-ethnic friendships within school classes reduce feelings of vulnerability for the whole classroom or in particular for students who have those friendships.

Regarding the functions of friendships, research has shown that friendships serve important psychological functions in the lives of children and adolescents (Hartup, 1996; Mendelson & Aboud, 1999; Sullivan, 1953), including fostering connectedness, validation, and buffering from distress. Not only is a lack of friends associated with feelings of loneliness (e.g., Marcoen, Goossens, & Caes, 1987; Parker & Asher, 1993), having at least one reciprocal friendship is also related to higher self-esteem among adolescents both concurrently (Bishop & Inderbitzen, 1995) and later in life (Bagwell, Newcomb, & Bukowski, 1998). Moreover, friendships can also buffer against distress. For example, adolescents with at least one friend are less likely to be peer victimized (Hodges, Malone, & Perry, 1997; Pellegrini, Bartini, & Brooks, 1999) and the existence of a friendship also protects youth against the emotional dis-

tress associated with peer victimization (Hodges, Boivin, Vitaro, & Bukowski, 1999; Sainio, Veenstra, Huising, & Salmivalli, 2012), and social isolation (Laursen, Bukowski, Aunola, & Nurmi, 2007).

Although compared to same-ethnic friendships, cross-ethnic friendships are rare, cross-ethnic friendships have been shown to be related to outcomes like more positive outgroup attitudes (Pettigrew & Tropp, 2008), lower intergroup anxiety among college students (Levin et al., 2003; Page-Gould et al., 2008; Turner et al., 2007), better social skills among ethnically diverse elementary school children (Hunter & Elias, 1999; Kawabata & Crick, 2008; Lease & Blake, 2005), less relational victimization and higher peer support over time at elementary school among varying ethnic groups (Kawabata & Crick, 2011).

It might be that cross-ethnic friendships serve different functions for ethnic minority and majority students. Tropp and Pettigrew (2005b) as well as Swart and colleagues (2011) show that the effect of intergroup contact on outgroup attitudes is stronger for majority group members than for minority group members. This might indicate that the meaning of cross-ethnic friendships differs between minority and majority group members. Tropp and Pettigrew (2005b) argued that, because minority members are more often stigmatized by the majority group than the other way around, interactions between the two groups reduce stereotypes of majority group members in particular. Following their line of reasoning it might thus be that cross-ethnic friendships in particular reduce (feelings of) being stigmatized or feeling vulnerable among minority group members. In line with this view cross-ethnic friendships have been found to buffer the effect of sensitivity to race-based exclusion on institutional belonging among African-American and Latino students in a predominantly White university (Mendoza-Denton & Page-Gould, 2008). This suggests that cross-ethnic friendships may help certain groups to overcome feeling vulnerable in the multi-ethnic school context. Therefore we hypothesize that cross-ethnic friendships will reduce feelings of vulnerability among ethnic minority students (*Vulnerability Hypothesis*). In (partial) support of this hypothesis cross-ethnic friendships have been shown to be associated with stronger sense of social-emotional safety among Latino but not among White middle school students (Munniksma & Juvonen, 2012).

Previous studies have shown that also ethnic diversity in and of itself can have beneficial effects for students. For example, institution level ethnic diversity is associated with more positive intergroup attitudes (Pettigrew & Tropp, 2006), lower peer victimization (Agirdag et al., 2011), and lower perceived vulnerability (loneliness, victimization and feeling unsafe) among minority group students (Juvonen et al., 2006). The question is whether the effects of ethnic diversity can be explained by the existence of cross-ethnic friendships. Several studies on ethnic diversity defined ethnic diversity by the number of ethnic groups and their equality in size (Agirdag et al., 2011; Juvonen et al., 2006). This means that higher ethnic diversity increases the opportunities for cross-ethnic friendships. If students take up those friendships, these cross-ethnic friendships in turn might make students feel less vulnerable in ethnically

diverse settings. Hence, we hypothesize that cross-ethnic friendships may (in part) explain why classroom ethnic diversity is related to lower feelings of vulnerability (*Mediation Hypothesis*).

Furthermore, cross-ethnic friendships could make all students in a school class feel less vulnerable, or in particular students that take up those friendships. That is, it could be that in particular those students who form the bridges between different ethnic groups in class feel less vulnerable over time, but it could also be that all students in that school class feel less vulnerable over time *because* there are bridges between those ethnic groups. Based on social identity theory (Tajfel & Turner, 1979), the common ingroup identity model (Gaertner et al., 1993) states that intergroup contact reduces prejudice most effectively when contact between subgroups is structured in such a way that it improves identification with a superordinate category including the subgroups. This is not the case in school classes with ethnically segregated friendship networks, where all friendships fall within ethnic groups. Instead, the absence of cross-ethnic friendships in school classes might elicit (feelings of) being stigmatized and feelings of vulnerability among minority members. In contrast, cross-ethnic friendships that create bridges between ethnic subgroups might improve identification with a superordinate category (instead of a subgroup). When students subsequently feel that they all belong to the same school class instead of to their separate ethnic subgroups, they are more likely to feel connected and safe at school. Hence, we hypothesize that next to the effect of cross-ethnic friendships on reduced feelings of vulnerability at the individual level, the existence of cross-ethnic friendships within school classes reduces feelings of vulnerability among all students in these school classes (*Classroom Vulnerability Hypothesis*).

Agirdag and colleagues (2011) did not find support for a relation between the number of cross-ethnic friendships at the school level on peer victimization. However, this school level effect was investigated at elementary schools where students mainly reside in classrooms, and the effect of cross-ethnic friendships at the individual level was not examined. Hence, this study will examine whether the existence of cross-ethnic friendships within the classroom decreases feelings of vulnerability at the classroom level, or whether in only the students who have cross-ethnic friendships feel less vulnerable in the multi-ethnic school context.

## **6.2 Present study**

Expanding research on the effects of ethnic diversity and cross-ethnic friendships on psychosocial wellbeing, this study hypothesized that cross-ethnic friendships will reduce feelings of vulnerability among ethnic minority students (Vulnerability Hypothesis). Three indicators of vulnerability in this study are in line with the study of Juvonen and colleagues (2006) sense of safety, feelings of loneliness, and perceived peer victimization. Second, it is hypothesized that cross-ethnic friendships may (in part) explain why classroom ethnic diversity is related to reduced feelings of vulnerability (Mediation Hypothesis). Third, we hypothesized that the existence of cross-

ethnic friendships within school classes reduces feelings of vulnerability among all students in these school classes (Classroom Vulnerability Hypothesis). These hypotheses will be tested longitudinally among African-American and Latino students, during their first year at Middle school. Next to cross-ethnic friendships, we also examine the effects of same-ethnic friendships in order to examine the differences in the effects of same- ethnic and cross-ethnic friendships.

### 6.3 Method

#### Sample

Participants for this study ( $n = 932$ ) were selected from a 3-year (6-wave) longitudinal study of 2003 6<sup>th</sup> grade students from 99 school classes from 11 middle schools in Greater Los Angeles. This is a subsample of youth included in the study of Juvonen and colleagues (2006). Unlike Juvonen and colleagues (2006), who did not examine the functions of friendships, we selected classrooms with sufficient representation of same- and cross-ethnic peers. African-American and Latino students were selected if they had at least two same- and two cross-ethnic classmates. Next, remaining classrooms were selected if more than 50% of the students participated in this study. This resulted in an analyses sample of 396 African-American (42.5%) and 536 Latino students (57.5%) from 66 middle school classes in 10 schools. Also, we selected Wave 1 and 2 in the first year of middle school (6<sup>th</sup> grade, fall and spring) to examine our questions because this is an important time for friendship selection and school adjustment (Hardy et al., 2002).

The 11 middle schools in this study were selected based on their ethnic composition. In five schools the numerical majority of the students (more than 50%) was Latino, in three schools the majority was African-American, and in the other three schools there was no clear ethnic majority. The ethnic breakdown of the total sample was 46% Latino, 29% African-American, 9% Asian, 9% Caucasian, and 7% multiracial. For this study we focused on the two largest ethnic groups in this sample, African-Americans and Latinos, because those were sufficiently represented across the school classes. The ethnicities of classmates were taken into account in the measure of classroom ethnic diversity and in the coding of same- and cross-ethnic friendships.

Prior to participation, parent consent and student assent were obtained. Of the contacted parents 75% returned the consent form and 89% of these parents gave consent (for more information about the procedure and sample see: Bellmore et al., 2004; and Nishina, Juvonen, & Witkow, 2005).

#### Measures

**Perceived school safety (T1, T2).** A seven-item subscale of the Effective School Battery (Gottfredson, 1984) was used to measure perceived school safety at Wave 1 and 2. A sample item is “How often are you afraid that someone will hurt or bother you in school?” Students answered on a scale from 1, *almost always*, to 5, *al-*

*most never* (Cronbach's  $\alpha = .74$  at T1, and  $\alpha = .74$  at T2). Items were coded such that higher scores indicate feeling more unsafe.

**Loneliness (T1, T2).** A 16-item version of the Asher and Wheeler's (1985) Loneliness Scale was used to measure feelings of loneliness at school at the beginning and the end of the school year. A sample item was: "I have nobody to talk to" (Cronbach's  $\alpha = .84$  at T1 and  $\alpha = .86$  at T2). Students answered on a scale from 1, *always true*, to 5, *not true at all*. Items were coded such that higher scores indicate stronger feelings of loneliness.

**Peer victimization (T1, T2).** A modified six-item version of the Peer Victimization Survey (Neary & Joseph, 1994) was used to measure perceived peer victimization. Students got six statements like "Some kids are often picked on by other kids BUT Other kids are not picked on by other kids." After students' chose which of the two options were more like them they indicated whether that option was "sort of true for me" or "really true for me". Items were scored on a four-point scale, coded such that higher scores indicate more peer victimization. For this study this scale was transformed to a five-point scale to facilitate the comparison with the other dependent variables measured at a five point scale (Cronbach's  $\alpha = .81$  at T1, and  $\alpha = .83$  at T2).

**Classroom ethnic diversity.** The Simpson Diversity Index ( $D_C$ ) was used to capture both the number of different ethnic groups in the school class as well as their relative sizes (Juvonen et al., 2006; Simpson, 1949):

$$D_C = 1 - \sum_{i=1}^g p_i^2$$

In this equation  $p_i$  denotes the proportions of each ethnic group  $i$ , which are squared ( $p_i^2$ ), summed across all groups  $g$ , and then subtracted from one to obtain the ethnic diversity index  $D_C$ . Based on the four ethnic groups in the sample, the diversity index could range from zero to .75. Across the school classes in the analyses sample the diversity index ranged from .14 to .70 ( $M = .46$ ,  $SD = .14$ ). To ease interpretation, the diversity index was centered by subtracting its mean.

**Same- and cross-ethnicity friendships (T2).** Reciprocal 'like to hang out with' nominations were used as a proxy for friendships. Students could nominate up to four classmates of any gender<sup>6</sup>. The mean number of unidirectional nominations was 3.37 ( $SD = .99$ ), of which 29% was cross-ethnicity, and 65% was reciprocated. Of the reciprocal nominations 27% was cross-ethnicity. Friendship nominations at Wave 2 were selected because, as opposed to the beginning of the school year, by spring students had the change to establish more stable friendships.

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<sup>6</sup>This is different from Chapter 5, in which we relied on unidirectional friendship nominations. Because in this study nominations were within the classroom as opposed to across grade in Chapter 5, the number of reciprocal nominations was higher in this study. Because we use 'like to hang out with' nominations, reciprocal nominations are more likely to really measure friendships between students.

**Background characteristics.** Self-reported gender and ethnicity were included as background variables. Boys were coded as zero and girls as one. Ethnicity was dummy-coded such that Latinos, the largest group, served as the reference group.

#### 6.4 Analytical Strategy

First, differences between the two ethnic groups regarding the psychosocial outcomes (sense of safety, peer victimization, loneliness) and the correlations between all main variables were examined. Next, direct effects of ethnic diversity and same- and cross-ethnic friendships on the psychosocial outcomes were examined. Because students were part of school classes ( $N = 66$ ), we are interested in ethnic diversity at the classroom level, and in individual versus classroom level effects, the hypotheses were tested by use of multilevel path models in Mplus (Muthén & Muthén, 1998-2010). Three models were constructed in Mplus that predict changes in to what extent students feel unsafe, are peer victimized, and feel lonely at school.

To control for baseline differences in the dependent variables based on personal and school class characteristics, dependent variable(s) were regressed on the control variables gender and ethnicity at the individual level and on ethnic diversity at the classroom level. Standardized parameter estimates are reported.

Preliminary analyses showed that feeling unsafe and perceived peer victimization were skewed. Hence, Maximum Likelihood Estimation with Robust Standard Errors (MLR) was used in the structural equation models, which reduces the bias in standard errors that non-normal data are prone to.

#### 6.5 Results

##### Preliminary Analyses

Regarding the number of same- and cross-ethnicity friendships, paired-samples  $t$ -tests show that Latino ( $t(535) = 11.01, p < .01$ ) as well as African-American ( $t(395) = 10.24, p < .01$ ) students had significantly more same-ethnicity (respectively  $M = 0.95, SD = 0.95$  and  $M = 0.98, SD = 0.98$ ) than cross-ethnicity friendships (respectively  $M = 0.36, SD = 0.63$  and  $M = 0.30, SD = 0.61$ ). Regarding gender and ethnic group differences in the number of same- and cross-ethnic friendships  $t$ -tests showed that there were no gender differences ( $t(930) = .24, p = .81$ ) or ethnic group differences ( $t(862.79) = 1.50, p = .13$ ) in the number of cross-ethnic friendships. There were no ethnic group differences in the number of same-ethnic friendships ( $t(805.38) = -.37, p = .71$ ), but there were gender differences in the number of same-ethnic friendships ( $t(928.85) = -5.62, p < .01$ ). Girls ( $M = 1.06, SD = 0.05$ ) had more same-ethnic friendships than boys ( $M = 0.87, SD = 0.04$ ).

Regarding the vulnerability measures, Table 6.1 shows means and standard deviations for Latino and African-American students.  $t$ -Tests showed that there were no significant ethnic group differences in feeling unsafe, peer victimization, or feeling lonely. Regarding gender and ethnic group differences 2 x 2 ANOVA's with gender (boy, girl) and ethnicity (Latino, African-American) as between-subjects factors (and

gender-ethnicity interactions) showed that in particular Latino girls reported lower peer victimization at T1 ( $M = 2.48$ ,  $SD = 1.00$ , gender x ethnicity:  $F(1,870) = 5.60$ ,  $p = .03$ ) and at T2 ( $M = 2.36$ ,  $SD = 0.90$ , gender x ethnicity:  $F(1,906) = 4.90$ ,  $p = .03$ ). In particular African-American boys reported lower loneliness at T1 ( $M = 1.69$ ,  $SD = 0.58$ , gender x ethnicity:  $F(1,886) = 5.82$ ,  $p = .02$ ). Regarding change over time, paired sample  $t$ -tests showed that, peer victimization ( $t(846) = 2.85$ ,  $p < .01$ ) feelings of loneliness ( $t(881) = 5.27$ ,  $p < .01$ ) and feeling unsafe ( $t(879) = 7.46$ ,  $p < .01$ ) decreased significantly over time (see also Table 6.1).

**Table 6.1** Means and Standard Deviations of the Main Study Variables by Ethnicity

	Latinos (n=536)		African-American (n=396)		Difference
	Mean	SD	Mean	SD	<i>t</i> -tests
Feeling unsafe T1	2.01	0.85	2.05	0.85	$p = .47$
Feeling unsafe T2	1.79	0.74	1.87	0.80	$p = .10$
Peer victimization T1	2.57	1.01	2.68	0.96	$p = .12$
Peer victimization T2	2.49	0.95	2.60	1.01	$p = .11$
Feeling lonely T1	1.77	0.60	1.75	0.65	$p = .78$
Feeling lonely T2	1.66	0.56	1.69	0.62	$p = .43$

**Table 6.2** Correlations between Study Variables at the Individual and the Classroom Level

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Classroom diversity		.54**	-.26*	-.57**	-.50**	-.32**	-.33**	-.35**	-.29*
2. Cross-ethnic friends T2	.26**		-.47**	-.34**	-.18	-.11	-.33**	-.35**	-.26*
3. Same-ethnic friends T2	-.11**	-.21**		.35**	.33**	.12	.39**	.27*	.22
4. Feeling unsafe T1	-.20**	-.10*	-.01		.74**	.64**	.60**	.60**	.58**
5. Feeling unsafe T2	-.17**	-.12**	-.02	.45**		.48**	.55**	.44**	.50**
6. Peer victimization T1	-.10**	-.05	-.04	.32**	.25**		.66**	.59**	.64**
7. Peer victimization T2	-.09**	-.11**	-.03	.26**	.38**	.50**		.56**	.57**
8. Feeling lonely T1	-.10**	-.14**	-.11**	.37**	.33**	.38**	.38**		.66**
9. Feeling lonely T2	-.07**	-.13**	-.13**	.25**	.39**	-.28**	.40**	.59**	

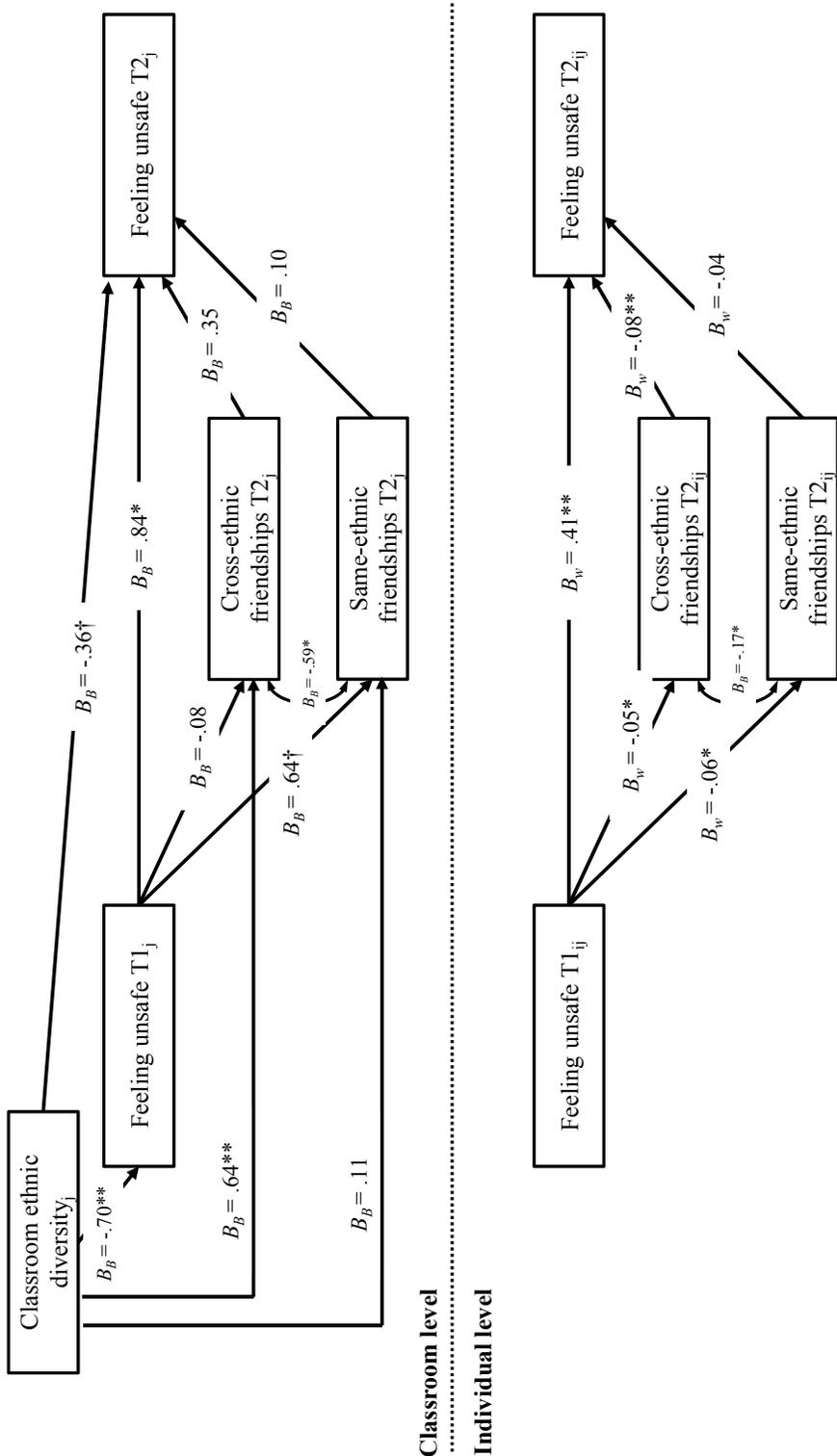
*Note.* Below the diagonal individual level ( $n = 932$ ) correlations, above the diagonal group level ( $n = 66$ ) correlations. \*  $p < .05$ ; \*\*  $p < .01$

Regarding the relations between classroom ethnic diversity, same- and cross-ethnic friendships, and the vulnerability measures, bivariate correlations at the individual level and the classroom level are shown in Table 6.2. The individual level correlations indicate that cross-ethnic friendships were related to feeling less unsafe, or feeling less lonely at T1 and T2, and to less peer victimization at T2 only. Same-ethnic friendships were only related to less feelings of loneliness at T1 and T2. Classroom ethnic diversity was related to all three aspects of vulnerability at both waves.

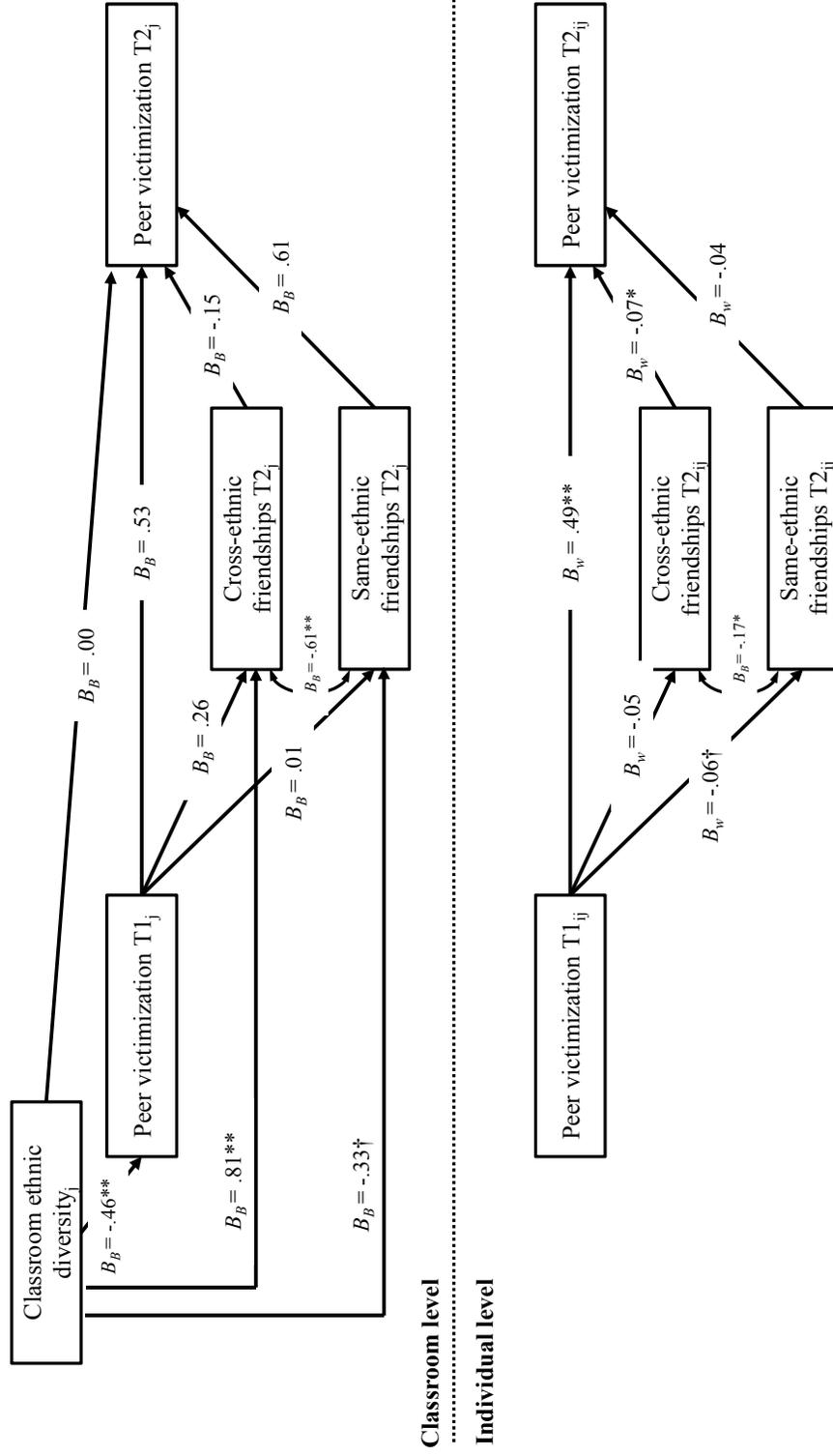
We tested whether correlation coefficients at the individual level differed between the ethnic groups by the Fisher's *r*-to-*z* transformation. None of the correlations between classroom ethnic diversity and the three aspects of vulnerability differed significantly (at  $\alpha = .05$ ) between Latinos and African-Americans. The correlations between same- and cross-ethnicity friendships and the three aspects of vulnerability did not differ significantly (at  $\alpha = .05$ ) between the two groups either.

### **Multilevel Path Models Predicting Changes in Feelings of Vulnerability**

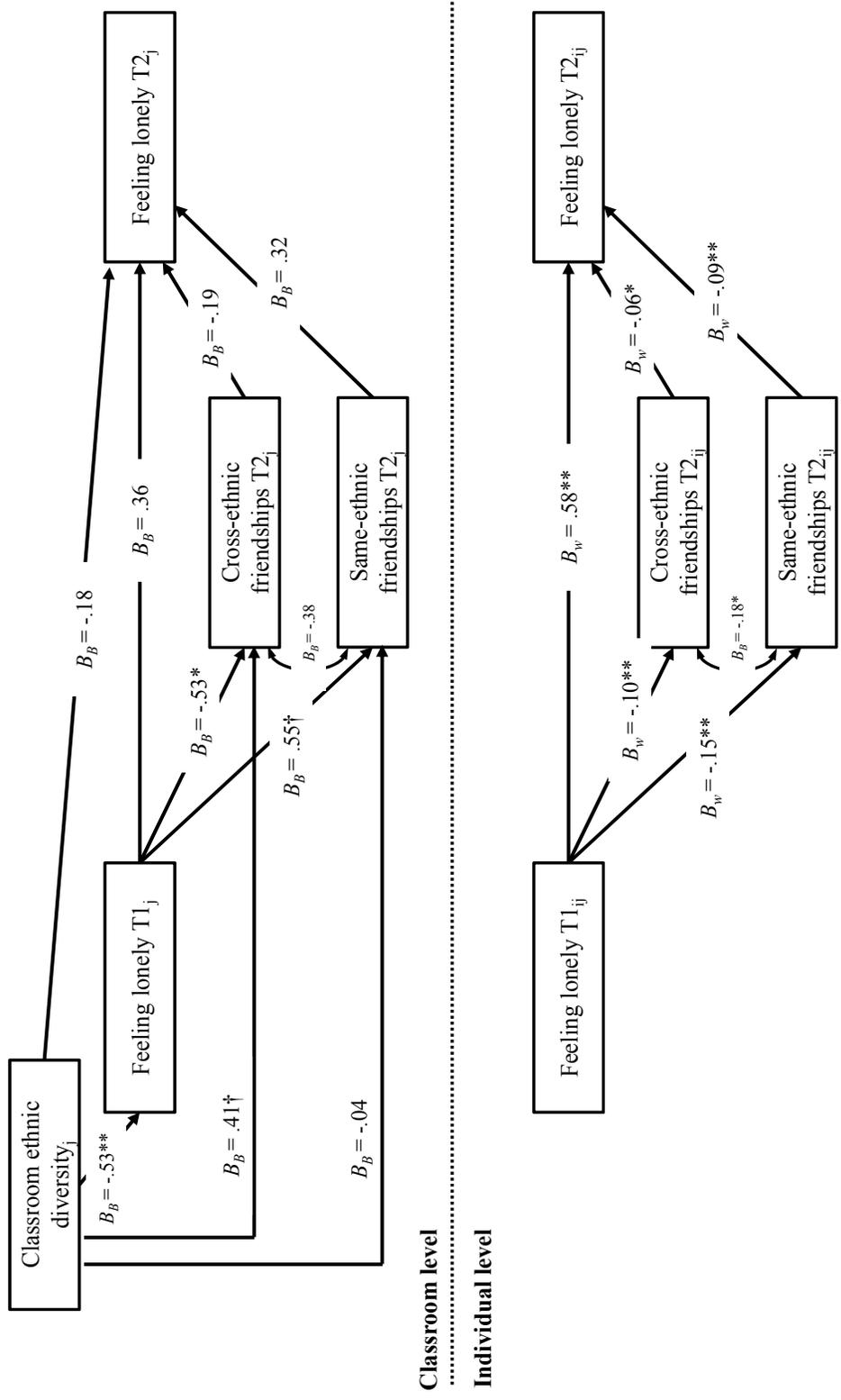
Three path models were constructed to predict changes in feeling unsafe (Figure 6.1), peer victimization (Figure 6.2), and feeling lonely (Figure 6.3). All three models fit the data (see fit indices below the figures). Gender and ethnicity were included as control variables in all models. Only gender predicted decreased peer victimization ( $B = -.07$ ,  $SE = .03$ ,  $p < .05$ ), indicating that in particular girls perceived to be less peer victimized over the first year of middle school than boys. We hypothesized that cross-ethnic friendships will be related to lower feelings of vulnerability among ethnic minority students (Vulnerability Hypothesis). In support of this hypothesis the path models (at the individual level) show that in particular cross-ethnic friendships, and not same-ethnic friendships, were related to a decline in perceived peer victimization ( $B = -.07$ ,  $SE = .03$ ,  $p < .05$ ), and to feeling less unsafe ( $B = -.08$ ,  $SE = .03$ ,  $p < .01$ ). Both same-ethnic friendships ( $B = -.09$ ,  $SE = .03$ ,  $p < .01$ ) and cross-ethnic friendships ( $B = -.06$ ,  $SE = .02$ ,  $p < .05$ ) were related to decreased feelings of loneliness. This indicates that in particular cross-ethnic friendships reduce perceived peer victimization and feeling unsafe, and both same- and cross-ethnic friendships reduce feelings of loneliness during the first year of middle school.



**Figure 6.1.** Path model explaining feeling unsafe at the individual (below) and the classroom level (above). Fit statistics:  $\chi^2(6) = 25.81, p < .05, CFI = .94, RMSEA = .06, SRMR_w = .04, SRMR_B = .01$ . Standardized regression coefficients are presented. Included controls are gender and ethnicity. †  $p < .1$ ; \*  $p < .05$ ; \*\*  $p < .01$



**Figure 6.2.** Path model explaining perceived peer victimization at the individual (below) and the classroom level (above). Fit statistics:  $\chi^2(6) = 27.61, p < .05, CFI = .94, RMSEA = .06, SRMR_W = .04, SRMR_B = .01$ . Standardized regression coefficients are presented. Included controls are gender and ethnicity. †  $p < .1$ ; \*  $p < .05$ ; \*\*  $p < .01$



**Figure 6.3.** Path model explaining feeling lonely at the individual (below) and the classroom level (above). Fit statistics:  $\chi^2(6) = 25.27, p < .05, CFI = .97, RMSEA = .06, SRMR_W = .04, SRMR_B = .03$ . Standardized regression coefficients are presented. Included controls are gender and ethnicity.  $^\dagger p < .1$ ;  $* p < .05$ ;  $** p < .01$

Regarding the directionality of the relation between friendships and vulnerability, the path models show that not only friendships affect vulnerability but feelings of vulnerability, in terms of feeling of unsafe and loneliness at T1, also affected whether students formed same-ethnic versus cross-ethnic friendships (T2) at middle school. Students who felt more unsafe when they entered middle school (T1) formed less same-ethnic friendships ( $B = -.06$ ,  $SE = .03$ ,  $p < .05$ ) and less cross-ethnic friendships ( $B = -.05$ ,  $SE = .02$ ,  $p < .05$ ) at school. Students who felt lonely when they entered middle school formed less same-ethnic friendships ( $B = -.15$ ,  $SE = .04$ ,  $p < .01$ ) and less cross-ethnic friendships ( $B = -.10$ ,  $SE = .04$ ,  $p < .01$ ). Thus, the relations between sense of safety and cross-ethnic friendships, and between feelings of loneliness and same- and cross-ethnic friendships seem to be bidirectional. Peer victimization did not affect the number of cross-ethnic friendships, thus whereas cross-ethnic friendships reduced peer victimization at T2, peer victimization at T1 did not affect the number of cross-ethnic friendships of students.

Furthermore, we hypothesized that cross-ethnic friendships might not only reduce feelings of vulnerability at the individual level, but also at the group level (Classroom Vulnerability Hypothesis). To examine this hypothesis, the path models (presented in Figures 1, 2, and 3) distinguish the effects at the individual and at the classroom level. The findings at the classroom level do not support the Classroom Vulnerability Hypothesis. Cross-ethnic friendships at the classroom level did not significantly predict to what extent students felt unsafe, felt lonely, and perceived to be peer victimized at T2. The same analyses were also performed without the vulnerability measures at T1. Those analyses did not show an association of classroom level cross-ethnic friendships with vulnerability either. Thus, cross-ethnic friendships predicted a decline in feelings of safety, perceived peer victimization, and loneliness at the individual level but not at the classroom level.

Furthermore, it was hypothesized that cross-ethnic friendships may (in part) explain why classroom ethnic diversity is related to reduced feelings of vulnerability (Mediation Hypothesis). Such indirect effects with a classroom level (between) independent variable have to be estimated at the classroom level (Preacher, Zgang & Zyphur, 2011). Namely, variables at the classroom level in principle affect all individuals within the same classroom similarly and therefore individual differences have to be explained by individual level variables (and not by classroom level variables). Whereas the results show in line with this hypothesis that classroom ethnic diversity indeed leads to more cross-ethnic friendships at the classroom level, this study does not find support for an effect of cross-ethnic friendships on the vulnerability outcomes at the classroom level. Thus, we do not find support for the Mediation Hypothesis.

## 6.6 Discussion

With schools becoming more ethnically diverse, more studies have started to examine how classroom ethnic diversity (e.g. Juvonen et al., 2006) and cross-ethnic friendships

(e.g., Kawabata & Crick, 2011) are related to the psychosocial wellbeing of students. Even though cross-ethnic friendships have been shown to be related to positive developmental characteristics, same-ethnic friendships are more prevalent in today's ethnically diverse schools (Moody, 2001). This study examined the unique functions of cross-ethnic friendships among African-American and Latino adolescents during their first year at middle schools.

Regarding cross-ethnic contact, Juvonen and colleagues (2006) showed that classroom ethnic diversity was related to lower perceived vulnerability among African-American and Latino students. This study extends this work by examining whether cross-ethnic friendships affect to what extent minority students feel vulnerable at school. Previous studies showed that cross-ethnic friendships are related to a more positive psychosocial development (Kawabata & Crick, 2011; and also Chapter 5: Munniksmä & Juvonen, 2012), and that cross-ethnic friendships can buffer the effect of race-based rejection sensitivity on sense of belonging (Mendoza-Denton & Page-Gould, 2008). We hypothesized that in particular cross-ethnic friendships would reduce feelings of vulnerability in terms of sense of safety, perceived peer victimization, and loneliness (Vulnerability Hypothesis). In support of this hypothesis, the findings showed that in particular cross-ethnic friendships were related to sense of safety and perceived peer victimization. However, both same- and cross-ethnic friendships reduced feeling less loneliness over the first middle school year.

Whereas cross-ethnic friendships were reduced feelings of vulnerability, this did not explain why classroom ethnic diversity was related to lower vulnerability (Classroom Vulnerability Hypothesis). Namely, at the classroom level cross-ethnic friendships were not related to classroom level vulnerability. Thus, the findings of Juvonen and colleagues (2006), of the relation between ethnic diversity and students' feelings of vulnerability, could not be explained by students in ethnically diverse school classes having more cross-ethnic friendships. Instead, we found that on top of the effect of classroom ethnic diversity on decreased feelings of vulnerability at the classroom level (Juvonen et al., 2006), cross-ethnic friendships were related to lower vulnerability at the individual level. This indicates that there is something more about diversity, over and beyond cross-ethnic friendships, that is associated with lower vulnerability. Classroom ethnic diversity as well as having an ethnically diverse friendship network is related to lower feelings of vulnerability, at least among societal ethnic minority students.

Regarding classroom level or at the individual level effects of cross-ethnic friendships, Agirdag and colleagues (2011) found no effect of cross-ethnic friendships at the group level (which they refer to as interethnic school climate) on peer victimization, but did not examine the effect of cross-ethnic friendships at the individual level. Thus, in line with Agirdag and colleagues (2011) we found that not the whole classroom benefits from the existence of cross-ethnic friendships among classmates. Adding to their study our data showed that only those students who take up cross-ethnic friendships feel less vulnerable over time.

This study adds to previous studies by showing how same- and cross-ethnic friendships are related to different aspects of psychosocial wellbeing of ethnic minority students over time. In addition, this study unraveled the effects of cross-ethnic friendships on students' perceived vulnerability at the classroom level and at the individual level by using multilevel path models. Although this yielded novel insights into the functions of same- and cross-ethnic friendships, some limitations should be noted. Because not all students in all school classes participated in the study and this study relies on peer nomination data, part of the cross- versus same-ethnic friendships could not be detected and coded.

This study focused on societal minority group students (Latino and African-American). The question is whether the findings would be the same for societal majority group students. We argued that whereas cross-ethnic friendships are stronger at reducing prejudice among societal majority students, cross-ethnic friendships might be stronger in reducing feelings of vulnerability among minority group students. Whereas we did not compare societal minority versus majority students in this study, Munniksma and Juvonen (2012) found that cross-ethnic friendships were related to a more positive sense of safety for societal ethnic minority students but not for majority group students in the United States. Adding to these and our findings, future studies should examine whether cross-ethnic friendships affect other aspects of psychosocial wellbeing among minority and majority groups. Relatedly, another interesting avenue for future research would be to examine to what extent the different functions of cross-ethnic friendships are inter-related. For example, do cross-ethnic friendships improve psychosocial wellbeing of students because cross-ethnic friendships reduce (feelings of) being stigmatized or being prejudiced by the majority group?

In sum, adding to the literature on the role of ethnic diversity and friendships in the lives of adolescents, this study showed how cross-ethnic friendships are uniquely related to different aspects of the psychosocial wellbeing of societal ethnic minority students who attend ethnically diverse schools. Ethnic diversity provides opportunities for cross-ethnic friendships, but only students who avail themselves of those opportunities feel less vulnerable.



## Chapter 7

### General Discussion

#### 7.1 Overview

Many Western societies and schools have become more ethnically diverse in recent years. Nonetheless, friendships of adolescents are often within ethnic groups (Moody, 2001; Vermeij et al., 2009). The low prevalence of cross-ethnic friendships can be attributed to their own preference for same-ethnic friendships but also to the influence of third parties like governments, schools, parents, and peers. These parties are of importance in creating the opportunities for cross-ethnic friendships and they may also affect friendship choices of adolescents. For example, whether governments invest in ethnically diverse schooling (desegregation policies) and whether schools distribute ethnic groups evenly over school classes affects adolescents' cross-ethnic friendship opportunities. Additionally, how schools deal with ethnic diversity, the parental attitudes toward their children's cross-ethnic peer relations, and whether other peers have cross-ethnic friendships may affect adolescents' same- and cross-ethnic friendship selection.

Given that preferences of adolescents, and the influence of third parties seem to result in adolescents having more same-ethnic than cross-ethnic friendships, knowledge about how (the lack of) cross-ethnic friendships affect the psychosocial wellbeing of adolescents is important. This knowledge might inform third parties about arguments on the desirability of ethnic diversity and cross-ethnic friendships. Arguments for whether governments invest in desegregation policies, mainly concern the effects of ethnic diversity on students' educational achievement and intergroup attitudes. Insight in whether and how ethnic diversity and cross-ethnic friendships affect psychosocial development of youth might add to those arguments. Little is known about the underlying reasons of why parents might show a resistance to their children's cross-ethnic relations. Hence, in this dissertation, I aimed to give insight into why some parents have a resistance to their children's cross-ethnic peer relations. Regarding the consequences of adolescents' cross-ethnic friendships, I aimed to provide insight into the influence of (extended) cross-ethnic friendships on attitudes towards other ethnic groups and on psychosocial wellbeing of adolescents. In sum, this dissertation examined the resistance to and consequences of cross-ethnic friendships in the lives of adolescents.

To investigate parental resistance to cross-ethnic peer relations (Chapter 2), I interviewed parents of middle school students in the Netherlands. To study the consequences of cross-ethnic friendships (Chapter 3 to 6) I made use of data sources from the Netherlands and the United States. The data sources used in Chapter 3 to 6 have in

common that the participants were middle school students who reported about their friendships at school. The data sources differed in ethnic composition and in the social psychological measures that were included, which made them suitable to examine the different research questions in this dissertation.

In this concluding chapter I first summarize the main findings of this dissertation regarding parental acceptance of their children's cross-ethnic friendships and the significance of cross-ethnic friendships in the lives of adolescents. Secondly, I discuss what the findings of this dissertation might imply for governments, schools, and parents. Third, based on the research presented in this dissertation, I identify future directions for studies on determinants and consequences of cross-ethnic friendships.

### **7.2.1 Parental Acceptance of Cross-Ethnic Relations**

In the first part of the dissertation (Chapter 2) I aimed to get more insight into parental acceptance of their children's cross-ethnic relations in different cultural groups. To this end, I studied the reasons for parental acceptance of their children's cross-ethnic peer relations among native Dutch and Turkish-Dutch parents.

In Chapter 2 I argued that parental concerns about children's cross-ethnic relations undermining the transmission and maintenance of ethnocultural values and practices may affect the acceptance of their children's cross-ethnic relations. In line with this idea, and with previous studies that showed that family integrity and norm conformity is more important in the Turkish than in the Dutch culture (Phalet & Schönflug, 2001b; Verkuyten, 2001), the findings in Chapter 2 showed that Turkish-Dutch parents were less accepting of cross-ethnic peer relations than native Dutch parents. To further examine cultural group-differences, I took a closer look at the cultural differences between those groups.

In the literature, the Dutch culture has been classified as a dignity culture and the Turkish has been classified as an honor culture (IJzerman & Cohen, 2011). In dignity cultures personal evaluations are important for attitudes and behavior. In honor cultures evaluations of others are more important for attitudes and behavior. Accordingly, the findings in Chapter 2 showed that compared to Dutch parents, Turkish-Dutch parents perceived their family reputation to be more dependent on the behavior of their child. It was found that family reputation vulnerability was related to lower parental acceptance of cross-ethnic relations in both groups, but the group difference in family reputation vulnerability explained part of why parental acceptance of close cross-ethnic relations was lower among Turkish-Dutch than among native Dutch parents. Additionally, Turkish-Dutch parents are known to be more active in practicing their religion (Islam) than Dutch parents (Christianity or no religion) (Driessen, 2007). We expected that religiosity would be related to lower parental acceptance of cross-ethnic relations because ethnic outgroup contacts might lead to a loss of religion or religious values. In line with our expectations we found that religiosity was related to lower parental acceptance of cross-ethnic relations among Turkish-Dutch as well as native Dutch parents. Group differences in religiosity explained an additional part of

why Turkish-Dutch parents were less accepting of cross-ethnic relations with Dutch peers than Dutch parents were of relations with Turkish peers. Not surprisingly, because many Moroccans as well as Turks are Muslim, religiosity did not explain why, compared to Dutch parents, Turkish parents were less accepting of their children's relations with Moroccans.

It was also examined in Chapter 2 whether parental acceptance of their children's cross-ethnic relations differed depending on the outgroup. In line with studies on ethnic hierarchies (e.g., Hagendoorn, 1995) native Dutch parents were more open to their children's relations with Turkish-Dutch than with Moroccan-Dutch peers, and Turkish-Dutch parents were more open to contact with native Dutch than with Moroccan-Dutch peers. Thus, among both Turkish-Dutch and native Dutch parents, Moroccan-Dutch peers were the least preferred group for their children's peer relations.

In sum, findings of Chapter 2 indicate that parental concerns about cultural group-differences and about how cross-ethnic peers might undermine ingroup norms, values and behavior affect parental acceptance of cross-ethnic peer relations. These concerns, and hence the resistance to close cross-ethnic relations, are higher when parents perceive that the behavior of their child affects the family reputation.

### **7.2.2 Cross-Ethnic Friendships and Outgroup Attitudes**

The second part of this dissertation (Chapter 3 and 4) aimed to expand the current knowledge on cross-ethnic friendships and outgroup attitudes. Chapter 3 adds to the social identity and the intergroup contact literature, by examining the role of group identification in the relation between same- and cross-ethnic friendships and outgroup attitudes. Chapter 4 adds to research on extended intergroup contact, by examining conditions under which (next to direct cross-ethnic friendships also) cross-ethnic friendships of ingroup friends (extended contact) improve outgroup attitudes.

#### **Adolescents' cross-ethnic friendships and outgroup attitudes**

In Chapter 3 I examined longitudinally among ethnic minority students whether and how their same- and cross-ethnic friendships affected attitudes toward the societal majority group. To reflect the bicultural worlds of adolescents and to examine the desirability of an orientation toward the ethnic ingroup or the societal majority group, I examined how same-ethnic and cross-ethnic friendships affected whether minority students identified with their ethnic ingroup and with the host society, and how this in turn affected attitudes toward the majority group. This is related to two central questions in the acculturation debate (Berry, 1997) which ask how important it is for ethnic minorities to maintain one's ethnic heritage culture and identity, and how important it is to develop relationships and commitments with the larger (host) society.

Findings of Chapter 3 showed that same-ethnic friendships were not related to ethnic ingroup identification, and same-ethnic friendships and ethnic ingroup identification were not related to attitudes toward the majority group (Dutch). Cross-ethnic friendships, however, led to more favorable attitudes toward the majority group through identification with the host society. Theoretically, this finding is in line with

the common ingroup identity model (Gaertner et al., 1993) in the sense that, among ethnic minority members, identification with the superordinate group (host society) improved attitudes toward a former subgroup (societal majority group members). In addition, ethnic minority students' friendships with the majority group stimulated identification with this superordinate group. Ethnic ingroup identification was generally high and did not moderate the effect of identity with the host society on attitudes to the majority group. This indicates that even when students identify strongly with their ethnic ingroup, they can simultaneously also identify with the host society, which improves attitudes toward the societal majority group.

Regarding the desirability of students with an immigrant background having an orientation toward their ethnic ingroup or toward the host society, Chapter 3 showed that same-ethnic friendships and ethnic ingroup identification do not benefit but also do not harm the ethnic minority students' attitudes toward the majority group. Cross-ethnic friendships with majority group peers on the other hand do help ethnic minority students' to feel part of the Dutch society and have a favorable attitude towards the Dutch.

#### **Extended Cross-Ethnic Friendships and Outgroup Attitudes**

Whereas Chapter 3 focused on direct cross-ethnic friendships, Chapter 4 examined extended cross-ethnic friendships. Building on the intergroup contact literature, Wright, Aron, McLaughlin-Volpe, and Ropp (1997) proposed that the knowledge that an ingroup member has a close relationship with an outgroup member (i.e., extended intergroup contact) also leads to improved outgroup attitudes. Chapter 4 examined conditions under which extended cross-ethnic friendships within school classes were related to more or less favorable outgroup attitudes among majority group members in the Netherlands.

In line with previous studies on cross-ethnic friendships (e.g., Feddes et al., 2009), findings in Chapter 4 showed that having direct friendships with Turkish peers was related to positive attitude change toward Turks. As expected and based on the view that extended intergroup friendships should provide new information, findings showed that extended cross-ethnic friendships were related to more favorable intergroup attitudes particularly for students who initially held relatively unfavorable attitudes. The effect of extended cross-ethnic friendships was not moderated by whether students had direct Turkish friends.

Additionally, it was argued that when extended cross-ethnic friendship effects are examined in smaller settings, more attention should be paid to structural social network dynamics. Based on concepts from social network analysis, it was demonstrated that when extended cross-ethnic friendships are examined within small social settings, like school classes, another measure which excludes direct cross-ethnic friendship within an extended cross-ethnic friendship triad is needed to examine extended cross-ethnic friendships. Also, the focus on extended cross-ethnic friendships within a small social setting allowed for a prediction of the extended cross-ethnic

friendship effect that was opposite to the traditional positive extended contact effect in larger social settings. Based on balance theory (Cartwright & Harary, 1956; Heider, 1958) one would expect unclosed triads to close over time. Accordingly, research on social networks showed that friendship networks are often characterized by transitivity, the tendency to close open triads (e.g., Davies et al., 2011). Thus, students tend to become friends with (outgroup) friends of (ingroup) friends. If that is not the case, this may be a deliberate choice, which might indicate that there is a negative cross-ethnic relation within the triad, which has been shown to lead to less favorable outgroup attitudes (Stark, 2011). Partly in line with this reasoning, Chapter 4 showed that extended cross-ethnic friendships could also be related to less favorable attitudes among students who initially held relatively positive attitudes.

In sum, Chapter 4 underscored that not only direct cross-ethnic friendships, but cross-ethnic friends of one's same-ethnic friends can improve outgroup attitudes among students who initially held negative outgroup attitudes. Extended contact within small contexts can, however, also lead to less favorable attitudes among students with relatively positive outgroup attitude.

### **7.2.3 Same- and Cross-Ethnic Friendships and Psychosocial Wellbeing**

The third part of the dissertation focuses on cross-ethnic friendships and psychosocial wellbeing. Chapter 5 adds to the intergroup contact literature that mainly focused on whether and how intergroup contact affects outgroup attitudes, by examining whether cross-ethnic friendships are associated with greater sense of social-emotional safety for societal minority and majority students. Chapter 6 builds on findings of Chapter 5 and examines whether classroom ethnic diversity affects feelings of vulnerability through cross-ethnic friendships at the individual and at the classroom level, and whether there are unique effects of same- and cross-ethnic friendships on students' psychosocial wellbeing.

#### **Ethnic Majority and Minority Group Differences**

Adding to the intergroup contact literature that mainly focused on whether and how contact between different groups affects outgroup attitudes, I examined in Chapter 5 whether cross-ethnic friendships are associated with greater sense of social-emotional safety for societal minority (Latino) and majority (White) students in the United States. Scholars have recently started to examine whether cross-ethnic friendships are associated with psychosocial wellbeing (e.g., Kawabata & Crick, 2008; Lease & Blake, 2005), but these studies did not examine group differences. However, cross-ethnic friendships might have a different meaning and hence different outcomes for majority and minority group members. Chapter 5 showed that even though cross-ethnic friendships were less prevalent than same-ethnic friendships, friendships that crossed ethnic boundaries were associated with a stronger sense of safety for societal minority students but not for societal majority students. Thus, societal minority youth gained from having cross-ethnic friends with regard to subsequent safety feelings. Tropp and Pettigrew (2005b) argued that because ethnic minority group members are

more often the targets of being prejudiced by majority group members than the other way around, contact between these groups in particular reduced prejudice among majority group members. Adding to this idea, the findings of Chapter 5 showed that in particular among ethnic minority members cross-ethnic friendships are related to a higher sense of social-emotional safety. Thus, whereas cross-ethnic friendships seem to reduce outgroup prejudice more strongly among majority members, these friendships might be related to psychosocial benefits among societal minority students.

### **Individual and Classroom Level Effects of Cross-Ethnic Friendships on Psychosocial Wellbeing**

Building on findings of Chapter 5, I investigated in Chapter 6 whether cross-ethnic and same-ethnic friendships were uniquely related to different aspects of psychosocial wellbeing. A previous study (Juvonen et al., 2006) found that ethnic diversity of the school context was related to decreased feelings of vulnerability among minority group students. I followed up on this study by examining whether this could be explained by students taking advantage of the increased opportunities for cross-ethnic friendships which in turn made them feel less vulnerable. I also examined whether the existence of friendships that cross ethnic boundaries were related to lower vulnerability for the whole classroom or only for those who engaged in those cross-ethnic friendships. This was studied among Latino and African-American middle school students in the greater Los Angeles area.

Chapter 6 showed that classroom ethnic diversity as well as cross-ethnic friendships were related to reduced feelings of vulnerability: Residing in ethnically diverse school classes, and cross-ethnic friendships were related to students feeling less unsafe, less peer victimized, and less loneliness. Both same- and cross-ethnic friendships reduced feelings of loneliness. Regarding individual versus classroom level effects of cross-ethnic friendships, findings showed that the existence of cross-ethnic friendships did not decrease feelings of vulnerability for all minority students in the classroom. Cross-ethnic friendship only reduced vulnerability among students who engaged in those friendships. Cross-ethnic friendships did not explain why ethnic diversity was related to lower feelings of vulnerability at the classroom level. These findings suggest that classroom ethnic diversity and the opportunities this creates to form friendships across ethnic boundaries are important in promoting psychosocial wellbeing in urban middle schools.

### **7.3 Practical Implications**

In the introduction, four parties were identified that can affect whether adolescents have cross-ethnic friends: Governments, schools, parents, and peers. Because governments, schools, and parents are more likely to make a more conscious choice on whether ethnic diversity and cross-ethnic friends of adolescents are desirable or should be encouraged, I discuss in the following how the findings of this dissertations regarding the resistance to and the significance of cross-ethnic friendships are relevant for those three parties.

**Governments**

Whereas many Western countries invest in desegregation policies to encourage ethnically diverse schooling (Bakker, 2011), the Dutch government decided in 2011, based on a lack of scientific evidence for the effect of ethnic diversity on educational achievement, to no longer invest in ethnically mixed schooling. Yet, supporters of mixed schooling argue that school ethnic diversity might not affect educational achievement but may improve outgroup attitudes (see for example Stark, 2011). The level of ethnic diversity of schools also affects opportunities for cross-ethnic friendships. This dissertation showed that direct and extended cross-ethnic friendships can improve outgroup attitudes among majority group students, and that cross-ethnic friendships increase identification with the host society which in turn improves outgroup attitudes among minority students. Additionally, classroom ethnic diversity as well as cross-ethnic friendships were related to decreased feelings of vulnerability in terms of sense of safety, less peer victimization, and lower loneliness among ethnic minority students. These findings indicate that next to having no clear and consistent effects on academic achievement, school ethnic diversity may affect intergroup attitudes (of minority and majority students) and psychosocial wellbeing of minority students. This suggests that if governments are concerned about intergroup attitudes and adolescents' psychosocial wellbeing then they should invest in desegregation policies.

Additionally, findings of Chapter 3 add insights to the debate about ethnic acculturation. Questions in the scientific literature (e.g., Berry, 1997) as well as in the public debate on ethnic acculturation concern the desirability of the orientation of immigrants towards their ethnic ingroup versus an orientation towards the host society. The orientation of ethnic minorities toward their own ethnic group may elicit concerns about whether this is related to negative relations or attitudes toward the host society. However, the findings in Chapter 3 showed among ethnic minority students that even though they identified with their ethnic ingroup many of those students also had cross-ethnic friendships and identified with the host society. Even among students who identified strongly with the ethnic ingroup, their cross-ethnic friendships were related to improved attitudes toward the outgroup through identification with the host society. Hence, this study supports the suggestions by Berry (1997) who argued that national policy should not be aimed at people with an immigration background relinquishing the identification and heritage of the ethnic background. Instead, national policy should be aimed at 'integration' in which people with immigration background can maintain the identity and heritage from their ethnic background, as well as maintain ties with the larger society.

**Schools**

The findings in this dissertation indicate that cross-ethnic friendships improve outgroup attitudes and psychosocial wellbeing of students. Several studies have shown that schools can affect cross-ethnic relations at school (e.g., Moody, 2001). This points to the important role that schools can play. Firstly, schools can increase

students' opportunities for cross-ethnic friendships by creating an even distribution of ethnic groups over the different school classes. The findings in Chapter 6 show that classroom ethnic diversity, defined by the equality in size and the number of ethnic groups, leads to more cross-ethnic friendships and to decreased feelings of vulnerability among minority group members. Additionally, Chapter 3 and 4 showed that those cross-ethnic friendships lead to more positive outgroup attitudes over time, and Chapter 5 and 6 showed that cross-ethnic friendships have psychosocial benefits among minority students. This indicates that how schools distribute students from different ethnic groups over school classes has an impact on the psychosocial development of students.

Secondly, whereas policies to encourage positive cross-ethnic relations like friendships were not investigated in this dissertation, practitioners can rely on a large body of research that has pointed to conditions that can facilitate a positive effect of ethnic diversity on intergroup attitudes (Pettigrew & Tropp, 2006) as well as cross-ethnic friendships (Moody, 2001). Conditions that have been identified as such are (1) status equality within the situation; (2) intergroup cooperation; (3) sharing common goals; and, (4) authority support (Allport, 1954; Pettigrew, 1998).

### **Parents**

Chapter 2 showed that Turkish-Dutch parents were less open to cross-ethnic peer relations than native Dutch parents. Resistance to cross-ethnic peer relations was mainly due to concerns about cultural differences and how cross-ethnic peers might undermine ingroup norms, values, and behavior. However, whereas parents might have concerns about cross-ethnic friendships leading to behaviors that deviate from ingroup norms, there are also psychosocial benefits of cross-ethnic friendships that they might not be aware of. In Chapter 5 I demonstrated that in particular students with an ethnic minority background seem to benefit from cross-ethnic friendships in the sense that cross-ethnic friendships make them feel safer and less vulnerable in school. Furthermore, this dissertation adds to the evidence that cross-ethnic friendships improve outgroup attitudes among minority and majority group students. Hence, it seems important to inform majority but particularly ethnic minority parents about these psychosocial benefits of cross-ethnic friendships. For example, schools can do this by discussing the ethnic integration of students, and what is known about the consequences of cross-ethnic friendships, in parent meetings so that parents know what the psychosocial benefits of cross-ethnic friendships can be.

Furthermore, the ethnic and racial socialization literature distinguishes several practices for ethnic or racial minority parents on how to prepare their children for a life in a multicultural society (Hughes et al., 2006). Ethnic or racial socialization can for example be focused on cultural socialization, preparation for bias, promotion of distrust, or egalitarianism. Adding to this literature, our findings suggest that if ethnic minority parents are concerned about stigmatization towards their group and the psychosocial wellbeing of their child, they should encourage cross-ethnic friendships of

their children. In a similar vein, if majority group parents want their children to have positive attitudes towards other ethnic groups, they should encourage their children's cross-ethnic friendships.

#### **7.4 New Directions**

This dissertation provides insights in parental acceptance of their children's cross-ethnic peer relations, and in the significance of cross-ethnic friendships in the lives of adolescents. The insights and the limitations of the studies in this dissertation provide several directions for future research.

The different chapters in this dissertation relied on data sources from the United States and from the Netherlands. This enabled me to examine the different research questions that required different levels and ranges of ethnic diversity of the samples as well as different outcome measures. However, the use of different samples also raises questions regarding to what extent findings can be generalized to different contexts. This should be addressed in future studies. For example, future studies should examine whether the findings regarding extended contact (Chapter 4) replicate in the United States, and whether findings on the relation between cross-ethnic friendships and psychosocial wellbeing (Chapter 5 and 6) replicate in other countries, including the Netherlands. It might be that the psychosocial benefits of cross-ethnic friendships depend on the level of prejudice between ethnic groups, or on the salience of ethnic group differences. If cross-ethnic friendships reduce feelings of vulnerability of minority students because of reduced perceived stigmatization or because of feeling more connected, then cross-ethnic friendships might have less profound effects in countries where there is less stigmatization between ethnic groups. However, like in the United States, cross-ethnic friendships have also been shown to improve outgroup attitudes between ethnic groups in the Netherlands and several other countries, which might mean that cross-ethnic friendships also reduce feelings of vulnerability among minority group members in the Netherlands and in other countries.

Furthermore, in Chapter 2 we argued how parental acceptance of cross-ethnic peer relations might differ between dignity and honor cultures. Whereas we showed that this was the case for native Dutch and Turkish-Dutch parents, future studies should examine whether this can be generalized to other honor versus dignity cultures such as respectively, the Latino honor culture and the European-American dignity culture in the United States (Ijzerman & Cohen, 2011).

Chapter 3 showed in line with the common ingroup identity model that, among ethnic minority students in the Netherlands, identification with the host society mediated the relation between cross-ethnic friendships and attitudes toward the ethnic majority group. Future studies should examine this in other contexts like in the United States, which has a different history of immigration than the Netherlands. Whereas in the Netherlands, the native Dutch citizens are still the clear numerical majority, the United States is a much more ethnically diverse 'melting pot'. Hence it would be interesting to examine, among ethnic or racial minority students in the United States,

whether cross-ethnic friendships with other minority groups or in particular with the majority group leads to stronger identification with ‘being American’ as a superordinate category, and whether this in turn leads to improved attitudes to the different ethnic groups or only to improved attitudes toward the societal majority group.

Next to questions of generalizability to different contexts, findings of this dissertation point to new avenues for future research. Regarding psychosocial wellbeing of students, I found in Chapter 5 that cross-ethnic friendships were related to stronger social-emotional safety among minority but not among majority students. Previous research has shown that cross-ethnic friendships are related to more positive outgroup attitudes, and that this relation is particularly strong among majority group members (Tropp & Pettigrew, 2005b). For a further understanding of group differences in the functions of cross-ethnic friendships, these findings raise the question to what extent the decrease in prejudice among majority group students and the increase in psychosocial wellbeing among minority group students are interrelated. Hence, one avenue for future research would be to examine in detail whether cross-ethnic friendships lead to better psychosocial wellbeing among minority students, *because* it reduces prejudice from the majority to the minority group.

In this dissertation I found that some parents had a resistance to cross-ethnic friendships of their children, but I did not examine whether this affected the friendship choices of adolescents. In the literature, surprisingly little research paid attention to how characteristics, attitudes or behaviors of parents affect their children’s cross-ethnic relations within multi-ethnic classrooms (one exception: Edmonds and Killen, 2009). Previous research found that parents influence friendship selection of pre-adolescents (e.g., Knoester, Haynie & Stephens, 2006; Warr, 2005) in relation to deviant behavior, academic performance, and prosocial behavior of friends. We argue that a similar influence may occur with regard to cross-ethnic friendship choices, but this has not been studied. Because cross-ethnic friendships have positive effects on the psychosocial development of adolescents, it seems important to examine how and to what extent parents have an influence on whether their children have same- or cross-ethnic friendships.

Studies on friendships and peer influence processes increasingly use social network methods to examine influence and selection processes. Social network methods (e.g., Stochastic Actor-Based Modeling) have been employed to examine determinants of same- and cross-ethnic friendship selection, but have to my knowledge not been applied to study the consequences of same- and cross-ethnic friendships. In this dissertation I did not make use of social network methods because I did not examine whole school classes, and the focus of most chapters was on the consequences instead of the determinants of cross-ethnic friendships. By use of social network analyses however, it is possible to disentangle in more detail whether outgroup attitudes affect friendship selection or whether friends affect attitudes while taking into account social network dynamics (e.g., reciprocity, transitivity). Also, several studies have examined the role of same- and cross-ethnic friendships and ethnic identity, but ethnic identity

might also affect same- versus cross-ethnic friendship selection. Hence, to disentangle in greater detail how same- and cross-ethnic friendships, attitudes, or group identification affect one another, social network studies are needed in this field.

Like most of the studies on friendship networks of adolescents, the studies in this dissertation were limited to the analyses of consequences of friendships within school classes (Chapter 3, 4, & 6) or within the grade (Chapter 5). Whereas this gives insight in the consequences of adolescents' same- and cross-ethnic friendships at school, the consequences of friendships outside the school class or outside the school are not taken into account. It might for example be that the effects of cross-ethnic friendships at school on adolescents' outgroup attitudes are particularly strong for students who do not have cross-ethnic friendships in other contexts. Hence, future studies that collect friendship data should not restrict their study to the classroom context, but extend it to the grade, the whole school, or ideally to other social contexts. Whereas this might be harder to organize, it will give a more complete picture of the friendship network of adolescents.

### **7.5 Final Conclusions**

This dissertation set out to examine parental acceptance of their children's cross-ethnic friendships on the one hand, and consequences of cross-ethnic friendships on adolescents' outgroup attitudes and psychosocial wellbeing on the other hand. This was examined during adolescents' first middle school years. When students enter middle school they meet many new peers, which might lead to worries among parents about with whom their children will affiliate. Today's (increasing number of) ethnically diverse schools provide opportunities for cross-ethnic friendships, but research shows that students mainly choose same-ethnic peers as friends. Regarding parental acceptance of their cross-ethnic relations, I found that concerns about cultural group-differences might lead to a lower parental acceptance of their children's cross-ethnic peer relations. Because of those cultural group-differences, cross-ethnic friendships might undermine the maintenance of ingroup ethnocultural values, behaviors or practices. However, regarding the consequences of cross-ethnic peer relations, findings in this dissertation underscore that there are more consequences of these friendships to take into account for deciding whether cross-ethnic friendships are desirable for adolescents. For societal majority group students, their own cross-ethnic friendships and also cross-ethnic friendships of their ingroup friends improve intergroup attitudes. For ethnic minority group students, cross-ethnic friendships can improve identification with the host society and subsequently their attitudes towards the host society. Next to intergroup attitudes, the studies in the United States indicate that ethnic diversity as well as cross-ethnic friendships are related to increased psychosocial wellbeing among ethnic minority students.

In sum, the take home message of this dissertation is that whereas parents sometimes have a resistance toward cross-ethnic peer relations, cross-ethnic friendships are related to more positive intergroup attitudes as well as psychosocial wellbe-

ing of adolescents. Thus, when parents are concerned about their children's intergroup attitudes and psychosocial wellbeing, it seems important to encourage ethnically diverse contexts as well as cross-ethnic friendships. Discouraging cross-ethnic friendships might have unintended consequences (that is, it might backfire).

## **Samenvatting in het Nederlands**

### **(Summary in Dutch)**

Over etnische grenzen: De weerstand tegen en het belang van interetnische vriendschappen onder adolescenten

#### **Inleiding**

Veel Westerse samenlevingen hebben te maken met een groeiende etnische diversiteit. Ook al laten de demografische trends zien dat de etnische diversiteit in samenlevingen en op scholen stijgt, onderzoek in Amerika (Currarini et al., 2010; Moody, 2001) en in Europese landen als Nederland (Vermeij et al., 2009) laat zien dat jongeren voornamelijk vrienden selecteren die dezelfde etnische achtergrond hebben als zijzelf (intra-etnische vriendschappen). Het lage aantal vriendschappen tussen leerlingen met een verschillende etnische achtergrond (interetnische vriendschappen) kan worden toegeschreven aan de individuele voorkeuren van adolescenten, maar ook aan derden als de regering, scholen, ouders en leeftijdsgenoten. Of de regering besluit om te investeren in het tegengaan van etnische segregatie in het onderwijs, of dat scholen etnische groepen gelijkmatig verdelen over klassen, heeft invloed op de etnische diversiteit van schoolklassen en daarmee ook op de mogelijkheid tot interetnische vriendschappen. Hoe daarnaast wordt omgegaan met etnische diversiteit binnen schoolklassen, de houding van ouders ten opzichte van interetnische vriendschappen, en of leeftijdsgenoten interetnische vriendschappen hebben, kan eveneens invloed hebben op intra- versus interetnische vriendschapsselectie van jongeren.

Aangezien de voorkeuren van jongeren en de invloed van derden lijken te resulteren in meer intra- dan interetnische vriendschappen onder adolescenten, is kennis over hoe interetnische vriendschappen gerelateerd zijn aan het welzijn van jongeren belangrijk. Dit kan (aanvullende) argumenten leveren aan overheden, scholen, ouders, en de jongeren zelf, voor de overweging of etnisch diverse scholen en interetnische vriendschappen wenselijk zijn. Eerder onderzoek wijst erop dat sommige ouders een weerstand hebben tegen interetnisch contact van hun kinderen. Er is echter niet veel bekend over waarom ouders deze weerstand hebben. Daarom zijn in dit proefschrift onderliggende redenen voor de weerstand van ouders tegen interetnische relaties van hun kinderen onderzocht. Om daarnaast meer inzicht te krijgen in de gevolgen van interetnische vriendschappen, is onderzocht hoe interetnische vriendschappen gerelateerd zijn aan de beeldvorming over andere etnische groepen en hoe interetnische vriendschappen gerelateerd zijn aan het psychosociale welzijn van jongeren. Kortom, in dit proefschrift is de weerstand tegen en het belang van interetnische vriendschappen onder jongeren onderzocht.

Het proefschrift bestaat uit drie delen. In het eerste deel heb ik de weerstand van ouders tegen interetnische relaties van hun kinderen onderzocht. Om hier een

beeld van te krijgen heb ik ouders van middelbare schoolleerlingen in Nederland geïnterviewd. In het tweede deel van het proefschrift heb ik onderzocht hoe interetnische vriendschappen van jongeren invloed hebben op hun beeldvorming over andere etnische groepen. Dit heb ik onderzocht op basis van de Arnhem Schoolstudie (Stark, 2011) waarin ondermeer de vriendschapsnetwerken en beeldvorming van leerlingen gedurende het eerste jaar van de middelbare school in kaart is gebracht. In het derde deel van dit proefschrift heb ik onderzocht tot in hoeverre intra- en interetnische vriendschappen gerelateerd zijn aan het psychosociale welzijn van middelbare schoolleerlingen. Hiervoor heb ik gebruik gemaakt van twee Amerikaanse datasets waarin vriendschapsnetwerken en aspecten van het psychosociale welzijn van leerlingen zijn gemeten. In het vervolg van deze samenvatting zal ik de belangrijkste conclusies van de verschillende hoofdstukken in dit proefschrift bespreken, gevolgd door een algemene conclusie.

### **Deel 1: Weerstand tegen Interetnische Vriendschappen onder Ouders**

Het doel van Hoofdstuk 2 was om meer inzicht te krijgen in waarom sommige ouders een weerstand tegen interetnische relaties van hun kinderen hebben. Dit onderzocht ik onder autochtoon-Nederlandse en Turks-Nederlandse ouders. In Hoofdstuk 2 heb ik betoogd dat ouders zich mogelijk zorgen maken over interetnische relaties van hun kinderen omdat deze relaties tot waarden en gebruiken kunnen leiden die afwijken van de waarden en gebruiken van de eigen etnische groep. In lijn met dit idee, en in lijn met eerdere studies waaruit bleek dat familie-integriteit en normconform gedrag belangrijker is in de Turkse dan in de Nederlandse cultuur (Phalet & Schönflug, 2001; Verkuyten, 2001), laten de bevindingen in Hoofdstuk 2 zien dat Turks-Nederlandse ouders minder open staan voor interetnische relaties van hun kinderen dan autochtoon-Nederlandse ouders. Om meer zicht te krijgen op de onderliggende redenen voor de weerstand tegen interetnische relaties in deze twee groepen, keek ik vervolgens naar culturele verschillen tussen deze groepen.

In de literatuur (zie IJzerman & Cohen, 2011) wordt de Nederlandse cultuur getypeerd als een *dignity culture* waarin voornamelijk eigen evaluaties invloed hebben op de houding en het gedrag van individuen. De Turkse cultuur wordt getypeerd als een *honor culture* waarin voornamelijk evaluaties van anderen belangrijk zijn voor de houding en het gedrag van individuen. De bevindingen in Hoofdstuk 2 lieten dan ook zien dat Turks-Nederlandse ouders, in sterkere mate dan autochtoon-Nederlandse ouders, het idee hadden dat de reputatie van het gezin aangetast kon worden door het gedrag van hun kinderen. Ouders die het idee hadden dat het gedrag van hun kinderen de gezinsreputatie aan kon tasten, stonden minder open voor interetnische relaties van hun kinderen. Dit was onder zowel Turks-Nederlandse als autochtoon-Nederlandse ouders het geval, maar doordat Turkse ouders de reputatie van het gezin als kwetsbaarder ervoeren stonden zij minder open voor interetnische relaties van hun kinderen. Dus het verschil in de waargenomen kwetsbaarheid van de gezinsreputatie verklaarde deels waarom Turks-Nederlandse ouders gemiddeld minder open stonden

voor interetnische vriendschapsrelaties van hun kinderen dan autochtoon-Nederlandse ouders.

Daarnaast lieten de bevindingen in Hoofdstuk 2 zien dat religie een rol speelde in hoe open ouders stonden voor de interetnische relaties van hun kinderen. Turks-Nederlandse ouders zijn over het algemeen actiever in het beoefenen van hun religie (de Islam) dan autochtoon-Nederlandse ouders (het christendom of geen religie) (Driesen, 2007). Omdat interetnische contacten kunnen leiden tot een verlies van religie of religieuze waarden, was onze hypothese dat religiositeit gerelateerd zou zijn aan een lagere acceptatie van interetnische relaties. In overeenstemming met deze hypothese vonden we dat religiositeit gerelateerd was aan een lagere acceptatie van interetnische relaties onder zowel Turks-Nederlandse als autochtoon-Nederlandse ouders. Aangezien religiositeit echter hoger was onder Turks-Nederlandse dan onder autochtoon-Nederlandse ouders stonden Turks-Nederlandse ouders minder open voor interetnische contacten van hun kinderen. Verschillen in religiositeit verklaarden dus een extra deel van waarom Turks-Nederlandse ouders minder open stonden voor interetnische relaties met Nederlanders, dan Nederlandse ouders voor relaties met Turken. Religiositeit verklaarde niet waarom, in vergelijking met Nederlandse ouders, Turks-Nederlandse ouders minder open stonden voor interetnische relaties met Marokkanen. Dit kan verklaard worden doordat Marokkanen net als Turken Moslim zijn.

In Hoofdstuk 2 heb ik ook onderzocht of de weerstand tegen interetnische relaties afhankelijk was van om welke etnische groep het ging. In lijn met studies op het gebied van etnische hiërarchieën (bijvoorbeeld Hagendoorn, 1995) stonden autochtoon-Nederlandse ouders meer open voor Turks-Nederlandse contacten dan voor Marokkaans-Nederlandse contacten. Turks-Nederlandse ouders stonden meer open voor contact met Nederlandse dan met Marokkaans-Nederlandse leeftijdgenoten. Dus zowel Turks-Nederlandse als autochtoon-Nederlandse ouders, hadden de meeste weerstand tegen Marokkaans-Nederlandse contacten van hun kinderen.

De bevindingen van Hoofdstuk 2 geven dus aan dat zorgen van ouders over hoe culturele verschillen de waarden en gebruiken van de eigen cultuur bij hun kinderen kunnen ondermijnen, invloed hebben op hun acceptatie van de interetnische relaties van hun kinderen. Deze zorgen en dus ook de weerstand tegen interetnische relaties is vooral hoog als ouders het idee hebben dat het gedrag van hun kinderen de religieuze voortzetting en de reputatie van hun gezin beïnvloedt.

## **Deel 2: Interetnische Vriendschappen en Beeldvorming over andere Etnische Groepen**

Het doel van het tweede deel van dit proefschrift (Hoofdstuk 3 en 4) was het uitbreiden van de huidige kennis over de invloed van interetnische vriendschappen op de beeldvorming ten aanzien van andere etnische groepen. Hoofdstuk 3 draagt bij aan de *social identity* en de *intergroup contact* literatuur, met een onderzoek naar de rol van groepsidentificatie in de relatie tussen intra- en interetnische vriendschappen en beeldvorming over andere etnische groepen. Hoofdstuk 4 draagt bij aan het recente

onderzoek op het gebied van *extended intergroup contact* (hierna indirect contact genoemd), door voorwaarden te onderzoeken waaronder indirect contact (dat wil zeggen: interetnische vriendschappen van intra-etnische vrienden) de beeldvorming over andere etnische groepen onder Nederlandse jongeren verbetert.

### **Interetnische Vriendschappen, Groepsidentificatie en Beeldvorming**

In Hoofdstuk 3 onderzocht ik onder allochtone leerlingen of intra- en interetnische vriendschappen en identificatie met de etnische groep of identificatie met de Nederlandse samenleving de beeldvorming over Nederlanders beïnvloedt. Dit houdt verband met twee centrale vragen in het acculturatiedebat (Berry, 1997) over enerzijds hoe belangrijk het is voor etnische minderheden om hun etnische cultuur en identiteit vast te houden en anderzijds, hoe belangrijk het is om relaties en verbintenissen te ontwikkelen met de (ontvangende) samenleving. De bevindingen in Hoofdstuk 3 lieten zien dat intra-etnische vriendschappen en identificatie met de eigen etnische groep niet gerelateerd waren aan de beeldvorming over Nederlanders. Interetnische vriendschappen met autochtoon-Nederlanders hadden wel een positief effect op de beeldvorming over Nederlanders doordat deze interetnische vriendschappen de identificatie met de Nederlandse samenleving bevorderde.

Theoretisch ondersteunde deze studie het *common ingroup identity model* (CIIM: Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993). Volgens dit model kan contact tussen verschillende groepen positieve beeldvorming over andere subgroepen bevorderen doordat mensen zich gaan identificeren met een overkoepelende identiteit die de verschillende subgroepen omvat. Op die manier worden voormalige subgroepen onderdeel van de grotere groep wat leidt tot positievere beeldvorming over voormalige subgroepen. Hoofdstuk 3 ondersteunt het CIIM in de zin dat onder de allochtoon-Nederlandse jongeren identificatie met de overkoepelende groep (Nederland als samenleving) de beeldvorming over de voormalige subgroep (autochtoon-Nederlanders) verbeterde. Interetnische vriendschappen met de meerderheidsgroep bevorderden de identificatie met de overkoepelende groep.

De allochtoon-Nederlandse jongeren in de studie in Hoofdstuk 3 identificeerden zich over het algemeen sterk met hun eigen etnische groep. Dit geeft aan dat zelfs wanneer allochtone jongeren zich identificeren met hun etnische groep ze zich tegelijkertijd ook kunnen identificeren met de ontvangende samenleving. Identificatie met de etnische groep houdt daarbij het effect van identificatie met de Nederlandse samenleving op de beeldvorming over Nederlanders niet tegen. Dus wat de wenselijkheid van een oriëntatie richting de eigen etnische groep of richting de Nederlandse samenleving betreft, liet Hoofdstuk 3 zien dat intra-etnische vriendschappen en identificatie met de eigen etnische groep de beeldvorming over Nederlanders niet verbetert maar ook niet hindert. Interetnische vriendschappen met meerderheidsgroep daarentegen helpen allochtoon-Nederlandse jongeren om zich onderdeel van de Nederlandse samenleving te voelen, wat vervolgens een positieve beeldvorming over autochtoon-Nederlanders bevordert.

### **Indirecte Interetnische Vriendschappen en Beeldvorming**

In Hoofdstuk 3 werd het effect van directe interetnische vriendschappen onderzocht, waarna in Hoofdstuk 4 het effect van indirecte interetnische vriendschappen werd onderzocht. Voortbouwend op de *intergroup contact* literatuur stelden Wright, Aron, McLaughlin-Volpe, en Ropp (1997) dat als iemand anders van de eigen etnische groep een nauwe relatie met een lid van een andere groep heeft (indirect contact) dit ook kan leiden tot een verbeterde beeldvorming over de andere groep. Dus niet alleen directe interetnische vriendschappen, maar ook interetnische vriendschappen van intra-etnische vrienden kunnen de interetnische beeldvorming verbeteren. In Hoofdstuk 4 onderzocht ik onder autochtoon-Nederlandse leerlingen voorwaarden waaronder indirecte interetnische vriendschappen gerelateerd waren aan de beeldvorming ten aanzien van Turken.

In overeenstemming met eerdere studies (bijvoorbeeld Feddes et al., 2009) lieten de bevindingen in Hoofdstuk 4 zien dat directe vriendschappen met Turkse klasgenoten de positieve beeldvorming over Turken bevorderde. Op basis van de aanname dat indirecte interetnische vriendschappen de beeldvorming verbetert omdat het nieuwe informatie over interetnisch contact verschaft was onze verwachting dat indirecte interetnische vriendschappen met Turken een positief effect zouden hebben op de beeldvorming over Turken. De bevindingen in Hoofdstuk 4 toonden aan dat dit alleen het geval was voor leerlingen met een oorspronkelijk minder positieve beeldvorming over Turken. Het effect van indirecte interetnische vriendschappen verschilde niet tussen leerlingen die wel of geen directe interetnische vriendschappen hadden.

Daarnaast heb ik in Hoofdstuk 4 beargumenteerd dat in onderzoek naar indirecte interetnische vriendschappen in kleinere contexten, zoals schoolklassen, er meer aandacht moet worden besteed aan structurele sociale netwerkdynamieken. In onderzoek naar indirect interetnisch contact wordt tot op heden niet specifiek gecontroleerd of in de meting van indirect contact geen sprake is van een directe interetnische vriendschap in dezelfde indirecte interetnische vriendschap triade. Concepten uit de sociale netwerkanalyse (als *transitive closure*) wijzen er echter op dat als een persoon een intra-etnische vriend heeft die een interetnische vriend heeft (indirecte interetnische vriendschap triade), het waarschijnlijk is dat deze persoon ook bevriend wordt met de interetnische vriend van de intra-etnische vriend. Dit is vooral het geval bij indirecte interetnische vriendschappen binnen kleine contexten, omdat hier de directe interetnische vriendschap voor handen is. Daardoor is het mogelijk dat als er een effect van indirect interetnisch contact op beeldvorming wordt gevonden, dat eigenlijk toe te schrijven is aan een directe interetnische vriendschap. Daarom is in Hoofdstuk 4 een meting van indirect interetnische vriendschappen voorgesteld, waarbij alleen indirecte vriendschappen worden geteld als er geen direct interetnisch contact (met de interetnische vriend van de intra-etnische vriend) is.

De focus op indirecte interetnische vriendschappen binnen kleine contexten laat ook een andere voorspelling van het effect van indirect interetnische vriendschappen toe die contrasteert met de traditionele indirecte contact hypothese (exten-

ded contact hypothesis). Namelijk, gebaseerd op *balance theory* (Cartwright & Harary, 1956; Heider, 1958) en het principe van transitiviteit zou kunnen worden verwacht dat mensen ook vrienden worden met de (in dit geval interetnische) vrienden van hun (in dit geval intra-etnische) vrienden. Als dat niet het geval is, kan dit een bewuste keuze zijn, die zou kunnen duiden op een negatieve interetnische relatie binnen de triade. Negatieve interetnische relaties kunnen een negatief effect hebben op de beeldvorming over de etnische groep (Stark, 2011). Deels in lijn met *balance theory*, bleek in Hoofdstuk 4 dat indirecte interetnische vriendschappen alleen tot een minder gunstige beeldvorming leidden onder leerlingen die oorspronkelijk een relatief positieve beeldvorming hadden. Dat dit effect niet werd gevonden onder leerlingen die een relatief negatieve beeldvorming hadden, was mogelijk omdat deze negatieve relatie slechts een bevestiging was van de negatieve beeldvorming (waardoor deze beeldvorming niet verandert).

Kortom, Hoofdstuk 4 benadrukt dat niet alleen directe interetnische vriendschappen, maar ook indirecte interetnische vriendschappen de beeldvorming over andere etnische groepen kunnen verbeteren. Echter, binnen kleine contexten kan een indirecte interetnische vriendschap ook duiden op een negatieve directe interetnische relatie wat kan leiden tot een minder gunstige beeldvorming over andere etnische groepen. Om deze processen goed te onderzoeken is het daarom van belang om in de meting van indirecte interetnische vriendschappen zeker te zijn dat er geen sprake is van een directe interetnische vriendschap.

### **Deel 3: Interetnische Vriendschappen en Psychosociaal Welzijn**

Het doel in het derde deel van dit proefschrift was om meer inzicht te krijgen in de invloed van interetnische vriendschappen op de psychosociale ontwikkeling van jongeren. Hiermee draagt dit deel van het proefschrift bij aan het huidige onderzoek op het gebied van *intergroup contact* en aan het recentere onderzoek naar de relatie tussen interetnische vriendschappen en het psychosociale functioneren van jongeren. Hoofdstuk 5 draagt hieraan bij door te onderzoeken of de relatie tussen interetnische vriendschappen en sociaal-emotionele veiligheid verschilt tussen de etnische meerderheidsgroep versus etnische minderheidsgroepen. Daarna bouwt Hoofdstuk 6 voort op de bevindingen van Hoofdstuk 5 en is onderzocht onder etnische minderheidsleerlingen of de etnische diversiteit en interetnische vriendschappen van deze leerlingen invloed hebben op de mate waarin etnische minderheidsleerlingen zich kwetsbaar voelen.

### **Verschillen tussen Etnische Minderheid- en Meerderheidsleerlingen**

In Hoofdstuk 5 onderzocht ik of interetnische vriendschappen gerelateerd waren aan een sterker gevoel van sociaal emotionele veiligheid onder etnische minderheidsleerlingen (Latijns-Amerikaans) versus etnische meerderheidsleerlingen (Europees-Amerikaans) in de Verenigde Staten. Dit sluit aan bij het onderzoek naar de relatie tussen interetnische vriendschappen en de beeldvorming over andere etnische groepen (bijvoorbeeld Davies en collega's, 2011), en bij het onderzoek naar de relatie tussen

interetnische vriendschappen en het psychosociale welzijn van jongeren (bijvoorbeeld Kawabata & Crick, 2008; Lease & Blake, 2005). Onderzoek naar het effect van interetnische vriendschappen op de beeldvorming over andere etnische groepen heeft uitgewezen dat dit effect sterker is onder meerderheidsgroepen dan onder minderheidsgroepen. Pettigrew en Tropp (2005) beredeneerden dat dit komt doordat meerderheidsgroepen met name vooroordelen hebben over minderheidsgroepen in plaats van andersom. Dus vooral onder meerderheidsgroepen kunnen interetnische vriendschappen leiden tot een positiever beeld over minderheidsgroepen. Op basis hiervan beredeneerde ik in Hoofdstuk 5 dat interetnische vriendschappen verschillende betekenissen en daarmee ook verschillende uitkomsten kunnen hebben voor minderheids- en meerderheidsgroepen. Waar interetnische vriendschappen vooral vooroordelen weg kunnen nemen onder de meerderheidsgroep, kunnen interetnische vriendschappen mogelijk (gevoelens van) stigmatisering en kwetsbaarheid wegnemen bij minderheidsgroepen. In lijn met deze beredenering wezen de bevindingen in Hoofdstuk 5 uit dat onder Latijns-Amerikaanse leerlingen in Amerika (maatschappelijke minderheid) interetnische vriendschappen gerelateerd zijn aan een sterker gevoel van sociaal-emotionele veiligheid. Voor Europeaan-Amerikaanse leerlingen (maatschappelijke meerderheid) hadden interetnische vriendschappen geen effect op het gevoel van sociaal-emotionele veiligheid.

Samengenomen geven voorgaande studies op het gebied van beeldvorming over andere etnische groepen, en de bevindingen in Hoofdstuk 5 aan dat interetnische vriendschappen verschillende betekenissen hebben voor leden van etnische minderheidsgroepen versus leden van de meerderheidsgroep. Terwijl interetnische vriendschappen in sterkere mate vooroordelen verminderen onder leden van meerderheidsgroepen, leiden interetnische vriendschappen vooral tot een beter gevoel van sociaal-emotionele veiligheid onder leden van minderheidsgroepen op school.

### **Interetnische Vriendschappen en Kwetsbaarheidgevoelens onder Minderheden**

Voortbouwend op de bevindingen van Hoofdstuk 5 onderzocht ik in Hoofdstuk 6 of interetnische vriendschappen gerelateerd waren aan een afname in gevoelens van kwetsbaarheid onder etnische minderheidsleerlingen. Een eerdere studie (Juvonen, Nishina, & Graham, 2006) vond dat de etnische diversiteit van scholen en schoolklassen gerelateerd was aan verminderde gevoelens van kwetsbaarheid onder Latijns-Amerikaanse en Afro-Amerikaanse leerlingen. Drie indicatoren voor kwetsbaarheid in de studie van Juvonen en collega's (2006) waren gevoelens van onveiligheid, slachtofferschap van pesten en eenzaamheid op school. Om aan te sluiten op deze studie zijn dezelfde uitkomstmaten gebruikt in de studie in Hoofdstuk 6.

Etnische diversiteit werd door Juvonen en collega's (2006) gedefinieerd door het aantal groepen en tot in hoeverre deze groepen gelijk waren in grootte. Hierdoor betekende een hogere etnische diversiteit een grotere kans op interetnische vriendschappen. Vandaar dat ik in Hoofdstuk 6 onderzocht of interetnische vriendschappen konden verklaren waarom etnische diversiteit gerelateerd was aan verminderde ge-

voelens van kwetsbaarheid onder Latijns- en Afro-Amerikaanse middelbare schoolleerlingen.

Met betrekking tot het effect van interetnische vriendschappen op gevoelens van kwetsbaarheid, waren de meeste eerdere studies op dit gebied cross-sectioneel van aard waardoor er geen conclusies gemaakt konden worden over de causaliteit van deze relaties. In Hoofdstuk 6 gebruikte ik daarom een longitudinaal design waarbij gecontroleerd werd voor eerdere gevoelens van kwetsbaarheid (veiligheid, slachtofferschap van pesten, eenzaamheid). De bevindingen wezen uit dat zowel etnische diversiteit als interetnische vriendschappen gerelateerd waren aan een vermindering in gevoelens van onveiligheid, slachtofferschap van pesten, en gevoelens van eenzaamheid op school. Waar alleen interetnische vriendschappen een effect hadden op onveiligheidsgevoelens en gepest worden, verminderden zowel intra- als interetnische vriendschappen gevoelens van eenzaamheid op school. Door het gebruik van een multi-level design konden we ook vaststellen dat het bestaan van interetnische vriendschappen niet de gevoelens van kwetsbaarheid voor de hele klas verlaagde. Alleen voor studenten die zelf interetnische vriendschappen hadden namen gevoelens van kwetsbaarheid af.

### **Conclusie**

In dit proefschrift heb ik onderzocht waarom sommige ouders een weerstand hebben tegen de interetnische vriendschappen van hun kinderen. Daarnaast heb ik onderzocht hoe interetnische vriendschappen van jongeren invloed hebben op de beeldvorming over andere etnische groepen en op het psychosociale welzijn van jongeren. Dit heb ik onderzocht onder leerlingen tijdens de eerste jaren op de middelbare school. Bij de transitie naar de middelbare school leren leerlingen veel nieuwe medeleerlingen kennen. Dit kan bij ouders tot zorgen leiden over met wie hun kinderen bevriend zullen raken.

Met betrekking tot ouderlijke acceptatie van interetnische relaties van adolescenten toonden de bevindingen in dit proefschrift aan dat zorgen over culturele verschillen kunnen leiden tot een lagere acceptatie van interetnische relaties met leeftijdgenoten. Als gevolg van culturele verschillen tussen etnische groepen, kunnen interetnische vriendschappen de handhaving van waarden, gedragingen of gewoontes van de eigen etnische groep ondermijnen. Echter, met betrekking tot de gevolgen van interetnische vriendschappen, laten de bevindingen in dit proefschrift zien dat er meer gevolgen van interetnische vriendschappen zijn die mee kunnen worden genomen in de beslissing of interetnische vriendschappen wenselijk zijn voor adolescenten. Voor de etnische meerderheidsgroep, leiden directe en indirecte interetnische vriendschappen tot een verbetering in de beeldvorming over andere etnische groepen. Voor de etnische minderheidsgroep dragen interetnische vriendschappen bij aan hun identificatie met de ontvangende samenleving wat vervolgens een positieve beeldvorming over de meerderheidsgroep bevordert. Naast beeldvorming laten de studies in de Verenigde

Staten zien dat etnische diversiteit en interetnische vriendschappen een positief effect hebben op het psychosociale welzijn onder minderheidsgroepen.

Kortom, de overkoepelende boodschap van dit proefschrift is dat terwijl er ouders zijn die een weerstand hebben tegen de interetnische relaties van hun kinderen, leiden interetnische vriendschappen tot een positievere beeldvorming over andere groepen en tot een beter psychosociaal welzijn onder adolescenten. Dus, als ouders of andere partijen een positieve beeldvorming over andere etnische groepen en het psychosociale welzijn van adolescenten belangrijk vinden, lijkt het van belang om etnische diversiteit en interetnische vriendschappen aan te moedigen.



## References

- Aberson, C. L., Shoemaker, C., & Tomolillo, C. (2004). Implicit bias and contact: The role of interethnic friendships. *Journal of Social Psychology, 144*(3), 335-347.
- About, F. E., Mendelson, M. J., & Purdy, K. T. (2003). Cross-race peer relations and friendship quality. *International Journal of Behavioral Development, 27*(2), 165-173.
- Adorno, T., Frenkel-Brunswick, E., Levinson, D., & Sanford, R. (1950). *The authoritarian personality*. New York: Harper.
- Agirdag, O., Demanet, J., Van Houtte, M., & Van Avermaet, P. (2011). Ethnic school composition and peer victimization: A focus on the interethnic school climate. *International Journal of Intercultural Relations, 35*(4), 465-473.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11-39). Heidelberg, Germany: Springer.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood-Cliffs: NJ: Prentice-Hall.
- Akpınar, A. (2003). The honour/shame complex revisited: Violence against women in the migration context. *Women's Studies International Forum, 26*(5), 425-442.
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge, Mass.: Addison-Wesley Pub. Co.
- Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness - a comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology, 53*(4), 500-505.
- Ayçiçeği-Dinn, A., & Caldwell-Harris, C. L. (2011). Individualism–collectivism among americans, turks and turkish immigrants to the U.S. *International Journal of Intercultural Relations, 35*(1), 9-16.
- Baerveldt, C., Van Duijn, M. A. J., Vermeij, L., & Van Hemert, D. A. (2004). Ethnic boundaries and personal choice: Assessing the influence of individual inclinations to choose intra-ethnic relationships on pupils' networks. *Social Networks, 26*(1), 55-74.
- Bagwell, C. L., Newcomb, A. F., & Bukowski, W. M. (1998). Preadolescent friendship and peer rejection as predictors of adult adjustment. *Child Development, 69*(1), 140-153.
- Bakker, J. (2012). *Cultureel-etnische segregatie in het onderwijs: Achtergronden, oorzaken en waarom te bestrijden? [Cultural and ethnic school segregation: Backgrounds, causes, and why to fight it?]* Landelijk Kenniscentrum Gemengde Scholen.

- Bellmore, A. D., Witkow, M. R., Graham, S., & Juvonen, J. (2004). Beyond the individual: The impact of ethnic context and classroom behavioral norms on victims' adjustment. *Developmental Psychology, 40*(6), 1159-1172.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology, 46*(1), 5-34.
- Berry, J. W. (2001). A psychology of immigration. *Journal of Social Issues, 57*(3), 615-631.
- Bifulco, R., Ladd, H. F., & Ross, S. L. (2009). Public school choice and integration evidence from Durham, North Carolina. *Social Science Research, 38*(1), 71-85.
- Bigler, R. S., Brown, C., & Markell, M. (2001). When groups are not created equal: Effects of group status on the formation of intergroup attitudes in children. *Child Development, 72*(4), 1151-1162.
- Bigler, R. S., Jones, L. C., & Lobliner, D. B. (1997). Social categorization and the formation of intergroup attitudes in children. *Child Development, 68*(3), 530-543.
- Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., et al. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries.. *Journal of Personality and Social Psychology, 96*(4), 843-856.
- Bishop, J. A., & Inderbitzen, H. M. (1995). Peer acceptance and friendship: An investigation of their relation to self-esteem. *Journal of Early Adolescence, 15*(4), 476-489.
- Blanchard, F. A., Lilly, T., & Vaughn, L. A. (1991). Reducing the expression of racial prejudice. *Psychological Science, 2*(2), 101-105.
- Blau, P. M. (1977). *Inequality and heterogeneity: A primitive theory of social structure*. New York: The Free Press.
- Bogardus, E. S. (1925). Measuring social distances. *Journal of Applied Sociology, 9*(1), 299-308.
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence, 21*(1), 166-179.
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues, 55*(3), 429-444.
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. *Advances in Experimental Social Psychology, 37*(37), 255-343.
- Byrne, D. E. (1971). *The attraction paradigm*. New York: Academic Press.
- Cameron, L., Rutland, A., & Brown, R. (2007). Promoting children's positive intergroup attitudes towards stigmatized groups: Extended contact and multiple classification skills training. *International Journal of Behavioral Development, 31*(5), 454-466.
- Cameron, L., Rutland, A., Hossain, R., & Petley, R. (2011). When and why does extended contact work? the role of high quality direct contact and group norms in

- the development of positive ethnic intergroup attitudes amongst children. *Group Processes & Intergroup Relations*, 14(2), 193-206.
- Cartwright, D., & Harary, F. (1956). Structural balance: A generalization of heider's theory. *Psychological Review*, 63(5), 277-293.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(2), 233-255.
- Christ, O., Hewstone, M., Tausch, N., Wagner, U., Voci, A., Hughes, J., et al. (2010). Direct contact as a moderator of extended contact effects: Cross-sectional and longitudinal impact on outgroup attitudes, behavioral intentions, and attitude certainty. *Personality and Social Psychology Bulletin*, 36(12), 1662-1674.
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., James, M., Mood, A. m., Weinfeld, F., et al. (1966). *Equality of educational opportunist*. Washington, DC: US Department of Health Education and Welfare Office of Education.
- Coon, H. M., & Kimmelmeier, M. (2001). Cultural orientations in the United States. *Journal of Cross-Cultural Psychology*, 32(3), 348-364.
- Crandall, C. S., Eshleman, A., & O'Brien, L. (2002). Social norms and the expression and suppression of prejudice: The struggle for internalization. *Journal of Personality and Social Psychology*, 82(3), 359-378.
- Currarini, S., Jackson, M. O., & Pin, P. (2010). Identifying the roles of race-based choice and chance in high school friendship network formation. *Proceedings of the National Academy of Sciences*, 107(11), 4857-4861.
- Damico, S. B., Bell-Nathaniel, A., & Green, C. (1981). Effects of school organizational-structure on inter-racial friendships in middle schools. *Journal of Educational Research*, 74(6), 388-393.
- Davies, K., Tropp, L. R., Aron, A., Pettigrew, T. F., & Wright, S. C. (2011). Cross-group friendships and intergroup attitudes. *Personality and Social Psychology Review*, 15(4), 332-351.
- Dhont, K., & Van Hiel, A. (2011). Direct contact and authoritarianism as moderators between extended contact and reduced prejudice: Lower threat and greater trust as mediators. *Group Processes & Intergroup Relations*, 14(2), 223-237.
- Dovidio, J. F., Eller, A., & Hewstone, M. (2011). Improving intergroup relations through direct, extended and other forms of indirect contact. *Group Processes & Intergroup Relations*, 14(2), 147-160.
- Dovidio, J. F., Gaertner, S. L., & Saguy, T. (2007). Another view of "we": Majority and minority group perspectives on a common ingroup identity. *European Review of Social Psychology*, 18, 296-330.
- Driessen, G. (2007). Trends in religious affiliation of parents of primary school children in the Netherlands in the period 1995-2005: Exploration of correlation with sex, ethnicity and socio-economic background. *Journal of Empirical Theology*, 20, 232-249.

- Durgel, E. S., Leyendecker, B., Yagmurlu, B., & Harwood, R. (2009). Sociocultural influences on German and Turkish immigrant mothers' long-term socialization goals. *Journal of Cross-Cultural Psychology, 40*(5), 834-852.
- Edmonds, C., & Killen, M. (2009). Do adolescents' perceptions of parental racial attitudes relate to their intergroup contact and cross-race relationships? *Group Processes & Intergroup Relations, 12*(1), 5-21.
- Eller, A., & Abrams, D. (2004). Come together: Longitudinal comparisons of Pettigrew's reformulated intergroup contact model and the common ingroup identity model in Anglo-French and Mexican-American contexts. *European Journal of Social Psychology, 34*(3), 229-256.
- Espelage, D. L., Bosworth, K., & Simon, T. R. (2001). Short-term stability and prospective correlates of bullying in middle-school students: An examination of potential demographic, psychosocial, and environmental influences. *Violence and Victims, 16*(4), 411-426.
- Feddes, A. R., Noack, P., & Rutland, A. (2009). Direct and extended friendship effects on minority and majority children's interethnic attitudes: A longitudinal study. *Child Development, 80*(2), 377-390.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*(2), 117-140.
- Gaertner, S. L., & Dovidio, J. F. (2000). *Reducing intergroup bias: The common ingroup identity model*. Ann Arbor: MI: Sheridan Books.
- Gaertner, S. L., Dovidio, J. F., Anastasio, P. A., Bachman, B. A., & Rust, M. C. (1993). The common ingroup identity model: Recategorization and the reduction of intergroup bias. *European Review of Social Psychology, 4*(1), 1-26.
- Gaertner, S. L., Dovidio, J. F., & Bachman, B. A. (1996). Revisiting the contact hypothesis: The induction of a common ingroup identity. *International Journal of Intercultural Relations, 20*(3-4), 271-290.
- Galvan, A., Spatzier, A., & Juvonen, J. (2011). Perceived norms and social values to capture school culture in elementary and middle school. *Journal of Applied Developmental Psychology, 32*(6), 346-353.
- Ganzeboom, H. B. G., & Treiman, D. J. (1996). Internationally comparable measures of occupational status for the 1988 international standard classification of occupations. *Social Science Research, 25*(3), 201-239.
- Goldsmith, P. A. (2004). Schools' role in shaping race relations: Evidence on friendliness and conflict. *Social Problems, 51*(4), pp. 587-612.
- González, R., & Brown, R. (2006). Dual identities in intergroup contact: Group status and size moderate the generalization of positive attitude change. *Journal of Experimental Social Psychology, 42*(6), 753-767.
- Gottfredson, D. C. (1984). *Effective school battery*. Baltimore: Psychological Assessment Resources.
- Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology, 60*, 549-576.

- Hagendoorn, L. (1995). Intergroup biases in multiple group systems: The perception of ethnic hierarchies. *European Review of Social Psychology*, 6(1), 199-228.
- Hallinan, M. T., & Williams, R. A. (1989). Interracial friendship choices in secondary schools. *American Sociological Review*, 54(1), 67-78.
- Hamm, J. V. (2000). Do birds of a feather flock together? The variable bases for African American, Asian American, and European American adolescents' selection of similar friends. *Developmental Psychology*, 36(2), 209-219.
- Hamm, J. V., Brown, B. B., & Heck, D. J. (2005). Bridging the ethnic divide: Student and school characteristics in African American, Asian-descent, Latino, and White adolescents' cross-ethnic friend nominations. *Journal of Research on Adolescence*, 15(1), 209-219.
- Hardy, C., Bukowski, W., & Sippola, L. (2002). Stability and change in peer relationships during the transition to middle-level school. *Journal of Early Adolescence*, 22(2), 117-142.
- Hartup, W. W. (1996). The company they keep: Friendships and their developmental significance. *Child Development*, 67(1), 1-13.
- Harwood, R. L., Schoelmerich, A., Schulze, P. A., & Gonzalez, Z. (1999). Cultural differences in maternal beliefs and behaviors: A study of middle-class Anglo and Puerto Rican mother-infant pairs in four everyday situations. *Child Development*, 70(4), 1005-1016.
- Hegar, R. L., & Greif, G. L. (1994). Parental abduction of children from interracial and cross-cultural marriages. *Journal of Comparative Family Studies*, 25(1), 135-142.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Hodges, E. V. E., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology*, 35(1), 94-101.
- Hodges, E. V. E., Malone, M. J., & Perry, D. G. (1997). Individual risk and social risk as interacting determinants of victimization in the peer group. *Developmental Psychology*, 33(6), 1032-1039.
- Hodson, G. (2011). Do ideologically intolerant people benefit from intergroup contact? *Current Directions in Psychological Science*, 20(3), 154-159.
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modeling technique. *Journal of Applied Quantitative Methods*, 9, 76-83.
- Hoelter, J. W. (1983). The analysis of covariance-structures - goodness-of-fit indexes. *Sociological Methods & Research*, 11(3), 325-344.
- Hornsey, M., & Hogg, M. (2000). Subgroup relations: A comparison of mutual intergroup differentiation and common ingroup identity models of prejudice reduction. *Personality and Social Psychology Bulletin*, 26(2), 242-256.
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology*, 42(5), 747-770.

- Huiberts, A., Oosterwegel, A., Vandervalk, I., Vollebergh, W., & Meeus, W. (2006). Connectedness with parents and behavioural autonomy among Dutch and Moroccan adolescents. *Ethnic and Racial Studies*, *29*(2), 315-330.
- Huijnk, W., Verkuyten, M., & Coenders, M. (2012). Family relations and the attitude towards ethnic minorities as close kin by marriage. *Ethnic and Racial Studies*, 1-20. doi: 10.1080/01419870.2012.699086
- Hunter, L., & Elias, M. J. (1999). Interracial friendships, multicultural sensitivity, and social competence: How are they related? *Journal of Applied Developmental Psychology*, *20*(4), 551-573.
- Ijzerman, H., & Cohen, D. (2011). Grounding cultural syndromes: Body comportment and values in honor and dignity cultures. *European Journal of Social Psychology*, *41*(4), 456-467.
- Juvonen, J., Nishina, A., & Graham, S. (2006). Ethnic diversity and perceptions of safety in urban middle schools. *Psychological Science*, *17*(5), 393-400.
- Juvonen, J., Wang, Y., & Espinoza, G. (2011). Bullying experiences and compromised academic performance across middle school grades. *Journal of Early Adolescence*, *31*(1), 152-173.
- Kalmijn, M. (1998). Intermarriage and homogamy: Causes, patterns, trends. *Annual Review of Sociology*, *24*, 395-421.
- Karsten, S., Ledoux, G., Roeleveld, J., Felix, C., & Elshof, D. (2003). School choice and ethnic segregation. *Educational Policy*, *17*(4), 452-477.
- Kawabata, Y., & Crick, N. R. (2008). The role of cross-racial/ethnic friendships in social adjustment. *Developmental Psychology*, *44*(4), 1177-1183.
- Kawabata, Y., & Crick, N. R. (2011). The significance of cross-racial/ethnic friendships: Associations with peer victimization, peer support, sociometric status, and classroom diversity. *Developmental Psychology*, *47*(6), 1763-1775.
- Knoester, C., Haynie, D. L., & Stephens, C. M. (2006). Parenting practices and adolescents? friendship networks. *Journal of Marriage and Family*, *68*(5), 1247-1260.
- Knoke, D., & Yang, S. (2008). *Social network analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Konan, P. N., Chatard, A., Selimbegović, L., & Mugny, G. (2010). Cultural diversity in the classroom and its effects on academic performance: A cross-national perspective. *Social Psychology*, *41*(4), 230-237.
- Kwak, K. (2003). Adolescents and their parents: A review of intergenerational family relations for immigrant and non-immigrant families. *Human Development*, *46*(2-3), 115-136.
- Laursen, B., Bukowski, W. M., Aunola, K., & Nurmi, J. (2007). Friendship moderates prospective associations between social isolation and adjustment problems in young children. *Child Development*, *78*(4), 1395-1404.

- Lazarsfeld, P. F., & Merton, R. K. (1954). Friendship as a social process: A substantive and methodological analysis. In M. Berger (Ed.), *Freedom and control in modern society* (pp. 8-66). Toronto, Canada: D. van Nostrand Company.
- Lease, A. M., & Blake, J. J. (2005). A comparison of majority-race children with and without a minority-race friend. *Social Development, 14*(1), 20-41.
- Leung, A. K., & Cohen, D. (2011). Within- and between-culture variation: Individual differences and the cultural logics of honor, face, and dignity cultures. *Journal of Personality and Social Psychology, 100*(3), 507-526.
- 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 & Intergroup Relations, 6*(1), 76-92.
- Logan, J. R., Oakley, D., & Stowell, J. (2006). Public policy impacts on school desegregation, 1970-2000. In J. Frazier, & E. Tettey-Fio (Eds.), *Race, ethnicity and place in a changing america* (pp. 33-44). Albany: SUNY Press.
- Logan, J. R., & Stults, B. (2011). *The persistence of segregation in the metropolis: New findings from the 2010 census* (Census Brief prepared for Project US2010. <http://www.s4.brown.edu/us2010>
- Lubbers, M., Scheepers, P., & Wester, F. (1998). Ethnic minorities in dutch newspapers 1990-5. *International Communication Gazette, 60*(5), 415-431.
- Lubke, G. H., Dolan, C. V., Kelderman, H., & Mellenbergh, G. J. (2003). On the relationship between sources of within- and between-group differences and measurement invariance in the common factor model. *Intelligence, 31*(6), 543-566.
- MacKinnon, D. P. (2008). *Introduction to statistical mediation analyses*. Mahwah, NJ: Erlbaum.
- Maliepaard, M., & Phalet, K. (2012). Social integration and religious identity expression among dutch muslims. *Social Psychology Quarterly, 75*(2), 131-148.
- Marcel Lubbers, Peer Scheepers, Maurice Vergeer. (2000). Exposure to newspapers and attitudes toward ethnic minorities: A longitudinal analysis. *Howard Journal of Communications, 11*(2), 127-143.
- Marcoen, A., Goossens, L., & Caes, P. (1987). Loneliness in pre through late adolescence - exploring the contributions of a multidimensional approach. *Journal of Youth and Adolescence, 16*(6), 561-577.
- McGill, R. K., Way, N., & Hughes, D. (2012). Intra- and interracial best friendships during middle school: Links to social and emotional well-being. *Journal of Research on Adolescence, 1*-17. doi: 10.1111/j.1532-7795.2012.00826.x
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology, 27*, 415-444.
- Meeus, W. (2011). The study of adolescent identity formation 2000-2010: A review of longitudinal research. *Journal of Research on Adolescence, 21*(1), 75-94.
- Meeus, W., & Dekovic, M. (1995). Identity development, parental and peer support in adolescence: Results of a national Dutch survey. *Adolescence, 30*(120), 931-944.

- Mendelson, M. J., & Aboud, F. E. (1999). Measuring friendship quality in late adolescents and young adults: McGill friendship questionnaires. *Canadian Journal of Behavioural Science-Revue Canadienne Des Sciences Du Comportement*, 31(2), 130-132.
- Mendoza-Denton, R., & Page-Gould, E. (2008). Can cross-group friendships influence minority students' well-being at historically white universities? *Psychological Science*, 19(9), 933-939.
- Miller, S. C., Olson, M. A., & Fazio, R. H. (2004). Perceived reactions to interracial romantic relationships: When race is used as a cue to status. *Group Processes & Intergroup Relations*, 7(4), 354-369.
- Moody, J. (2001). Race, school integration, and friendship segregation in America. *American Journal of Sociology*, 107(3), 679-716.
- Mouw, T., & Entwisle, B. (2006). Residential segregation and interracial friendship in schools. *American Journal of Sociology*, 112(2), 394-441.
- Mummendey, A., Klink, A., & Brown, R. (2001). Nationalism and patriotism: National identification and out-group rejection. *British Journal of Social Psychology*, 40(2), 159-172.
- Munniksmä, A., Flache, A., Verkuyten, M., & Veenstra, R. (2012). Parental acceptance of children's intimate ethnic outgroup relations: The role of culture, status, and family reputation. *International Journal of Intercultural Relations*, 36(4), 575-585.
- Munniksmä, A. & Juvonen, J. (2012). Cross-ethnic friendships and sense of social-emotional safety in multi-ethnic middle school: An exploratory study. *Merrill-Palmer Quarterly*, 58(4), 489-506.
- Muthén, L. K., & Muthén, B. O. (1998-2010). *Mplus User's guide. sixth edition*. Los Angeles, CA: Muthén & Muthén.
- Neary, A., & Joseph, S. (1994). Peer victimization and its relationship to self-concept and depression among schoolgirls. *Personality and Individual Differences*, 16(1), 183-186.
- Nesdale, D., Durkin, K., Maass, A., & Griffiths, J. (2005). Threat, group identification, and children's ethnic prejudice. *Social Development*, 14(2), 189-205.
- Newcomb, A. F., & Bagwell, C. L. (1995). Children's friendship relations: A meta-analytic review. *Psychological Bulletin*, 117(2), 306-347.
- Newcomb, T. M. (1956). The prediction of interpersonal attraction. *American Psychologist*, 11(11), 575-586.
- Newgent, R. A., Lee, S. M., & Daniel, A. F. (2007). Interracial best friendships: Relationship with 10th graders' academic achievement level. *Professional School Counseling*, 11(2), 98-104.
- Nier, J. A., Gaertner, S. L., Dovidio, J. F., Banker, B. S., Ward, C. M., & Rust, M. C. (2001). Changing interracial evaluations and behavior: The effects of a common group identity. *Group Processes & Intergroup Relations*, 4(4), 299-316.

- Nijsten, C. (1998). *Opvoeden in turkse gezinnen in nederland. [parenting in turkish families in the netherlands.]*. Assen, The Netherlands: VanGorcum.
- Nishina, A., Juvonen, J., & Witkow, M. R. (2005). Sticks and stones may break my bones, but names will make me feel sick: The psychosocial, somatic, and scholastic consequences of peer harassment. *Journal of Clinical Child and Adolescent Psychology, 34*(1), 37-48.
- Noels, K. A., Leavitt, P. A., & Clément, R. (2010). To see ourselves as others see us? On the implications of reflected appraisals for ethnic identity and discrimination. *Journal of Social Issues, 66*(4), 740-758.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Malden, MA: Blackwell.
- Onderwijsraad. (2005). *Spreidingsmaatregelen onder de loep (desegregation policies discussed)* No. 20050113/824). Den Haag: Onderwijsraad.
- Orfield, G., & Lee, C. (2007). *Historic reversals, accelerating resegregation, and the need for new integration strategies*. . Los Angeles: Civil Rights Project/Proyecto Derechos Civiles, UCLA.
- Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: Reducing anxiety in intergroup contexts through cross-group friendship. *Journal of Personality and Social Psychology, 95*(5), 1080-1094.
- Paolini, S., Hewstone, M., & Cairns, E.,. (2007). Direct and indirect intergroup friendship effects: Testing the moderating role of the affective-cognitive bases of prejudice. *Personality and Social Psychology Bulletin, 33*(10), 1406-1420.
- Paolini, S., Hewstone, M., Cairns, E., & Voci, A. (2004). Effects of direct and indirect cross-group friendships on judgments of catholics and protestants in Northern Ireland: The mediating role of an anxiety-reduction mechanism. *Personality and Social Psychology Bulletin, 30*(6), 770-786.
- Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29*(4), 611-621.
- Pellegrini, A. D., Bartini, M., & Brooks, F. (1999). School bullies, victims, and aggressive victims: Factors relating to group affiliation and victimization in early adolescence. *Journal of Educational Psychology, 91*(2), 216-224.
- Pels, T., Distelbrink, M., Postma, L., & Geense, P. (2009). *Opvoeding in de migratie context: Review van onderzoek naar de opvoeding in gezinnen van nieuwe nederlanders [parenting in the migration context: A review of research on parenting in families of dutch newcomers]*.. Utrecht, The Netherlands: Verwey-Jonker Instituut.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology, 49*, 65-85.

- Pettigrew, T. F., Christ, O., Wagner, U., & Stellmacher, J. (2007). Direct and indirect intergroup contact effects on prejudice: A normative interpretation. *International Journal of Intercultural Relations*, 31(4), 411-425.
- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? meta-analytic tests of three mediators. *European Journal of Social Psychology*, 38(6), 922-934.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751-783.
- 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(2), 496-507.
- Phalet, K., & Schönplflug, U. (2001a). Intergenerational transmission in Turkish immigrant families: Parental collectivism, achievement values and gender differences. *Journal of Comparative Family Studies*, 32(4), 489-504.
- Phalet, K., & Schönplflug, U. (2001b). Intergenerational transmission of collectivism and achievement values in two acculturation contexts. *Journal of Cross-Cultural Psychology*, 32(2), 186-201.
- Phinney, J. S., Cantu, C. L., & Kurtz, D. A. (1997). Ethnic and American identity as predictors of self-esteem among African American, Latino, and White adolescents. *Journal of Youth and Adolescence*, 26(2), 265-285.
- Phinney, J. S., Jacoby, B., & Silva, C. (2007). Positive intergroup attitudes: The role of ethnic identity. *International Journal of Behavioral Development*, 31(5), 478-490.
- Phinney, J. S., Romero, I., Nava, M., & Huang, D. (2001). The role of language, parents, and peers in ethnic identity among adolescents in immigrant families. *Journal of Youth and Adolescence*, 30(2), 135-153.
- Plant, E. A. (2004). Responses to interracial interactions over time. *Personality and Social Psychology Bulletin*, 30(11), 1458-1471.
- Plant, E. A., & Devine, P. G. (2003). The antecedents and implications of interracial anxiety. *Personality and Social Psychology Bulletin*, 29(6), 790-801.
- Poteat, V. P. (2007). Peer group socialization of homophobic attitudes and behavior during adolescence. *Child Development*, 78(6), 1830-1842.
- Powers, D. A., & Ellison, C. G. (1995). Interracial contact and black racial-attitudes - the contact hypothesis and selectivity bias. *Social Forces*, 74(1), 205-226.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Quillian, L., & Campbell, M. E. (2003). Beyond black and white: The present and future of multiracial friendship segregation. *American Sociological Review*, 68(4), 540-566.

- Raabe, T., & Beelmann, A. (2011). Development of ethnic, racial, and national prejudice in childhood and adolescence: A multinational meta-analysis of age differences. *Child Development, 82*(6), 1715-1737.
- Rasbash, J., Browne, W., Healy, M., Cameron, B., & Charlton, C. (2011). *MLwiN* (2.23rd ed.). University of Bristol: Center for Multilevel Modeling.
- 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*(1), 171-190.
- Rutland, A., Cameron, L., Jugert, P., Nigbur, D., Brown, R., Watters, C., et al. (2012). Group identity and peer relations: A longitudinal study of group identity, perceived peer acceptance, and friendships amongst ethnic minority English children. *British Journal of Developmental Psychology, 30*(2), 283-302.
- Ryder, A., Alden, L., & Paulhus, D. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology, 79*(1), 49-65.
- Sabatier, C. (2008). Ethnic and national identity among second-generation immigrant adolescents in France: The role of social context and family. *Journal of Adolescence, 31*(2), 185-205.
- Sainio, M., Veenstra, R., Huitsing, G., & Salmivalli, C. (2012). Same- and other-sex victimization: Are the risk factors similar? *Aggressive Behavior*. doi: 10.1002/ab.21445
- Schwartz, D., Gorman, A. H., Nakamoto, J., & Toblin, R. L. (2005). Victimization in the peer group and children's academic functioning. *Journal of Educational Psychology, 97*(3), 425-435.
- SCP (2012a). *Jaarrapport integratie 2011 [Annual report on integration 2011]* No. SCP-publicatie 2012-3). The Hague: Sociaal en Cultureel Planbureau (The Netherlands Institute for Social Research).
- SCP (2012b). *Jaarrapport integratie 2011[Annual report integration]*. Den Haag: Sociaal en Cultureel Planbureau.
- Sikkink, D., & Emerson, M. O. (2008). School choice and racial segregation in US schools: The role of parents' education. *Ethnic and Racial Studies, 31*(2), 267-293.
- Simpson, E. H. (1949). Measurement of diversity. *Nature, 163*(4148), 668.
- Snellman, A., & Ekehammar, B. (2005). Ethnic hierarchies, ethnic prejudice, and social dominance orientation. *Journal of Community & Applied Social Psychology, 15*(2), 83-94.
- Snijders, T. A. B., & Bosker, R. J. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling* (1st ed.). London: Sage Publishers.
- Stark, T. H. (2011). *Integration in schools: A process perspective on students' inter-ethnic attitudes and interpersonal relationships*. University of Groningen / ICS.

- Stark, T. H., & Flache, A. (2012). The double edge of common interest. *Sociology of Education*, 85(2), 179-199.
- Statistics Netherlands (2010). *Jaarrapport integratie 2010 [annual report on integration 2010]*. The Hague / Heerlen: Centraal Bureau voor de Statistiek.
- Statistics Netherlands (2011). *CBS statline*. Retrieved July, 12, 2012, from <http://statline.cbs.nl>
- Stearns, E. (2004). Interracial friendliness and the social organization of schools. *Youth & Society*, 35(4), 395-419.
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.
- Sumner, W. (1906). *Folkways*. New York: Ginn.
- Svensson, Y., Stattin, H., & Kerr, M. (2011). In- and out-of-school peer groups of immigrant youths. *European Journal of Developmental Psychology*, 8(4), 490-507.
- Swart, H., Hewstone, M., Christ, O., & Voci, A. (2011). Affective mediators of intergroup contact: A three-wave longitudinal study in South Africa. *Journal of Personality and Social Psychology*, 101(6), 1221-1238.
- Syed, M., & Juan, M. J. D. (in press). Birds of an ethnic feather? Ethnic identity homophily among college-age friends. *Journal of Adolescence*. doi: 10.1016/j.adolescence.2011.10.012
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33-48). Monterey, CA: Brooks/Cole.
- Tausch, N., Hewstone, M., Schmid, K., Hughes, J., & Cairns, E. (2011). Extended contact effects as a function of closeness of relationship with ingroup contacts. *Group Processes & Intergroup Relations*, 14(2), 239-254.
- Titzmann, P. F., Silbereisen, R. K., & Schmitt-Rodermund, E. (2007). Friendship homophily among diaspora migrant adolescents in Germany and Israel. *European Psychologist*, 12(3), 181-195.
- Tolsma, J., Lubbers, M., & Coenders, M. (2008). Ethnic competition and opposition to ethnic intermarriage in the Netherlands: A multi-level approach. *European Sociological Review*, 24(2), 215-230.
- Tropp, L. R., & Pettigrew, T. F. (2005a). Differential relationships between intergroup contact and affective and cognitive dimensions of prejudice. *Personality and Social Psychology Bulletin*, 31(8), 1145-1158.
- Tropp, L. R., & Pettigrew, T. F. (2005b). Relationships between intergroup contact and prejudice among minority and majority status groups. *Psychological Science*, 16(12), 951-957.
- Turner, R. N., & Brown, R. (2008). Improving children's attitudes toward refugees: An evaluation of a school-based multicultural curriculum and an anti-racist intervention. *Journal of Applied Social Psychology*, 38(5), 1295-1328.

- Turner, R. N., Hewstone, M., Voci, A., Paolini, S., & Christ, O. (2007). Reducing prejudice via direct and extended cross-group friendship. *European Review of Social Psychology, 18*, 212-255.
- Turner, R. N., Hewstone, M., Voci, A., & Vonofakou, C. (2008). A test of the extended intergroup contact hypothesis: The mediating role of intergroup anxiety, perceived ingroup and outgroup norms, and inclusion of the outgroup in the self. *Journal of Personality and Social Psychology, 95*(4), 843-860.
- Umaña-Taylor, A. J. (2004). Ethnic identity and self-esteem: Examining the role of social context. *Journal of Adolescence, 27*(2), 139-146.
- Updegraff, K. A., Kim, J., Killoren, S. E., & Thayer, S. M. (2010). Mexican American parents' involvement in adolescents' peer relationships: Exploring the role of culture and adolescents' peer experiences. *Journal of Research on Adolescence, 20*(1), 65-87.
- US Census. (2011). *Overview of race and hispanic origin: 2010* (US Census Briefs No. C2010BR-02). <http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf>: United States Census Bureau.
- Vedder, P., Berry, J. W., Sabatier, C., & Sam, D. (2009). The intergenerational transmission of values in national and immigrant families: The role of zeitgeist. *Journal of Youth and Adolescence, 38*(5), 642-653.
- Verkuyten, M. (2001). Global self-esteem, ethnic self-esteem, and family integrity: Turkish and Dutch early adolescents in the Netherlands. *International Journal of Behavioral Development, 25*(4), 357-366.
- Verkuyten, M. (2003). Positive and negative self-esteem among ethnic minority early adolescents: Social and cultural sources and threats. *Journal of Youth and Adolescence, 32*(4), 267-277.
- Verkuyten, M., & Kinket, B. (2000). Social distances in a multi ethnic society: The ethnic hierarchy among dutch preadolescents. *Social Psychology Quarterly, 63*(1), 75-85.
- Verkuyten, M., & Thijs, J. (2002). Racist victimization among children in the Netherlands: The effect of ethnic group and school. *Ethnic and Racial Studies, 25*(2), 310-331.
- Verkuyten, M., & Yildiz, A. A. (2007). National (dis)identification and ethnic and religious identity: A study among Turkish-Dutch Muslims. *Personality and Social Psychology Bulletin, 33*(10), 1448-1462.
- 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*(4), 230-239.
- Warr, M. (2005). Making delinquent friends: Adult supervision and children's affiliations. *Criminology, 43*(1), 77-106.
- Wimmer, A., & Lewis, K. (2010). Beyond and below racial homophily: ERG models of a friendship network documented on Facebook. *American Journal of Sociology, 116*(2), 583-642.

- Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology*, 73(1), 73-90.
- Zhou, M. (1997). Growing up American: The challenge confronting immigrant children and children of immigrants. *Annual Review of Sociology*, 23, 63-95.

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