Embedded in a Context: The Adaptation of Immigrant Youth
Till alla i mitt hjärta
Embedded in a Context:
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Abstract


With rising levels of immigration comes a need to know what fosters positive adaptation for the youth growing up in a new culture of settlement. The issue is increasingly studied; however, little of the research conducted has combined a developmental with a contextual approach. The aim of this dissertation was to explore the adaptation of immigrant youth on the basis of developmental theories and models which put emphasis on setting or contextual conditions. This entailed viewing immigrant youths as developing organisms that actively interact with their environments. Further, immigrant youths were seen as embedded in multiple settings, at different levels and with different contextual features. Two of the overall research questions addressed how contextual features of the settings in which the youth are embedded were related to adaptation. Results from all three studies combined to show that the contextual feature of a setting is not of prime or sole importance for the adaptation of immigrant youth, and that the contextual feature of SES diversity is of greater importance than the ethnic compositions of settings. The next two overall research questions addressed how the linkage between settings was related to adaptation. The results indicated that adaptation is not always setting specific and that what is happening in one setting can be related to adaptation in another setting. Further, it was found that the cultural distance between settings is related to adaption, but that contextual factors affect this relationship. Overall, the results of the dissertation suggests that the adaptation of immigrant youth is a complex matter that is explained better by interaction and indirect effects than by main and direct effects. This highlights the importance of taking all settings in which the immigrant youths are embedded into account and to account for how the settings interact to understand the factors that foster and hinder positive adaptation of immigrant youth.

Keywords: immigrant youth, adaptation, development, settings, contextual features, linkage.

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Acknowledgements

It is easy to think that this thesis is the product of my five years as a doctoral student. In a way it is, but for me the Ph.D education has not only been about writing a thesis, but about learning as much as possible. Therefore, what I have learnt while writing this thesis is only a fraction of the knowledge I am taking with me. The biggest lessons I have learnt you cannot touch upon. Psychology is the study of humans - our thoughts, behaviors and motivations- and above all, I have learned a lot about humans. In theory and in practice, and about myself in particular. I am pleased to have written this thesis, but I am more pleased about the knowledge I have gained. I have learnt about life, for life.


My memories of my time at the Center for Developmental Research will always be defined by the people working there, former and present. First and foremost, I would like to thank my supervisor, Håkan Stattin, for giving me this opportunity. Maybe it is because of your “throw-them-in-the-deep-end-and-they’ll-learn-to-swim-strategy” that I today feel that I have the knowledge and experience to handle most situations, and if I don’t, I know where to look. I would also like to thank my co-supervisor, Marga-
ret Kerr. I am grateful for teaching me how to write scientifically. Praise from you about my writing has meant the world to me and has inspired me to improve my writing. I have learnt a lot from the two of you, so thank you for sharing your knowledge. I also want to thank everyone at CDR and YES for providing a creative environment and for all the crazy conversations during lunch. Some of you need to be mentioned by name. Terese, you and I started at CDR on the very same day, and I do not think that I would have stayed after that first semester if we had not gone through it together. After sticking together for the last five years, through ups and downs at both work and in our personal lives, you are a dear friend to me. Kära fröken Selma, what would life at CDR have been without all our conversations?! Psychological research is all about questions about people and we have discussed them all! Vivi, actually I would have been doing something completely different the last five years if it had not been for you telling me about this Ph.D position – so, thank you for that and for also joining me and making my time at CDR so much more enjoyable. I also want to give a special thanks to Bill “the Stat Savior” Burk, and Vilma “the Angel” Pakalniskiene, for our collaborations, for helping me to find my feet in the confusing world of being a Ph.D student, and for answering all my “stupid” questions.

Also, a big thank you to all the wonderful people I have met during these past five years - including, Dr. Fuligni, Dr. Graham and Dr. Juvonen and all their students at UCLA for the warm welcome and support during my visit. See you soon again! Thank you also to Dr. Dina Birman for a lovely visit at UIC, Dr. Hendry and Dr. Kloep for teaching me about quantitative methods and for being my role models. To Anne, Astrid, Dagmar, Elisabeth, Hildegunn, Janne, & Marja-Lena for being who you are. It is because of nice people like you all that I want to stay in the field of research.

Finally, I want to give a special thanks to all the pupils, teachers, principals and parents at the schools where we collected the data - without you my research would not exist and not matter.

So, this is the end. And the start of something new. Come what may...
List of studies

This dissertation is based on the following studies, which will in the text be referred to by the number of the study.


Study 3  Svensson, Y, Stattin, H., & Kerr, M. School as a safe haven in disadvantaged neighborhoods. *Manuscript to be submitted.*
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Introduction

Meet three hypothetical 15 year-old Swedish youths: Ahmed, Dalaaya and Petter. They are going through about the same developmental changes, but also have some different experiences, depending on their background and their current contexts. Ahmed came from Iraq as an eight year-old, with his mother and his five younger siblings. Ahmed’s father is still in Iraq, but the family has not heard from him for a few years now. Ahmed’s mother is unemployed and does not speak Swedish, so – being the oldest son – Ahmed is the person in charge of all contacts with Swedish agencies. Ahmed has a lot of friends, all of them with immigrant backgrounds, which makes him feel safe and understood. They will defend and support him if needed. Dalaaya was born in Sweden, but her parents migrated to Sweden from Somalia before she was born. Both parents are lawyers, and they live in a privileged neighborhood. Dalaaya is the only one in her class with an immigrant background, and all her friends are Swedish. Petter was born in Sweden, as were both his parents and their parents. He lives with his mother and three siblings in a small apartment in a disadvantaged neighborhood. He does not like spending time at home because it is so crowded and hectic with all the smaller siblings, and he spends most of his time with his many friends, just hanging out.

These three young Swedes have three quite distinct different stories and their lives look very different. But there are questions over the ways in which their adaptation is similar and dissimilar, and why. Will Dalaaya and Ahmed be more different, or will Ahmed and Petter be more different from Dalaaya? Are the differences due to different backgrounds, different immigration status, different gender, different socioeconomic status, or to the different neighborhoods in which they live? All three are developing youths; they are going through puberty, with the physical development and the typical changes that take place during adolescence. For all three, their social world will expand, and they will spend more time with friends outside the home. On the other hand, their experiences are bound to be different because they spend their time in settings that are different. The aim of this dissertation is to better understand whether and, if so, how the developmental period of adolescence is dissimilar, or similar, for some immigrant youths than for other immigrants and non-immigrants, depending on the settings in which they are embedded.
Theoretical framework

The developing youth
Youth development is complex, and numerous attempts have been made to theorize about it and develop explanatory models. Even though there is no universal model upon which all agree, there are some shared principles that provide a foundation for the study of development (Steinberg, Vandell, & Bornstein, 2011). First, development is seen as the result of continuous interaction between the individual and the environment (Boyce et al., 1998). That is, the developing youth will go through cognitive, affective and social developmental processes (Stattin, 1995) and biological and maturation processes (Lerner, 2006) that influence and are influenced by the context. Further, youths are embedded in a number of settings. The social world grows during adolescence (Larson et al., 1996), and will come to extend beyond the family, which was the most important setting during childhood (Steinberg et al., 2011). During adolescence, the family continues to be an important setting (Parke et al., 2003), but the school and peer settings grow in importance (Steinberg, Vandell, & Bornstein, 2011). Changes to the settings in which youths spend most of their time, and also changes to what they are doing and with whom (Motti-Stefanidi, Berry, Chryssochou, Sam, & Phinney, in press), continue throughout adolescence. Second, development takes place in settings at different levels. That is, the proximal settings in which youths are directly embedded are in turn embedded in other settings that will indirectly influence individual adaptation and development (Bronfenbrenner & Morris, 2006). Therefore, influence will run up and down, from the lowest level of individual characteristics to the highest level of aspects of society and culture. Third, development is a dynamic and reciprocal process. Youths are not passive recipients of influences but actively shape their own development, by selecting their settings and the people in them, by subjectively interpreting the settings where they spend their time, and by affecting what is taking place in these settings (Steinberg et al., 2011). Finally, development is cumulative, and occurs throughout the lifespan. Thus, youth development builds on the development of the child and will continue into adult life. In sum, many theories and models of youth development rest upon the principles that developing youths are embedded in a number of settings that are connected to each other at different levels, and that youths are active agents who interpret and influence their environments. These theories have common ground, but also differ in what they focus upon.

One of the most influential models of human development is Bronfenbrenner’s bioecological model (1979). According to this model,
development can be understood in terms of dynamic interplay between
individuals, their surroundings, and the psychological processes that oper-
ate over time (Bronfenbrenner & Morris, 2006). The settings can be con-
ceptualized as constituting an overarching system composed of several
subsystems that have their own features and implications for youths’ de-
velopment, while at the same time being part of larger systems (Darling,
2007). Thus, one of the things that the bioecological model of human de-
velopment stresses is that the settings in which development occurs may
have different characteristics and subsystems that will influence the de-
velopment and adaptation of the individual youth.

The idea of multiple settings that are interrelated is shared by other
models. Szapocznik and Coatsworth’s (1999) ecodevelopmental model, for
example, places special emphasis on the interconnectedness of contexts,
and stresses the importance of interactions between the social settings of
development and the adaptation of youth. One of the main arguments is
that strong and complementary links between social contexts have a posi-
tive influence on a child’s adaptation and development, while weak and
opposing links do not (Pantin, Schwartz, Sullivan, Coatsworth & Szapocznik,
2003). Thus, in this model, it is the interactions between set-
tings that are in focus, and the strengths of the links between the settings
are seen as determinants of the adaptational outcome.

The third principle shared by many developmental models is the idea of
the youth as an active agent. The holistic-interactionalistic perspective
(Magnusson & Stattin, 2006) highlights the youth as an active agent in
three specific ways. First, youths will, wherever possible, choose the set-
tings they want to be part of and what interactions to get involved in. The
family and the school are typically not the settings chosen by the individu-
al, but other settings are preferred, such as the peer and leisure settings
(Stattin, 2003). Second, youths will shape their adaptation by actively in-
terpreting their experiences. In this context, a distinction has been made
between the actual, objective and the perceived environment (Magnusson
& Stattin, 2006). It has been argued that youths’ subjective experiences
and unique perceptions of the world shape their experiences of the envi-
ronment, and are, therefore, likely to affect their adaptation (Boyce et al.,
1998). The meanings they attribute to experiences function as mediators
between the actual contexts and their behaviors and adaptation in those
contexts (Magnusson & Stattin, 2006). Thus, there is a third aspect to
youth agency and the ways in which youths shape their environments; the
manners in which they act and/or interact will have an environmental im-
pact (Magnusson & Stattin, 2006). Youths’ behaviors have, for example,
been found to influence the ways in which they are parented (e.g. Glatz,
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Stattin & Kerr, 2011; Persson, Stattin, & Kerr, 2004), and how their peers react to them (e.g. Berndt & Keefe, 1995; Burk, Kerr, & Stattin, 2008). In general, the idea of the youth as an active agent in shaping his or her adaptation is a common theme in several theories of development.

Other theories do not share the above principles but have ideas to add to the study of adolescent development. Stage-environment fit theory (Eccles et al., 1993) suggests that adaptation can be predicted when there is a match between the needs of youths at particular developmental stages and the opportunities afforded them by their proximal environments. On this view, negative psychological changes associated with adolescent development result from a mismatch between the needs of developing adolescents and the opportunities offered by their social environments (Eccles et al., 1993). Adolescents whose environments change in ways that go against normative development are more likely to experience difficulties, while adolescents whose social environments respond to their changing needs are more likely to experience positive outcomes. When the environment is both responsive to the changing needs of the individual and offers the kind of stimulation that will propel continued positive growth (Gutman & Eccles, 2007), there will be positive adaptation. Thus, stage-environment fit theory puts the developmental stage of the adolescent in focus, and suggests that adaptation can only be understood by considering age-appropriate tasks.

To summarize, many theories of adolescent development have in common that they emphasize youths’ embedment in multiple settings; and, these settings are not insulated from each other, but there is interplay between them. They also indicate that development occurs in a multilayered context, and that youths are active agents involved in shaping their adaptation and the settings in which they are embedded. Some also highlight the importance of exploring the characteristics of all the settings, placing emphasis on interactions between them, and taking the developmental stage of the youths into account.

The developing immigrant youth

Immigrant youths, like all youths, are developing organisms (Sam & Oppedal, 2003; Sam, 2006). They undergo the same developmental changes as all youths; however, they also go through changes that are due to immigration. An extensive body of research has been devoted to the study of acculturation, which refers to the changes that take place following intercultural contacts (Berry, 2006). For immigrants arriving in a new country, there are many different ways of living and settling into the everyday life of a multicultural society (Berry, Phinney, Kwak, & Sam, 2006). Acculturation, like development, is a process that takes place over time, which
makes it difficult to separate developmental changes from changes due to acculturation (Sam, 2006). However, as Sam (2006) argues, it may be that such separation should not be sought, since the adaptation and acculturation of immigrant children should be seen as one form of development, not as two separate processes. Acculturation can then be seen as development in two cultural contexts, and the process through which youths acquire the competence required to function in and move between the two (Sam, 2006). Thus, even though acculturation can refer to specific tasks relevant only to immigrants, it can also be seen as a form of development that immigrant youths may achieve differently from non-immigrant youths.

Despite the common ground shared by development and acculturation, the two have seldom been combined, and the few attempts that have been made have focused on specific experiences in isolated settings (Sam, 2006). There is, therefore, no integrated, conceptual model of the adaptation of immigrant youths that also incorporates developmental models (Sam, 2006). There are, however, a few models based on the general developmental models, and they have been adjusted so as to better fit the issue of the adaptation of immigrant youths. In these models, multiple relationships and interplay between settings are conceived as more complex and challenging, since the proximal setting of immigrant youths represents more cultures than one. The sociocultural perspective is similar to the ecological one, in that both recognize that development must be understood within the specific context in which it occurs (Steinberg et al., 2011). However, while the ecological perspective places equal emphasis on all aspects and all levels, the sociocultural perspective stresses the cultural demands of each setting in which the youth is embedded (Shweder et al., 2006). From this perspective, adaptation is seen as a result of trying to meet the cultural demands of a specific setting, something that can be more complex for immigrant youths. Since immigrant youths live in and move between settings that represent different cultures, cultural demands might differ between settings (Birman, Trickett, & Vinokurov, 2002). For example, parents and peers of the same ethnicity may represent the culture of origin, and teachers and native peers represent the culture of settlement. Thus, the different settings in which immigrant youths are embedded can either offer opportunities or present risks for adaptation depending on whether they can satisfy the different demands.

The integrative framework of immigrant youth adaptation in context (Motti-Stefanidi et al., in press) also emphasizes the division of cultures and the increased complexity that this entails. This model combines developmental, acculturation and social-psychological perspectives so as better to fit the development of immigrant youths. The model has three levels –
the societal level, the level of interaction, and the individual level. The middle level is divided into the home-culture contexts represented by the family and ethnic peers, and the dominant cultural contexts represented by the school and native peers. From this perspective, the adaptation of immigrant youths is judged by a combination of how well they deal with developmental challenges and how well they live in, and move between settings with different cultural demands (Motti-Stefanidi et al., in press). In line with Sam’s (2006) suggestion that acculturation is a form of development, positive adaptation is then seen as the result of successful negotiation of the multiple worlds of the immigrant youth.

Taken together, models of the development of immigrant youths differ from the general models in that they put greater emphasis on the different cultures in the various settings. This means that the daily life settings of immigrant youths may be embedded in two different cultural contexts, which will make the interplay between the settings more complex and adaptation dependent on the ease with which these interactions take place.

Previous empirical findings

The adaptation of immigrant youth
In general, there is a lack of studies that examines the adaptation of immigrant children and adolescents (Aronowitz, 1984), especially in a European context. One exception is the ICSEY study (Berry, Phinney, et al., 2006), which is a cross-cultural, cross-sectional study, using data from over 7,000 immigrant youths from diverse backgrounds living in 13 different countries. The main aim of the study was to explore immigrant youths’ adaptation to living in two cultural contexts, in terms of both personal well-being and their school and community adjustment. The focus of investigation was adaptation in different social settings, and the interplay between these settings. The societal level was included by comparing societies of settlement and the individual level by considering how the youths identified and lived in the two cultural contexts. The adaptation of immigrant youths was found to be good, especially among those who identified with both cultures. That these integrated youths showed the best adaptation compared to those who only identified with one or none of the culture supports the idea of successful adaptation being the result of having the competence and skills to move between multiple cultural contexts. More empirical support for the complexity in the interactions between settings for immigrant youths was found by Phelan, Yu, and Davidson (1994). In their study, non-immigrant youths were found to have no problems making transitions between the settings of family, school, and peers, because the settings were
congruent. For immigrant youths, three patterns in how and how well they coped with the transitions were found. One group managed the transitions well and adapted to different settings easily; a second group found the transitions discomforting and difficult, and they struggled to adjust, especially in school; and, a third group found the transitions impossible, and showed the poorest adaptation (Phelan et al., 1994). These findings empirically support the theoretical idea that the adaptation of immigrant youths is complex, and depends, in part, on the ease with which they can move between settings.

Previous empirical research that has tested the ecological models when exploring the adaptation of immigrant youths is scarce, since it would optimally require a multilevel approach. Nevertheless, a few European studies have reported on multilevel analyses of the adaptation of immigrants. In the Netherlands, Verkuyten and colleagues explored the school adjustment (Verkuyten & Thijs, 2002a), self-esteem (Verkuyten and Thijs, 2004), and experience of racist victimization (Verkuyten & Thijs, 2002b) of immigrant youths using multilevel analyses to separate school, class and individual-level effects. The results show that adaptation at the individual level is dependent on contextual features at the classroom level, such as the ethnic composition of the classroom, the teacher’s behaviors, and the extent to which the education is multicultural. Thus, variables at different levels may be important for understanding the adaptation of immigrant youths.

Further, a recent study (Motti-Stefanidi, Asendorpf, & Masten, 2012) explored adaptation in terms of academic achievement, conduct, peer popularity, and psychological well-being over three years in a sample of first- and second-generation immigrants, and non-immigrant youths in Greece. In the study, individual and classroom effects were separated using multilevel hierarchical linear models, and both initial level of adaptation and change over time were explored. Risks and resources at both individual and classroom levels were included. It was found that, at the individual level, adaptation was more related to resources, such as self-efficacy and parental school involvement, than to risk factors, like immigrant status or social adversity. At the classroom level, the socioeconomic and ethnic composition of the classroom moderated the relationship the effects of immigrant status and self-efficacy on students’ academic achievements and peer popularity (Motti-Stefanidi et al., 2012). Combined, these findings suggest that factors at different levels can affect adaptation differently, thereby offering support for a more contextualized approach to the study of immigrant youth adaptation.

Given the complex interactions and different cultural contexts associated with the adaptation of immigrant youth one would expect them to be more
poorly adapted than nonimmigrant youth. However, contrary to what
might be expected, multiple studies have found that immigrant youths are
even better adapted than non-immigrant youths, despite their often lower
SES and more disadvantaged circumstances (Berry, Phinney, et al., 2006;
Fuligni, 1997). This phenomenon has been termed the “immigration para-
dox”, and has been supported in different contexts and for different immi-
grant and minority groups. For example, immigrant children and adoles-
cents in the US have shown remarkably good adaptation, in terms of good
school adjustment and academic records (Fuligni, 1997), few problem be-
haviors (Harris, 1999), and reading achievement (Palacios, Guttmannova,
& Chase-Lansdale, 2008). The immigrant paradox has also been support-
ed in European studies, in terms of self-esteem, life satisfaction and mental
health in Sweden and Norway (Virta, Sam & Westin, 2004), school sati-
sfaction (Verkuylten & Thijs, 2002a) and self-esteem (Verkuylten & Thijs,
2004) in the Netherlands, and bullying and victimization in an Austrian
sample (Strohmeier, Spiel, & Gradinger, 2008; Strohmeier & Spiel, 2003).
However, there are also studies that do not support the immigrant para-
dox. In the ICSEY study the immigrant paradox was only partly suppor-
ted. In terms of sociocultural adaptation, it was found that first-generation
immigrants had better adaptation than national youth, and that second-
generation immigrants were equally well adapted as national youth. In
terms of psychological adaptation, on the other hand, it was found that
first-generation immigrants did not show better adaptation (in terms of life
satisfaction, self-esteem and lack of psychological problems) in any of the
countries included. In Sweden, second-generation immigrants showed bet-
ter psychological adaptation than both national youths and first-generation
immigrants (Sam, Vedder, Ward, & Horenczyk, 2006), which is not in line
with the immigrant paradox. Also, there are other studies that have not
confirmed the immigrant paradox. Motti-Stefanidi and colleagues (2008),
for example, examined whether being an immigrant was a risk factor for
adolescent adaptation in Greek urban schools. The results showed that
first-generation immigrants had worse school adaptation and emotional
adjustment than native peers in the same schools (Motti-Stefanidi,
Pavlopoulos, Obradović, Dalla, et al., 2008). Thus, it seems that immi-
grants are better off than non-immigrant youths under some circumstances,
but not under others.
Problems, limitations and question left unanswered by the existing models

As well as a shortage of models that build on general developmental models to explain the adaptation of immigrant youth (Sam, 2006), there are a number of problems and limitations with the ones that do exist. First, the inconsistent results regarding the immigrant paradox indicate that something has been overlooked. Why are some immigrant groups better adapted than non-immigrants in some settings and not in others? One explanation given in previous research suggests that it could be due to differences in the contextual characteristics of the settings (Motti-Stefanidi, Pavlopoulos, Obradović, & Masten, 2008). This suggests that contextual factors should be paid more attention, and that there is a need to compare adaptation between settings with different contextual features.

Another explanation for why some immigrant groups are well adapted in some settings and not in others has been offered by previous research. It concerns the ease of the transitions between settings. Both past theories and empirical findings support the idea that the adaptation of immigrant youths partly depends on the ease with which they move between settings with different cultural demands (e.g. Phelan et al., 1994). However, this does not explain why some youths move with ease between the settings and some do not. Besides individual characteristics like cultural competence, one possible explanation could be the cultural distance between the settings. For example, for families who stay close to their cultures of origin and live by the values of those cultures, the cultural distance might be quite large between that setting and the school setting, in which the values of the culture of settlement predominate. The transition between the family and school settings might then be harder to make for the immigrant youth than if the family lived by the values of the culture of settlement. The idea that the cultural distance between the settings might be related to adaptation has not been addressed or tested previously.

This leads us to the third limitation of the existing models – the relationships between the specific settings and youth adaptation. In most of the existing theories the settings are described as interrelated, meaning that how well an individual adapts in any one context should not be seen in isolation from adaptation in other contexts (Stattin, 1995). On the other hand, there are reasons to suppose that adaptation can be setting-specific, and that what happens in any one setting will affect adaptation in that setting but not necessarily in other settings. For example, Kiesner and colleagues (2003) found that in-school peers’ behaviors were uniquely related to individuals’ school-based behaviors, while the behaviors of out-of-
school peers were uniquely related to individuals’ after-school behaviors (as in the case of delinquency). Given that the settings frequented by immigrant youths represent different cultures and different values, adaptation might be even more specific to the setting in which it occurs. It has been shown that different settings place different demands on immigrants (Birman et al., 2002). Some settings, such as the school, demand adaptation to the culture of settlement, since immigrants must speak the native language and adopt native norms in order to succeed in school. Other settings, such as a segregated neighborhood, might demand adaptation to the culture of origin, or to the culture of being an immigrant. This has been supported in a number of studies. Chinese youths, for example, have been found to feel more Chinese when engaging in cultural activities and interacting with ethnically diverse peers (Fuligni, Yip, & Tseng, 2002), and for Russian American youths in the US, it has been found that acculturation to the American culture predicts better grades and support from American friends, while acculturation to the Russian culture predicts support from Russian friends (Birman et al., 2002). This suggests that the adaptation of immigrant youths cannot be understood independent of context and that there may even be contradicting demands or values in different settings, making the relationships between settings and adaptation more complex. Thus, it is still an unanswered question whether the adaptation of immigrant youths is specific to a certain setting or whether it can spread across settings.

A fourth limitation of previous models concerns the division into two cultures. The division implies that there are only two distinct cultures involved, the culture of settlement and the culture of origin. This might apply in the US, where the major ethnic groups are considered homogeneous and distinct, and where people often live in neighborhoods largely populated by members of the same ethnic group. However, this is not the case in many multicultural societies. In a country like Sweden, for example, the immigrant group is heterogeneous (Pettersson, 2003; Ålund, 1997), and people from many different cultural backgrounds often live together, separated from the majority group (Sam et al., 2006). This implies that the people who are not from the majority culture that an immigrant youth meets may well not belong to the same ethnic group; therefore, what immigrants share is not a cultural or ethnic background but the experience of being an immigrant. Even though it has been argued that, in order to detect cross-ethnic differences, distinct ethnic groups should be compared within a distinct societal or cultural setting (Berry, 2006), this might not be possible or even valid in some contexts. In some contexts, it might be more important
to examine immigrant or minority groups rather than distinct ethnic groups.

Finally, in assessing the adaptation of immigrant youths, with whom should they be compared? There is no clear-cut answer to this question. Some argue that comparing the adaptation of immigrant youths with that of their non-immigrant peers, seen as setting the standards for “normal” development, may lead to conclusions that are to the disadvantage of the immigrant youths (Garcia Coll, Akerman, & Cicchetti, 2000). Immigrants may have to deal with additional tasks of discrimination-related, acculturative stress (Berry, Phinney et al., 2006), and sometimes even trauma (Porche, Fortuna, Lin, & Alegria, 2011), that will negatively affect their adaptation; thus, comparing youths with these additional risk factors with youths without them would be unfair. Others argue that it is reasonable to compare the adaptation of immigrant youth with that of non-immigrant youths, since the adaptation of the native youths will set a comparative norm (Motti-Stefanidi et al., in press). This debate concerns comparison between immigrants and non-immigrants. However, if it is the case that contextual factors can affect the adaptation of immigrant youths, so that they are well adapted in some and not in other settings, such comparison will not be enough. Given that contextual factors are important enough for adaptation to vary with them, immigrant youths in different contexts should be compared with each other, in order to fully understand the importance of the context. The ultimate comparison, then, would be to compare immigrants and non-immigrants in different settings, thereby separating differences due to being an immigrant from those arising from contextual factors.

This dissertation

The current research rests heavily on previous models of development. On the basis of existing developmental models, it is assumed that youths are embedded in multiple settings that are interrelated. It is also assumed that development occurs at multiple levels, and that youths are involved as active agents in shaping their adaptation and the settings in which they are embedded. As suggested, the characteristics of the settings are in focus, and emphasis is placed on the linkage between the settings. Further, the developmental stage of the youths is taken into account by focusing on the tasks relevant in adolescence. Also, in line with the models of development of immigrant youths, it is recognized that settings are embedded within more than one cultural context, which is thought to add to the complexity of the interactions between the settings for immigrant youth.
The conceptual framework presented here has been developed to address the limitations of earlier models. First, there is an emphasis on the contextual features of the settings. That is, by comparing settings of the same type but with different contextual characteristics, it is possible to explore how adaptation is related to the context, e.g. by comparing the adaptation of immigrant youths in schools where they are in a minority with schools in which they are in a majority. This entails that comparisons are not only made between immigrants and non-immigrants, but also between immigrants in one context and immigrants in another context. Such comparisons make it possible to disentangle differences due to contextual factors from those due to having an immigrant background. A number of different contextual factors are included to determine which are of most importance.

A second emphasis is put on the linkage between settings, and how they are related to adaptation. This is done in two ways. First, it is explored if adaptation is setting-specific or if adaptation in one setting is linked to adaptation in other settings. Second, it is thought that the linkage is related to adaptation in the way that easy transitions between settings will be related to good adaptation while difficult transitions are related to poor adaptation. The ease of the transitions is thought to depend on the cultural distance between settings. Thus, moving between two settings that share the cultural values is easier than moving between two settings with different cultural values. However, in the current framework, there will not be a simple division into just two different cultural contexts—the culture of settlement and the ethnic culture—as in previous models. Rather, there are divisions between the culture of settlement and the cultures of both the ethnic and immigrant groups. In the conceptual model, the division is seen as a continuum, with the culture of the immigrant group at one end, and the culture of settlement at the other. This entails that all the settings can be located closer to or at a longer distance from the cultures, and thereby also from each other. The setting of the family is closest to the ethnic/immigrant culture, while the school is closest to the culture of settlement, and the settings that are chosen by youths, like the peer setting and the leisure context (Magnusson & Stattin, 2006), are located midway between the two cultures. For example, youths may have immigrant friends and non-immigrant friends, or may spend their free time in a setting that is close to their home culture (e.g. a religious setting) or in a setting that is close to the culture of settlement (e.g. a sports setting). It is envisaged that the distances between settings will determine the ease of interaction between them, and in turn be associated with adaptation.
The conceptual model

Based on the pros and cons of previous models and theories, a conceptual model was developed, as presented in Figure 1. The model is designed to be broad enough to include all the settings in which immigrant youths are embedded, but also to be capable of going in-depth into the characteristics of specific settings, and the theories and previous research relevant to adaptation within each setting. The model should not be seen as an attempt fully to explain the adaptation of immigrant youth, but as offering a conceptual framework to guide the empirical studies presented in this dissertation.

Figure 1. The conceptual framework.
The levels

In this section, I will go in detail into each of the levels considered in this dissertation. Borrowing terminology from existing models, four levels are included: societal level, community level, interrelation level, and individual level. The two highest levels will be addressed only briefly. The influence of the distal societal setting (macro level) is regarded as indirect, filtering through proximal contexts (Boyce et al., 1998; Magnusson & Stattin, 2006). It is not included in the analyses in any of the studies, but is described here in order to provide an interpretative background. The community level is addressed in the studies, in that two samples with different conditions are used – one small city and one mid-sized city. However, no direct comparison between the samples has been made. In accordance with the ecodevelopmental model (Szapocznik and Coatsworth, 1999) and the ecological system model of development (Bronfenbrenner, 1979), the focus is on the interactional level and the interplay between settings. The contextual features of the settings and their associations with adaptation will be given extra attention. At the individual level, the focus is on various forms of adaptation, but intercultural and demographic factors are included, since differences in adaptation due to these factors have been found in previous research (e.g. regarding gender and generational status).

The societal level - Immigration in Sweden

Sweden has a history of being an ethnically diverse country. In 1940-1947 there was a period of refugee migration from Finland, Denmark and Norway; 1948-1972 was a period largely marked by labor migration from Finland and southern Europe; 1973-1989 was characterized by refugee migration from non-European countries; and from 1990 up to today there has been refugee migration from the former Yugoslavian countries and the Middle East (Berry, Westin, Vedder, Rooney, & Sang, 2006). This has meant that the main immigrant groups now living in Sweden are from the Nordic countries, like Finns, Danes, and Norwegians, and the former Yugoslavian countries, like Croatians and Bosnians. Other big groups are Greeks and Turks, and refugees from South America (mainly Chileans), Turkey, Lebanon (Assyrians), Iran, and Iraq (mainly Kurds).

Sweden is currently one of the countries in Europe with the highest levels of immigration (Edling & Rydberg, 2010). In 2011, immigrants constituted approximately 15% of the Swedish population, and in 2010 the largest groups of immigrants arriving in Sweden came from Iraq, Poland, Somalia, China, and Iran (Statistics Sweden, 2010). Sweden has signed the UN refugee convention, which means that Sweden must test any person’s asylum request, and that all seekers who are refugees or in need of protection should be
granted asylum. According to the convention, Swedish law and EU regulations, a person is considered to be a refugee if he or she has well-established reasons to be persecuted due to race, nationality, religious or political opinion, gender, sexual orientation or belonging to a specific societal group, or if he or she is at risk of execution, torture or other degrading treatment (Swedish Migration Board, 2012). Most immigrants are, however, not refugees, since the main reasons for migration to Sweden are family reunification and labor-market-related (Swedish Migration Board, 2012).

Sweden is an immigrant friendly country, both in terms of governmental policies and the attitudes towards immigrants among the population. Sweden has the highest migration integration index (83 out of 100%) of the 33 countries listed, according to MIPEX (www.mipex.eu), indicating that Sweden is the country that offers the most opportunities for migrants and immigrant to participate in society. The index is assessed by measuring governments’ policies and their implementation and it reveals whether all residents are guaranteed equal rights, responsibilities and opportunities. Further, people in Sweden are in general positive to immigrants and migration, and attitudes seem to be becoming more positive over time. In 2009, 36% of respondents in a national wide survey thought that Sweden had too many immigrants, compared with 52% in 1993 (Demker, 2009). In an international survey conducted in 2007, 53% of Swedish respondents agreed that immigration should be restricted, while the same proportion was 75% in the UK, and 68% in France (Nation Pew Global Attitudes Survey, 2007). However, as the economic climate has changed, so have attitudes towards immigration. In the last national election in 2010, a nationalistic party entered the Swedish parliament for the first time. Still, Sweden compares favorably with other countries, worldwide and in Europe, in offering the arriving immigrants equal and fair opportunities.

**Community level**

Research addressing differences at the community level is rare. Many studies refer to the location of a school or the kind of area from which their sample was drawn, like urban areas (e.g. Motti-Stefanidi et al., 2008), but a targeted search of the literature generated no European study that has explored differences in experiences between immigrants living in rural and urban areas. However, studies from the US suggest that the experience of being an immigrant in a rural area might be different from the experience of being an immigrant in an urban area. For example, Latino immigrant youths and families in rural communities have reported being faced with limited employment opportunities, small and isolated ethnic communities, and few formal support systems (Dalla & Christensen, 2005). Further,
living in a small rural community provides little infrastructure for informal and formal services to help immigrant families, and school systems cannot meet demands for English as a second language (Stone & Meyler, 2007). This suggests that the experience of being an immigrant youth might differ according to area of residence; however, this, to my knowledge has not previously been investigated in a European setting.

**Interrelation level**
The following section focuses on proximal settings, and describes the theories and previous findings that have given depth to the study of the adaptation of immigrant youth in and across these settings.

The neighborhood settings
The neighborhood setting is not included in many previous models, and tends to be poorly described when it is. In the context of ecological system theory, Bronfenbrenner (1979) describes the neighborhood as an exo-system, i.e. a setting in which a person is not directly involved, but which includes settings that in turn include that person. In other words, the neighborhood is seen as an overarching setting in which other settings, like the school, the family and the peer group are embedded. Given that influences will run down (and up) between settings at different levels, neighborhood characteristics will affect what happens in the settings embedded within it.

An extensive body of research has explored the adaptational outcomes of residing in different types of neighborhoods. Most of this research comes from the US and has focused on differences between poor, disadvantaged neighborhoods and more affluent neighborhoods. The disadvantaged neighborhoods are often described as dangerous places, characterized by high proportions of low-income residents, female-headed households and unemployed men, and by residential instability (Leventhal & Brooks-Gunn, 2000). These structural factors are important when explaining behaviors, in that, according to social disorganization theory, they have the ability to promote or prevent neighborhood organization (Shaw & McKay, 1942). Since disadvantaged neighborhoods lack factors that promote organization, adaptation is poorer in these neighborhoods than in more affluent neighborhoods.

The neighborhood setting has been found to have both indirect and direct effects on individual adaptation. Some direct effects shown previously are that youths growing up in disadvantaged neighborhoods have more deviant peer affiliations (Brody et al., 2001), exhibit more frequent externalizing behavior problems and poorer mental health (Leventhal &
Brooks-Gunn, 2000), and report more psychological distress (Shumow, Vandell, & Posner, 1999) than youths growing up in more advantaged neighborhoods.

Two of the most frequently explored indirect neighborhood effects are those of neighborhood income, or socioeconomic status, and racial-ethnic composition (Leventhal & Brooks-Gunn, 2000), both of which may be particularly important in the case of immigrant youths. Ethnic composition of the neighborhood has been shown to affect adaptation. For example, English-speaking skills were found to be associated with good self-esteem in predominately non-Chinese neighborhoods in the US, while Chinese cultural participation (i.e. eating Chinese food and listening to Chinese music) was positively related to self-esteem in predominantly Chinese neighborhoods (Schnittker, 2002). Also, living in segregated neighborhoods where basically everyone has the same ethnic background has been found to be associated with a stronger ethnic identity (Birman et al., 2002), less contact with national peers, and more contact with members of one’s own ethnic group (Phinney, Berry, Vedder, & Liebkind, 2006). Of the two, greater support for the effects of neighborhood SES has been found than for the effects of racial/ethnic heterogeneity (Leventhal & Brooks-Gunn, 2000). For example, in the ICSEY study, no empirical support was found for relationships between neighborhood ethnic composition and youth’s psychological or sociocultural adaptation (Vedder, van de Vijver, & Liebkind, 2006). In short, there are indications that neighborhood contextual factors may be associated with the adaptation of immigrant youth; however, much of this research has been performed in an American context, and less support has been found in a European context.

The leisure settings
Leisure settings can be seen as forming a part of the neighborhood in which youths actively participate, since most youths spend their leisure time in their home neighborhood. Thus, what youths do during their free time is much dependent on the type of neighborhood in which they live, and the opportunities or lack of opportunities for different activities that exist in the neighborhood. For example, access to structured, supervised activities is often poor in disadvantaged, low-SES neighborhoods, and youths living there devote more of their time to unstructured peer-oriented activities (Sampson, Raudenbush, & Earls, 1997) than youths in advantaged neighborhoods. Since immigrant youths more often live in low-SES neighborhoods (Lamborn, Dornbusch, & Steinberg, 1996), they might also lack the resources to go to another neighborhood, depending on the size of the town of residence and how segregated it is.
The peer settings
One of the most prominent tasks of adolescence is to form and maintain positive peer relations (Masten, Burt, & Coatsworth, 2006; Vernberg, Beery, Ewell & Abwender, 1993). Adolescents spend one-third of their waking hours with peers (Hartup & Stevens, 1997), and peers are the main source of support and interaction during this period (Collins & Steinberg, 2006). Given the salience of the task, it is no surprise that whether or not it is performed successfully will have a great impact on adaptation. It has, for example, been found that youths who are accepted and liked by their peers, and have good friends, show higher self-esteem and relatively few behavioral and emotional symptoms (Rubin, Bukowski, & Parker, 2006), whereas rejected youths show poorer adaptation in terms of feeling lonely (Woodhouse, Dykas, & Cassidy, 2012) and anxious (Lau et al., 2012). Thus, forming friendships is important for all youths.

Friendships are often defined as mutual, close relationships between two people (e.g. Newcomb & Bagwell, 1995), and studies based on this definition have typically explored dyadic, reciprocated friendships. There are, however, some problems with the definition. First, it has been argued that unreciprocated relationships are also of importance. Unreciprocated friendships can be important for individuals’ development, since it is possible to identify with and be influenced by people even though they do not return a person’s nomination (Kiesner, Cadinu, Poulin, & Bucci, 2002). Thus, by definition, friendships do not necessarily have to be mutual. Second, it has been found that the peer formations of youth are not limited to dyads. Several studies have shown that youth social networks are often complex, with youths becoming friends with their friends’ friends in triadic relationships, and that these friends of friends also influence the youths’ behaviors (e.g. Huisman & Snijders, 2003; Snijders, 2001). Therefore, limiting the study of friendships to dyadic relationships may mean that important sources of peer influence are missed.

Looking more closely at the friendships and peer formations of immigrant youths, it can be seen that there are additional issues to address. The ethnicity or group belonging of an immigrant youth’s peers can be seen as a fundamental aspect of acculturation, and has been used as a way to validate a person’s acculturation attitudes (Berry, Kim, Power, Young, & Bujaki, 1989). Also, having both intra- and inter-ethnic peers might be seen as a sign of the positive adaptation of immigrant youths (Motti-Stefanidi et al., in press), since it implies that they are competent in two settings with different cultural demands. Further, intra- and inter-ethnic friendships may serve different purposes for immigrant youths. Friendships with non-immigrant peers might help introduce immigrant youth to the culture of
settlement, and function as an entrée to the absorbing society (Horenczyk & Tatar, 1998). Non-immigrant friends then operate as representatives of the social norms and the cultural milieu of the absorbing society, and – through interactions with their host friends – immigrant youths become acquainted with the social and cultural messages that convey the norms and roles expected of them (Horenczyk & Tatar, 1998). Thus, having non-immigrant friends can provide immigrant adolescents with the information, support and contacts needed to adapt to their new culture and society. Associations with ethnic peers might, on the other hand, function as a link to the culture of origin. Together with parents and other family members, same-ethnicity peers can help to maintain the culture of origin (Motti-Stefanidi et al., in press), and uphold a strong ethnic identity (Phinney & Ong, 2007). Thus, the ethnicity or immigrant status of the friends of immigrants may be an important aspect to consider when exploring the adaptation of immigrant youth.

Two theories are often referred to when considering inter-ethnic and inter-group peer formation. The first, social contact theory (Allport, 1954), suggests that regular, persistent contacts between people of different ethnic backgrounds enhance the chances that they will be friends. Thus, attending the same school class will increase the chances of youths from different backgrounds becoming friends. The other theory is that of ethnic homophily, which suggests that, when given a choice, people tend to choose peers on the basis of pre-existing similarities (Cairns & Cairns, 1994; McPherson, Smith-Lovin, & Cook, 2001; Kirke, 2004). According to the homophily hypothesis, youths with the same ethnic backgrounds will tend to select each other as friends. Thus, there are theories that address the formation of intra- and inter-group friendships.

To conclude, when studying the peer settings of immigrant youth, it seems important to view friendships as complex networks, comprised of both reciprocating and nonreciprocating friends, and both immigrant and nonimmigrant friends.

The school setting
Schools are one of the most important developmental contexts for adolescents in contemporary societies (Steinberg et al, 2004; Verkuyten & Thijs, 2004). They play an instrumental role in helping children acquire the knowledge and skills, and also the behaviors and values that are considered important for the welfare of youth and society. Schools are also expected to offer caring and supportive settings that help students to develop a positive self-concept (Verkuyten & Thijs, 2004). Thus, functioning well in
school is of great importance for various adaptational outcomes, both concurrently and in a longer-term perspective.

For immigrant youths, the school may play additional roles. Being the key acculturative setting, the school represents and introduces the immigrant to the culture of the society of settlement (Suárez-Orozco & Suárez-Orozco, 2002; Vinokurov, Trickett, & Birman, 2002) in a number of ways. The school setting is the obvious setting for academic development and language acquisition, and the main setting where immigrant youths can come into contact with peers from the society of settlement. Whether or not in-school adaptation is positive seems to depend much on features of the school setting. First, as the school can be seen as a small-scale version of the receiving society, reflecting overall attitudes towards ethnic diversity and immigrants (Felix & You, 2011), it can also be a setting for different forms of victimization (Strohmeier & Spiel, 2003; Verkuyten & Thijs, 2002b), and of cultural conflict and stress due to acculturation (Vinokurov et al., 2002), if negative attitudes are prevalent. Second, school composition has been found to be related to the adaptation of immigrant and ethnic-minority youths. A large body of research has explored how the ethnic composition of schools is related to different forms of adaptation in the United States (e.g. Juvonen, Nishina, & Graham, 2006). However, since the ethnic groups and the school systems in the US differ from those in European countries, it is difficult to know whether the findings can be easily translated. Thus, I will rely more on the European studies that have examined the relationships between the ethnic composition of schools and various forms of adaptation. A Norwegian study (Dalhaug, Oppedal, & Roysamb, 2011) examined cultural competence and its relationship to depressive symptoms in two school contexts with different proportions of ethnic-minority students. It was found that in schools with about 60% ethnic-minority students there was a negative correlation between host-culture competence and depression, while in schools with about 90% ethnic-minority students, there was no significant correlation. Further, in a German study, it was found that immigrant students who attended schools with a low ethnic composition were less accepted and less popular among peers, which, it was suggested, was due to the smaller number of immigrant students with which to be friends (Titzmann & Silbereisen, 2009). Additionally, Dutch and Belgian studies both showed that ethnic-minority youths were subjected to less ethnic harassment and victimization in schools with higher proportions of immigrants than in schools where non-immigrants were in a majority (Agirdag, Demanet, van Houtte, & Van Avermaet, 2010; Verkuyten & Thijs, 2002b). These results suggest that
contextual factors, like school composition, are related to various forms of adaptation among immigrant youths.

The family setting
Maintaining positive family relations while, at the same time, developing an autonomous and independent identity may be a challenging task for young people. For immigrant youths, it can be even more demanding, as the family constitutes the strongest connection with the culture of origin. Immigrant youths often acculturate faster to the society of settlement than their parents do (e.g. Le & Stockdale, 2008; Szapocznik & Kurines, 1993). This can sometimes lead to conflicts within the family, as the youth is caught between the family, which represent values from the culture of origin, and other settings, like the school and the peer settings, which represent the culture of settlement. As parent-youth interactions are embedded in different sociocultural contexts, there are cultural differences in the quality, function and meaning of these interactions (Trommsdorf & Kornadt, 2003). Parents from collectivistic cultures, for example, have been found to adopt more controlling and authoritarian parenting practices, and to place less emphasis on youth autonomy (Chao, 1994). However, there are also cultural differences in the way youths interpret their parents’ behaviors. Parental control, for example, has been found to be perceived as an act of caring, and is less likely to elicit negative reactions among youths in Asian cultures than among European-American adolescents (Chao & Aque, 2009; Rohner & Pettengill, 1985). This might be a reason why adolescents from different cultural backgrounds report similar levels of conflict and cohesion with their parents, despite holding different beliefs about parental authority and individual autonomy (Fuligni, 1998). Thus, parent-youth interactions must be understood in the cultural contexts in which they occur (Brown & Mounts, 2007), and what is adaptive must be seen in the light of the values of the culture in question.

The interplay between settings
As mentioned above, most theories view youths’ everyday life settings as interrelated, and posit that settings at higher levels will influence what happens in settings at lower levels. It seems that the associations with individual adaptation become stronger the more proximal the settings are, for example family-level variables tend to be more important for individual outcomes than neighborhood-level variables (Leventhal & Brooks-Gunn, 2000). Also, previous studies suggest that settings at different levels might be important for different types of adaptation. Atzaba-Poria, Pike and Deater-Deckard (2004) investigated whether and how externalizing and
internalizing problems could be predicted by risks at three different ecological levels: the individual (e.g. IQ, temperament, self-worth), the microsystem (e.g. sibling relationship, friendship, and parent-child relationship) and the exosystem (e.g. family SES, parental social support, and parental job spillover). The results showed that externalizing problems, like delinquent and aggressive behaviors, were predicted mainly by risks at micro-system level, while internalizing problems, like anxious and depressive behaviors, were predicted by risks at both the individual and exosystem levels. Therefore, depending on the specific type of adaptation in question, some levels may be of greater importance than others.

That the neighborhood setting seems to influence adaptation in the settings embedded within it has been mentioned above, but more examples can be given. The family setting, for example, has been found to be subject to neighborhood effects in that parenting in disadvantaged neighborhoods becomes more difficult, due often to a lack of physical and social resources to help parents raise their children (Furstenberg, Cook, Eccles, Edler, & Sameroff, 1999). The dangerous-neighborhood hypothesis (Grolnick, 2003) suggests that parents in dangerous neighborhoods, with gang activities and delinquent behaviors, adopt more restrictive, authoritarian parenting practices (Furstenberg et al., 1999), and that stronger disciplinary practices may be needed in order to protect youths from the risks that are prevalent in these neighborhoods (Mason, Cauce, & Gonzales, 1997). It has also been argued that parents can influence their children’s peer relations by choosing the neighborhood they live in, since neighborhoods vary in terms of the opportunities they offer for peer-peer contact (Parke et al., 2003). However, this choice is not equally distributed; while more affluent parents have the means to choose to live in the type of neighborhood that supports their values, parents in low-SES and minority groups may be unable to move to a better neighborhood, despite a desire to provide their children with a better living situation (Parke et al., 2003; Furstenberg et al., 1999). Thus, there are several ways in which the neighborhood can affect the interactions taking place within the family.

The neighborhood has also been found to affect the peer group settings in a number of ways. Adolescents are limited by the contextual features of a setting in the kinds of choices they can make regarding their social networks (Kiesner et al., 2003). First, the ethnic composition of the neighborhood will affect friendship formation. The extents of actual in-group and out-group interactions among peers are also constrained by community demographics. The ICSEY study found that in more ethnically diverse neighborhoods adolescents had more contact with national peers and less contact with their own peer group, than in neighborhoods dominated by
their own group (Phinney et al., 2006). Second, kinds of friends will be affected by neighborhood characteristics. Dyads of antisocial boys, for example, have been found to live within the same neighborhood (Dishion, Andrews, & Crosby, 1995). That is, whom you choose as friends is much dependent on what kinds of youth live in your neighborhood.

Schools will also be affected by the type of neighborhood in which they are embedded. Research from the US has shown that the likelihood of having well-qualified teachers differs across socially defined groups, and that poor and minority students are more likely to be exposed to unqualified teachers (Eccles & Roeser, 2011). Further, schools in disadvantaged neighborhoods are often described as dangerous places with high levels of victimization and violence (Menifield, Winfield, Homa, & Cunningham, 2001). These schools will not be equipped to support the developmental and acculturative needs of immigrant youths (Suárez-Orozco, Bang, & Onaga, 2010), which will result in poorer academic, behavioral, and psychological adaptation (Roeser, Eccles, & Sameroff, 1998). However, it is unknown whether these results can be transferred to a European or Swedish context.

To conclude, there seems to be empirical support for the idea that factors at a higher level will affect adaptation in the settings embedded within them, at a lower level. There is also substantial empirical support for the interrelatedness of settings at the same level. For example, as immigrant youths make friends across ethnic groups, conflicting pressures from parents and peers might put them in a challenging position (Berry, Phinney, et al., 2006). Also, parents in collectivistic cultures have been found to attach less importance to peers outside the family (Way, Greene, & Mukherjee, 2007), and immigrant parents are often stricter than parents in Western societies in regulating social contacts with peers (Booth, 2002) and romantic partners (Berry, Phinney, et al., 2006). Thus, the peer and family settings might be interrelated and affect adaptation in both settings. An example of how the family and school settings are related is found in the aforementioned Greek study, where parental school involvement was found to be related to academic achievement for both immigrant and non-immigrant students (Motti-Stefanidi et al., 2012). These results support the interrelatedness of settings, both horizontally and vertically.

The individual level
Factors at individual level have been divided into three subgroups in the literature: intercultural, adaptive, and demographic. Intercultural factors describe the ways individuals view and feel about relationships between groups and how they live in multicultural settings. Adaptation is seen as both a process and as a possible outcome of immigrant youth development and
acculturation, while demographic factors are thought to contribute to variation in adaptation, and function as moderators of the relationship between intercultural relations and adaptation (Berry, Phinney, et al., 2006).

Intercultural factors - Who is an immigrant?
There is no established general definition of the term “immigrant” (Statistics Sweden, 2005), and who is considered to be an immigrant seems to vary across countries and studies. While second-generation immigrants are usually considered to be minorities and not immigrants, first-, second- and sometimes even third-generation immigrants are referred to as immigrants in a European context (Motti-Stefanidi et al., in press). In the ICSEY study, the definition of immigrant youths included both first- and second-generation immigrants (Berry et al., 2006), and a similar definition is used by Statistics Sweden. Most studies make a distinction between first- and second-generation immigrants, but few studies specify what this entails. For example, in some studies, the youth has to have both parents born in another country to be counted as an immigrant, while according to other definitions it is enough that one parent, or even the grandmother (Agirdag et al., 2011) is born in another country. This introduces confusion and makes comparisons difficult.

In the empirical studies in this dissertation the definition of an immigrant is that of a person born in a country other than Sweden or the other Nordic countries, and/or with both parents born outside the Nordic countries. Thus, this definition includes both first and second-generation immigrants. In Studies 1 and 2 both first and second immigrants were included and compared, and in Study 3 only first-generation immigrant youth were included. The reason for adopting this definition was twofold. First, it is stricter than definitions where the origin of only one parent is considered. The rational for this is that living with one parent from the country of settlement is thought to be different from living with both parents of another origin. Having one native parent will give the youth access to the native culture and language, and is thus not comparable to immigrants without a native parent. Second, the Nordic countries are similar with similarities in language and a shared history. According to Hofstede’s cultural distances indexes the Nordic countries are almost identical (Hofstede, 2012). Thus, Nordic immigrants were excluded from the group of immigrant youths to ensure that is was culturally distinct from the group of Swedish youth. This, however, only excluded a small number of youths (e.g. 6 youths in Study 2) and the exclusion would not have altered the results.
Adaptation factors

Adaptation refers to the relatively stable changes that an individual goes through to meet the demands of the environment, and is a person’s active attempts to improve the match between himself or herself and that environment (Berry, 2006). Successful adaptation then can be achieved by the person changing his or her behaviors to fit the environment, by trying to change the environment, or by the person avoiding any environment that does not match (Berry, 2006). Further, adaptation is described as both a process and a long-term outcome (Berry, Phinney, et al., 2006). That is, measures of adaptation can refer both to the efforts to become adapted and to the resulting outcome of those efforts. For example, immigrant youth can try to adapt to the culture of settlement by having native peers. These peer formations are then one measure of adaptation. Having native peers might in turn be related to other measures of adaptation, for example, native language acquisition. Thus, the concept of adaptation refers to both the active attempts to accomplish a match with the surrounding environments, and the success of these attempts.

The general concept of adaptation has previously been divided into psychological and sociocultural adaptation (Searle & Ward, 1990). Psychological adaptation refers to internal health (e.g. depression, self-esteem and life satisfaction), while sociocultural adaptation has been described as the quality of relationships between individuals and their sociocultural contexts (e.g. in terms of school satisfaction and success, or normbreaking activities in the neighborhood) (Berry, Phinney, et al., 2006). As has been shown above, sociocultural and psychological adaptation do not always go hand-in-hand, and different factors are predictive of the two types of adaptation (Searle & Ward, 1990). Thus, some settings may promote positive sociocultural but not good psychological adaptation, and vice-versa.

What defines good adaptation? It has been argued that adaptation should be seen as a bipolar continuum ranging from poorly adapted to well-adapted (Berry, 2006). In general, successful adaptation means successfully performing age-appropriate developmental tasks (Masten et al., 2006). During the adolescent years this might, for example, include success in school, having close friends, and maintaining positive family relations (Motti-Stefanidi et al., in press). It has been suggested that the developmental tasks are concerned with both psychological and sociocultural adaptation. Good psychological adaptation would then entail successfully performing individual developmental tasks, and also good internal functioning, as reflected in strong self-esteem, high life-satisfaction, and the like (Masten et al., 2006), while good sociocultural adaptation would entail the successful performance of tasks involving relations with a multiplicity of people and environments.
However, the quality of immigrant youth adaptation is more complex, since it cannot be judged solely on the basis of the way in which youths deal with normative developmental tasks, but also on how they deal with these tasks in contexts that include more than one culture (Motti-Stefanidi et al., in press). A well-adapted immigrant youth then has gained the knowledge and skills to live comfortably and feel good within and between his or her various cultural contexts (Sam & Oppedal, 2002).

Demographic factors
Three demographic factors have been included in the current studies: age, gender, and generational status. It has been suggested that age is one of the most influential factors in the processes and outcomes involved in the adaptation of immigrant youths (Berry, Phinney, et al., 2006). In the current research, age is considered in the sense that the explored developmental tasks are salient to the period of adolescence, and that the chosen measures are adapted to fit the adolescent age group. Because of the growing body of research showing that first-generation immigrant adolescents show more positive adaptation than later-generation immigrants and natives (e.g. Sam et al., 2006; van Geel & Vedder, 2010), most analyses have been performed with first- and second-generation immigrants separated. Also, since gender differences have been found in the adaptation of immigrant youths, such differences were explored in one of the studies.

Overall aim and research questions
The primary aim of this dissertation is to explore how the adaptation of immigrant youth is related to the multiple settings in which they spend their time. Five settings, all salient for the adolescent age group, were chosen and studied: the peer-, school-, leisure-, family-, and the neighborhood settings. Two issues were in focus – the contextual features of the settings and the linkages between the settings. Based on theories and previous results about each of the included settings and how they are linked, I have developed hypotheses about how they are related to psychological and sociocultural adaptation of immigrant youth. The overarching research question of the dissertation is how these settings combine to produce positive or negative adaptation for immigrant youth. Four specific research questions were formed and tested, two that addressed relations between contextual features of the settings and adaptation, and two that addressed the relations between the linkages of settings and adaptation:

1. Can the contextual features of the settings help explain why some immigrants are better adapted than other immigrants and nonimmigrants? (Studies 1, 2 and 3);
2. Which contextual factors are of most importance for the adaptation of immigrant youth? (Studies 1, 2 and 3);
3. Is the adaptation of immigrant youth setting-specific, or does what happens in any one setting affect adaptation in other settings? (Studies 1 and 3); and
4. Is the cultural distance between settings related to adaptation? (Studies 1 and 3).

How each study fits with the overall aim

Study 1
The first study deals with the developmental task of forming friendships in two different settings – the school and the neighborhood. Schools and neighborhoods are where youths spend the most time with their peers during adolescence, but for immigrant youths the settings may offer different opportunities for forming friendships with non-immigrant youths, depending on their ethnic composition. The peer formations are seen as one form of adaptation that, in turn, might be related to other forms of adaptation in the settings. In this study, the peer formations of youths living in a majority immigrant neighborhood, but attending an integrated school, were examined to see whether the ethnic composition affected peer formation in a school setting. Previous research has suggested that the in-school peer group and the out-of-school peer group are largely composed of the same peers, but that the groups have parts that are specific to the different settings. We sought to explore whether this was the case in our sample. Then, we tested whether peer formations in and between the school and neighborhood settings were related to adaptation in each setting. In short, in connection with the overall research question posed in this dissertation, the first study addresses all four research questions. Thus, Study 1 explores whether the contextual features of a setting can help explain why some immigrant youths are better adapted than other immigrants and nonimmigrants and which contextual factors are of most importance. The study also explores whether the adaptation of immigrant youth is setting-specific, and whether the cultural distance between settings is related to adaptation.

Study 2
The second study deals with the developmental task of forming friendships, and seeks to understand the possible negative influences of those friendships. The settings included are the peer group and the neighborhood, and adaptation refers to both the peer formations and the outcome of delin-
quency. The main purpose of the study was to explore whether the social processes underlying the development of delinquency differ according to school composition and/or between immigrants and non-immigrants. First, the social processes of influence and social selection were compared between immigrants and non-immigrants. Then, a distinction was made between schools with a majority of immigrant students and schools with a majority of non-immigrant students, and differences in the processes behind delinquency, for immigrants and non-immigrants, were tested for in the two school contexts. Taken together, and in connection with the overall research question posed in this dissertation, the second study aims to address the two questions concerning the relationship between contextual factors of the settings and adaptation. That is, Study 2 explores whether the contextual features of the settings can help explain why some immigrants are better adapted than other immigrants and nonimmigrants, and which contextual factors are of most importance for their adaptation.

Study 3
The third study concerns the developmental tasks involved in school adjustment, and touches upon the task of becoming an autonomous, independent person. The settings of the school, the neighborhood and the family are included. In this study, adaptation is measured in terms of a number of outcomes in each setting, such as perceived influence in the family, threats in the school, and feelings of safety in the neighborhood. The main purpose of the study was to explore whether youths living in disadvantaged neighborhoods perceive their schools differently from youths living in advantaged neighborhoods, primarily due to the contrasts between the school setting and out-of-school settings that is hypothesized to be more salient for youths in disadvantaged neighborhoods. In connection with the overall aim of the dissertation, the third study addresses both the relationship between adaptation and the linkage between settings, and adaptation and the contextual features of the settings. In other words, Study 3 addresses all four research questions and explores whether contextual features of the settings can help explain why some immigrants are better adapted than other immigrants and non-immigrants, which contextual factors are of most importance, whether adaptation is setting-specific or spreads across settings, and finally, whether the adaptation of immigrant youth can be explained on the basis of the cultural distance between settings.
Method

Participants and procedure

Sample for Study 1
The sample for Study 1 was drawn from a community-based, cohort-sequential study conducted in a small city in central Sweden with about 26,000 inhabitants. The study started in 2001, and five annual data collections took place. The overall aim of the study was to understand the development of problem behaviors in the contexts of families, peers, and school. About 3,000 students in grades 4 to 12 (≈10-18 years-old) throughout the community were invited to participate each year. The targeted sample was representative of the country in terms of parental unemployment (6%) on the first occasion of measurement (T1), but mean income was approximately 4% lower than it was nationally. The average proportion of immigrant youths in the city at T1 was 11.8%, which was higher than the average in the country at that time (8.4%).

Concerning study procedures, youths filled out questionnaires during regular school hours. They were assured of the confidentiality of their responses, and were told that participation was voluntary and they could withdraw their participation at any time. No teachers were present, and the questionnaires were administered by trained research assistants. Parents were informed about the study through community-based meetings and by mail, and could refuse to allow their child’s participation by returning a prepaid form (1% of the total sample did so). Contributions to class funds were made for the 4th to 6th grades; and all pupils in grades 7 to 12, whether they participated or not, were entered into lotteries for movie tickets. The questionnaires were in Swedish, and pupils judged by teachers to have insufficient language skills did not participate. Those who participated and needed extra help were provided with assistants to read, explain and reword the questions. The study was approved by the University’s Ethics Review Board.

The analytic sample for Study 1 was maximized by combining data from two separate cohorts. All youths in grades 7-9 (ages 13-16) at waves 2 and 5 of questionnaire administration were selected, and combined into an initial sample of 1,929 participants (992 boys and 937 girls). Of these, 9% met the criterion of being an immigrant. Thus, the final analytic sample consisted of 174 immigrant youths (51% girls, 75% first-generation, mean age = 14.39 years). The sample was ethnically diverse, including 31 countries of origin. Most participants came from the former Yugoslavian coun-
tries (43%), from Middle Eastern countries like Iraq and Syria (32%), and from South American countries such as Chile and El Salvador (7%).

**Sample for Study 2 and Study 3**
The samples for studies 2 and 3 came from a cohort-sequential study that started in 2007 in a medium-sized Swedish city (N = 132,000) in Sweden. The primary purpose of the study project was to examine how youths perceive their life situation in the three settings where they spend the most time: home, school, and their neighborhood. Youths in grades 7 through 9 (ages 12-17), enrolled in seven different schools, were targeted. The schools were chosen on the basis of mean incomes in the areas in which they were located, and an oversampling was made of schools within low-income and high-income areas, so as to have a wide range of SES areas. About 20% of the sample had an immigrant background, which was higher than the national figure at that time (17.3%; Statistics Sweden, 2010). The unemployment rate, of about 4.6%, was lower than the national figure (6.1%).

The city is residentially segregated, with some public housing areas largely composed of immigrants and with other areas with few immigrants. This kind of housing segregation, where various immigrant groups live separated from the majority, is common in Sweden, and has increased rapidly in recent years (Berry, Westin, et al., 2006).

The analytic sample for Study 2 consisted of 1,169 youths (590 males and 579 females) with data from the first two waves of questionnaire administration. At the onset of the study, participants ranged in age from 12 to 16 years (M = 13.92, SD = 0.85). In the analytic sample, 846 youths were either themselves born in Sweden or had parents who were both born in Sweden or the Nordic countries (0.5% originated from the other Nordic countries). The remaining 323 youths (27.6% of the total sample) were either themselves born in a country other than Sweden (first generation immigrants = 46.4% of the immigrant sample) or had parents who were both born outside of Sweden or the other Nordic countries (second generation = 53.6% of the immigrant sample). Their countries of origin were Middle Eastern countries (38.4% of the immigrant sample), the former Yugoslavian countries (18.3%), Somalia and Eritrea (11.8%), Eastern Europe (5%), Asian countries (6.8%), Western Europe (1.2%), and other countries (18.5%). Forty youths did not indicate their countries of origin.

The analytic sample for Study 3 consisted of 1,390 youths (658 boys and 732 girls). They ranged in age between 12 and 17 years (Mage = 14.34, SD = 1.01). Of the analytic sample, 213 youths were themselves born outside of Sweden (first-generation immigrants). They originated from the former Yugoslavian counties (24.6%), Middle Eastern countries like Iran,
Iraq, Kurdistan and Syria (38.6%), Eastern African countries such as Eritrea and Somalia (21.8%), European countries such as Poland and the UK (4.2%), Asian countries such as Vietnam and Thailand (3.5%), and South American countries such as Colombia and El Salvador (1%). The remaining 6.3% originated in other counties, and were too diverse to make up distinct groups.

**Measures**

The following section describes the measures employed, subdivided according to the different settings covered by the three studies. The measures were selected to assess both psychological and sociocultural adaptation. For example, psychological adaptation was assessed in terms of school adaptation, and sociocultural adaptation in terms of normbreaking and normative activities with peers. Item scores were reversed whenever needed so that a high value always indicated a high value on the concept measured.

**Adaptation in the school setting**

**School satisfaction.** In Study 1, school satisfaction was used as an indicator of positive adaptation in school, and was assessed by asking participants to respond to five school-related questions. The items concerned enjoying school, describing their own relationships with school, feeling forced to go to school, feeling satisfied with their own work, and doing their best in school. Responses were given on a 5-point Likert scale (Kerr & Stattin, 2000). Cronbach’s alpha was .76 for the scale in Study 1. In Study 3, school satisfaction was assessed using the same five items as in Study 1, but with an additional sixth item, “How do you like school?” to capture general liking or disliking. Reliability was adequate (α = .76) in Study 3.

**Good teacher relations.** For Study 3, the youths responded to twelve items about their relations with their teachers (Kerr & Stattin, 2000). Some examples are: “Do the teachers at your school care about the students?” “If you have problems with something at school, can you talk to your teachers about it?” “Are your teachers there for you if you want to talk about things that are not school-related?” and “Are the teachers at your school fair towards the students?” Response scores ranged from 1 (Yes, all of them or almost all of them) to 4 (No, hardly any of them), and all items were coded so that high values indicated good teacher relations. The scale showed good reliability, with a Cronbach’s alpha of .92.

**Disclosure in class.** For Study 3, three items were used to assess how much the youth revealed about themselves in school. The items were: “Do you usually talk about your thoughts and feelings in class?” (1 = Very of-
ten to 5 = Almost never) “Do you like telling things about yourself in class?” (1 = A lot to 5 = Not at all) and “Do you often spontaneously talk about your own experiences in class?” (1 = Yes, absolutely to 5 = Not at all). The scale showed adequate reliability ($\alpha = .81$).

**Longing for school** was a construct developed for Study 3. The two items used were “On a Sunday, how do you feel about going to school the next day?” (1 = Bad, I want to stay home and have some more free time to 3 = Great, I long for school and friends) and “During a long school break, how often do you long for school?” (1 = Do not long for school at all to 3 = A large part of the break). The two-item scale had a Cronbach’s alpha of .68.

**Influence at school.** To assess the youths’ experiences of having influence in decisions taken in their schools, they were asked six questions: “Are students allowed to take part in planning and discussing what you are taught at school?” “Is it possible for students to influence which days you have homework and tests?” “If students have objections about things, do the teachers take them into account?” “Do you think that students can influence planning and teaching?” “Do you think that the teachers and the students respect each other and listen to each other’s views?” and “Do teachers take students’ opinions seriously? (Response options: 1= Not at all to 5 = Yes, absolutely). Reliability was good ($\alpha = .85$).

**Threats in school.** Four items concerned whether the youths experienced threats in school: “Have you ever been afraid of other students during break time?” “Are there groups of students that hang around at school and threaten others?” “Have you ever seen things at school that made you concerned?” and “Have there been problems with noisy students, graffiti, locker break-ins, or similar things at your school?” The responses were given on a five-point Likert scale (1= No, to 5= Yes, often). The four items produced a Cronbach’s alpha of .81.

**Sexual harassment at school.** Seven items concerned the youths’ experiences of being sexually harassed (Witkowska & Menckel, 2005). Examples: “Has anyone commented on your looks or your body in a sexual way that you don’t like?” “Has anyone spread rumors of a sexual nature about you?”, and “Has anyone fondled or touched your body in a sexual way that you don’t like?” Responses were given on a 5-point Likert scale, ranging from “Never” to “Daily”. The scale showed good internal consistency, with a Cronbach’s alpha of .82.

**Personal harassment at school.** To assess personal harassment we used five items specifically developed for this study. Examples are: “Has anyone commented or made fun of you or the way you look in a derogatory way?” and “Has anyone told you that you need to change in order to be accepted
— for example, lose weight, change appearance, or the way you are?” Responses ranged from 1 (No/Never) to 5 (Daily/Almost every day). Cronbach’s alpha was .79.

**Victim of bullying in school.** For Study 3, three items were used to make up a scale for being a victim of bullying at school. This measure was originally developed for a cross-national survey of bullying among pupils in grades 4 through 9 in Switzerland and Norway (Alsaker & Brunner, 1999). The items were: “Have you been mocked, teased in an unpleasant way, or has anyone said nasty things to you at school or on the way to or from school (this semester)?” “Have you been beaten, kicked, or assaulted in a nasty way by anyone at school or on the way to or from school (this semester)?” and “Sometimes one can be alienated by someone or some people and not be allowed to hang out with them. Has this ever happened to you (this semester)?” Responses ranged from 1 (No, it has not happened) to 4 (Yes, it has happened several times a week). The scale showed adequate internal consistency (Cronbach’s α = .70).

**Bullying.** To assess negative adaptation in school in Study 1, we asked the participants three questions about bullying someone in school during the last year. The items concerned saying nasty things, mocking or making fun of someone in an unpleasant way, hitting, kicking or attacking someone, and excluding someone. The response options ranged from 1 (No, it has not happened) to 4 (Yes, it has happened several times a week). The scale was adapted from a bullying instrument developed by Alsaker and Brunner (1999), and showed a reliability of .78.

**Adaptation in the neighborhood and leisure settings**

**Delinquency.** For Study 2, delinquency was assessed using a scale consisting of 16 questions about whether the youths had engaged in delinquent behaviors during the past year. The questions were about shoplifting, vandalizing public or private property, taking money from home, creating graffiti, breaking into a building, stealing from someone’s pocket or bag, buying or selling stolen goods, stealing a bike, being in a physical fight in public or carrying a weapon, and stealing a car, moped or motorcycle (Kerr, Stattin, & Burk, 2010). The responses ranged from 1 (Never) to 5 (More than 10 times). The scale showed good internal consistency, with Cronbach’s alphas of .81 at T1 and .92 at T2.

**Normbreaking activities with peers.** For Study 1, as a measure of negative adaptation outside school, a scale consisting of five activities pursued together with peers was used. The activities were shoplifting, drinking alcohol, keeping secrets from parents, talking about illegal things, and doing other things for which one could be caught by the police (Kakihara, Tilton-
Weaver, Kerr, & Stattin, 2009). The items concerned the last month and the responses ranged from 1 (No) to 3 (Yes, several times). The scale showed good internal consistency, with a Cronbach’s alpha of .85.

**Normative activities with peers.** To assess positive adaptation in the leisure setting in Study 1, participants were asked to report on normative activities they had pursued together with their peers during the last month. The five items concerned watching TV, studying together, talking on the phone/chatting, using the computer, and hanging out in town (Kakihara, et al., 2009). The response range was 1 (No) to 3 (Yes, several times). Alpha reliability was .70.

**Neighborhood threat.** The scale of neighborhood threat used for Study 3 was developed for that study, and assessed by nine items concerning the youths’ feelings of safety in the neighborhood they lived. Three examples are: “I feel unsafe when I am out in the evenings,” “I have been threatened, hit, or chased this semester,” and “There are groups of youths that run around and are threatening to others”. Response options ranged from 1 (Don’t agree) to 3 (Agree completely). The scale showed adequate reliability (α = .79).

**Adaptation across the neighborhood and school settings**

**Feeling safe.** For Study 3, a measure was developed to establish the settings in which the students felt safe. It involved just one question: “In some places you can enjoy yourself and you feel safe and secure. In other places, you feel anxious and insecure. Where do you feel safe and secure?” The response options were “I feel secure in school but not outside school,” “I don’t feel secure in school but I feel secure outside school,” “I feel secure both in school and outside school,” and “I don’t feel secure in school or outside school”.

**Adaptation in the peer settings**

**Peer nominations.** For Study 1, the youths were asked to nominate a maximum of 20 peers: ten they hung out with in school, and ten they hung out with after school. Based on the origins of the nominated peers, the numbers of Swedish and immigrant peers were calculated for all participants. For Study 2, participants were asked to nominate three important peers in their schools. These could be friends, siblings, or romantic partners, but for that study only those nominated as friends were included. The youths were also asked to nominate a maximum of eight peers they regarded as belonging to their peer group in school. Thus, each youth could nominate a maximum of 11 peers at any one time point.
Adaptation in the family setting

Perceived influence at home. Youths responded to six statements concerning their perceived influence in the family (Stattin, Persson, Burk, & Kerr, 2008). Examples: “Your parents listen to you when decisions are to be made in the family,” “You feel like you have influence and are taking part in things that happen in your family,” “Your parents let you take part when you are going to decide something in the family,” and “Your parents ask you when decisions are to be made in the family”. Response options ranged from 1 (Don’t agree at all) to 4 (Agree totally). The Cronbach’s alpha of the scale was .90. The scale was developed to mirror the scale for Perceived influence at school.

Contextual variables

School composition. For Study 2, the sample was divided into two groups based on the composition immigrant/non-immigrant students. Seven schools were chosen on the basis of their ethnic composition, with the aim of having a wide range of different schools. This resulted in three schools with a majority of immigrant youths (54.3% to 65.2%), and four schools with a minority of immigrant youths (11.1% to 25.1%).

Neighborhood SES. For Study 3, the sample was divided into two groups based on the average mean income in their neighborhood, as defined by the catchment area of each school. The first group was made up of 1,075 youths, living in four advantaged (annual mean income ≈37,000 USD), and the second group of 315 youths living in two disadvantaged neighborhoods (annual mean income ≈25,000 USD). The annual mean income for the whole community was 35,000 USD. The two groups were significantly different in terms of mean income ($t(4) = 4.06, p = .015$). The seventh school included in the overall research project was excluded from Study 3 because the average mean income in the neighborhood where the school was located was not distinct from the other schools, and the neighborhood could not be regarded as either disadvantaged or advantaged.

Measures of individual differences

Immigrant status. Participants were asked if they were born in Sweden or in another country. Youths born in another country were asked to write down their country of birth. The same procedure was adopted for the countries of birth of their mothers and fathers separately. Two immigration status groups were distinguished: minority youths who were not born in the Nordic countries (Finland, Norway, and Sweden) or for whom both parents were born outside the Nordic countries, and majority youths who were of Swedish or other Nordic decent.
**Subjective socioeconomic status.** For Study 3, the youths were asked five questions about their experiences of the economic situation in their families. Two examples are: “How much money does your family have in comparison with other families?” and “If you want to buy things that cost a lot of money (e.g. computer, skateboard, cell phone, etc.), do your parents have the money to buy them?” The items were all coded so that high values indicated high subjective SES, and the scale was created from the mean of the five items. The scale had a Cronbach’s alpha of .71 at both time points.
Results

Study 1

The aim of the first study was to examine the patterns of peer formation of immigrant youths who live in a segregated neighborhood but go to an integrated school. The theoretical background for the study lay in two theories that are often used to explain friendship formation among youths of different ethnic backgrounds. Social contact theory (Allport, 1954) suggests that regular, persistent contacts between people of different ethnic backgrounds enhance the chances that they will be friends. Thus, people of different ethnic backgrounds will interact with each other and become friends if they spend time together in a shared setting. Another line of research, founded in the homophily hypothesis, suggests that same-background friendships will prevail, since it entails that, given a choice, people will tend to choose peers who are similar to themselves (McPherson et al., 2001).

Further, previous findings suggest that peer formations depend on the composition of the setting in which it is formed. Looking at immigrant youths in Austria, Spiel (2009) found that they had integrated peer groups in school, but outside school they showed strong preferences for friends of the same ethnicity. Also, it has been suggested that adaptation is setting-specific, and certain kinds of ethnic formations may be more adaptive in some settings than in others (Kiesnser et al., 2003; Birman et al., 2002). Based on theoretical assumptions and previous results, we expected to find that friendship formations would differ between the school and the leisure settings, and that immigrant youths would have more Swedish friends in the integrated school setting and more immigrant friends in the segregated out-of-school setting. Further, we expected that having non-immigrant friends would be adaptive in the school setting, and that engaging with immigrant friends would be associated with good adaptation in the neighborhood setting.

The results were not in line with our predictions. Using a cluster analysis based on number of immigrant and number of non-immigrant friends in each setting, we found that most youths had few peers, both in the school setting (66%) and outside of school (51%). Looking at the peer formations across the two settings, it was found that most youth had the same type of formations in both settings, and for 39% of the sample this meant having few friends across settings. Further, we found no cluster with the expected friendship pattern of more Swedish friends in school and more immigrant friends out of school. On the contrary, having Swedish friends in one setting and immigrant friends in the other setting was rare. To the contrary,
in our sample more youths than expected by chance had the same type of friendships in both settings, and youths mostly showed the same kind of friendship formation in both settings, regardless of the ethnic composition of each setting. These results contradict previous findings (Spiel, 2009; Kiesner, Kerr, & Stattin, 2004). In terms of the peer formations in relation to adaptation, the results showed that, for boys, having only immigrant friends in school was related to problematic adjustment in both settings, in terms of bullying behaviors in school and normbreaking activities outside school. No relationship between any kind of peer formation and adaptation was found for girls. The results suggest that the peer groups of immigrant youth are small, and not sensitive to the ethnic composition of the settings in which they occur. Further, the peer group formations are only related to adaptational outcomes for immigrant boys.

**Study 2**

In the second study, the aim was to examine peer selection and socialization processes related to the delinquency of immigrant and non-immigrant youths, both in schools in which immigrants were the majority and in schools in which they were the minority. The theoretical background for the study comes from the idea of homophily, or the tendency for friends to be more similar to each other than non-friends (Cairns & Cairns, 1994; Kirke, 2004). Both of the two processes that are presumed to underlie homophily, peer selection and social influence (Burk, Steglich, & Snijders, 2007; Kandel, 1978), have been found to apply to homophily in the case of delinquency (Dishion, Spracklen, Andrews, & Patterson, 1996; Kiesner et al., 2002; Snijders & Baerveldt, 2003). That is, youths have been found to be similar to their friends in terms of levels of delinquency, both because they tend to choose friends who are equally delinquent as themselves, and because they are influenced by their friends’ delinquency over time.

As immigrant youth on average has been found to be more delinquent than non-immigrants we wanted to test whether the peer processes behind delinquency also differed between immigrant and non-immigrant youth. More specifically, based on these theoretical and empirical suggestions, we hypothesized that immigrant youths would be more likely than non-immigrant youths to select delinquent peers and be more influenced by their peers’ delinquent behavior. Further, as it has been shown that peer formation depends on the ethnic composition of the setting in which it is formed (Vermeij, van Duijn, & Baerveldt, 2009), we anticipated differences in selection and influence processes according to whether they occurred in a majority-immigrant or minority-immigrant school.
It was found that immigrant youths were not more delinquent than non-immigrant youths. Further, both immigrant and non-immigrant youths were found to be similar to their friends on delinquent behaviors, and peer selection and influence seemed to operate in a complementary manner to explain this similarity. The selection effects of both delinquency and immigrant status were statistically significant across the networks. This suggested that immigrants do not differ from non-immigrants on either the prevalence of or the peer processes behind delinquency. We also tested whether there was a difference in how immigrant and non-immigrant youths selected their peers. The results indicated that immigrant youth were neither more nor less likely to select a delinquent peer than were non-immigrant youths. Thus, youths selected peers on the basis of having the same immigration status and a similar level of delinquency, but immigrant youths were not more likely to select delinquent peers than were non-immigrant youths. In terms of influence, it was found that all youths were likely to be influenced by their peers’ delinquent behaviors, but immigrant youths were not more likely to be influenced than Swedish youths. To summarize, youths adopted the behaviors of their peers, but immigrant youths were not more susceptible to delinquent peer influences than non-immigrant youths.

Concerning contextual differences, i.e. whether the peer-selection and social-influence processes related to delinquency differ between the two school contexts, it was found that the two groups of schools were more similar than dissimilar. Neither of the homophilic processes differed significantly between the two types of schools. That is, the selection effects of immigration status and of delinquency in minority immigrant and majority immigrant schools did not differ significantly in magnitude; nor were immigrant youths more likely to select a delinquent peer in majority immigrant schools than in minority immigrant schools. Looking at the influence of delinquency, we could see that even though there was a significant effect only in the minority immigrant schools, the difference between the two types of schools was not significant. Thus, selection processes with regard to delinquency related to immigration status and deviant peer influence did not significantly differ between schools with a majority of immigrant youths and schools with a majority of non-immigrant youths. In conclusion, the results show that the social processes behind the delinquency of immigrant youths are similar to the processes of non-immigrant youths, and that the ethnic composition of the school does not moderate the homophilic processes behind delinquency.
Study 3

The aim of the third study was to examine the perceptions of their schools held by adolescents in disadvantaged and advantaged neighborhoods. The previous literature has suggested that disadvantaged neighborhoods are dangerous and threatening places (Leventhal & Brooks-Gunn, 2000), due to structural factors like poverty, ethnic heterogeneity, and single-headed households, all of which hinder neighborhood organization. These problems are then thought to leak into the schools located in these kinds of neighborhoods (Mateu-Gelabert & Lune, 2003), and the schools will, according to this view, be dangerous places simply because they are in dangerous neighborhoods. There is, however, another way of looking at the matter. In this study, we proposed that the school setting in disadvantaged neighborhoods functions as a contrast to the out-of-school setting, and schools would be perceived as safe havens by the youths in these neighborhoods. We proposed two contrast effects. First, we expected youths in disadvantaged neighborhoods to feel that they had little influence on decisions taken in the family, but that in school they would be allowed to influence decisions, would be listened to, and would have their opinions valued by grown-ups. Second, we expected youths in disadvantaged neighborhoods to experience their neighborhoods as threatening and insecure, but to experience their school settings as safe and supportive. We did not expect to find these contrast effects in advantaged neighborhoods since the two settings would be more congruent. Further, we expected the contrast effects to be at the neighborhood level and to go above and beyond the individual differences between the adolescents living in the different types of neighborhoods. On the assumption that we would find the expected contrast effects, we advanced the hypothesis that youths in disadvantaged neighborhoods would perceive their schools as safe havens more than youths in advantaged neighborhoods. Finally, we wanted to test whether the findings were dependent on immigrant status rather than living in a particular type of neighborhood.

The results were in line with our contrast-effect hypothesis. Both contrast effects were supported at the neighborhood level, but not at the individual level. At the neighborhood level we found support for both contrast effects, since the youths in disadvantaged neighborhoods perceived their out-of-school settings as threatening and closed to their influence, but their schools as safe places where they felt listened to and influential. This was not found in advantaged neighborhoods, where youths did not experience any contrast between their in-school and out-of-school settings.

To explore whether the contrast effects would imply that the adolescents perceived their school as a safe haven, we combined measures of longing
for school, feeling secure enough to disclose in the classroom, good teacher relations, and school satisfaction into a safe-haven factor. On testing for differences between the two types of neighborhoods, it was found that adolescents in disadvantaged neighborhoods perceived their school as a safe haven to a greater extent than adolescents in advantaged neighborhoods. Also, when asked in which settings they felt safe, it was typical for adolescents in disadvantaged neighborhoods to report feeling safe at school but not outside school, while it was more typical for adolescents in advantaged neighborhoods to report feeling safe both in school and outside school.

To test whether the safe-haven experience could be explained by the contrast between the out-of-school and in-school contexts in disadvantaged neighborhoods, we controlled for adolescents’ perceptions of influence at school when testing for differences in the safe-haven experience between adolescents in disadvantaged and advantaged neighborhoods. The results showed a substantial decrease in the difference between neighborhoods when adolescents’ perceptions of influence at school were taken into account. Thus, it seems that adolescents’ perceptions of influence at school substantially explain why adolescents in disadvantaged neighborhoods perceive their school as a safe haven.

Finally, after dividing the sample into immigrants and non-immigrants, we found that the results held true for all youth living in disadvantaged neighborhoods, but the contrast effects were stronger for the immigrants living in these neighborhoods. To conclude, it seems that youths living in a disadvantaged neighborhood, especially immigrant youths, perceive that they have an influence in their schools, by contrast to what is typical in their neighborhoods, and that they perceive their schools as safe havens more than youths in advantaged neighborhoods.
Discussion

Answers to the overall research questions

The aim of this dissertation was to explore how the adaptation of immigrant youth is related to the linkages between the multiple settings in which youths are embedded, and the contextual features of these settings. In light of this aim, four research questions were posed.

The first two questions addressed the relationships between adaptation and the contextual features of the settings, and both questions were addressed by all three studies. The first question concerned whether the contextual features of the settings can help explain why some immigrants are better adapted than nonimmigrants and other immigrants. In Study 1 the sample consisted of only immigrant youth, and therefore, the comparison was made between subgroups of immigrant youths depending on their peer formations. The results showed no differences in peer formations between the segregated neighborhood setting and the integrated school setting. The peer formations were only related to the adaptational outcomes for boys, and not for girls. The small group of boys, who had only immigrant peers in both settings, were equally poorly adapted in both settings. Thus, their adaptation was not related to the contextual features of the settings. Based on these results it seems that the contextual features of the settings are not a big part of explaining why some immigrants are better adapted than other immigrants. In Study 2 the comparison was made between immigrants and nonimmigrants in majority immigrant and minority immigrant schools. The results showed no differences in the levels of delinquency or the processes behind delinquency between immigrants and nonimmigrants. More importantly, this was found regardless of the ethnic composition of the school. Thus, again the results showed no support for the idea that adaptational differences could be due the contextual features of the setting. Finally, in Study 3 we compared the adaptation of immigrants and nonimmigrants in both advantaged and disadvantaged neighborhoods. The results showed that immigrant youth in disadvantaged neighborhoods reported the best school adaptation, compared with immigrant youths in advantaged neighborhoods and nonimmigrant youths in both types of neighborhoods. Further, it was a combination of the contextual feature of neighborhood SES and immigrant status that explained why this group was best adapted in school. To sum up, it seems that when there are differences in adaptation between subgroups of immigrants or between immigrant and nonimmigrants, the contextual feature of the settings is not the sole explanation for those differences.
The second research question asked which of the contextual factors under investigation is most important for the adaptation of immigrant youth. Two contextual features were explored – ethnic composition and SES diversity – in both the school and the neighborhood settings. It was found that the contextual factor of the ethnic composition of a setting is not of great importance for the adaptation of immigrant youth. We found no association between the ethnic composition of a setting and adaptation in that setting in any of the studies. In Study 1 we showed that immigrant youths had similar patterns of non-immigrant and immigrant peers in both the integrated school setting and the segregated neighborhood setting. That is, the ethnic composition of the setting was not associated with adaptation in the form of peer formation within that setting. Similarly, Study 2 showed that the social processes behind the development of delinquent behaviors were similar for immigrant youths regardless of whether they attended a majority immigrant or a majority non-immigrant school. In other words, the contextual factor of school composition was not associated with adaptation in terms of delinquency development. In Study 3 we instead studied the contextual feature of neighborhood SES, and found it to be related to adaptation. The results showed contrast effects between the in-school and out-of-school settings for youths living in disadvantaged neighborhoods, but not for youths living in advantaged neighborhoods. In other words, neighborhood SES was associated with adaptation in terms of experiencing the school as a safe and democratic place. In sum, it seems that the answer to the second research question is that neighborhood SES is the contextual factor of greater importance for the adaptation of immigrant youth than the ethnic composition of a setting.

The following two research questions addressed how the linkage between settings is related to adaptation. Both questions were explored in studies 1 and 3. The first of the two, and the third overall question, concerned whether adaptation is setting-specific or whether factors in one setting can affect adaptation in another setting. In Study 1, the peer formation of immigrant boys was associated with adaptation both in school and out of school, and in Study 3 it was the contrast between the in-school and out-of-school settings that was associated with good in-school adaptation. Based on the results of the two studies, it seems that adaptation is not always setting-specific, and that factors in one setting can affect adaptation in other settings. Thus, adaptation is not only an issue of the characteristics of the setting in which it occurs, but is also affected by factors of the surrounding settings.

The final research question asked whether the cultural distance between settings is related to adaptation. In Study 1, the distance between the segre-
gated neighborhood and the integrated school can be seen as quite large, as the neighborhood is close to the immigrant/ethnic culture and the school is close to the Swedish culture. Considering adaptation in terms of friendship formation, the results that most immigrant youths reported few friends in both settings could be interpreted as a sign of poor adjustment. Further, for the small group of immigrant boys who reported having only other immigrant friends, both in the school setting and in the neighborhood, the distance between the peer group and the school setting is large. This was found to be related to poor adaptation, both in school and out of school. In Study 3, we found that the distance between settings is greater in some contexts than in others. When embedded in an advantaged neighborhood, the settings seem to be close to each other, since the youths do not perceive any contrast between the settings. In a disadvantaged neighborhood, on the other hand, the two non-chosen settings of the family and school seem to be distant from each other, especially for immigrant youths. This means that it is the distance between the settings that creates the contrast effect. The greater distance between the settings in disadvantaged neighborhoods was related to adaptation in the way that the youth perceived the school setting as more positive due to the contrast it made to the out-of-school settings. To summarize, the answer of the final research question seems to be that the distance between settings is related to adaptation, but a greater distance is not always associated with poor adaptation. Whether the distance is related to good or poor adaptation seems to depend on the contextual factors of the overarching setting in which the settings are embedded.

The findings in relation to previous research

How well do the results of the current studies fit with the existing literature and previous research findings? It seems that they both support and contradict, but also extend, previous knowledge about the adaptation of immigrant youth.

First, the results partly confirm the so-called immigrant paradox. We found few differences between immigrants and nonimmigrants, and when we did find differences, the immigrant youth were as well adapted, or even better adapted, than their Swedish counterparts. That is, immigrant youths were found not to be at higher risk for developing delinquent behaviors than non-immigrant youths, and in disadvantaged neighborhoods, immigrant youth showed more positive in-school adaptation than did non-immigrant youths. However, the immigrant paradox also suggests that first generation immigrant are better adapted than later generation immigrants. This was not supported in the current studies, as we found no differences in adaptation between first- and second-generation immigrant
youths. This suggests that generational status might not be as important an issue in a Swedish context as it has been shown to be in some previous, mainly American, studies. To summarize, the current studies both support and contradict the immigrant paradox.

Do the current results then also offer some explanations why the immigrant paradox is sometimes supported and sometimes not? It has been suggested that one reason could be differences in the contextual features of the settings (e.g. Motti-Stefanidi, 2008). This was, therefore, tested in all of the included studies. It seems that some contextual features are more important than others, as differences in neighborhood SES were found to be of greater importance than differences in the ethnic composition of the school and the neighborhood settings. This supports previous findings showing greater support for the effects of neighborhood SES than for the effects of racial/ethnic heterogeneity (Leventhal & Brooks-Gunn, 2000). However, even though we found differences between the disadvantaged and advantaged neighborhoods, the effects were stronger for immigrants in disadvantaged neighborhoods than any of the other groups. This suggests that adaptation is a matter of the combination of neighborhood SES and immigrant status. In conclusion, it seems that the contextual features of a setting are not directly and not on their own explaining the immigrant paradox.

However, the contextual features of the settings were found to be indirectly related to adaptation. It was found that the cultural distance between settings differed with the contextual factors of the overarching setting in which they were embedded, and this difference was in turn related to good adaptation in some context and to poor adaptation in others. By introducing the idea of cultural distance between settings we have extended knowledge about the adaptation of immigrant youth. The concept of cultural distance has commonly been used to describe the distance between values of different national cultures (Hofstede, 2012), and the cultural distance between the culture of origin and the culture of settlement has been shown to be an important predictor of immigrant adaptation (Briones, Verkuyten, Cosano, & Tabernero, 2012). The present studies have shown that it makes sense to also consider the distance between settings with different cultural demands. Previous results have shown that some immigrant youth have smooth transitions between settings while others do not (Phelan et al, 1994). The cultural distance between settings offers an alternative explanation that goes beyond the factors on the individual level, like cultural competence, suggested previously. The current results indicate that by systematically studying how the cultural distance
between settings is related to adaptation in different contexts, we can further extend knowledge about the adaptation of immigrant youth.

Further, the current results offer support for the idea that adaptation results from a match between the needs of the youth and the settings’ ability to meet these needs. A match can lead to good adaptation, and no match to poor adaptation, as suggested by stage-environment fit theory (Eccles et al., 1993). If the school setting is considered as the prime setting for coming into contact with the culture of settlement and forming peer relations with non-immigrant youths, having no nonimmigrant friends in a school with a majority of nonimmigrants can be seen a sign of not meeting the demands of that setting. Also, the school setting imposes demands for competence in the culture of settlement, in terms of the norms and language that prevail. Thus, having only immigrant friends makes it harder for immigrant boys to meet the academic demands of the school. This mismatch between the demands of the settings and the boys’ needs were found to be related to poor adaptation, both in school and out of school.

In Study 3, the out-of-school setting did not appear to meet the adolescents’ needs for autonomy and influence, but the in-school setting did, which resulted in a fit between the youths’ needs for autonomy and influence and was therefore related to positive in-school adaptation. Thus, it seems the adaptation of immigrant youths is a matter of how well the youths meet the demands of a setting, and how well the setting can meet the needs of the youths.

To summarize, what is, then, important for the adaptation of immigrant youth? The current studies were developed on the basis of developmental and ecological models and theories, such that multiple settings were included, at different levels and with different contextual features. At the individual level, immigrant and generational status, age, and gender were included. Five settings were included: the neighborhood, leisure, peer, school, and family settings, as well as two contextual features of the settings: the ethnic composition and SES diversity. It has been suggested previously that the associations with individual adaptation become stronger the more proximal the settings are (Leventhal & Brooks-Gunn, 2000). That would imply that, for example, school-level factors would be more important for individual outcomes than neighborhood-level factors. This was not supported by the current results, as the ethnic composition of both the school and neighborhood settings were found not to be important factors for individual adaptation. Rather, it seems that the type of contextual factors is of greater importance than the proximity of the setting. Also, it seems that contextual feature are important in interactions with individual factors like immigrant status, and to explain when the cultural distance...
between settings is related to good adaptation. Further, on the basis of previous developmental models the settings were not seen as isolated from each other and the linkage between them was a focus of the current studies. It was found that the cultural distance between settings was related to adaptation and that the adaptation was not always setting-specific but could spread from one setting to another. Also, a match between the needs of the youth and the demands of the setting was found to be associated with good adaptation, while a mismatch was related to poor adaptation. Thus, it seems that the adaptation of immigrant youths is related to some contextual features of settings, especially in interaction with individual factors and as an indirect effect on adaptation. Further, it seems that the distance between settings, the match between settings, and the needs of the youth are important to address when explaining the adaptation of immigrant youth.

**Limitations and strengths**

The most salient limitations of this dissertation should be mentioned. First, the aim was to explore the adaptation of immigrant youths in a developmental framework. Both normative development and the changes that take place due to immigration are processes that occur over time (Berry, Phinney, et al., 2006). But, only one of the three studies included in the dissertation is longitudinal, which makes it difficult to say anything about the developmental and acculturative processes operating over time, or the directions of effects. The reason for the cross-sectional designs was two-fold. First, despite the large overall sample size, the subsamples of immigrants, and especially immigrant youths living in advantaged neighborhoods, were too small for longitudinal analysis. Other studies have also recognized the difficulties of following immigrant samples over time (Motti-Stefanidi et al., 2012).

Second, most of the questions posed in the studies were not explicitly longitudinal. Because of the limited research on many of the topics addressed, cross-sectional results can be regarded as a first snap-shot of what is going on (Berry, Phinney, et al., 2006). Not taking proper account of what happens over time is a weakness this dissertation shares with much of the existing research on the adaptation of immigrant youth. Even though it has been stated that it is crucial to consider different time aspects and stages of acculturation (Berry, Phinney, et al., 2006), there are still only a few long-term longitudinal studies. The ICSEY study, for example, is cross-sectional in its design. The time issue has been dealt with in previous studies even with cross-sectional data, e.g. by including as variables age at time of integration and length of time in the new country (Titzmann, Raabe, &
Nevertheless, more longitudinal studies are needed to accurately address the questions related to the adaptation, acculturation and development of immigrant youths.

Second, it could be argued that an important issue of the immigrant experience has been left out in this dissertation. The focus of the current studies is on the normative developmental tasks of immigrant youth, not their acculturative tasks. That is, the tasks and types of adaptation addressed in the studies are relevant to all youths, not only immigrant youths. This procedure was adopted in order to make comparisons between immigrants and non-immigrants possible. Accordingly, three of the issues that, it has been suggested, are especially salient for immigrant youths – acculturation, identity formation and discrimination (Phinney et al., 2006) – have not been given direct attention in this dissertation. Since type of peer formation can be seen as an indicator of acculturation (Berry et al., 1989), the normative developmental task of peer formation can also be seen as an indirect proxy for acculturation. However, it is possible that the inclusion of direct measures of acculturation, discrimination and different types of identity (ethnic and national) would have enabled a richer picture of the adaptation of immigrant youth or would have permitted other explanations of some of the current findings.

A third limitation of the studies lies in the fact that the data did not allow for multilevel analyses, which would have been optimal for exploring effects at different levels. To do justice to the different levels of analysis, and to be able to disentangle individual and group effects, multilevel statistical analyses are the most appropriate (Motti-Stefanidi et al., in press). In Study 3 we tried to minimize this limitation as far as possible by using nested analyses, thereby ensuring that the effects found were at the level under investigation. More research, using a longitudinal multilevel approach to the study of immigrant adaptation is needed, in line with a recent study by Motti-Stefanidi, Asendorpf and Masten (2012).

The division into immigrants and non-immigrants, rather than into distinct ethnic groups, can be seen as both a limitation and a strength. It is a limitation in the sense that the immigrant group is not homogenous, and there is likely to be large variation within the group, since the immigrants have a range of different ethnic backgrounds. It has been argued that the adaptation of immigrants can only be understood by studying and comparing distinct ethnic groups in a specific cultural or national context (Berry, Westin, et al., 2006), since it is difficult to generalize findings across countries and across ethnic groups (Virta et al., 2004). Then, cultural and ethnic differences in a group can be understood in a given context, and can be compared with the same group in another context, like in another country.
or in the culture of origin (Fuligni, 1998). Also, as mentioned previously, the cultural distance between the culture of origin and the culture of settlement has been shown to be an important predictor of immigrant adaptation, with greater distance resulting in a more difficult acculturation process (Briones et al., 2012). In order to take cultural distance into account, distinct ethnic or cultural groups need to be studied in a defined cultural context. In theory this makes perfect sense, but in practice it is not so clear-cut. Research covering different ethnic groups has often demonstrated larger within-group than between-group differences (Rowe, Vazsonyi, & Flannery, 1994), suggesting that categorizing on the basis of ethnic background will not necessarily create homogenous groups. Further, as described earlier, the immigrant group in Sweden, and in many other multicultural societies, is made up of people with a diverse mix of ethnic backgrounds and nationalities (Pettersson, 2003). Forming distinct ethnic groups would not only be difficult because of the diversity of the sample and the small group sizes it would entail, but also it would not provide a measure that reflects the macrolevel context, i.e. Sweden today. The same immigrant/non-immigrant division has been made in other studies, with the rationale that what immigrant youths share is not the same ethnicity, but the language of the country of settlement, the experience of being in a minority, and the task of living between two cultures (Dalhaug et al., 2011). Thus, treating diverse immigrant groups as one group might be a way of addressing issues that are common to all immigrants and of pin-pointing the “immigrant experience”.

Another strength of the dissertation lies in the diversity of its studies when they are combined. A broad range of theories and methodology was employed. Since different developmental tasks of salience during adolescence were explored, and since I combined more than one setting at a time, a broad perspective on immigrant adaptation was obtained. Looking at settings with different contextual features and applying specific theories to each setting gave greater depth to the studies. Also, in terms of analysis, both person- and variable-oriented methods were used, and both social-network analyses and nested-level analyses were employed. As is stated in much of the existing research, the adaptation of immigrant youth involves a complex and complicated net of actors, settings with different contextual features, and factors that operate at different levels. Testing them all in one study would not have been possible. In order to try to understand such processes, different theoretical perspectives and different methods of data treatment need to be combined (Stattin, 1995), as was the case in this dissertation.
Issues of validity
Some issues of validity should be mentioned. Population validity is the type of external validity that refers to how well sample results can be extrapolated to a population as a whole. In the current dissertation, two large samples from two communities were employed, both of which were drawn to be representative of the general population. In that sense, the validity is adequate. However, the general external validity of the current results can be discussed. Given the importance that has been attached to the contextual factors at each level of the conceptual model, it is questionable whether the results can generalized to other contexts. On the highest societal level, for example, Sweden is one of the most migration friendly countries in the world, and as the societal level is thought to affect adaptation in the lower levels embedded within, it is possible that the same results would not be found in another country with less positive policies and attitudes towards immigrants. In a similar manner, contextual factors at each level in the model might hamper the generalizability: to bigger cities or more rural areas within Sweden, to settings and samples with different ethnic compositions than those of the current studies. However, this does not decrease the theoretical importance of the results.

Using only self-reports increases the risk of common method variance. Some measures, like the delinquency measure in Study 2, might have been more appropriately based on objective reports or peer reports, since youths tend to underreport their own delinquent behaviors (van Batenburg-Eddes et al., 2012). However, the majority of measures in the studies assess youth perceptions, which is in line with the idea of the youth as an active agent. If youths are seen as active agents, who shape and choose their environments on the basis of their perceptions and interpretations of what is happening (e.g. Magnusson & Stattin, 2006), then it is youths’ subjective experiences that should be of the greatest interest. Thus, all measures used in the studies capture youths’ own perceptions of their situations.

Another issue concerns the construct validity of the measures included. Assessing and comparing measures across cultural groups introduces the difficulty of ascertaining whether they are interpreted in the same way by both native and immigrant youths (Motti-Stefanidi et al., 2012). We cannot be certain that any differences found are not due to immigrant and non-immigrant youths attributing different meanings to the concepts. It is possible to test for measurement equivalence and control for construct biases between linguistic groups (van de Vijver & Tanzer, 2004), but this was not done here because of the diversity of the immigrant sample.
Future directions

As well as adopting more longitudinal, multilevel approaches to the study of the processes of immigrant youth adaptation, a next step might be to better try to understand why an adaptive process takes place. The optimal way of doing this would be to combine qualitative and quantitative methods. For example, it would be interesting to ask the immigrant boys in Study 1 why they only have immigrant friends. Is segregation a choice on their part, or are they separated because no non-immigrant wants to be their friend? Mixed-method designs would give richer information about the thoughts underlying the actions of immigrant youths, which would be in line with the idea of the youth as an active agent.

Further, given the very limited amount of research that explores the role of type of community or living in a rural/urban area in Europe in the adaptation of immigrant youth, further research in this area would be an important next step. There are many reasons to think that, as an immigrant family, living in a small village in the countryside is different from living in a multicultural suburb in a big city. However, this is an issue to be explored in future research, since it has great practical implications for where newly arriving immigrants are placed and for their later adaptation in any country of settlement.

Studies that have integrated contextual features in the study of immigrant youth adaptation are still rare, though the number is increasing. Even rarer are studies that systematically measure contextual factors on each level, and examine how they are interrelated. In the current research no direct measures on the societal level are included. Thus, combining objective measures on both distal and proximal levels with the psychological theories on the individual level would be one way to better understand the adaptation of immigrant youth.

Implications and applications - Why is this important?

The most important implication of the current studies is that they prompt us to revise our views about immigrant youth in general and of immigrant youth in disadvantaged neighborhoods in particular, both in research and in everyday life. In research we need to develop new theoretical models, such as the contrast-hypothesis, to explain the positive features of being an immigrant and of living in disadvantaged neighborhoods. As the media often report a negative image of immigrant youths this also has to become more nuanced. The current results show that the negative image is not adequate, as immigrant youths were not found to be more delinquent or more prone to develop delinquent behaviors than non-immigrant youth.
Also, that the adaptation of immigrant youth was shown not to vary with the ethnic composition of the settings can be seen as an indication of successful integration. That is, immigrant youth will be well-adapted both in schools with many other immigrants and in schools with few immigrants. Because Sweden is one of the most migration friendly countries in the world, it can be a good context to develop models of successful adaptation, and the current results can be useful in doing that.

Why do we need the knowledge that this dissertation has supplied? Immigration is a worldwide phenomenon, and with it comes the need for knowledge on how to deal with growing multiculturalism, at both the individual and societal levels. At the societal level, while immigration places demands on receiving countries, it is also a resource for them (Berry, Phinney, et al., 2006). Since the future lies in youth, if immigrant youths adapt successfully, they will be able to contribute to the well-being of the receiving society. It was long thought that immigration was a completely negative experience (Fuligni, 1998), with poor adaptation, and low psychological well-being as a result. If this were so, then having a large number of immigrants would then be a burden for a country. However, if the immigrant paradox holds true and first-generation immigrant youths are even better adapted than native youth, they should grow up to be good, productive citizens who will contribute to the welfare of their countries of settlement under the right circumstances.

The question is what will turn immigrant youths into resources for their countries of settlement. In order to address this question, we first need to understand their adaptation as youths, and what will foster positive outcomes. Then, it would be possible to see that the contextual conditions foster positive adaptation, for instance by developing school programs that offer educational support to meet both the developmental and the acculturative needs of immigrant youths (Motti-Stefanidi et al., in press). With such knowledge, it would be possible to develop policies and practices that can shift the balance away from negative and towards positive outcomes (Berry et al., 2006). One potentially successful example of this in the current research concerns youths’ perceptions of their schools in disadvantaged neighborhoods (Study 3). In sum, knowledge of the factors that foster the positive acculturation of immigrant youth is needed, at both the individual and societal levels.

Some of the prevention programs for immigrant youth that have been developed are based on the idea that youths are embedded in multiple settings, and that the distances between these settings must be minimized. For example, Familias Unidas (Coatsworth, Pantin, & Szapocznik, 2002; Pantin et al., 2003) is a multilevel, parent-centered intervention developed
from an ecodevelopmental perspective, with the aim of preventing problem behaviors among Hispanic youth in the US. The idea behind the program is to foster connections between parents and the adolescents’ school and peer settings, in order to get parents positively involved in their adolescents’ lives. This is thought to strengthen the links between the family setting and the other settings in which adolescents are involved, and in that way facilitate interactions between them (Coatsworth et al., 2002). A similar idea lies behind the Head Start program, which is a federal program in the US that promotes the school readiness of children from low-income families. One of the central ideas behind the program is that of strengthening parents’ connections with their child, their child’ peers, and the community. The success of these programs points to the importance of not taking the youth out of his or her context and of involving multiple settings at different levels in order to promote positive adaptation.

Immigration and the growing multiculturalism in our societies are not only issues for the people who are migrating. Receiving countries are, at societal level, facing issues of how to manage immigration flows and the multiculturalism that comes with them (Appleyard, 2001). However, immigration is also an issue for the people of the receiving society at an individual level. Living in a multicultural society, we will all – more or less, and by choice or not – come into contact with people from backgrounds other than our own. Thus, acculturation is not only an issue for immigrating youths, but also for non-immigrant youths, since they will themselves change in response to their contacts with other cultures (Phinney et al., 2006; Sam & Oppedal, 2003). As the world becomes more globalized, multicultural competence will be of benefit for all of us. Thus, finding ways of living together is in all our interests.

Conclusions
On the basis of the results of the studies in this dissertation, what then will be the answers to the questions about Ahmed, Dalaaya and Petter, posed in the introductory paragraph? Will Dalaaya, Ahmed and Petter differ in their adaptation, and if they do, will the differences be due to their backgrounds, their migration status, their gender, their socioeconomic status, or the neighborhoods in which they live? It seems safe to say that the three youths will differ, and that some factors are of greater importance than others in working as risk or protective factors. Further, the issues involved seem to be more about interactions than main effects and about indirect effects rather than direct effects. Being an immigrant is not a risk factor in itself, but being an immigrant boy with only immigrant friends does seem to be. Being an immigrant living in a disadvantaged neighborhood does not seem
to be a risk factor for the development of delinquency, but it is for feeling unsafe and lacking influence in out-of-school settings. Thus, it seems that adaptation depends on the combination of risks and resources offered to youths by each setting and the type of adaptation in question.

Even though the results presented in this dissertation should not be used to make predictions at the individual level, the hypothetical Ahmed is likely to show the poorest adaptation of the three youths. He has most of the risk factors for poor adaptation. He is a boy, he lives in a segregated, disadvantaged neighborhood, and his peer group, both in school and during free time consists only of other immigrant friends, all of which have been shown, in this dissertation, to be associated with poorer adjustment. Risk factors have been shown to act in a cumulative manner, in the sense that the more risks youths experience the more problem behaviors they will exhibit (Atzaba-Poria et al., 2004). However, living in a disadvantaged neighborhood, Ahmed may benefit from an important protective factor, namely a democratic school open to his influence, which might be the one resource in his settings that would counterbalance the risk factors. This illustrates the complexity of the adaptation of immigrant youths, and the need to study contextual features of and the interactions between all the settings in which the youths are embedded.
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IYLVASVENSSON Embedded in a context: The adaptation of immigrant youth


In- and out-of-school peer groups of immigrant youths

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Multiethnic societies typically aim to have immigrant and native youths mix and be friends, preferably in all contexts in which they spend time. Schools and neighbourhoods are the two settings where youths spend the most time with peers during adolescence. The present study explored the in- and out-of-school peer groups of 174 immigrant junior high school pupils (Mean age = 14.39) who attended an integrated school but lived in a segregated neighbourhood. A person-oriented approach was used and cluster analyses were conducted both within and across the two settings. The results show that youths mostly have the same kind of friendship formations in both settings, regardless of the ethnic composition of each setting. In terms of adaptation, the results consistently show that for boys, having only immigrant friends is related to problematic adaptation in both settings. No relationship between peer formations and adaptation was found for girls. The study highlights the importance of considering gender and viewing youths as embedded in systems of multiple settings, in order to achieve true integration.

Keywords: Immigrant youths; Peer groups; In-school and out-of-school adaptation.

Many youths in the world today will not grow up in their culture of origin but in another country alongside youths of another culture. In most of these multiethnic societies there is an aim of integration, saying that people of different ethnic backgrounds should mix. The idea is that immigrants will blend into the receiving society and become well adapted, an idea often

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This research was funded by a grant from the Swedish Research Council to MK and HS.

We acknowledge the support of the teachers, principals, and pupils who participated in the study.

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supported by research (Sam, Vedder, Ward, & Horenczyk, 2006). However, previous research has made little effort to understand these friendship formations in different contexts (Hamm, 2000). When will immigrant youths be friends with native youths? Will the ethnic composition of the setting play in? Is having a mix of friends always adaptive regardless of the setting? More knowledge about friendship formations of immigrant youths in different settings and how these formations are related to adaptation will foster future integration policies.

Two theories are often used to explain friendship formations of youths of different ethnic backgrounds. Social contact theory (Allport, 1954) suggests that regular, persistent contact between people of different ethnic backgrounds will enhance the chances that they will be friends. Another line of research suggests that, when given a choice, people tend to choose peers from the same ethnic group as themselves, a phenomenon called ethnic homophily (McPherson, Smith-Lovin, & Cook, 2001). Thus, there are theoretical support for both same-background and different-background friendship formations of immigrant youths.

What will, then, determine what kind of friendships will be formed? One answer might the setting in which the friendship is formed. Most studies on peer formations in general are based on in-school peers. However, during adolescence youths spend increasingly more time with out-of-school peers (Kiesner, Poulin, & Nicotra, 2003), and previous studies have shown that these friends are not always the same friends as in school (Kiesner, Kerr, & Stattin, 2004). When studying the friendship formations of immigrant youths it might be even more important to make this distinction, as different settings will offer different selection opportunities. In school, the options of peer choices are restricted to those in the school (Kiesner et al., 2003) and youths of different background are “forced” to have contact. In school, social contact theory would apply. Outside of school, however, there are fewer structural restrictions, and immigrant youths can be more selective and choose peers who are similar to themselves. Neighbourhoods in Europe are often segregated with different immigrant groups living together but segregated from the majority group. Thus, in the neighbourhood, homophily theory would apply, as immigrants choose other immigrants as friends. In sum, friendship formations might differ depending upon the setting in which they are formed.

Another important aspect might be the ethnic composition of the setting in which the friendships are formed. According to social contact theory, youths are most likely to nominate a cross-ethnic friend in schools with many students of different backgrounds (Hamm, 2000). There is also empirical evidence that the composition of the setting will affect ethnic homophily. In a study of diaspora immigrant youths in Germany, the lower the concentration of immigrants in the schools immigrant youths attended,
the lower the proportion of immigrant peers they had in their networks (Silbereisen & Titzmann, 2007). Thus, when immigrants are in a minority in school, the paucity of other immigrants in the school limits the choice of immigrant friends and during these conditions school is the natural setting for integration (Sam et al., 2006). In sum, both same-background and different-background peer formations will be affected by the composition of the setting in which they are formed.

Including out-of-school peers might be especially important when studying immigrants living in segregated, low-socioeconomic-status (SES) neighbourhoods. In these areas, access to structured, supervised activities is often poor, and the youths living there spend much time in unstructured, peer-oriented activities (Sampson, Raudenbush, & Earls, 1997). Youths who spend much time in unstructured activities with low adult supervision are often more prone to deviant behaviours and affiliation with delinquent friends (Mahoney, Stattin, & Magnusson, 2001), and rates of delinquency and crime are higher in neighbourhoods with many unsupervised teenage peer groups (Sampson & Groves, 1989). Additionally, research from the United States shows that minority groups are more connected to networks in their neighbourhoods than to their in-school networks (Urberg, Degirmencioglu, Tolson, & Halliday-Scher, 1995). Thus, allowing peer nominations from the out-of-school setting might be extra important when studying immigrant youths living in segregated, low-SES areas.

Past research dealing with immigrant youths in Europe gives little information about peer formations across settings. To our knowledge, only one study has compared in-school and out-of-school peer formations of immigrant youths in Europe. Looking at immigrant youths in Austria, Spiel (2009) found that friendship patterns differed greatly between the two settings. In school, the immigrant youths had integrated peer groups, but outside of school they showed strong preferences for friends of the same ethnicity. These results support the idea of including both in- and out-of-school settings when exploring the peer groups of immigrant youths; however, neither the ethnic composition of the two settings nor the effects of these formations on adaptation were considered.

Relating the peer formations to adaptation, there are also reasons to consider the setting. Peers who are not captured using school-based nominations are especially important for behaviours, such as delinquency, that occur after school (Kiesner et al., 2004). Kiesner and colleagues (2003) showed that the behaviours of peers in a given setting will be related to an individual’s behaviours in that specific setting. In their study, in-school peers’ behaviours were uniquely related to individuals’ school-based behaviours while the behaviours of out-of-school peers were
uniquely related to individuals’ after-school behaviours. Also, research has shown that different contexts put different demands on immigrants (Birman, Trickett, & Vinokurov, 2002). Some settings, such as school, demand adaptation to the culture of settlement, as immigrants must speak the native language and adopt native norms in order to succeed in school. Other settings, such as a segregated neighbourhood, might demand adaptation to the culture of origin, or to a culture of being an immigrant. According to this view, it would be adaptive to have non-immigrant friends in school and adaptive to have other-immigrant friends out of school. Taken together, having non-immigrant friends in school would be adaptive for in the in-school adaptation, while immigrant friends would be adaptive for the out-of-school adaptation of immigrant youths.

In sum, there are reasons to expect that immigrant youths will have different friendship formations in school than out of school, and that the composition of the setting will influence these peer formations. In the present study we explored whether immigrant youths had different friendship formations in an integrated school setting compared to a segregated out-of-school setting. We also explored how these formations were related to adaptation in the two settings. Given that the different demands of the two settings would affect friendship formations, we expected that it would be adaptive to have non-immigrant friends in school in terms of in-school behaviours and adaptive to have other-immigrant friends outside of school for out-of-school behaviours. Thus, the following research questions were asked:

1. What do the patterns of peer formations of immigrant youths look like in school and out of school?
2. How are these peer formations related to in-school and out-of-school adaptation?
3. How are the friendship formations in the two settings related to each other, and how are different combinations of in-school and out-of-school friendship formations related to adaptation in both settings?

**METHOD**

**Participants**

The participants were part of a community-based study conducted in the middle of Sweden (total population roughly 26,000). The first out of five annual data collections took place in 2001. All school classes in grades 4 to 12 in the community participated (ages approximately 10–18). Overall youth
participation rates were over 90% each year. The average percentage of immigrant youths in the city at T1 was 11.8%, which was higher than the average in the country at that time (8.4%). The community is highly segregated with a few neighbourhoods where almost all immigrants live. However, as there are only two junior high schools in the community their uptake of pupils is from different neighbourhoods, and thus the ethnic composition of the schools is a mix of all surrounding neighbourhoods.

In order to maximize the target sample, data for two separate cohorts were combined into one sample. Specifically, we selected all youths in grades 7–9 (ages 13–16) at waves 2 and 5 (out of five) and combined them in the initial target sample of 1929 participants (992 boys and 937 girls). Participants born or with both parents born in countries other than the Nordic countries were defined as immigrants. Nine percent of the target sample met this criterion, which yielded the analytic sample of 174 immigrant youths (51% girls, 75% first generation, mean age = 14.39 years). The group was ethnically diverse, including 31 countries of origin. Most originated from the former Yugoslavian countries (43%), from Middle Eastern countries such as Iraq and Syria (32%), and from South American countries such as Chile and El Salvador (7%). 73% of the group spoke only Swedish or both Swedish and their mother tongue at home.

In Sweden, immigrants tend to live in neighbourhoods that are segregated from the majority group, but contain a mix of migrant groups (Berry, Westin, et al., 2006). All youths included in the study lived in segregated areas where, according to community statistics, between 50–70% of youths were born in countries other than the Nordic counties. They attended both junior high schools in the community—School 1 had an ethnic composition of 4% immigrant youths and School 2 had 15% immigrant youths at T1. Thus, the participants of the study lived in a segregated area, but attended an integrated school.

Procedure

The youths filled out questionnaires during regular school hours. They were assured of the confidentiality of their answers. Teachers were not present; trained research assistants administered the questionnaires. Participation was voluntary. Parents were informed about the study through community-based meetings and by mail, and could decline their child’s participation by returning a prepaid form (1% of the total sample did so). All pupils, whether they participated or not, were entered in drawings for movie tickets. The questionnaires were administered in Swedish, and those pupils judged by teachers to have insufficient language skills did not participate. Those who
participated and needed extra help, had research assistants reading, explaining and rewording the questions. The study was approved by the University’s Ethics Review Board.

Measures

Peer nominations

Youths could nominate a maximum of 20 peers, ten peers they hung out with in school and ten peers they hung out with after school. Based on the origins of the nominated peers, the numbers of Swedish and immigrant peers were calculated for all participants, separately for the in-school and out-of-school settings. We used outgoing nominations as an indicator of peer groups. Unreciprocated friendships can be important for individuals’ development as it is possible to identify with and be influenced by people even though they do not return the nomination (Kiesner, Cadinu, Poulin, & Bucci, 2002).

Setting-specific adaptation

Adaptation was measured as positive and negative in-school adaptation, in terms of school satisfaction and bullying, and as positive and negative out-of-school adaptation, in terms of normative activities with peers and normbreaking activities with peers.

In-school adaptation.

School satisfaction. As an indicator of positive adaptation in school, school satisfaction was assessed by asking the participants to respond to five questions about their school adjustment. The items concerned enjoying school; describing the relationship to school; feeling forced to go to school; feeling satisfied with their own work; and doing their best in school. Responses were given on a 5-point Likert scale (Kerr & Stattin, 2000). The Cronbach’s alpha was .76.

Bullying. To assess negative adaptation in school, we asked the participants three questions about bullying someone in school during the last year. The items concerned saying nasty things; mocking or making fun of someone in an unpleasant way; hitting, kicking or attacking someone; and excluding someone. The response options ranged from 1 (no, it has not happened) to 4 (yes, it has happened several times a week). The scale was adapted from a bullying instrument developed by Alsaker & Brunner (1999). It showed a reliability of .78.
Out-of-school adaptation.

**Normative activities with peers.** Concerning positive adaptation outside of school, participants were asked to report on normative activities they had done together with their peers during the last month. The five items concerned watching TV; studying with peers; talking on the phone/chatting; using the computer; and hanging out in town (Kakihara, Tilton-Weaver, Kerr, & Stattin, 2010). The response format was 1 (no) to 3 (yes, several times). The alpha reliability was .70.

**Normbreaking activities with peers.** This was the measure of negative adaptation outside of school. It consisted of five activities done together with peers: shoplifting; drinking alcohol; keeping secrets from parents; talking about illegal things; and doing other things for which one could be caught by the police (Kakihara et al., 2010). The items concerned the last month and the responses ranged from 1 (no) to 3 (yes, several times). The scale showed good internal consistency, with a Cronbach’s alpha of .85.

**Plan of analysis**

We used a person-oriented approach to investigate the patterns of peer formations of immigrant youths, with the measures of numbers of Swedish/immigrant friends in school and Swedish/immigrant friends out of school as the criterion variables for cluster analyses. First, we examined the patterns for the two settings separately and then across the two settings. All cluster analyses were also performed separately for first- and second-generation immigrants, but as no differences were found in the cluster solutions, these results are not reported. After creating the clusters, we examined differences between them in terms of in-school and out-of-school adjustment and performed analyses of variance (ANOVAs) both within each setting and across settings. Because gender differences have been found in ethnic homophily (e.g., Hallinan & Smith, 1985) these analyses were performed separately for boys and girls. All dependent variables were examined for mean differences between genders and between first- and second-generation immigrants. As no significant differences were found in these two respects, these results are not presented.

**RESULTS**

**Patterns of in-school and out-of-school peer formations**

What do the patterns of immigrants’ in-school and out-of-school peer groups look like? To answer this question, we performed two hierarchical cluster analyses, one for the in-school setting with the number of immigrant friends in
school and number of Swedish friends in school as criterion variables, and another cluster analysis for the out-of-school setting based on the number of immigrant and Swedish friends out of school. The in-school analysis resulted in a three-cluster solution, and these clusters are shown to the left in Figure 1. The first cluster was characterized by low numbers of both immigrant and Swedish friends in school. Thus, this cluster was labelled “Few friends in school” \((n = 115)\). The second cluster showed high numbers of Swedish friends in school and was thus labelled “Swedish friends in school” \((n = 22)\). The third cluster was characterized by high numbers of immigrant friends in school and was labelled “Immigrant friends in school” \((n = 37)\). The out-of-school analysis also resulted in a three-cluster solution similar to the in-school patterns. The three out-of-school friendship clusters, shown to the right in Figure 1, were: “Few friends out of school” \((n = 89)\), “Swedish friends out of school” \((n = 37)\) and “Immigrant friends out of school” \((n = 48)\).

**Relation between in-school and out-of-school adaptation**

In order to answer the second research question, if there were differences in in-school and out-of-school adaptation between the clusters in the two settings, we performed ANOVAs with the three clusters in each setting as the independent variable and the positive and negative adaptation measure in each setting as the dependent variable. The results are presented separately for boys and girls in Table 1. For girls, the results show no differences between the three clusters in either setting. For boys, however,
TABLE 1
Results of ANOVAs examining in-school friendship formation differences on in-school adaptation and out-of-school friendship formation differences on out-of-school adaptation, for boys and girls separately (n = 174)

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Few friends</td>
<td>Swedish friends</td>
<td>Immigrant friends</td>
<td>F-values (df)</td>
<td>Few friends</td>
<td>Swedish friends</td>
<td>Immigrant friends</td>
<td>F-values (df)</td>
</tr>
<tr>
<td><strong>In school</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School adjustment</td>
<td>3.05 (0.65)</td>
<td>2.76 (0.52)</td>
<td>2.68 (0.74)</td>
<td>2.35 (2, 79)</td>
<td>2.70 (0.66)</td>
<td>2.95 (0.66)</td>
<td>2.90 (0.65)</td>
<td>1.13 (2, 81)</td>
</tr>
<tr>
<td>Bullying</td>
<td>1.33a (0.52)</td>
<td>1.57a (0.52)</td>
<td>1.69b (0.63)</td>
<td>3.16* (2, 80)</td>
<td>1.35 (0.71)</td>
<td>1.33 (0.86)</td>
<td>1.13 (0.47)</td>
<td>0.68 (2, 81)</td>
</tr>
<tr>
<td><strong>Out of school</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normative activities</td>
<td>1.73a (0.62)</td>
<td>2.26b (0.45)</td>
<td>2.21b (0.48)</td>
<td>6.96** (2, 62)</td>
<td>2.07 (0.65)</td>
<td>2.28 (0.44)</td>
<td>2.27 (0.46)</td>
<td>1.44 (2, 77)</td>
</tr>
<tr>
<td>Normbreaking activities</td>
<td>1.40a (0.64)</td>
<td>1.21a (0.32)</td>
<td>1.73b (0.76)</td>
<td>3.60* (2, 62)</td>
<td>1.30 (0.43)</td>
<td>1.42 (0.53)</td>
<td>1.46 (0.62)</td>
<td>0.81 (2, 75)</td>
</tr>
</tbody>
</table>

*Note: Across rows, means with different subscripts differ significantly in SNK comparisons. *p < .05; **p < .01.
the cluster “Immigrant friends” stands out in both settings. Boys with high numbers of immigrant friends in school bullied others significantly more than boys with Swedish friends in school. Also in the out-of-school setting, having high numbers of immigrant friends was related to problematic adaptation, in terms of significantly higher levels of normbreaking activities. The immigrant boys with few friends out of school had significantly fewer normative activities outside of school. In short, as an immigrant boy, having many immigrant friends, regardless of setting, was related to poorer adaptation.

Patterns across the in-school and out-of-school setting

To test how the peer formations in each setting were related to each other, the frequencies of the three clusters in the two settings were first compared using the EXACON program for single-cell contingency table analysis (Bergman & El-Khoury, 1987). In this program, observed and expected patterns are compared, and those observed significantly more often than expected by chance are referred to as “types,” whereas those observed less often than expected by chance are termed “antitypes” (Bergman & El-Khoury, 1999). These results are presented in Table 2 and show that having the same cluster membership in both settings is typical, while it is atypical to have many Swedish friends in one setting and many other immigrant friends in the other setting.

We also carried out another hierarchical cluster analysis (Ward’s method) in order to examine the patterns of friendship formations of immigrant youths across the in-school and out-of-school settings. The four

<table>
<thead>
<tr>
<th>In-school cluster</th>
<th>Out-school cluster</th>
<th>Observed</th>
<th>Expected</th>
<th>Ratio obs./exp.</th>
<th>Hypergeometric probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few friends</td>
<td>Few friends</td>
<td>66</td>
<td>58.52</td>
<td>1.13</td>
<td>.0160</td>
</tr>
<tr>
<td>Few friends</td>
<td>Swedish friends</td>
<td>24</td>
<td>24.45</td>
<td>0.98</td>
<td>.5023</td>
</tr>
<tr>
<td>Few friends</td>
<td>Immigrant friends</td>
<td>25</td>
<td>31.72</td>
<td>0.79</td>
<td>.0137</td>
</tr>
<tr>
<td>Swedish friends</td>
<td>Few friends</td>
<td>9</td>
<td>11.25</td>
<td>0.80</td>
<td>.2120</td>
</tr>
<tr>
<td>Swedish friends</td>
<td>Swedish friends</td>
<td>12</td>
<td>4.68</td>
<td>2.56</td>
<td>.0002 T**</td>
</tr>
<tr>
<td>Swedish friends</td>
<td>Immigrant friends</td>
<td>1</td>
<td>6.07</td>
<td>0.16</td>
<td>.0052 A*</td>
</tr>
<tr>
<td>Immigrant friends</td>
<td>Few friends</td>
<td>14</td>
<td>18.93</td>
<td>0.74</td>
<td>.0502</td>
</tr>
<tr>
<td>Immigrant friends</td>
<td>Swedish friends</td>
<td>1</td>
<td>7.87</td>
<td>0.13</td>
<td>.0006 A**</td>
</tr>
<tr>
<td>Immigrant friends</td>
<td>Immigrant friends</td>
<td>22</td>
<td>10.21</td>
<td>2.15</td>
<td>.0001 T***</td>
</tr>
</tbody>
</table>

Note: T=significant type; A=significant antitype. *p < .05; **p < .01; ***p < .001; Bonferroni adjusted (p=.0056).
nomination variables, number of immigrant friends and number of Swedish friends in both settings, were entered and a six-cluster solution was produced (explained 68.7% of the error sums of squares). The six clusters are shown in Figure 2. The first cluster was characterized by low scores on all four criterion variables and was thus labelled “Few friends across settings” ($n=68$). The second cluster showed high numbers of Swedish friends in school, thus was thus labelled “Swedish friends in school” ($n=12$). Cluster three showed high numbers of immigrant friends in school, thus the label “Immigrant friends in school” ($n=13$). The fourth cluster displayed high numbers of immigrant friends both in school and out of school and was labelled “Immigrant friends across settings” ($n=18$). The fifth cluster was characterized by high scores on Swedish friends in both settings, and was thus labelled “Swedish friends across settings” ($n=25$). The last and sixth cluster was characterized by high numbers of immigrant friends out of school and was labelled “Immigrant friends out of school” ($n=38$).

How are these peer formations related to in-school and out-of-school adaptation? To answer this we performed a set of ANOVAs, one for each of the four adaptation measures, separately for boys and girls. The results are presented in Table 3. As can be seen, the boys in the cluster “Immigrant friends in school” did significantly more normbreaking activities with their friends than the boys in all other clusters. We also found that these boys bullied others in school more than other boys. Thus, having many immigrant friends in school seems to be associated with poor adaptation both in school and out of school. Again, we found no differences between
TABLE 3
Results of ANOVAs examining peer group formation differences, on measures of in-school and out-of-school adaptation, for boys (n = 85) and girls (n = 89) separately

<table>
<thead>
<tr>
<th></th>
<th>Few friends across settings</th>
<th>Swedish friends in school</th>
<th>Immigrant friends in school</th>
<th>Immigrant friends across settings</th>
<th>Swedish friends across settings</th>
<th>Immigrant friends out of school</th>
<th>F-values (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School adjustment</td>
<td>2.92 (0.71)</td>
<td>2.77 (0.62)</td>
<td>2.63 (0.80)</td>
<td>2.52 (0.63)</td>
<td>3.16 (0.45)</td>
<td>3.16 (0.62)</td>
<td>1.83 (5, 76)</td>
</tr>
<tr>
<td>Bullying</td>
<td>1.40_a (0.60)</td>
<td>1.67_a (0.53)</td>
<td>1.91_b (0.69)</td>
<td>1.70_a (0.48)</td>
<td>1.42_a (0.62)</td>
<td>1.18_a (0.31)</td>
<td>1.38^ (5, 77)</td>
</tr>
<tr>
<td>Normative activities</td>
<td>1.82 (0.68)</td>
<td>2.00 (0.60)</td>
<td>2.60 (0.57)</td>
<td>2.20 (0.41)</td>
<td>2.25 (0.49)</td>
<td>2.00 (0.53)</td>
<td>1.48 (5, 59)</td>
</tr>
<tr>
<td>Normbreaking activities</td>
<td>1.45_a (0.65)</td>
<td>1.00_a (0.00)</td>
<td>2.90_b (0.14)</td>
<td>1.86_a (0.71)</td>
<td>1.25_a (0.35)</td>
<td>1.38_a (0.64)</td>
<td>4.02** (5, 59)</td>
</tr>
<tr>
<td><strong>Girls</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School adjustment</td>
<td>2.76 (0.63)</td>
<td>3.03 (0.70)</td>
<td>3.04 (0.64)</td>
<td>2.81 (0.65)</td>
<td>2.59 (0.67)</td>
<td>2.73 (0.69)</td>
<td>0.69 (5, 78)</td>
</tr>
<tr>
<td>Bullying</td>
<td>1.37 (0.72)</td>
<td>1.52 (1.12)</td>
<td>1.25 (0.70)</td>
<td>1.05 (0.13)</td>
<td>1.28 (0.45)</td>
<td>1.20 (0.73)</td>
<td>0.49 (5, 78)</td>
</tr>
<tr>
<td>Normative activities</td>
<td>2.09 (0.62)</td>
<td>2.07 (0.68)</td>
<td>1.87 (0.57)</td>
<td>2.28 (0.45)</td>
<td>2.19 (0.40)</td>
<td>2.46 (0.46)</td>
<td>1.80 (5, 74)</td>
</tr>
<tr>
<td>Normbreaking activities</td>
<td>1.27 (0.46)</td>
<td>1.43 (0.63)</td>
<td>1.29 (0.44)</td>
<td>1.60 (0.63)</td>
<td>1.39 (0.54)</td>
<td>1.44 (0.54)</td>
<td>0.63 (5, 72)</td>
</tr>
</tbody>
</table>

*Note: Across rows, means with different subscripts differ significantly at p < .05 in SNK comparisons. ^p < .10; *p < .05; **p < .01.
the clusters in either form of adaptation for girls. In sum, the answer to the question about the friendship formations of immigrant youths across settings seems to be that having many immigrant friends as an immigrant boy is related to high problematic adaptation, both in school and out of school.

To rule out age differences, all ANOVAS were performed controlling for age. The results were almost identical to those already reported. The only difference found when controlling for age was that the boys in the cluster “Immigrant friends in school” did significantly more normative activities with peers ($p = .10$) than the other clusters.

**DISCUSSION**

To date, little is known about the peer formations of immigrant youths in different contexts. In this study, we conducted person-oriented analyses to explore the patterns of immigrant youths’ friendship formations in and across the two settings where they spent most of their time, in school and in the neighbourhood. Based on indications in previous literature, we expected to find that the friendship formations would differ between the settings and that the immigrant youths would have more Swedish friends in the integrated school setting and more immigrant friends in the segregated out-of-school setting. No cluster showed the expected pattern, and having Swedish friends in one setting and immigrant friends in the other setting was rare. On the contrary, in our sample more youth than expected by chance had the same type of friendships in both settings, which contradicts previous research (Kiesner et al., 2004; Spiel, 2009). How can this be explained?

It seems that most youths in our sample formed their friendships in one setting and then kept them across settings. This indicates that youths do not view the settings as isolated parts, but there is an interplay going on between settings. The town where the study was conducted is small, and the neighbourhoods might not be as isolated as we assumed. It is possible that the immigrant youths are involved in out-of-school activities like sports, and that they meet friends there from other neighbourhoods. Thus, the immigrant youths in our sample might not be truly separated out of school even though they live in segregated areas. It would be interesting to see if these results would apply to segregated neighbourhoods in bigger cities.

It is striking that no cluster showed high levels of both immigrant and Swedish friends simultaneously, in either setting or across settings. The clusters showed either high levels of Swedish friends in school or high levels of immigrant friends in either setting, but never both in one setting. In acculturation models, social relationships are one key dimension (Phinney, Berry, Vedder, & Liebkind, 2006) and are often used to validate a person’s acculturation strategy (Berry, Kim, Power, Young, & Bujaki, 1989). If the
friendship formations are seen as a validation of the youths’ acculturation strategies, the youths in this study seem to have assimilation or separation strategies, and not the integrated strategy that has been found to be the most common strategy (Berry, 1997, 2001; Berry, Phinney, Sam, & Vedder, 2006). Most acculturation studies have, however, not considered the characteristics of the context in which acculturation is taking place (Birman, Trickett, & Buchanan, 2005), or the different acculturative demands that different contexts put on immigrants (Birman et al., 2002). It is thus possible that the reason that we find no cluster with high levels of both non-immigrant and immigrant friends in either of the two settings is simply that there are no demands to be integrated. In neither the in-school nor the out-of-school setting do the immigrant youths in our sample feel a need to be integrated.

The current study adds to existing knowledge by also examining how membership in different friendship formations is related to adaptation. Even though we found few differences, the ones we found were consistent across analyses. They show that being an immigrant boy with many immigrant friends is related to adaptation problems, especially in school. It seems that when the boys make an active choice to have only immigrant friends it is related to poor adaptation. According to social contact theory (Allport, 1954) contact in itself is not enough to establish positive relationships between individuals with different backgrounds (Hamm, 2000), which is shown in our results as these boys choose immigrant friends even though they are in a minority in school. Adolescents with strongly positive attitudes towards their own ethic group may avoid cross-ethnic friendships (Hamm, 2000) and seek to maintain an ethnically homogenous circle of friends as a way of strengthening their ethnic identity (Peshkin, 1991). Thus, this group of boys might strongly identify with being an immigrant, and by only seeking other immigrants as friends they affirm their identities as immigrants.

The question is why we only find these effects for boys? One explanation is that the outcome variables capture male more than female activities. The dependent variables measuring poor adaptation, bullying, and normbreaking behaviours, might be behaviours more characteristic of poor adaptation for boys than for girls (e.g., Steinberg, 2008). However, the measures used were constructed to capture both male and female behaviours. The measure of bullying, for example, consisted of both physical forms, such as hitting, and emotional forms, such as social exclusion. Also, this study concerns behaviours that are closely tied to a specific setting, while internalizing behaviours are states that span across settings. For example, if you are depressed you are not depressed in only one setting, but in all settings in which you spend time. Thus, the gender differences found in this study cannot be explained by the choice or construction of the outcome measures.
A more plausible explanation of the results might have to do with the question of what comes first, the friendship formations or the adaptation problems? It seems possible that segregated boys have other problems that prevent them from adapting. Our results show that these boys do a lot of normbreaking activities with their peers out of school. Living in the segregated, low-SES neighbourhood as they do, it is likely that these activities are unstructured and offer little adult supervision, and, as such, might promote deviant behaviours (Mahoney et al., 2001). Thus, it is not clear whether the friendship formations cause the adaptation problems, or the adaptation problems cause these boys to seek out friendships with segregated peer groups. Further attention should be paid to this group of boys in order to fully understand the direction of effects.

One might argue that when immigrant youths choose their peers it is not an active choice. Discrimination and the immigrants’ length of residence and lack of fluency in the native language might make it problematic for immigrant youths to choose natives as their peers, even if they wanted to (Silbereisen & Titzmann, 2007). In the present study, we used unreciprocated nominations. We asked the immigrant youths to nominate the peer groups that they themselves thought they belonged to and spent time with in those settings. Hence, the nominated peers were subjectively important to the individuals, rather than being determined by an outside observer. Thus, although the immigrants in the current study might or might not objectively be part of the group they nominated, they identified and spent time with the group, which is what this study is about.

A limitation of this study is that we considered immigrants as one homogenous group, although the youths were from a variety of ethnic backgrounds. The town where the study was conducted is small and it is not possible to make comparisons between distinct ethnic groups, as the immigrant group is too diverse and too small. We believe that this is the case for many immigrants in Europe today, as the ethnic groups are seldom as distinct as in the USA. To our knowledge, no study has explored whether immigrants tend to choose other immigrants as peers, even if they are not from the same ethnicity before choosing peers from the host country. Research has shown that immigrants in Sweden mix across ethnic boundaries (Ålund, 1997), and are less ethnically homogeneous than immigrants in the USA (Pettersson, 2003). This suggests that immigrant status, per se, might be more important for Swedish immigrants when selecting their friends than the same ethnic background. We conclude that knowledge about how immigrant youths form their friendships when the immigrant group consists of a mix of many cultural backgrounds is much needed when dealing with European immigrants.

Despite the mentioned limitations, the study has several strengths. A first strength is the use of person-oriented analyses. Using a person-oriented
approach made it possible to identify naturally occurring groups of individuals according to the pattern they show with respect to our four criteria variables (Bergman & Magnusson, 1997). Also, by using a person-oriented approach we could compare those with many friends and those with few friends, as they belong to different clusters. Although there are many reasons for not nominating any friends other than having no friends, our results are interesting in that they show that having few or no friends is not as bad as having many immigrant friends. Thus, the use of a person-oriented approach gave richer information than had we used a variable-oriented framework.

The foremost strength with the current study is that it is novel in its approach. It is the first study that examines differences in peer group formations in and outside of school as a function of the composition of each setting. It is the first to show a relation between the peer formations of immigrant youths in and outside of school and their adaptation in the two settings. In doing so, we argue that the interplay between peer groups and adaptation across settings should be viewed as systems, and not isolated parts. This is in line with Bronfenbrenner’s ecological model of development (e.g., 1977, 1986), which emphasizes the importance of thinking of youths as embedded in systems of relationships.

The current results have implications for further research and practical integration work in our societies. We have shown the negative consequences for immigrant boys who actively seek to form homogenous immigrant groups. Schools and neighbourhoods are the two settings where youths spend the most time with their peers. The goal must be mixed peer groups both in school and out of school, which is the true meaning of integration (Silbereisen & Titzmann, 2007). In this study we have shown that if the aim of true integration is to be accomplished in our multicultural societies, youths must be viewed as embedded in systems of multiple settings and work must be done in order for immigrant and native youths to become friends in all settings.

Manuscript received 8 September 2009
Revised manuscript accepted 25 January 2011
First published online 21 April 2011

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Peer selection and influence of delinquent behavior of immigrant and nonimmigrant youths: Does context matter?

Ylva Svensson,¹ William J. Burk,² Håkan Stattin,¹ and Margaret Kerr¹

Abstract
This study examines selection and influence related to delinquent behaviors of immigrant and nonimmigrant adolescents attending three majority-immigrant schools (54% to 65.2% immigrant) and four minority-immigrant schools (11.1% to 25.1% immigrant) in one community. The sample included 1,169 youths (50.4% male; 24.2% immigrant) initially between the ages of 12 and 16 years (M = 13.92, SD = 0.85). Results showed that immigrant and nonimmigrant adolescents were similar to their peers on delinquent behaviors, and peer selection and social influence operated in a complementary manner to explain this similarity. The processes did not differ between immigrants and nonimmigrants or between school contexts, suggesting that immigrants do not differ from nonimmigrants on either the prevalence or the processes behind delinquency.

Keywords
adolescence, delinquency, friendship selection, immigrant and nonimmigrant youth, peer influence

The image of immigrant youths in Europe today is often stereotypic. Media reports of riots in suburban areas of large western European cities have portrayed immigrants as angry, stone-throwing youths who set cars on fire and attack the police and fire fighters. As research and official records support that immigrants and youths from deprived areas are overrepresented in crime statistics (Brottsförebyggande rådet, 2005, report no. 17), it is easy to get the impression that delinquency is primarily a problem of immigrant youths living in segregated areas, only committing crime together with other immigrants. However, does this image correspond to reality? Can the delinquency of immigrant youths be explained by processes in their peer networks and by the contexts in which these peer formations exist? The aim of the present study was to address these questions by examining peer selection and influence processes related to delinquency of immigrant and nonimmigrant youths in schools in which immigrants were the majority and in schools in which immigrants were the minority.

Why look at peer processes when exploring delinquency?
Peers play an important role in the development of most behaviors during adolescence, and especially in the development of delinquency. Most delinquent acts are done together with peers (Kiesner, Kerr, & Stattin, 2004), and several studies have shown that peers tend to be similarly delinquent (Dishion, Spracklen, Andrews, & Patterson, 1996; Kiesner, Cadinu, Poulin, & Bucci, 2002; Snijders & Baerveldt, 2003). This similarity is referred to as homophily, and describes the tendency for friends to be more similar to each other than non-friends (Cairns & Cairns, 1994; Kirke, 2004). Two processes underlie homophily: peer selection and social influence (Burk, Steglich, & Snijders, 2007; Kandel, 1978). Peer selection refers to the process of people selecting peers based on pre-existing similarities (Byrne, 1971). Social influence, also termed socialization or assimilation, refers to the process of peers becoming more similar over time due to indirect and direct forms of social influence (Kandel, 1978).

Both social influence and selection have been found to play roles in the development of delinquency during early and mid-adolescence (Burk, Kerr, & Stattin, 2008; Burk et al., 2007). More importantly, the two processes have been suggested to work in a complementary manner. Psychosocial theories (Erickson, Crosnoe, & Dornbusch, 2000; Oetting & Beauvais, 1987) suggest that youths initiate friendships with similarly-delinquent peers (selection). Once friendships are established, youths within peer clusters will influence each other to become more similar in delinquent behaviors. Thus there are reasons to expect that both selection and influence effects operate in the development of delinquency with initial selection and subsequent influence.

Why would the peer processes related to delinquency differ between immigrants and nonimmigrants?
It has previously been suggested that there are no reasons to assume that the social processes behind delinquency would differ between immigrants and nonimmigrants (Moffitt, 2006). However, even though the processes might be the same, there might be reasons

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to expect differences between immigrants and nonimmigrants in the salience of these processes. In terms of selection effects, the probability of choosing deviant peers could be higher for immigrants for two reasons. First, immigrants more often live in disadvantaged neighborhoods where both the frequency and severity of delinquency are higher than in privileged neighborhoods (Sampson & Groves, 1989). Thus, there are more delinquent youths in these kinds of neighborhoods and the chances of choosing a delinquent peer might be higher. Second, for immigrants there is an additional selection effect, as several studies have shown a preference for intraethnic over interethnic peer formations (Baerveldt, van Duijn, Vermeij, & van Hemert, 2004; McPherson, Smith-Lovin, & Cook, 2001; Titzmann, Silbereisen, & Schmitt-Rodermund, 2007). As immigrants have been found to be, on average, more delinquent than nonimmigrants, this increases the chance that immigrants, by choosing other immigrants as their peers, would be more likely than nonimmigrants to choose delinquent peers. In terms of influence, previous findings suggest that immigrants might be more inclined to be influenced by peers because of their lower status. Immigrants and ethnic minorities often rank themselves lower on subjective social status than do majorities (Reitzel et al., 2010) and, as perceived popular adolescents are most influential (Wilson, Karimpour, & Rodkin, 2011), immigrant youths might be more easily influenced than nonimmigrant youths. To summarize, the social processes of selection and influence in the development of delinquency might be the same regardless of immigration status; however, previous findings suggest that these processes might be more pronounced among immigrant than nonimmigrant youths.

**Why look at context differences?**

There are also reasons to assume that these processes would depend on the context in which they occur. A study on ethnically-diverse classrooms showed that selection among classmates was affected by the proportion of minority members in the neighborhood, with majority members showing less in-group homophily and minority members showing more in-group homophily with increasing numbers of minority members in the neighborhood (Vermeij, van Duijn, & Baerveldt, 2009). This indicates that selection processes vary with the ethnic composition of the context. If and how influence effects vary with the context has, to our knowledge, not been investigated previously.

In the current study we explore the processes related to the delinquency of immigrant and nonimmigrant adolescents in two different school contexts. This is done in four steps. First, we test whether immigrant adolescents engage in more delinquent behaviors than nonimmigrants in different school contexts (immigrant majority and immigrant minority). Based on previous studies we expect immigrant youths and youths in disadvantaged neighborhoods to be more delinquent. Second, we ask whether immigrant adolescents are more likely than nonimmigrant adolescents to select delinquent peers; and third, we explore whether immigrant adolescents are more likely than nonimmigrant adolescents to adopt the delinquent behaviors of their peers. These two questions have not been explored previously. Existing literature indicates that immigrant youths are more delinquent on average than nonimmigrant youths, and immigrant youths have been found to prefer other immigrants as their friends. Therefore we expect to find that immigrant youths are more likely than nonimmigrant youths to select delinquent peers and to be more influenced by their peers’ behavior than nonimmigrant youths. Finally, we ask whether peer selection and social influence processes related to delinquency differed between schools in which immigrants were in the majority and those in which they were in the minority. Based on previous studies on the importance of the context, we anticipated contextual differences, but refrained from formulating specific predictions regarding context.

Because of a growing body of research showing that first-generation immigrant adolescents show more positive adaptation than later generation immigrants and natives (e.g., Sam, Vedder, Ward, & Horenczyk, 2006; van Geel & Vedder, 2010), we ran all analyses separating first and second generation immigrants.

**Method**

**Participants and procedure**

The sample was from a cohort-sequential study conducted in a city in central Sweden (around 132,000 inhabitants). The target sample consisted of all students attending classrooms of grades 7 to 9 in seven public schools. At Time 1 (T1) a total of 1,559 youths participated and 1,485 youths participated one year later at Time 2 (T2). At the start of the project in 2007, 18.4% of participants reported immigrant backgrounds. This proportion was higher than the average in Sweden at that time (17.3%; Statistiska centralbyrån [SCB], 2010). The town is segregated with some public housing areas that are largely composed of immigrants and some areas with very few immigrants. The seven schools were chosen on the basis of their ethnic composition with the aim of having a wide range of different schools. This resulted in three schools with a majority of immigrant youths (54.3% to 65.2%), and four schools with a minority of immigrant youths (11.1% to 25.1%).

The analytic sample consisted of 1,169 youths (590 males and 579 females) with data from both waves. The number of youths included at each school ranged from 73 (43% of the total sum of pupils in the school) to 323 (94% of the total number of pupils). At the onset of the study, participants ranged in age from 12 to 16 years ($M = 13.92, SD = 0.85$). In the analytic sample, 323 youths were either born in a country other than Sweden (first generation = 46.4%) or had both parents born outside of Sweden (second generation = 53.6%). Their countries of origin were Middle Eastern countries (38.4%), former Yugoslavian countries (18.3%), Somalia and Eritrea (11.8%), Eastern Europe (5%), Asian countries (6.8%), Western Europe (1.2%), and other countries (18.5%). Forty youths did not indicate their countries of origin.

Questionnaires were administered by trained research assistants during regular school hours. No school staff members were present. The participants were assured of the confidentiality of their answers. Participation was voluntary and the adolescents themselves could decline participation in the classroom. The parents could withdraw permission for their children’s participation at any time by sending in a prepaid post card (1% did so). All pupils, regardless of whether they were participating or not, had to stay in the classroom for one and a half hours. In the middle of the session there was a break with refreshments, and most pupils had sufficient time to take additional breaks. Participants who needed more time or got tired could get an additional hour and a half or could finish the questionnaires when the research assistants visited the school a second time. To avoid fatigue effects, half of the sample started with one questionnaire and the other half started with another questionnaire. The order of the scales was also
counterbalanced between each wave. The questionnaires were administered in Swedish, but youths in need of help due to language difficulties had research assistants reading and explaining each question to them. The study was approved by the Regional Research Ethics Committee.

**Measures**

**Peer nominations.** Participants were asked to nominate three important peers in their schools. These could be friends, siblings, or romantic partners, but in the present study only those nominated as friends were included. The youths were also asked to nominate a maximum of eight peers who they considered belonged to their peer group in school. Thus, every youth could nominate a maximum of 11 peers at each time point. These nominations were used to delineate peer networks at both measurements separately for each school.

**Immigration status.** Participants were asked if they were born in Sweden, in a Nordic country, or in another country. Youths born in other countries were asked to write down their countries of birth. The same procedure was done for the countries of birth of their mothers and fathers separately. Two immigration status groups were distinguished: minority youths who were not born in Nordic countries (Finland, Norway, and Sweden) or for whom both parents were born outside of the Nordic countries; and majority youths who were of Swedish and Nordic descent.

**Delinquency.** The scale consisted of 16 questions about whether the youths had engaged in delinquent behaviors during the past year. The questions were about: shoplifting; vandalizing public or private property; taking money from home; creating graffiti; breaking into a building; stealing from someone’s pocket or bag; buying or selling stolen goods; stealing a bike; being in a physical fight in public or carrying a weapon; and stealing a car, moped or motorcycle (Kerr, Stattin, & Berk, 2010). The responses ranged from 1 (never) to 5 (more than 10 times). The scale showed good internal consistency, with Cronbach’s alphas of .81 at T1 and .92 at T2. Individual mean level differences were examined using the average score of all items. Six categories were created from the average scores for the actor-based models. These six categories were constructed in an identical manner for T1 and T2 and designed to include a meaningful number of adolescents in each category. The first category included adolescents who did not report any delinquent activities during the previous year. The remaining categories reflect adolescents with delinquency scores ranging from: 1.01 to 1.24, 1.25 to 1.40, 1.41 to 1.60, 1.61 to 2.00, and 2.01 to 5.00, respectively.

**Subjective socioeconomic status.** The youths were asked five questions about their experiences of the economic situations in their families. The items and response options were: “How much money does your family have in comparison to other families?” (1 = We have a lot less money than other families to 5 = We have a lot more money than other families); “Has it happened this semester that you could not go with your friends because you could not afford it?” (1 = No, probably not to 3 = Yes); “How is the economic situation in your family?” (1 = My parents often complain about not having enough money to 3 = My parents never complain about not having enough money); and “If you would compare with others in your class, do you have more or less money with which to buy things?” (1 = I have much less money than others in my class to 5 = I have a lot more money than others in my class). The items were all coded so that high values indicated high subjective socioeconomic status (SES) and the scale was created from the mean of the five items. The scale had a Cronbach’s alpha of .71 at both time points.

**Plan of analyses**

We initially compared majority and minority youths in immigrant-minority and immigrant-majority schools on numbers of peers, delinquency, and SES. We also compared the two types of schools on characteristics of the peer networks.

The primary analyses utilized actor-based models of network and behavioral dynamics which are implemented in the Simulation Investigation for Empirical Network Analyses (SIENA) software program (Snijders, Steglich, Schweinberger, & Huisman, 2007). These models estimate parameters describing changes in peer ties (network dynamics) and changes in individual delinquency (behavioral dynamics) using a continuous-time Markov Chain Monte Carlo (MCMC) approach (Snijders et al., 2007). Specifically, all changes in friendship ties and individual delinquent behaviors observed between the two measurements are modeled as the most probabilistic sequence of events explaining the total amount of observed changes. That is, these models include two dependent variables, one describing changes in peer ties and one describing changes in delinquency, which are modeled simultaneously with each depending on the other. The complexity of the resulting model did not allow for explicit calculation of parameter values, so estimated parameters and their standard errors were derived from iterative computer simulations. Readers interested in more detailed descriptions of these models and statistical formulations of parameters are referred to Snijders and colleagues (Snijders et al., 2007; Snijders, van de Bunt, & Steglich, 2010).

We focused on parameters estimating the effects of immigration status and delinquency on changes in peer formations and the effects of immigration status and friends’ delinquency on changes in adolescent delinquent behaviors. Specifically, three parameters describe the effects of immigration status on peer dynamics: immigration status ego describes the effect of the nominator’s immigration status on selection, immigration status alter describes the effect of nominees’ immigration status on selection, and same immigration status describes the tendency for adolescents to nominate peers with the same immigration status. Three similar parameters describe the effects of delinquency on peer dynamics. An interaction between the immigration status of the nominator and delinquency of nominee (immigration status ego × delinquency alter) was also included to test whether immigrant youths were more inclined than nonimmigrant youths to choose delinquent peers. Another three parameters described the effects of immigration status and peers’ delinquency on individual delinquent behavior dynamics. Effect from immigration status describes differences between immigrants and nonimmigrants on changes in delinquency, delinquent influence (average similarity parameter) describes peers’ delinquent behaviors as predictors of change in delinquency, and the interaction between immigration status and delinquent influence tests whether immigrants are more susceptible to peer influence than nonimmigrants.

Identically-specified models were performed for each school-based peer network. To simplify presentation of these results, we
aggregated the results of the seven models using the multi-group option within SIENA (see Snijders et al., 2007). Parameters were estimated separately for the three immigrant-majority schools and the four immigrant-minority schools, and each parameter was tested to determine differences between the two school contexts (Ripley, Snijders, & Preciado, 2011).

### Results

#### Descriptive analyses

The first research question concerned differences in delinquency between immigrants and nonimmigrants in the two types of schools and between immigrants in majority-immigrant schools and immigrants in minority-immigrant schools. The lower part of Table 1 presents means and standard deviations of delinquency across waves, immigration status groups, and school context, as well as the number of adolescents in each of the delinquency categories created for the actor-based models. The results of a 2 (immigration status) × 2 (school context) × 2 (time) repeated measures analysis of variance (ANOVA) revealed a within-subjects effect of time, $F(1,1037) = 19.14, p < .001$, the average mean level of adolescent delinquency increasing from T1 to T2. All between-subjects effects were nonsignificant.

Table 1 also displays descriptive statistics of the structural characteristics of the network. As can be seen, the number of ties and the average number of ties for participants (average degree) increased from T1 to T2. About two-thirds of all nominations were reciprocated, and roughly half of the youths became peers with their peers’ peers in triadic relationships (transitivity). At both time points approximately 75% of all ties were between individuals in the same immigration status group (about 20% between immigrants and 55% between nonimmigrants), with the remaining 25% of ties including roughly equal numbers of nonimmigrants nominating immigrants and of immigrants nominating nonimmigrants. While the number of intra- and interethnic ties somewhat differed as a function of school context, the percentage of intraethnic ties was similar in the minority-immigrant and majority-immigrant schools (77% and 71%, respectively).

#### Peer network and delinquent behavior dynamics: Total sample

We performed a series of actor-based models to test selection effects based on immigrant status (same immigration status) and delinquency (delinquency similarity selection), while controlling for the network structure and homophily of gender, age, and SES. The results, presented in Table 2, indicate that both selection effects were statistically significant across the seven models. That is, similarity between relationship partners on immigration status and delinquency uniquely predicted changes in friendship. In order to test the second research question, whether there was a difference in how immigrant and nonimmigrant youths selected their peers, we included an interaction between delinquency and the immigration status (delinquency alter × immigration status ego). This interaction was nonsignificant in our model, indicating that immigrant

### Table 1. Descriptive statistics of peer networks and delinquent behaviors

<table>
<thead>
<tr>
<th></th>
<th>Minority-immigrant</th>
<th>Majority-immigrant</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1</td>
<td>T2</td>
<td>T1</td>
</tr>
<tr>
<td><strong>Network characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td>817</td>
<td>817</td>
<td>352</td>
</tr>
<tr>
<td>Number of ties</td>
<td>4,074</td>
<td>4,619</td>
<td>2,311</td>
</tr>
<tr>
<td>Nonimmig → nonimmig</td>
<td>2,871</td>
<td>3,351</td>
<td>584</td>
</tr>
<tr>
<td>Nonimmig → immig</td>
<td>455</td>
<td>513</td>
<td>348</td>
</tr>
<tr>
<td>Immig → immig</td>
<td>238</td>
<td>232</td>
<td>1,029</td>
</tr>
<tr>
<td>Immig → nonimmig</td>
<td>510</td>
<td>523</td>
<td>350</td>
</tr>
<tr>
<td>Average degree</td>
<td>4.04</td>
<td>4.64</td>
<td>3.08</td>
</tr>
<tr>
<td>Reciprocity index</td>
<td>.66</td>
<td>.70</td>
<td>.62</td>
</tr>
<tr>
<td>Transitivity index</td>
<td>.53</td>
<td>.49</td>
<td>.49</td>
</tr>
</tbody>
</table>

#### Note

The average degree describes the average number of adolescents’ friendship nominations. The reciprocity index describes the proportion of ties that are reciprocated; the transitivity index describes the proportion of triadic relationships exhibiting transitive network closure. Delinquency ranges from 1 (none) to 5 (more than 10 times).
youths were not more or less likely to select a delinquent peer than nonimmigrant youths. Thus, youths selected peers on the basis of same immigration status and similar levels of delinquency, but immigrant youths were not more likely to select delinquent peers than nonimmigrant youths.

In the third research question we asked whether immigrant adolescents were more likely than nonimmigrant adolescents to adopt the delinquent behaviors of their peers. We tested the influence effect of delinquency (average similarity; influence), which was statistically significant, indicating that peers’ delinquency predicted changes in youth delinquency. In order to test whether there was a difference between immigrants and nonimmigrants in susceptibility of peer influence, we included an interaction between immigration status and friends’ delinquent behaviors (delinquency similarity × immigration status). That interaction was nonsignificant, indicating that immigrant youths were not more likely than Swedish youths to be influenced by their peers’ delinquent behaviors. Thus, youths adopted the behaviors of their peers, but immigrant youths were not more susceptible to delinquent peer influence than the nonimmigrant youths.

### Peer network and delinquent behavior dynamics: Comparing school contexts

The fourth research question was whether peer selection and social influence processes related to delinquency differently between the two school contexts. The results are presented in Table 3. As can be seen, the two groups of schools were more similar than dissimilar. None of the homophilic processes of primary interest differed significantly between the two types of schools. That is, selection effects of immigration status and of delinquency in minority-immigrant and majority-immigrant schools did not differ significantly in magnitude. The interaction effects were not significantly different in the two types of schools, indicating that immigrant youths were not more likely to select a delinquent peer in majority-immigrant schools than in minority-immigrant schools. Looking at the influence effect of delinquency, we could see that, even though there was a significant influence effect only in the minority-immigrant schools, the difference between the two types of schools was not significant. Thus, selection processes related to immigration status and delinquency and deviant peer influence did not significantly differ between schools with a majority of immigrant youths and in schools with a majority of nonimmigrant youths. The only differences between the two types of schools that were related to our research questions were the ways immigration status was related to activity and popularity. Immigrant youths in the minority-immigrant schools received significantly more nominations (immigration status alter) and nominated significantly more peers (immigration status ego) than immigrants in the majority-immigrant schools.

Additional actor-based models were also performed to examine differences between first and second generation immigrants. Specifically, we included parameters that examined whether first and second generation immigrants received more peer nominations, nominated more peers, and were more likely to select peers with the same immigration status as nonimmigrants (alter, ego, and similarity parameters, respectively). Interactions also tested whether first and second generation immigrants were more likely than nonimmigrants to select delinquent peers (immigration status ego ×

### Table 2. Parameter estimates for the actor-based model estimating delinquent selection and influence across all schools (N = 1,169)

<table>
<thead>
<tr>
<th></th>
<th>Est.</th>
<th>SE</th>
<th>t-ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network dynamics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigration status ego</td>
<td>.110</td>
<td>.044</td>
<td>2.50</td>
<td>.012</td>
</tr>
<tr>
<td>Immigration status alter</td>
<td>.070</td>
<td>.039</td>
<td>1.79</td>
<td>.099</td>
</tr>
<tr>
<td>Same immigration status (selection)</td>
<td>.184</td>
<td>.034</td>
<td>5.41</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Delinquency ego</td>
<td>.037</td>
<td>.024</td>
<td>1.54</td>
<td>.123</td>
</tr>
<tr>
<td>Delinquency alter</td>
<td>.028</td>
<td>.022</td>
<td>1.27</td>
<td>.203</td>
</tr>
<tr>
<td>Delinquency similarity (selection)</td>
<td>.427</td>
<td>.164</td>
<td>2.60</td>
<td>.009</td>
</tr>
<tr>
<td>Delinquency alter × immigration status</td>
<td>−.346</td>
<td>.230</td>
<td>1.50</td>
<td>.133</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdegree</td>
<td>−3.916</td>
<td>.053</td>
<td>−73.89</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>2.379</td>
<td>.053</td>
<td>44.69</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Transitive triplets</td>
<td>.512</td>
<td>.017</td>
<td>30.12</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>3-cycles</td>
<td>−.589</td>
<td>.031</td>
<td>−19.00</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Same classroom</td>
<td>1.141</td>
<td>.034</td>
<td>33.56</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Same gender</td>
<td>.754</td>
<td>.037</td>
<td>20.38</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Same age</td>
<td>.583</td>
<td>.096</td>
<td>6.07</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Same SES</td>
<td>.068</td>
<td>.048</td>
<td>1.42</td>
<td>.157</td>
</tr>
<tr>
<td><strong>Delinquency dynamics</strong></td>
<td></td>
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Note. Statistical significance of parameter estimates is determined with a t-ratio, which is obtained by dividing the unstandardized estimate (Est.) by the standard error (SE).
delinquency alter) and whether first and second generation immigrants were more likely to adopt their friends’ delinquent behaviors (average similarity × immigrant status). While some differences between first and second generation immigrants emerged in terms of the number of peer nominations sent and received (second generation immigrants nominated more friends and received more nominations than nonimmigrants in the immigrant-majority schools), all four interactions testing differences between first and second generation immigrants on selection and influence related to delinquency were nonsignificant in all seven schools and those examining the immigration status ego and alter were nonsignificant in immigrant-minority and immigrant-majority schools, respectively.

**Discussion**

The overall aim of this study was to investigate whether the delinquency of immigrant youths could be explained by processes in their social networks and whether these processes were moderated by the social status of the immigrants. Previous studies have shown that the social processes behind the delinquency of immigrant youths are similar to the processes of nonimmigrant youths. Our results also suggest that the ethnic composition of the school does not moderate the homophilic processes, because the selection and influence effects were not significantly different between majority-immigrant schools and minority-immigrant schools. Furthermore, we did not detect any significant differences between first and second generation immigrants on selection and influence related to delinquency. These findings both support and extend previous literature.

Our findings support theories that suggest similarity between peers’ delinquency can be attributed to both selection and influence effects (Erickson et al., 2000; Oetting & Beauvais, 1987). Youths in our study, both immigrant and nonimmigrant, selected similarly-delinquent peers and were influenced by their peers’ delinquent behavior. The novel features of this study were that immigrant youths did not seem to be more likely to select delinquent peers, nor were they more influenced by delinquent friends than were nonimmigrant youths. These results confirm Moffitt’s (2006) proposition about there being no differences in the social processes behind delinquency between immigrants and nonimmigrants. However, we also extended this idea, showing that the social processes behind delinquency did not differ as a function of the ethnic composition of the school. In the overall model we found no differences in selection and influence effects between schools where immigrants were in a majority and schools where they were in a minority. That is, immigrant youths growing up in disadvantaged contexts are not more inclined to choose delinquent peers or to be influenced by their delinquent peers. In other words, neither the levels nor the processes of delinquency could be connected to the social status of the immigrants. Previous
results have shown that immigrants and minority youths perceive themselves to have lower relative positions in the social hierarchy (Reitzel et al., 2010). However, our results suggest that this depends on the composition of the context, as immigrants in schools with few other immigrants were found to be both more active and more popular than immigrants in schools with many other immigrants. Thus immigrant youths seem to be more active and central in peer networks of schools in which they are the minority.

There are important practical implications of the results showing no differences between immigrant and nonimmigrant youths on the social processes of the development of delinquency. Knowing the processes behind a behavior is important for planning prevention and interventions programs. The programs to fight delinquency will be differently designed depending on the underlying processes. If selection is behind delinquency, interventions must focus on preventing the establishment of antisocial peer formations, but if influence is the process behind delinquency, the focus must be on breaking already-existing antisocial peer formations. In the current study both homophilic processes were found for delinquency and, thus, both types of interventions are needed. More importantly, the social processes were found to be the same for immigrants and non-immigrants, indicating that intervention programs could be the same for all youths, regardless of immigration status.

Some limitations of the present study should be mentioned. First, the average levels of delinquency are low in the current sample. This might be due to the fact that, by only including youths with nomination data from both time points, we might have missed out on some of the most delinquent youths with the highest school absence. However, the sample is community based as the aim of the study was to explore the social processes related to delinquency in a representative sample. Also, we utilized an analytic technique that models delinquency as a categorical dependent variable to accommodate the distributional properties of this measure. Second, the possible nominations were restricted to within the schools. This was done because not all schools in the town were included in the study. As most delinquent acts take place after school and with peers outside of the school context, it is possible that, by restricting the nominations to the schools, we missed important information about networks and delinquency (Kerr, Stattin, & Kiesner, 2007; Kiesner et al., 2004). However, most peers are captured by in-school nominations (Ennett & Bauman, 1994), and our results are similar to those of studies using similar analytic techniques on Swedish adolescent peer networks that included both in-school and out-of-school peers (Burk et al., 2007, 2008).

Despite these limitations, the study has several strengths. The first strength is the unique sample. It includes schools of various ethnic compositions from a single community followed for two consecutive years, and we used nominations of all schoolmates, not only within the same grade or class. A further strength is the use of peers’ self-reports of their own delinquency. Commonly, respondents’ perceptions of their peers’ behaviors are used. However, perceptions and actual behaviors do not always match (Berndt & Keeffe, 1995), as adolescents often overestimate the degree of similarity between themselves and their peers (Erickson et al., 2000). This could lead to overestimations of the strength of peer influence (Aseltine, 1995). By using the nominated peers’ own reports of their delinquency we could be sure we were not overestimating the effects in our results. Finally, when examining social networks it is important to estimate selection and influence simultaneously, and with social network analyses this is possible without excluding a majority of relationships in order to ensure independence of observations. Also, SIENA makes it possible to control for various selection effects. Thus, effects found in this study are over and above the selection effects of age, gender, and socioeconomic status. Hence this study offers new and unique insights into the social processes behind the development of delinquency.

In conclusion, the development of delinquency among immigrants does not seem to be different from that of nonimmigrants, or different in contexts with high proportions of immigrants, than in contexts with few immigrants. These results have implications for interventions to reduce delinquency. Delinquency is not only a problem of immigrants in segregated, low-SES areas, and interventions cannot be limited to that group. As the social processes behind the development of youth delinquency seem to be the same regardless of immigration status and context composition, the interventions can be universal. In fighting youth delinquency, we need to broaden the view of immigrant youths and youths in deprived areas as the main target groups.

Acknowledgments
We acknowledge the support of the teachers, principals, and pupils who participated in the study.

Funding
This study was supported by grants from the Swedish Council for Working Life and Social Research.

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Running head: SCHOOL AS A SAFE HAVEN

School as a Safe Haven in Disadvantaged Neighborhoods

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This research was funded by a grant from the Swedish Research Council to Håkan Stattin and Margaret Kerr. We acknowledge the support of the teachers, principals, and pupils who participated in the study.

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Abstract

We proposed that for adolescents living in disadvantaged neighborhoods schools environments could create a contrast to the out-of-school settings. We proposed two contrast effects, in which experiences that are better than expected are perceived as even better. First, we hypothesized that adolescents in disadvantaged neighborhoods would perceive their schools as more open to their influence than youths in advantaged neighborhoods, due to the contrast with the typical home environments in these neighborhoods. Second, compared with adolescents in advantaged neighborhoods, we expected adolescents in disadvantaged neighborhoods to perceive their schools as secure and safe due to the contrast they would make to their more threatening and dangerous neighborhoods. Because these contrast effects, we predicted that youths in disadvantaged neighborhoods would perceive their school as safe havens to a higher extent than other youths. We tested the idea using a sample of 1,390 adolescents living in disadvantaged and advantaged neighborhoods ($M_{age} = 14.34, SD = 1.01$). Both contrast effects were supported at the neighborhood level. Compared with adolescents in advantaged neighborhoods, those in disadvantaged neighborhoods perceived their schools as allowing more student influence and as equally safe. Adolescents in disadvantaged neighborhoods also perceived their schools as safe havens more than adolescents from advantaged neighborhoods. The results were significant independent of immigrant status, but they were more salient for immigrant adolescents in these neighborhoods. In conclusion, for adolescents in disadvantaged neighborhoods, a school setting perceived as safe and open to influence can function as a contrast to the out-of-school settings.

*Keywords:* school, neighborhood, adolescents, influence, safety, contrast effects
School as a Safe Haven in Disadvantaged Neighborhoods

Schools of the Western world today face the tasks of getting students to feel good at school and to be motivated and interested in schoolwork. This is especially challenging in disadvantaged neighborhoods, where schools are often described as dangerous places with high levels of victimization and violence (Menifield, Winfield, Homa, & Cunningham, 2001). The problems in these schools are due, it is thought, to the problems in the neighborhoods in which they are located. According to social disorganization theory (Shaw & McKay, 1942), the lack of structural factors and stability in these neighborhoods results in low public order and weak control over the inhabitants. The lack of structural factors in the neighborhoods is then thought to “leak into” the schools located within them (Mateu-Gelabert & Lune, 2003). As schools normally reflect the composition of the neighborhoods in which they are located (Ennett, Flewelling, Lindrooth, & Norton, 1997), the adolescents in these neighborhoods who experience social problems will also attend schools in the neighborhoods in which they live. What, then, should schools in these neighborhoods do to increase the chances that students will feel good at school and be motivated and interested in schoolwork?

Intuitively, one might think that exerting greater control over students in schools would be effective in dampening problems in schools, and indeed it might. It might not be the best strategy, however, for making students feel good about school and want to learn. Previous research suggests that this would be better accomplished with an open, democratic climate. Students have been found to have the highest motivation, learning, and well being in schools and classrooms in which they feel autonomous, competent, and emotionally supported, and where they can influence what happens in their classrooms (Zimmer-
Gembeck, Chipuer, Hanisch, Creed, & McGregor, 2006; Niemiec & Ryan, 2009). Further, because one of the developmental tasks of adolescence is to develop an independent identity, stage-environment fit theory (Eccles et al., 1993) suggests that adolescents will appreciate environments where they feel autonomous and influential. In sum, these results suggest that rather than exerting more control over students, schools might do well to see that students have a feeling that their school is democratic in that they have a fair amount of influence in issues of importance to them.

In disadvantaged neighborhoods, adolescents’ perceptions of their schools might be so different from what they had expected as to create a contrast effect. A contrast effect, in adaptation level theory (Helson, 1964), concerns how people’s judgments of their experiences are influenced by their expectations (Brickman, Coates, & Janoff-Bulman, 1978). In particular, a contrast between an experience and prior expectations can make the judgment of that experience more extreme than it would have been without the prior expectations. For instance, if a child is told over and over by an older sibling how difficult algebra will be, and then the child does not experience algebra as particularly difficult, his or her judgment of how easy the course was should be more extreme than if the older sibling had not created the expectation of difficulty. In short, if one expects an experience to be really bad, and then it is not so bad, one will tend to judge the experience as more positive than if the original expectation had not been there.

How might a contrast effect take place for adolescents in disadvantaged neighborhoods? In disadvantaged neighborhoods, adolescents’ experiences at home and in the neighborhood might affect their perceptions of the school environment. To begin, these neighborhoods are often less safe than advantaged neighborhoods (Leventhal & Brooks-
Gunn, 2000), and adolescents undoubtedly perceive the threats. At home, adolescents in disadvantaged neighborhoods might experience relatively low degrees of influence over issues that concern them. These neighborhoods are often largely populated by immigrant groups (Lamborn, Dornbusch, & Steinberg, 1996), for whom authoritarian parenting is relatively normative (Dornbush, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Lamborn et al., 1996). In addition, parents in dangerous neighborhoods tend to use authoritarian, controlling strategies to protect their adolescents from harm (Grolnick, 2003; Lamborn et al., 1996). Both the threats in the neighborhood and the lack of influence at home should affect adolescents’ expectations about the school environment and, as such, could create a contrast effect for adolescents in disadvantaged neighborhoods. Specifically, concerning threats in the neighborhood, these experiences should prompt negative expectations about the school environment, as it is part of the neighborhood. If adolescents then experience the school as less threatening, or safer, than they expected, they should perceive it as safer than they would have without the negative neighborhood experiences. Likewise, the experience of low influence in the family should prompt negative expectations about influence in the school environment for adolescents in disadvantaged neighborhoods. Then, if they experience the school as allowing them more influence than they expected, their judgments of the amount of influence they have at school should be more positive than if they had not had the home experience. Adolescents in advantaged neighborhoods, on the other hand, should expect the same high degree of influence at school that they have at home, and should not experience this contrast effect. Thus, adolescents in disadvantaged neighborhoods should end up judging their schools as more democratic and less threatening than they would have without the prior negative expectations.
To our knowledge, contrast effects have always been conceptualized as arising from individuals’ perceptions of their unique experiences, but in our conceptualization neighborhoods are the units that adolescents use in creating expectations about their schools. Our reasoning is based on prior theorizing about the role of neighborhoods in adolescents’ educational achievement. Some have suggested that in disadvantaged neighborhoods characteristics such as social instability (Shaw & McKay, 1942) and poverty (Wilson, 1987) affect the perceptions of all adolescents in the neighborhood, creating low expectations for future success and feelings of hopelessness. These theorists argued, further, that disadvantaged neighborhoods do not offer adolescents role models or good, viable ideas about ways to escape poverty (i.e., getting an education, getting a job). We believe a similar reasoning can be applied to this issue. For instance, concerning influence in the family, it may be a very different thing to have low influence in one’s family when most families one knows have the same arrangement than when most families one knows allow adolescents more influence. Specifically, when nearly everyone one knows has the same family arrangement, then it might seem like the way the world works, whereas if most other families have a different arrangement, then one’s own family arrangement might be seen as idiosyncratic. Adolescents would be more likely to make predictions about school based on a view that low influence is the way the world works rather than on a view that low influence is an idiosyncratic arrangement. Thus, when adolescents form expectations about the school context, they might use their perceptions of the conditions in their neighborhood as a whole as well as the conditions in their own unique families. In short, contrast effects might be seen at the neighborhood level. A similar argument could be made about threats in
the neighborhood. In sum, we propose that a contrast effect will be based on neighborhoods, rather than adolescents’ unique experiences.

If adolescents in disadvantaged neighborhoods experience a contrast effect, this could have broader implications for their positive feelings about school. In particular, these adolescents might perceive school as a safe haven, meaning a place where they: enjoy being, feel safe and comfortable, know their opinions are valued, and have good relations with adults. We expect to find that adolescents living in disadvantaged neighborhoods will experience their schools as safe havens, due to the contrast they make to the out-of-school experience of high threats and low influence in family decisions. For adolescents living in advantaged neighborhoods, this contrast effect should not exist, and they will not experience their schools as safe havens to the same extent.

One alternative explanation that should be ruled out is ethnicity. As ethnic minorities and immigrants are overrepresented in disadvantaged neighborhoods (Lamborn et al., 1996) any contrast effects we find might not be due to neighborhood, per se, but to immigrant status. Minority students have been found to feel safer, experience less peer harassment, and exhibit higher self-worth in more ethnically diverse schools, due to a more even distribution of numerical power across ethnic groups in these schools than in more homogenous schools (Juvonen, Nishina, & Graham, 2006). The schools in disadvantaged neighborhoods in Europe (where this study is taking place) are typically ethnically diverse, thus minority adolescents may feel safer in these schools than in the more homogenous schools in the advantaged neighborhoods. This might create a stronger contrast between the in-school and the out-of-school settings for adolescents with immigrant backgrounds in disadvantaged neighborhoods than other adolescents in these neighborhoods. Consequently, being an
immigrant and attending school in a disadvantaged neighborhood might create a stronger contrast effect than living in a disadvantaged neighborhood alone.

In the present study, we examined the perceptions that adolescents in disadvantaged and advantaged neighborhoods have of their schools. We proposed that the perceptions of adolescents in disadvantaged neighborhoods would be subject to a contrast effect, in which good things are perceived as better if one expects them not to be so good. In this case, the school environment would be perceived as more open to influence and safer than the out-of-school environment, from which adolescents’ expectations would be derived. Because of the contrast effect, adolescents would perceive the school more positively than they would have without the comparison with the disadvantaged neighborhood conditions. In short, their perceptions of the school might be as positive as or more positive than those of adolescents in advantaged areas. Although we predicted effects on the neighborhood level, we first examined the evidence for individual-level effects. Individual-level effects would be seen if those who experienced low influence at home and high threats in their neighborhoods, regardless of neighborhood, perceived their schools as more positive than those who did not have the same negative out-of-school experiences. Then, we examined the predicted neighborhood-level contrast effects. These would be seen if adolescents in disadvantaged neighborhoods, on average, perceived their schools more positively than those in advantaged neighborhoods. We reasoned that one implication of a contrast effect would be the perception of school as a safe haven. Thus, we examined neighborhood differences in these perceptions and whether they were explained by perceptions of influence at school. Finally, we tested the alternative explanation that the effects could be explained by immigrant status rather than neighborhood.
Method

Participants

Participants were part of a study conducted in a town in central Sweden with about 132,000 inhabitants. The overall aim of the study was to examine how adolescents perceive their life situations in the three contexts where they spend the most time: at home, in school and in their neighborhoods. Adolescents in grades 7 through 9 (ages 12-17) were targeted, and the target sample (all pupils listed in the school records) was 1,561 adolescents. About twenty percent of the sample had an immigrant background (both first and second generation), which was higher than the national figure at that time (17.3%; SCB, 2010). The unemployment rate of about 4.6% was lower than the national figure (6.1%). The town is segregated with some public housing areas largely composed of immigrants and other areas where few immigrants live. This kind of housing segregation, where different migrant groups live separated from the majority, is common in Sweden and has increased rapidly during recent years (Berry, Westin, Virta, Vedder, Rooney, & Sang, 2006).

The analytic sample of the current study consisted of 1,390 adolescents (658 boys and 732 girls). They ranged in age between 12 and 17 years ($M_{age} = 14.34, SD = 1.01$). Of the analytic sample, 213 youths were themselves born outside of Sweden (first-generation immigrants). Most of the immigrant adolescents originated from the former Yugoslavian counties (24.6%); Middle Eastern countries such as Iran, Iraq, Kurdistan, and Syria (38.6%); Eastern African countries such as Eritrea and Somalia (21.8%); European Countries such as Poland and the UK (4.2%); Asian countries (Vietnam and Thailand; 3.5%); and South American countries such as Colombia and El Salvador (1%). The remaining 6.3% originated from countries too diverse to form groups of reasonable size.
The sample was divided into two groups based on the average mean income in their neighborhoods, which were defined as the uptake area of each school. The first group comprised 1,075 adolescents, living in four advantaged neighborhoods (annual mean income \( \approx 37,000 \text{ USD} \)), and the second group included 315 adolescents living in two disadvantaged neighborhoods (annual mean income \( \approx 25,000 \text{ USD} \)). The annual mean income for the whole community was 35,000 USD. The two groups were significantly different in terms of mean income \( (t(4) = 4.06, p = .015) \). In schools in advantaged neighborhoods 15.9% of the sample had immigrant backgrounds, and in the schools in disadvantaged neighborhoods 59.6% were immigrants. The adolescents who were living in advantaged neighborhoods attended schools in advantaged neighborhoods and the adolescents living in disadvantaged neighborhoods attended schools in disadvantaged neighborhoods.

**Procedure**

Adolescents filled out questionnaires in their classrooms during regular school hours. Trained research assistants informed the participants about the kinds of questions included and how long it would take to answer them. The students had 1.5 hours to finish the questionnaires, and they were told that their participation was voluntary and that their answers would be handled confidentially. Parents were informed about the study in advance by mail and could withdraw their children from participating at any time by sending in a prepaid postal card (about 1% of all parents did so). Thus, only adolescents who actively chose to participate and whose parents agreed to their participation took part in the study. The questionnaires were administered in Swedish. Adolescents with language difficulties had research assistants reading and explaining the questions to them, and were allowed
additional time to finish if needed. The Regional Research Ethics Committee approved the study, measures, and procedures.

Measures

**In-school measures.** In agreement with the safe haven concept, the defining features of perceiving the school as a safe haven in this study were that the pupils felt safe, were satisfied with their school experiences, had good relationships with their teachers, felt free to disclose their feelings and thoughts in their classes, and longed for school during holidays and weekends.

**School satisfaction.** School satisfaction was assessed with six items, measuring the extent to which adolescents liked and felt comfortable in school (Kerr & Stattin, 2000). The items were “How do you like school?” (Response options: 1 = A lot to 5 = Not at all) “Do you do your best in school?” (1 = Most often to 5 = Almost never) “Does school feel like a burden?” (1 = Very often to 5 = Almost never) “How would you describe the relationship between yourself and school?” (1 = As best friends to 5 = As enemies) and ”Are you satisfied with your school work?” (1 = Most often to 5 = Almost never). The reliability was adequate (α = .76).

**Good teacher relationships.** We asked the adolescents twelve items about their relationships with their teachers (Kerr & Stattin, 2000). Example items were: “Do the teachers at school care about the students?” “If you have problems with something at school, can you talk to your teachers about it?” “Are your teachers there for you if you want to talk about things that are not school-related?” “Are the teachers at school fair toward the students?” and “Do the teachers give their students praise when they are doing a good job?” The response items ranged from 1 (Yes, all of them or almost all of them) to 4 (No, hardly
any of them), and all items were coded so that high values indicated good teacher relationships. The scale showed good reliability, with a Cronbach’s alpha of .92.

**Disclosure in class.** Three items were used to assess how much the adolescents told about themselves in school. The items were: “Do you usually talk about your thoughts and feelings in class?” (1 = *Very often* to 5 = *Almost never*) ”Do you like telling things in class?” (1 = *A lot* to 5 = *Not at all*) and ”Do you usually spontaneously tell about your own experiences in class?” (1 = *Yes, absolutely* to 5 = *Not at all*). The items were reversed so that high values indicated much disclosure in class. The scale showed good reliability (α = .81).

**Longing for school.** The scale assessing longing for school was a construct developed for this study. The two items used were: “On a Sunday, how do you feel about going to school the next day?” (1 = *Bad, I want to stay home and have more free time* to 3 = *Great, I long for school and friends*) and “During a long school break, how often do you long for school?” (1 = *Do not long for school at all* to 3 = *A large part of the break*). The two-item scale had a Cronbach’s alpha of .68.

**Perceived influence in school decisions.** To assess the adolescents’ experiences of their schools as open to their influence, we asked six questions: “Are students allowed to take part in planning and discussing what will be taught at school?” “Is it possible for students to influence which days you will have homework and tests?” “If students have objections about things, do the teachers take them into account?” “Do you think that students can influence planning and teaching?” “Do you think that the teachers and the students respect each other and listen to each other’s opinions?” and “Do teachers take
students’ opinions seriously? (Response options: 1 = Not at all to 5 = Yes, absolutely). The reliability was good (\(\alpha = .85\)).

**Feeling safe.** To assess where adolescents felt safe we asked the question: “In some places you can enjoy yourself and you feel safe and secure. In other places, you feel anxious and insecure. Where do you feel safe and secure?” The response options were “I feel secure in school but not outside of school,” “I don't feel secure in school but I feel secure outside of school,” “I feel secure both in school and outside of school,” and “I don't feel secure in school or outside of school.”

We used four scales to capture adolescents’ exposure to threats, personal and sexual harassment, and bullying at school.

**Threats in school.** Four items assessed adolescents’ experiences of threats in school: “Have you ever been afraid of other students during break time?” “Are there groups of students that hang around at school and threaten others?” “Have you ever seen things at school that made you concerned?” and “Have there been problems with noisy students, graffiti, locker break-ins, or similar things at your school?” The responses were given on a five-point Likert scale (1 = No, to 5 = Yes, often). The four items produced a Cronbach’s alpha of .81.

**Sexual harassment at school.** Seven items addressed the adolescents’ experiences of being sexually harassed (Witkowska, 2005). Example items were: “Has anyone commented on your looks or your body in a sexual way that you don’t like?” “Has anyone spread rumors of a sexual nature about you?” “Has anyone made jokes or made gestures in a way that is sexual, and that you perceive as negative?” Responses were given on a 5-point
Likert scale, ranging from “Never” to “Daily”. The scale showed good internal consistency with a Cronbach’s alpha of .82.

**Personal harassment at school.** To assess personal harassment we used a scale of five items developed for this study through focus group interviews in the schools. Example items were: “Has anyone commented or made fun of you or the way you look in a derogatory way?” and “Has anyone told you that you need to change in order to be accepted—for example lose weight, change style, or the way you are?” The response format ranged from 1 (No/Never) to 5 (Daily/Almost every day). Cronbach’s alpha was .79.

**Victim of bullying in school.** Three items made up the scale of being a victim of bullying at school. This measure was originally developed for a cross-national survey of bullying among pupils in grades 4 through 9 in Switzerland and Norway (Alsaker & Brunner, 1999). The items were: “Have you been mocked, teased in an unpleasant way, or has anyone said nasty things to you at school or on the way to or from school (this semester)?” “Have you been beaten, kicked, or assaulted in a nasty way by anyone at school or on the way to or from school (this semester)?” and “Sometimes one can be alienated by someone or some people and not be allowed to hang out with them. Has this ever happened to you (this semester)?” The response format ranged from 1 (No, it has not happened) to 4 (Yes, it has happened several times a week). The scale showed adequate internal consistency (Cronbach’s α = .70).

**Out-of-school measures.**

**Perceived influence in family decisions.** Adolescents responded to six statements concerning their perceived influence in the family (Stattn, Persson, Burk, & Kerr, 2008). They were: “Your parents listen to you when decisions are to be made in the family,” “You
feel like you have influence and are taking part in things that happen in your family,” “Your parents let you take part when you are going to decide something in the family;” “If you have other points of view, then these viewpoints can change decisions taken in the family,” “Your parents ask you when decisions are to be made in the family,” and “When you are having a discussion at home, you usually get to finish what you have to say.” Response options ranged from 1 (Don’t agree at all) to 4 (Agree totally). The Cronbach’s alpha of the scale was .90. The content of the Perceived influence in family decisions scale and Perceived influence in school decisions scale were designed to mirror each other as closely as possible.

**Neighborhood threat.** The scale of neighborhood threat was developed for this study, and assessed by nine items concerning the adolescent’s feelings of safety in their neighborhoods. The items were; “I have seen things when I’ve been out at night that have got me concerned,” “Problems such as noisy people, graffiti, and burglary are quite common,” “There are adults that I want to avoid,” “The police are often in the area,” “The adults living here don’t seem to care about us adolescents,” “I feel unsafe when I am out in the evenings,” “I have been threatened, hit, or chased this semester,” “There are groups of adolescents that run around and are threatening to others,” and “The neighbors don’t talk to each other when they meet.” The response options ranged from 1 (Don’t agree) to 3 (Agree completely). The scale showed adequate reliability (α = .79).

**Plan of Analyses**

Because of the nested structure of the data—pupils from advantaged neighborhoods went to the schools located within their neighborhoods and pupils from disadvantaged neighborhoods attended the schools that were located in their neighborhoods—we
performed analyses of variance with a nested design. The six schools made up a between-groups factor with six levels, and these were nested under the second factor, which was type of neighborhood (advantaged or disadvantaged). This nested design enabled us to ensure that all effects tested were between the two types of neighborhoods. For the analyses of the last research question concerning adolescents with immigrant backgrounds, we included immigration status as a level nested under the neighborhoods, thereby differentiating between immigrants and non-immigrants in the two types of neighborhoods.

**Results**

**Preliminary Analyses**

First we verified that the safe haven measures of school were distinct from the negative experiences of physical threat, harassment, and victimization in school, rather than being the opposite ends of one continuum. We performed a principal components analysis with varimax rotation. It supported a two-factor solution ($r = -.31, p < .001$), with the first factor capturing threatening experiences at school (threats in school, sexual harassment, personal harassment, and being a victim of bullying) and the other factor capturing feelings of school as a safe haven (longing for school, disclosure in classroom, school satisfaction, and good teacher relations). The factor loadings ranged between .52 and .84 with low cross-loadings. We concluded that the safe haven measures were distinct from the measures of threats at school.

**Differences between Adolescents in Advantaged and Disadvantaged Neighborhoods in their Perceptions of Threats in their Neighborhoods and their Influence in Family Decisions.**
To establish that adolescents in advantaged and disadvantaged neighborhoods did, indeed, differ on problematic home and neighborhood conditions, we looked at mean differences between the adolescents in the two types of neighborhoods on the family and neighborhood measures. We used nested ANOVAs. The results showed that adolescents living in disadvantaged neighborhoods perceived significantly less influence in family decisions, $F(1, 11.74) = 23.89, p < .001$. The mean for a standardized measure of influence at home was .09 ($SD = 0.92$) for the adolescents from advantaged neighborhoods and -.19 ($SD = 1.12$) for the adolescents from disadvantaged neighborhoods. Adolescents in advantaged neighborhoods also perceived their neighborhoods as significantly less threatening than adolescents in disadvantaged neighborhoods, $F(1, 6.15) = 39.09, p < .001$. The means were -.15 ($SD = .92$) and .36 ($SD = 1.02$), respectively, for the adolescents in advantaged and disadvantaged neighborhoods. As expected, then, the adolescents living in disadvantaged neighborhoods experienced more negative family and neighborhood situations.

**Test of the Contrast-effect Hypothesis.**

Although our prediction was that we would see contrast effects on the neighborhood level rather than the individual level, we began by testing for individual-level effects. To do so, we trichotomized the measures of adolescents’ perceptions of influence at home and perceptions of neighborhood threats (30%-40%-30% splits) and compared the groups on perceptions of influence at school. A contrast effect would be suggested if those who were low on influence at home perceived higher levels of influence at school than would be expected from the other groups’ perceptions. As shown in Table 1, the results did not suggest a contrast effect. Adolescents who were low, average, or high on influence at home
differed on influence at school, and posthoc analyses showed that all three groups were significantly different from each other on the measure of influence at school. But, the effect was basically linear; the group that experienced low influence at home showed no tendency toward inflated perceptions of influence at school. Also the adolescents who perceived low, average, or high levels of threats in their neighborhoods differed on threats at school. Again, posthoc analyses showed that all three groups were significantly different from each other on the measure of threats at school, and again, those who experienced high levels of neighborhood threats showed no tendency toward inflated perceptions of safety at school. Finally, using ANOVAs with a nested design we controlled for type of neighborhood. As shown in Table 1, the differences between the groups were almost identical to the differences before controlling for neighborhood type. In conclusion, the results were not consistent with a contrast effect at the individual level.

We then turned to the test of contrast effects on the neighborhood level. On average, adolescents in disadvantaged neighborhoods experienced lower mean levels of influence at home than those in advantaged neighborhoods. For adolescents in disadvantaged areas, the higher levels at school should create a contrast effect in which influence at school should be perceived as higher than it would have been without the experience of low influence at home. Since the adolescents in advantaged areas did not experience low levels of influence at home, they should not show inflated perceptions of influence at school. Concerning threats in school, we also predicted a contrast effect. Previous studies have shown that youth living in troubled neighborhoods have more behavior problems, like more aggressive behaviors, than youth living in advantaged neighborhoods (Beyers, Loeber, Wikström, & Stouthamer-Loeber, 2001). As youth brings their behaviors with them into the school setting, schools in disadvantaged neighborhoods would expose their students to higher levels
of victimization and school violence than schools in advantaged neighborhoods (Mateu-Gelabert & Lune, 2003). It is reasonable to believe, however, that the structure and supervision built into the school setting should dampen some of these problems, so the levels of bullying and aggression at school should be lower than in the neighborhood. Theoretically, for adolescents experiencing high levels of threats in the neighborhood, the lower levels experienced in school should create a contrast effect in which threats in school should be perceived as less than they would have been without the experience of threats in the neighborhood. In this case, then, the smaller the difference in reported school threats between advantaged and disadvantaged neighborhoods, the more the results would be in line with a contrast effect. This because a small or nonsignificant difference would suggest that adolescents in disadvantaged neighborhoods were not perceiving more threats in school than adolescents in advantaged neighborhoods.

Using an ANOVA with schools nested under neighborhoods, we predicted adolescents’ perceptions of influence at school from their perceptions of threats in their neighborhoods and type of neighborhood—advantaged or disadvantaged. Similarly we predicted adolescents’ perceptions of threats at school from their perceptions of threats in their neighborhood and type of neighborhood. The results are reported in Table 2. As shown in the table, both perceptions of influence at home and type of neighborhood were significant predictors of influence at school. In agreement with our prediction of a contrast effect, adolescents in disadvantaged neighborhoods perceived more influence at school ($M = .37$) than adolescents from advantaged neighborhoods ($M = -.15$). Also as shown in the table, perceptions of threats at school were predicted by perceptions of threats in the neighborhood, but not by type of neighborhood. Thus, adolescents from advantaged and disadvantaged neighborhoods perceived their schools as equal in threats. This similarity
might be seen as consistent with a contrast effect since the adolescents in disadvantaged neighborhoods perceived considerably higher threats in their neighborhood than adolescents from advantaged neighborhoods. Overall, the results show support for a contrast effect on the neighborhood level.

**Implications for Feelings about School.**

Are adolescents in disadvantaged neighborhoods more likely than those in advantaged neighborhoods to perceive school as a safe haven, as we predicted? To answer this, we carried out two separate analyses.

First, we looked at neighborhood differences on the measure of school as a safe haven. With an ANOVA using a nested design we examined differences between adolescents from advantaged and disadvantaged neighborhoods on the safe-haven factor score. The results showed significant differences between adolescents in the two types of neighborhoods, $F(1, 5.01) = 13.80, p = .014$. Adolescents in disadvantaged neighborhoods perceived their schools as a safe haven to a higher extent than adolescents in advantaged neighborhoods (disadvantaged: $M = .29 (SE = .06)$; advantaged: $M = -.11 (SE = .03)$). Thus, in addition to perceiving higher degrees of influence than adolescents in advantaged neighborhoods, adolescents in disadvantaged neighborhoods also reported seeing their school as a safe haven more than those in advantaged neighborhoods.

In a second look at whether adolescents in disadvantaged neighborhoods see their schools as a safe haven more than those in advantaged neighborhoods, we used an additional indicator of adolescents’ perceptions of school as a safe haven. The indicator was a categorical variable of adolescents’ reports of feeling safe in different contexts (in school but not outside of school; outside but not in school; safe in both contexts; not safe in either
We examined the proportions of adolescents from the two types of neighborhoods falling into each of these four categories using the EXACON program (Bergman & El-Khoury, 1987). In EXACON, observed and expected frequencies for each predictor-outcome combination are compared, and those observed significantly more often than expected by chance are labelled *Types*, whereas those observed significantly less often than expected by chance are labelled *Antitypes* (Bergman & El-Khoury, 1999). As seen in Table 3, with a Bonferroni-adjusted $p$-value, in advantaged neighborhoods more adolescents than expected by chance reported that they felt safe both in school and outside of school, whereas feeling safe only in school was an antitype. Adolescents in disadvantaged neighborhoods, by contrast, reported feeling safe only in school more often than expected by chance, and feeling safe in both contexts was an antitype. Thus, feeling safe at school but not outside of school was characteristic of adolescents in disadvantaged neighborhoods, and this supports the safe haven hypothesis.

**Does Perceived Influence Explain Neighborhood Differences in Feelings about School?**

Can the safe-haven experience be explained as a contrast between the out-of-school and in-school contexts? The underlying idea was that adolescents in disadvantaged neighborhoods have less sense of being in control of what is going on around them, because they are not permitted to have a voice in decisions at home and they feel threatened in their neighborhood contexts. If this is so, then the differences between advantaged and disadvantaged neighborhoods in experiences of school as a safe haven will be explained by the fact that adolescents in disadvantaged neighborhoods experience their schools as more open to their influence than adolescents in advantaged neighborhoods. If the contrast-effect idea holds, then the differences between the two types of neighborhoods in terms of the safe
haven experiences would decrease or disappear if we were to control for the adolescents’ perceptions of influence at school. To test this, we performed a series of ANOVAs with the safe haven measures as the dependent variables, and where we controlled for the adolescents’ perceptions of influence at school. The results are presented in Table 4, where the results of the ANOVAs without controlling for influence at school are shown on the left side of the table, and the results when controlling for influence at school are shown on the right. As shown in the table, when we controlled for the adolescents’ perceptions of influence at school, substantial proportions of the original differences found between neighborhoods were accounted for. The differences in school satisfaction and good teacher relations completely disappeared when the adolescents’ perceptions of influence at school were controlled. However, perceptions of influence at school did not contribute much to reductions in the measure Longing for school. Overall, though, it seems that adolescents’ perceptions of influence at school substantially explain why adolescents in disadvantaged neighborhoods perceive their schools as a safe haven.

**Neighborhood or immigrant status?**

In order to test if there was a stronger contrast effect for adolescents with immigrant backgrounds in disadvantaged neighborhoods than other adolescents in these neighborhoods, we used nested ANOVAs, where we included the main effects of neighborhood type (advantaged/disadvantaged), immigrant status (immigrant/non-immigrant), and immigrant status nested under neighborhood type. The results are presented in Table 5. They show that the safe haven phenomenon seems to be foremost a neighborhood effect, as all measures are highly significant on the neighborhood level. Adolescents in disadvantaged neighborhoods showed lower perceived influence in family
decisions, higher neighborhood threat, and higher positive school experiences than adolescents living in advantaged neighborhoods. Only in terms of longing for school did we find a significant effect of immigrant status, where immigrants showed higher levels of longing for school than did non-immigrants, regardless of neighborhood. In terms of the overall safe haven factor and school satisfaction there were differences associated with immigration status nested under neighborhood. In both these cases immigrants in advantaged neighborhoods showed the lowest levels of perceiving school as a safe haven and school satisfaction, whereas immigrants in disadvantaged neighborhoods showed the highest levels. This suggests a combination of neighborhood and background effects, in that the safe-haven phenomenon is most salient among immigrants living in disadvantaged neighborhoods.

Discussion

The aim of the present study was to examine the perceptions that adolescents in disadvantaged and advantaged neighborhoods have of their schools. In doing so, we proposed an alternative way of thinking about schools in disadvantaged neighborhoods. We suggested that the perceptions of their schools of adolescents in disadvantaged neighborhoods would be subject to two contrast effects. First, we proposed that adolescents who lived in dangerous and threatening neighborhoods would expect the school environment to be dangerous and threatening, as well, and would then perceive the schools more positively when they turned out to be safer than their neighborhoods. Second, we expected that adolescents who lived in disadvantaged neighborhoods would perceive their families and others in their neighborhoods as closed to their influence, would expect to find the same in school, and would then experience an enhanced positive perception of the school when it was found to be more open to their influence. In combination the two contrast
effects would make students in disadvantaged neighborhoods perceive their schools as safe havens.

At the neighborhood level we found that adolescents living in neighborhoods that they experienced as threatening and dangerous experienced their schools as safe havens where they felt satisfied and safe, and where they longed to be during times when the school was closed. We also showed that in comparison with adolescents in advantaged neighborhoods, adolescents in disadvantaged neighborhoods experienced less influence in family decisions at home, while at the same time, they experienced being listened to and having a say in decisions in school. Thus, in line with a presumed contrast effect between out-of-school and in-school experiences, students in disadvantaged neighborhoods seemed to experience their schools as safe havens from the problems of the out-of-school contexts.

The results supported the contrast effect hypotheses at the neighborhood level, but not at the individual level. Thus, it was the contrast between their neighborhood and their school experiences rather than between their individual home experiences and experiences in school, that accounted for the contrast effect. The fact that the contrast effects were only supported on the neighborhood level and not on the individual level, suggests that the whole is more than the sum of the parts. That is, there is a shared experience among adolescents living in disadvantaged neighborhood, and this shared experience is above and beyond differences in perceptions at the individual level between adolescents living in disadvantaged and privileged neighborhoods. Neighborhood effects have been shown in various studies previously and for a wide range of adaptation outcomes (see Leventhal & Brooks-Gunn, 2000 for a review), however, it is to our knowledge the first time that it has been shown empirically that neighborhood level effects exceeded individual level effects.
This point to the importance of including factors at multiple levels in order to fully understand the factors associated with adolescent adaptation.

The results of the current study suggest that schools in deprived areas may play an important role for their students, who will be among the future participants in a democratic society. In fact, it was the adolescents’ perceptions of their influence at school that to a great extent explained why adolescents in disadvantaged neighborhoods had such positive perceptions and experiences of school. These results should not be surprising, as previous studies have shown that adolescents prefer democratic organizations, and decision making procedures that give them a high degree of autonomy (Helwig & Turiel, 2002). Human beings seem to have innate needs for autonomy (Grolnick, 2003), and this need is especially salient during adolescence (Eccles et al., 1993). The strength of these results is rather that the school seemed to fill a more prominent role for adolescents who grew up in environments that did not allow them much influence. Even though it has been suggested that the foundation for democratic participation is laid in the family setting (Flanagan, 2003; Miklikowska & Hurme, 2011) the current study suggests that the school could, for some subgroups of adolescents, compensate for a lack of influence in the home setting.

That the schools in disadvantaged neighborhoods seems to be of additional importance to its students is further supported by the consequential findings that immigrant adolescents in disadvantaged neighborhoods reported higher levels of school satisfaction and safe haven experiences than all other adolescents in the study. This suggests that the school experience of these immigrant adolescents can counteract alienation and teach this group that there are places in the society that value their input, where their opinions are listened to, and where they have an impact. As immigrant adolescents have been found to have lower trust in
societal institutions (Ekman & Zetterberg, 2011), the experience of being part of a
democratic system seems to be of great importance for the integration process of these
immigrant adolescents. To summarize it seems that for the adolescents in most need of it,
the foundation of democratic participation and civic education may be laid in school.

The current study is not the first to suggest that positive experiences in one setting can
overcome negative experiences in another domain. The concept of arenas of comfort
(Simmons & Blyth, 1987) refers to a context where the individual can relax and rejuvenate
from stressful experiences in other arenas. Call and Mortimer (2001) empirically tested the
comfort arena hypothesis and found support, albeit weak, for the idea that a harmful or
threatening experience in one context could be compensated for in another domain through
positive relationships and enhancing experiences. According to this perspective, the schools
in our study are arenas of comfort that compensate for what is lacking outside of school.
However, besides the fact that comfort was measured in different ways in different settings
in the Call and Mortimer study, the concept of arenas of comfort is too general, and it does
not say anything about what is being compensated for or how this compensation is
happening. Our concept of a safe haven is more specific in the way that we have defined
what is lacking in the out-of-school context and how it is compensated for in the in-school
setting. Thus, the current study extends existing knowledge about how adolescents cope
with daily stressors across multiple settings.

Some limitations of the current study should be mentioned. First, the study is cross-
sectional, making it impossible to say anything about the directions of effects. Based on
these analyses we do not know if it is the open climate of the school that created the safe
haven experience over time, something that would be of interest to investigate further.
Second, we have only used adolescents’ reports, thus these results regard the adolescents’ subjective perceptions of their out-of-school and in-school experiences. Although this was necessary to investigate the contrast effect, it would add further evidence for a contrast effect to have objective measures of influence in the schools, in order to rule out the alternative, but rather implausible, explanation that schools in advantaged areas actually do offer students less influence than do schools in disadvantaged areas. It is for future research to explore the relationship between subjective perception of adolescents and more objective measure of influence and safety at schools in disadvantaged neighborhoods.

Despite its limitations, this study has several strengths. First, the study is unique in that it offers a radically different view of an issue extensively explored previously. For the first time research indicates that schools in disadvantaged neighborhoods can play an important role for students by functioning as a positive contrast to the students’ negative out-of-school experiences. It is possible that the contrast hypothesis can be extended beyond the neighborhood-school settings. For example, it could be the case that extra-curricular activities and various adult-led leisure activities might also function as safe havens. Thus, the contrast effect hypothesis could potentially extend existing research about disadvantaged neighborhoods and offer new insights beyond the scope of the current study.

This leads to the second major strength of the current study, which is the theoretical and practical implications the results offer. One implication is that because our findings contradict the often-reported negative view of schools in disadvantaged neighborhoods, they prompt us to reevaluate the role of these schools. Often, evaluations of schools are based on grades and test points. However, as motivation and learning have been found to be highest in classrooms where students feel autonomous, competent, and emotionally supported by
their teachers (Zimmer-Gembeck et al., 2006), and feeling unsafe at school has been found to predict a decrease in levels of school engagement and academic achievement (Graham & Bellmore, 2007; Nishina & Juvonen, 2005), there is a need for future studies to examine whether the safe haven phenomena will also affect students’ grades over the long term. Regardless, the results of the current study highlight the need to broaden the view of the successfulness of schools, and imply that these schools play an important role in fostering active members of the society. Another implication is the need to reformulate existing theories. Past studies have commonly used social control models as their theoretical base (Hirschi, 1969; Sampson & Laub, 1993) to explain problematic behaviors in troubled neighborhoods, suggesting that when problems leak into the school context from the troubled neighborhoods they are located in, the school will then step up the control in order to try to keep the problems out. The contrast effect hypotheses supported in this study offers an alternative way of theorizing about schools in disadvantaged neighborhoods. Besides the need to replicate these findings, more research is needed in order to understand the conditions under which the contrast effects apply.

Finally, the results suggest that increased formal or informal control in order to keep the problems of the neighborhoods out of the schools might not be the best way to go for these schools. Commonly used methods like drug testing, metal detectors at the school entries, camera monitoring, and different Zero Tolerance policies with regard to violence will probably not enhance the adolescents’ positive perceptions of their schools. Also, these efforts have not proven to be effective in increasing school safety, but rather, have resulted in higher rates of suspensions, particularly for poor and minority students (The APA Zero Tolerance Task Force, 2008). Thus, an increase in influence would be more effective than
an increase in control in order to enhance students’ perceptions of school. A recent review of the effects of student participation in school decision-making showed evidence of positive effects on the development of students’ life skills, democratic skills and citizenship in forms of increased civic knowledge, an awareness and understanding of democratic practices, and improvement in student-adult relationships (Mager & Nowak, 2012). Thus it seems that having a say in school related decisions has positive effects, both for concurrent satisfaction in school and for learning skills that are needed in order to become an active member of a democratic society. We believe that this study has social implications in this regard. The study suggests that what schools in disadvantaged neighborhoods should do to enhance the chances that students will feel good at school and be motivated and interested in schoolwork is to increase the students’ influence instead of stepping up the control.
References


Running head: SCHOOL AS A SAFE HAVEN


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Running head: SCHOOL AS A SAFE HAVEN

Table 1

*Means (SDs) on School Measures for Groups with Different Levels of Out-of-school Measures Before and After Controlling for Neighborhood Type*

<table>
<thead>
<tr>
<th></th>
<th>Not controlling for neighborhood type</th>
<th>Controlling for neighborhood type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Influence at school</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low influence at home</td>
<td>-.18 (^a) (1.00)</td>
<td>-.19 (^a) (.98)</td>
</tr>
<tr>
<td>Average influence at home</td>
<td>-.05 (^b) (.98)</td>
<td>-.02 (^b) (1.01)</td>
</tr>
<tr>
<td>High influence at home</td>
<td>.20 (^c) (.99)</td>
<td>.22 (^c) (.99)</td>
</tr>
<tr>
<td><strong>Threats at school</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low threats in neighborhood</td>
<td>-.29 (^a) (.94)</td>
<td>-.34 (^a) (1.00)</td>
</tr>
<tr>
<td>Average threats in neighborhood</td>
<td>-.13 (^b) (.94)</td>
<td>-.12 (^b) (.97)</td>
</tr>
<tr>
<td>High threats in neighborhood</td>
<td>.53 (^c) (.94)</td>
<td>.57 (^c) (.95)</td>
</tr>
</tbody>
</table>

*Note.* Means with different subscripts differ significantly at \(p < .05\) in SNK posthoc comparisons.

\(^1\) Influence at school: Total sample: \(F (2, 1484) = 17.53, p < .001\); control for neighborhood type: \(F (2, 1291) = 17.55, p < .001\).
Running head: SCHOOL AS A SAFE HAVEN

2 Threats at school: Total sample: $F\ (2, \ 1428) = 94.58, \ p < .001$; control for neighborhood type: $F\ (2, \ 1244) = 90.59, \ p < .001$. 
### Table 2

*Means (SDs) on Influence and Threats at School from Similar Out-of-school Measures for Advantaged and Disadvantaged Neighborhoods*

<table>
<thead>
<tr>
<th></th>
<th>Advantaged neighborhoods</th>
<th>Disadvantaged neighborhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Influence at school</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence at home</td>
<td>40.44 (1, 1292)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Neighborhood type</td>
<td>18.67 (1, 4.89)</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>-.15 (.031)</td>
<td>.37 (.060)</td>
</tr>
<tr>
<td><strong>Threats at school</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threats in the neighborhood</td>
<td>282.39 (1, 1245)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Neighborhood type</td>
<td>3.27 (1, 4.60)</td>
<td>.135</td>
</tr>
<tr>
<td></td>
<td>.06 (.030)</td>
<td>-.19 (.057)</td>
</tr>
</tbody>
</table>
**Table 3**

*EXACON Results Showing Differences in the Answers of Where Adolescents Feel Safe, in Disadvantaged and Advantaged Neighborhoods Separately (n =1362)*

<table>
<thead>
<tr>
<th>Response option</th>
<th>Disadvantaged</th>
<th>Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hypergeometric</td>
<td>Hypergeometric</td>
</tr>
<tr>
<td></td>
<td>Obs./Exp.</td>
<td>Probability</td>
</tr>
<tr>
<td>Safe at school – not safe outside school</td>
<td>39/22.5</td>
<td>.001 T</td>
</tr>
<tr>
<td>Not safe at school – safe outside of school</td>
<td>28/20.3</td>
<td>.0329</td>
</tr>
<tr>
<td>Safe both at school and outside of school</td>
<td>221/253.6</td>
<td>.001 A</td>
</tr>
<tr>
<td>Not safe at school or outside of school</td>
<td>19/10.6</td>
<td>.0039</td>
</tr>
</tbody>
</table>

*Note. T = significant type; A = significant antitype. Bonferroni adjusted p = .00625.*
Table 4

Testing for Mean Differences in Safe Haven Measures between Adolescents from Advantaged and Disadvantaged Neighborhoods, Without and With Control for Adolescents’ Perception of Influence at their School

<table>
<thead>
<tr>
<th></th>
<th>Without control for perception of influence at school</th>
<th>With control for perception of influence at school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td>Factor 2: Safe haven</td>
<td>13.80</td>
<td>.014</td>
</tr>
<tr>
<td>Disclosure in classroom</td>
<td>32.83</td>
<td>.003</td>
</tr>
<tr>
<td>Longing for school</td>
<td>9.79</td>
<td>.028</td>
</tr>
<tr>
<td>School satisfaction</td>
<td>4.02</td>
<td>.100</td>
</tr>
<tr>
<td>Good teacher relations</td>
<td>16.42</td>
<td>.006</td>
</tr>
</tbody>
</table>
Table 5

Results of Nested ANOVAS Showing Mean Differences between Immigrants and Non-immigrants in Advantaged and Disadvantaged Neighborhoods on Neighborhood Level and the Level of Immigration Status

<table>
<thead>
<tr>
<th></th>
<th>Standardized Means</th>
<th>Neighborhood</th>
<th>Immigrant status</th>
<th>Immigrant status nested under neighborhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out-of-school experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived influence in family decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighborhood threat</td>
<td>-0.17</td>
<td>0.05</td>
<td>0.34</td>
<td>0.38</td>
</tr>
<tr>
<td>Positive school experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2: Safe haven</td>
<td>-0.13</td>
<td>-0.24</td>
<td>0.33</td>
<td>0.66</td>
</tr>
<tr>
<td>Disclosure in class</td>
<td>-0.08</td>
<td>-0.14</td>
<td>0.36</td>
<td>0.27</td>
</tr>
<tr>
<td>School satisfaction</td>
<td>0.01</td>
<td>-0.31</td>
<td>0.06</td>
<td>0.20</td>
</tr>
<tr>
<td>Good teacher relations</td>
<td>-0.05</td>
<td>-0.12</td>
<td>0.06</td>
<td>0.25</td>
</tr>
<tr>
<td>Longing for school</td>
<td>-0.22</td>
<td>0.12</td>
<td>0.40</td>
<td>0.90</td>
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</tbody>
</table>
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