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General Introduction
BACKGROUND

All over the world for decades people have been migrating voluntarily from one country to another mainly attracted by the perspective of greater economic prosperity, more employment opportunities, and a better quality of life and well-being. The number of international migrants worldwide—people who left their country of birth to settle permanently in another country—is currently estimated at 232 million or 3.2 percent of the world’s population (UN DESA, 2013). There appears to be a general tendency for migration to more developed countries (136 million; e.g. US, Germany, UK) than to less developed countries (96 million; e.g. Brazil, Morocco, China) (see also IOM, 2013). Compared to other areas in the world, Europe is considered the most popular region for settlement, harboring an estimated number of 72 million international migrants in 2013 (UN DESA, 2013).

After World War II, various Western European countries were at the receiving end of consecutive migration waves that occurred throughout the second half of the twentieth century. Guest worker programs based on formal agreements between governments were put into place to recruit manual laborers from Italy, Greece, Spain and Portugal for industrial work in Belgium, France, Germany, Sweden, the Netherlands, and Switzerland (Fassmann & Munz, 1992; Heath, Rothon, & Kilpi, 2008). This was followed by a substantial influx of guest workers followed with people originating from countries including Turkey, Morocco, and Yugoslavia. Additional labor migrants without agreed upon programs came to fill in lower segments of the labor market from Turkey, India and Pakistan to Denmark, Norway, and Sweden. Countries like the UK, France, and the Netherlands also had labor migrants coming in from (ex-) colonies (e.g. the Caribbean and South and East Asia; Heath et al., 2008). During the 1970s, the economic recession, the oil price crisis, as well as the restrictive immigration laws, greatly reduced labor migration. However, migrants continued heading to Western European countries through processes like family reunification (serial migration) and by fetching a spouse from their country of origin (Fassmann & Munz, 1992; FORUM, 2003).

With increased globalization, cultural diversity has exponentially grown in various societies all over the world. Consequently, the integration of migrants into new sociocultural environments has been much under public
policy attention and research interest in classic host countries like Canada, the US, and more recently also in Western European countries (Berry, 1997, 2005; Bhugra, 2004). Along with these developments, classic migration relevant theoretical concepts such as acculturation (change at the cultural and psychological level of cultural groups that come into contact with each other) and acculturative stress (stress response to challenging environmental demands in the process of acculturation) are now being revived and introduced in contemporary research on the psychological and social adaptation of migrant populations (Rudmin, 2003; Sam & Berry, 2010). Individual differences in psychological and social outcomes among migrants have become well-acknowledged, emphasizing variability in the process of acculturation and experienced adversity (Berry, 1997). For instance, a migrant may experience changes that include the learning of new socio-behavioral skills and norms that are assumed to increase person-environment fit, minimizing insurmountable psychological and social conflicts (Berry, 1997). Not necessarily maladaptive, but somewhat more problematic would be the alternative situation wherein a migrant may experience difficulty in the process of changing the old and/or learning the new skills, giving rise to acculturative stress. These perceived problems and experienced stress—particularly when social support is low (Sam & Berry, 2010)—are thought to put migrants at increased risk for poor psychological and social adjustment when “changes in the cultural context exceed the individual’s capacity to cope, because of the magnitude, speed, or some other aspect of the change” (the psychopathology perspective; Berry, 1997, p. 13).

Despite the fact that the majority of previous migration-related research has centered mostly on economic aspects, an international attention shift is now taking place towards the well-being and development of migrants (IOM, 2013). Accumulating empirical investigations around the world have attested to the central stress hypothesis encompassing migrant status as a risk factor for the development of psychopathology and social adjustment problems among first-generation migrants (people who migrated personally; e.g. Al-Issa & Tousignant, 1997). In Europe, this line of research proliferated based on epidemiological findings showing relatively higher incidence rates of psychotic disorders among migrants, a phenomenon that has now been linked to social-psychological stressors such as social exclusion, low societal status and (perceived) discrimination (Bhugra, 2004;
Kirkbride et al., 2012; Selten & Cantor-Graae, 2005; Veling, 2013). Keeping in mind variability in migration history between and within countries, and between and within minority groups, numerous studies on more common mental health problems show evidence that several ethnic groups of first-generation migrants have higher levels of anxiety and depression when compared to ethnic majority natives in countries like Norway, Belgium, the UK, Italy, Sweden, France and Spain (Abebe, Lien, & Hjelde, 2012; Carta, Bernal, Hardoy, Haro-Abad, & Report on the Mental Health in Europe Working Group, 2005; Levecque, Lodewyckx, & Vranken, 2007; Levecque & van Rossem, 2014; Missinne & Bracke, 2012). These increased levels of mental health problems have often been attributed to migrant’s lower socioeconomic status (SES) (Dohrenwend et al., 1992; Wadsworth & Achenbach, 2005). However, controlling for this factor has not always been found to fully explain the group differences (Levecque et al., 2007; Reijneveld, 1998; Wit et al., 2008).

In the specific case of the Netherlands, labor migrants who at first came for temporary industrial work opportunities in the 1950s-1970s, eventually settled permanently. They were a select population consisting of predominantly poor, low-educated, unskilled people of Turkish, Moroccan, Surinamese and Netherlands Antillean origin. Currently, the number of foreign migrants residing in the Netherlands is estimated at 3,594,744, that is 21.4% of the Dutch population (Statistics Netherlands, 2014a). Turks (19.8%), Moroccans (18.8%), Surinamese (17.4%) and Netherlands Antilleans (7.2%) form the largest foreign migrant groups (Statistics Netherlands, 2014b) that fall under the official definition of having a non-Western minority status\(^1\), a category constituting over half of the total foreign migrant population. Compared to Dutch natives, first-generation migrants with a non-Western minority status are often profiled as socially and economically disadvantaged, with low income, higher and prolonged unemployment rates, poor housing conditions, low educational level and insufficient Dutch language proficiency (SCP, 2001a; 2012). Dutch studies on the mental health outcomes of these first-generation labor migrants have shown higher prevalence rates of affective disorders and accompanying somatic complaints (Bengi-Arslan, Verhulst, & Crijnen, 2002; Schrier et al., 2012; Wit et al., 2008). Relevant factors associated with their migrant background, such as ethnic minority status, acculturative stress including loss of pre-migration social support networks, experienced discrimination and difficulty in
sociocultural skill acquisition have often been implicated in the etiology of their increased risk for the development of psychopathology (Abebe et al., 2012; Bengi-Arslan et al., 2002; Jansen et al., 2010; Searle & Ward, 1990).

Of particular importance for the present thesis is the growing number of non-Western second-generation migrants (children of migrants or ethnic minority children; Al-Issa & Tousignant, 1997). The proportion of the four largest non-Western migrant groups has increased substantially due to an increase of over a quarter of a million non-Western second-generation individuals since 2000 (SCP, 2012), making up for 45.2% of the total non-Western migrant population (Statistics Netherlands, 2014a). Although a steady but slow progress in the new generations is becoming apparent in terms of higher educational and professional levels being reached, and better Dutch socio-cultural knowledge and housing conditions obtained, public concerns continue to be raised about the behavioral adjustment and societal integration of non-Western minority youth in the Netherlands. Compared to Dutch native youth, non-Western minority youth has an alarmingly high unemployment rate, is still showing substantial Dutch language delays, underachieves academically, and is found overrepresented in criminal suspect rates and juvenile correctional institutions (Jennissen, 2009; SCP, 2012; 2014; Stevens, Veen, Vollebergh, Berkers, & Hendriks, 2009). In contrast to the large body of literature on adult and adolescent first-generation non-Western migrants, empirical studies on the psychological and social adjustment of these migrants’ children—but also children of migrants in general—are sparse, still in its infancy and in need of a better understanding (see Stevens & Vollebergh, 2008 for review).

Children of migrants take in a fairly unique position facing the double challenge of growing up in two different cultures, the culture of familial origin at home and the dominant culture of the receiving society in school. With a socially and economically disadvantaged family background, their psychosocial development may be hampered due to their relatively impoverished living conditions, insufficient exposure to dominant culture socialization, low parental socio-emotional support and poor home-based cognitive stimulation (Brooks-Gunn, Klebanov, & Duncan, 1996; Jäkel, Schölmerich, Kassis, & Leyendecker, 2011; Jansen et al., 2010; McLoyd, 1998; Vedder, Boekaerts, & Seegers, 2005). In addition, whilst acculturating, children of migrants simultaneously have to work through major universal developmental tasks such as the internalization of socially
appropriate values, norms and behaviors, establishing satisfying social relations with mainstream peers, and the achievement of educational success. Children of non-Western migrants in the Netherlands may also have to deal with the burden of having to bridge a greater cultural distance (degree of dissimilarity between host culture and culture of origin; Berry, 1997; SCP, 2012) than for instance children with a Western minority status. This could likely complicate non-Western minority children’s adaptation to encountered incompatibilities, increase their experienced psychological stress and make them more vulnerable for psychopathology (externalizing and internalizing), social problems, and academic underachievement.

Although more attention is being paid to these issues (Coll et al., 1996; Sam, 2006), scholars have repeatedly stated that the child developmental research field suffers from a lack of longitudinal studies on the nature and course of the psychological and social adjustment of ethnic minority children with a family migrant background (Aronowitz, 1984; Fuligni, 2001; Stevens & Vollebergh, 2008; Vollebergh, 2003). To date, our general understanding of this matter is insufficient and complicated by mixed findings derived from cross-sectional investigations. Around the globe there are reports of increased levels of adjustment problems (Aronowitz, 1984; Bengi-Arslan, Verhulst, Ende, & Erol, 1997; Rutter et al., 1974; Sagatun, Lien, Søgaard, Bjertness, & Heyerdahl, 2008; Stevens et al., 2003; Zwirs et al., 2010), decreased levels (Davies & McKelvey, 1998; Fuligni, 1998; Zwirs, Burger, Schulpen, & Buitelaar, 2006), or similar levels (Atzaba-Poria, Pike, & Barrett, 2004; Ayalan, Fischer, & Naske, 1993; Kolaitis, Tsiantis, Madianos, & Kotopoulos, 2003; Leavell et al., 2004) of adjustment problems in ethnic minority migrant youth when compared to ethnic majority native youth. The patchy and unequivocal results which have mainly been attributed to methodological variation across studies, have led to the need for more empirical grounding and longitudinal designed research (Fuligni, 2001; Stevens & Vollebergh, 2008; Vollebergh, 2003; Sam, 2006). In addition, previous research on the link between migration and mental health has mostly focused on the short-term period after personal migration in adulthood and the “storm and stress phase” during adolescence, leaving several important developmental questions regarding the childhood period unanswered.

Among non-Western minority youth there appears to be a tendency for having more behavioral, emotional and social adjustment difficulties when
compared to their majority native counterparts (Abebe et al., 2012; Sagatun et al., 2008; Stevens et al., 2003; Verkuyten & Thijs, 2002; Vollebergh, 2003). The research field and societal debate on the adjustment of non-Western minority children in the Netherlands however, has predominantly been driven by descriptive data on the increased levels of externalizing problem behavior among adolescents (i.e. aggression, delinquency; Boon, Haan, & Boer, 2010; Jennissen, 2009; Paalman, 2013; Stevens et al., 2009; Veen, Stevens, Doreleijers, Ende, & Vollebergh, 2009). This prominent risk for behavioral maladjustment is often reflected by a disproportionate representation of particularly disadvantaged, non-Western minority adolescents in the juvenile justice system of the Netherlands (see Figure 1.1), and in various other Western societies as well (Engen, Steen, & Bridges, 2002; Hawkins, Laub, Lauritsen, & Cothern, 2000; Jennissen, 2009; Tonry, 1997). Importantly, the increased delinquency among non-Western minority youth is also observed when self-report is used as a source, and when possible spurious effects of SES are taken into account (Borghans & Terweel, 2003; Junger-Tas, Cruijff, van de Looij-Jansen & Reelick, 2003).

The behavioral, emotional and social adjustment over time of non-Western minority youth in the period before the age of twelve constitutes

![Figure 1.1. The Dutch age-crime curve based on suspect rate data from 2009 broken down by ethnicity. The vertical axis represents percentage with reference to ethnic group. The horizontal axis represents age (SCP, 2012).](image)
a major gap in our knowledge. Cross-sectional studies wherein children and adolescents were collapsed into age groups suggest that their adjustment difficulties are particularly evident in the outcome dimension of externalizing problem behavior, and are most salient in the school context (Bevaart et al., 2012; Rutter et al., 1974; Stevens et al., 2003; Vollebergh, 2003; Vollebergh et al., 2005; Zwirs et al., 2010). Concerning the outcome dimension of internalizing problem behavior (e.g. anxiety), the general picture is less clear. Cross-sectional studies show that teachers report no differences or lower levels of emotional problems among non-Western minority children compared to Dutch natives (Stevens et al., 2003; Vollebergh et al., 2005), while at the same time there are indications that non-Western children themselves and their parents do report increased emotional problems (Bengi-Arslan et al., 1997; Janssen et al., 2004). In mainstream research, childhood behavioral and emotional problems have frequently been investigated together with social behavior and experiences with peers, also from a longitudinal perspective (Brendgen, Vitaro, Bukowski, Doyle, & Markiewicz, 2001; Burt, Obradović, Long, & Masten, 2008; Cole & Carpentieri, 1990; van Lier & Koot, 2010). However, a vast amount of the studies in ethnicity-related child developmental research is cross-sectional and lacking an integrative approach wherein psychological and social functioning are considered simultaneously. The few available cross-sectional findings in the outcome dimension of early social adjustment, suggest that ethnic minority and migrant children are more likely to experience peer problems in school. Specifically, they have been found to experience more peer victimization (McKenney, Pepler, Craig, & Connolly, 2006; Strohmeier, Kärnä, & Salmivalli, 2011; Verkuyten & Thijs, 2002), to be less liked by their peers (Grünigen, Perren, Nägele, & Alsaker, 2010; Ladd & Burgess, 2001; Lubbers, 2006), to have fewer friendship relations (Strohmeier & Spiel, 2003), and to display less pro-social behavior in the classroom when compared to their ethnic majority and native counterparts (Matthews, Kizzie, Rowley, & Cortina, 2010; Mieloo et al., 2013).

In order to advance our understanding on the psychosocial adjustment of non-Western minorities, a longitudinal approach during the childhood years may be crucial for several reasons. First, longitudinal designs have been promoted for their potential to capture within-individual change over time, enabling more insight into the transient or persistent nature of problem behavior (Fuligni, 2001; Leyendecker, 2011; Muthén & Khoo,
Second, due to a previous focus on adolescence and adulthood (Motti-Stefanidi, Asendorpf, & Masten, 2012; Sagatun et al., 2008; Sirin et al., 2013; van Oort et al., 2007), little is known about the psychosocial adjustment of non-Western minorities in childhood. Finally, previous research has indicated that psychopathology later in life is associated with increased psychopathological symptoms in the childhood years (Caspi, Moffitt, Newman, & Silva, 1996; Coie, Lochman, Terry, & Hyman, 1992; Hofstra, van der Ende, & Verhulst, 2002; Kim-Cohen et al., 2003). These considerations suggest that more studies should focus on the childhood period as a fundamental developmental stage wherein psychopathology may both develop and therefore prevented at an early stage.

**Overall Aims of this Thesis**

In an effort to contribute to a better understanding of ethnic differences in psychosocial and educational adjustment, the present thesis aimed to investigate (1) the *development* of ethnic differences in the domains of behavioral, emotional, and social functioning across the entire elementary school period, (2) whether teacher reports of ethnic differences in externalizing problem behavior may alternatively be due to a behavioral assessment *bias* as a function of children’s ethnicity, and (3) whether child social and behavioral factors help *explain* ethnic differences in externalizing problems and academic achievement.

An ongoing study on the psychosocial development of children in Dutch schools provided the unique opportunity to extend previous cross-sectional studies by investigating a number of important questions, aimed to advance our knowledge on ethnic variations in maladjustment, as seen in the Netherlands. Children with parents who are born in relatively low industrialized non-Western developing countries all share the characteristic of having a family history of migration. Although there is much diversity between and within minority subgroups making up the larger non-Western minority group as a whole (e.g. cultural distance and religion), when general indicators for adjustment are considered separately for subgroups, they all appear to fall below the average level of functioning of the Dutch native majority group (SCP, 2001a; 2012; 2014). Because the differences among the ethnic minority subgroups are far less substantial than the differences observed between all the subgroups together and the ethnic
majority group, our primary interest was to investigate psychological, social, and academic ethnic disparities by comparing native majority group Dutch children with ethnic minority group non-Western children.

The first research aim that we addressed (see Chapter 2), was whether ethnic level differences in psychosocial adjustment as demonstrated in previous cross-sectional studies are already present in the early years of elementary school and, if so, whether these persist or change over time. Specifically, we were interested to explore whether ethnic differences in psychosocial development can be observed in the elementary school period addressing a broad spectrum of adjustment indices including behavioral problems (aggression, conduct problems, oppositional defiant behavior), attention-deficit/hyperactivity, anxiety, social experiences (peer social preference, peer victimization, number of best friendship relationships) and pro-social behavior.

For the second aim it is important to point out that the present studies were conducted in schools, and used teachers and peers as informants. Also, as stated earlier, children with a non-Western ethnic background have been reported to display elevated levels of behavioral problems according to teachers. On the other hand, differences in behavior problems as measured by self- or parent-reports are found less pronounced or even absent (Bevaart et al., 2012; Stevens et al., 2003). Considering that the development of externalizing behavior in the context of school is predominantly studied by use of teacher report (Keiley, Bates, Dodge, & Pettit, 2000; Stevens & Vollebergh, 2008), it is necessary to exclude the possibility that teacher-reported ethnic differences in the level and change of externalizing problem behavior are due to an ethnic bias in teacher behavioral assessment. Therefore, before we could address the aims regarding possible underlying mechanisms for ethnic differences in problem behavior and academic outcomes, we first needed to exclude potential teacher bias, as was done in Chapter 3.

The third aim (Chapter 4 and 5) was to advance our understanding of possible factors contributing to ethnic differences in behavioral and academic outcomes. As externalizing problems and academic underachievement are the most notable studied developmental outcomes of ethnicity-related risk, these were given specific attention in this thesis. In Chapter 4, ethnic differences in the association between peer social preference and externalizing problem behavior were explored over the first years of
elementary school. In Chapter 5, it was investigated whether classroom behavioral and social adjustment contribute to ethnic differences in end of elementary school achievement independently of children's cognitive skills.

RESEARCH QUESTIONS

Development During the Formative Years of Elementary School

The elementary school years mark the start of an important transitional phase wherein children’s lives become increasingly complex from a developmental perspective (Perry & Weinstein, 1998). The school context provides a rich setting for the intensive investigation of possible ethnic differences in psychosocial and educational adjustment in childhood and over time. Multi-faceted processes of change take place that force all children to take on new challenges in the domains of behavioral adjustment, social relations and experiences, emotion regulation, and cognitive performance (Perry & Weinstein, 1998). The distinctive formative period of primary education comes along with a profound expansion of children’s social world, accompanied by increased demands for social competencies, behavioral inhibition, emotion knowledge, and sufficient general cognitive and verbal skills. Despite these dramatic developmental shifts and increased requirements–combined with the fact that the school environment is also colored by the dominant host culture–few empirical studies have been conducted on the psychological, social, and educational adjustment of children of non-Western migrants during the stepping-stone years of primary education.

Overall, non-Western minority youth have been found more likely to experience psychological, social and educational adjustment problems when compared to Dutch natives (Heath et al., 2008; Vollebergh, 2003). However, as most research on non-Western minority youth’s psychosocial functioning is based on cross-sectional designs and older age-samples, the robustness and course of their adjustment during the early foundational years of elementary school remain unknown. Overcoming this limitation is indispensable for the design of effective preventive interventions that aim to counteract possible early escalation into increased levels of problem behavior with structural outcomes at a later age (i.e. psychiatric
disorders, unemployment, delinquency). Importantly, antisocial development research has shown that adults and adolescents characterized by persistent aggressive and delinquent behaviors can be identified already in their childhood years. By means of repeated early psychological and social adjustment measures such as oppositional defiant behavior, conduct problems and peer relational problems, it can be predicted whether children are more likely to follow normative or deviant behavioral trajectories over time (i.e. resp. decreasing or increasing levels of problem behavior; Brendgen et al., 2001; Broidy et al., 2003; Loeber, van der Laan, Slot, & Hoeve, 2008; Moffitt, 1993; Nagin & Tremblay, 1999). Against this background, the first study presented in this thesis (Chapter 2) investigated the research question:

ARE DIFFERENCES IN PSYCHOLOGICAL AND SOCIAL ADJUSTMENT BETWEEN NON-WESTERN MINORITY CHILDREN AND MAJORITY NATIVE DUTCH CHILDREN VISIBLE ALREADY AT SCHOOL-ENTRY, AND IF SO, TO WHAT EXTENT DO THEY PERSIST OR CHANGE OVER THE COURSE OF THE ELEMENTARY SCHOOL PERIOD?

Ethnic Bias in Teacher Behavioral Assessment

Another important area of ethnicity-related child developmental research concerns the phenomenon that most data on the behavioral adjustment of minority and migrant children in the school context has been chiefly restricted to teacher report (Keiley, Bates, Dodge, & Pettit, 2000; Stevens et al., 2003; Zwirs et al., 2010). Elementary school teachers are generally considered central figures in the early signaling and referral process of children displaying problematic, disruptive behaviors. Compared to parents, teachers are thought to have a more trained eye for perceiving deviancy in child behavior, especially since they are exposed to such a large pool and diverse groups of children. However, the perspective of and assessment by teachers is, like that of parents and children, connected to ethnocultural standards or culturally based thresholds for judging particular behaviors as problematic (Lambert et al., 2001; Weisz, McCarty, Eastman, Chaiyasit, Suwanlert, 1997). For schoolteachers, of whom the majority are member of the native dominant culture, it has been proposed and shown that their appraisal of increased externalizing problems among minority and migrant
children may be confounded by these children’s ethnicity (Epstein et al., 2005; Sonuga-Barke, Minocha, Taylor, & Sandberg, 1993; Stevens et al., 2003). The confound is theorized to stem from ethnic stereotypical ideas and prejudicial beliefs that teachers may hold and apply in the assessment of children’s behavioral adjustment (Chang & Sue, 2003; Wittenbrink, Judd, & Park, 1997), suggesting biased, and thus invalid reports. The teacher-reported increased externalizing problems can also be seen in accord with the disproportionate criminal suspect rate of disadvantaged ethnic minorities in various Western countries (Hawkins et al., 2000; Stevens et al., 2009; Tonry, 1997). Although this is frequently used as argumentative support for the claim that ethnic minority children are more likely to show behavioral problems, there is also counter argumentative support indicating that arrests and sentencing procedures as well as teacher ratings can be confounded by an ethnic bias (Blair, Judd, & Chapleau, 2004; Jennissen, 2009; Sonuga-Barke et al., 1993; Weitzer, 1996).

Thus, it remains unclear whether teacher-reported ethnic differences in externalizing problem behavior may indeed be due to a teacher bias as a function of children’s ethnicity. The few studies that have investigated the potential effect of children’s ethnicity on teacher ratings of school problem behavior have used cross-sectional designs and limited their focus to attention-deficit/hyperactivity disorder symptoms (ADHD; Epstein et al., 2005; Hosterman, DuPaul, & Jitendra, 2008; Reid, Casat, Norton, Anastopoulos, & Temple, 2001). Longitudinal tests for the investigation of possible ethnic bias in teacher assessment of child symptoms of oppositional defiant disorder (ODD) and conduct disorder (CD), have not been conducted yet. The availability of this data would help to clarify whether and at what point in time an ethnic bias may be present across the elementary school period. The second study presented in this thesis (Chapter 3) therefore investigated the research question:

ARE TEACHER REPORTED ETHNIC DIFFERENCES IN EXTERNALIZING PROBLEM BEHAVIOR ACROSS THE ELEMENTARY SCHOOL PERIOD INFLUENCED BY AN ETHNIC BIAS?

Because developmental research on ethnicity-related risks has been mostly directed at externalizing problem behavior and academic achievement (Steinberg, Dornbusch, & Brown, 1992; Stevens & Vollebergh, 2008),
these domains will be the focal outcomes in the following chapters (resp. Chapter 4 and Chapter 5). Besides the poorer societal adjustment as shown in antisocial outcomes, disadvantaged ethnic minority youth have also been found at increased risk for academic underachievement, grade retention and school dropout (Farkas, 2004; Heath et al., 2008; Kao & Thompson, 2003; Lee, 2002; Steinberg et al., 1992). Importantly, childhood externalizing problems and academic failure are predictors of later unemployment status and delinquency (Campbell, Spieker, Burchinal, & Poe, 2006; Loeber et al., 2008; Timmermans, van Lier, & Koot, 2009). To intervene early and reduce the externalizing and academic problems that disadvantaged minority children tend to struggle with, it has been proposed that a more comprehensive, empirically-based understanding of the direct social environment is needed (Coll et al., 1996; Vollebergh et al., 2005). Developmental theorists in particular, have underlined the necessity of longitudinally designed studies that address ethnic minority children’s social position and experiences when investigating ethnic variations in adjustment (Coll et al., 1996).

**Social Position and Adjustment**

Dutch data among adults and children shows general consensus on the relative lower social hierarchical standing of non-Western minorities when compared to Western minorities and Dutch natives. Specifically, non-Western minorities are placed at the bottom or lowest end of a linear scale of societal ethnic groups, indicating they are less preferred socially, and more often exposed to adverse social experiences such as stigmatization, exclusion and rejection (Hagendoorn, 1995; Verkuyten & Kinket, 2000; Verkuyten & Thijs, 2002). Considering the out-group position of non-Western minorities in various industrialized Western societies (Hagendoorn, 1995; Pettigrew, 1998; Verkuyten, Hagendoorn, & Masson, 1996; Verkuyten & Kinket, 2000), children belonging to these marginalized minority groups may likely also have a low social position in the classroom. Despite the scarcity of studies conducted at the intersection of peer relations with ethnicity, findings do suggest that ethnic minority and migrant children are more likely to experience poor peer acceptance (Grüningen et al., 2010; Lubbers, 2006), chronic peer rejection (Ladd & Burgess, 2001), social exclusion (Verkuyten & Thijs, 2002) and peer victimization (Monks, Ortega-Ruiz, & Rodríguez-Hidalgo, 2008; Strohmeier et al., 2011).
A poorer social adjustment among ethnic minority children raises concerns and fuels the need for more empirical data on their classroom behavior and social experiences. The formation of positive relationships with pro-social classroom peers provides children with beneficial opportunities for learning and rehearsing social rules and understanding social norms (Rubin, Bukowski, & Parker, 2006). Failure to develop such peer relations in elementary school is associated with having a low peer group status or low peer social preference scores (i.e., liked by few classmates, and disliked by many; Coie, Dodge, & Coppotelli, 1982; Parker, Rubin, Erath, Wojlawowicz, & Buskirk, 2006). Low social preference on its turn has been found to predict a multitude of detrimental proximal and distal outcomes including increased aggressive and oppositional behavior, academic failure, and delinquency (Deater-Deckard, 2001; Parker & Asher, 1987; Parker et al., 2006).

A low social preference score or low peer group status may be experienced as more stressful by non-Western minority children than by other children. This may be due to non-Western cultures often having a strong collectivistic or group-oriented sense of belonging in which the maintenance of harmonious relationships with others is highly valued (Chen, 2006; Oyserman, Coon, & Kemmelmeier, 2002) and acceptance by the social environment is considered fundamental (Baumeister & Leary, 1995). Also, cumulative complicating factors such as family poverty, social adversity, familial mental health problems, and perceived discrimination are known to cause increased (family)stress and decrease the available parental support (Oort, Ende, Wadsworth, Verhulst, & Achenbach, 2011; Veling et al., 2007). These may additionally make non-Western children more vulnerable to the negative effects of being disliked in school (Berry, Poortinga, & Pandey, 1997). Potential ethnic differences in the association between peer social preference and the development of externalizing problem behavior has not been investigated previously. Addressing this gap in our knowledge would provide possible starting points for interventions aimed at the improvement of ethnic minority children’s social-behavioral adjustment in elementary school (van Lier, Muthen, van der Sar, & Crijnen, 2004; Witvliet, van Lier, Cuijpers, & Koot, 2009). The third study presented in this thesis (Chapter 4) investigated the research question:
DOES THE ASSOCIATION BETWEEN PEER SOCIAL PREFERENCE AND EXTERNALIZING PROBLEM BEHAVIOR DIFFER BETWEEN ETHNIC MINORITY NON-WESTERN CHILDREN AND ETHNIC MAJORITY NATIVE DUTCH CHILDREN DURING THE EARLY YEARS OF ELEMENTARY SCHOOL?

The Ethnic Gap in Achievement

In Western Europe, compared to majority native youth, minorities with a migrant background from less-developed non-Western countries significantly underperform in education, experience more barriers in their access to the labor market, and have lower occupational attainment (Heath et al., 2008). Poor educational qualifications are amongst the factors that place youth at risk for social immobility and economic hardship. Compared to Dutch natives, non-Western minority youth are found to be more often unemployed, leave school without proper qualifications, repeat a grade and attend low skilled trajectories (SCP, 2001b; 2012; Statistics Netherlands, 2012a). In most European countries, individual standardized test scores at the end of primary school are used as an indicator for admission to and placement in ability trajectories in secondary education suitable to the child’s competencies (comparable to the US standardized SAT). In the Netherlands, when compared on the standardized national achievement test in sixth grade (Cito Eindtoets Basisonderwijs), the achievement of non-Western minority children is found to be substantially lagging behind that of native Dutch majority children (see Figure 1.2).

Of the many possible explanations offered for the ethnic gap in achievement, social and economic inequality is the most influential. Low family socio-economic resources have been found to account for a great part of the cognitive underperformance in the childhood years (Crosnoe & Cooper, 2010; Duncan, Yeung, Brooks-Gunn, & Smith, 1998; Magnuson & Duncan, 2006). These disadvantages are frequently associated with insufficient home-based cognitive stimulation and poor second language acquisition (Jencks & Phillips, 1998; Lee & Burkam, 2002; SCP, 2001b; Verhallen & Bus, 2010; Votruba-Drzal, 2003; Washbrook, Waldfogel, Bradbury, Corak, & Ghanghro, 2012). Besides cognitive factors, social and behavioral variables are also relevant correlates of children’s academic success that should be considered more in ethnicity research (Caprara, Barbaranelli,
Pastorelli, Bandura, & Zimbardo, 2000; Hinshaw, 1992a, 1992b; Masten et al., 2005; Timmermans et al., 2009; Wentzel & Caldwell, 1997). For example, mainstream research shows that classroom behavior problems are linked to poor academic outcomes (Campbell et al., 2006; Fergusson & Horwood, 1998; Masten et al., 2005; Risi, Gerhardstein, & Kistner, 2003; Timmermans et al., 2009). It has also been shown that children with low peer group status, and affiliations with deviant friends, are at increased risk for doing poorly in school (Ladd, Birch, & Buhs, 1999; Ladd, 1990; O’Neil, Welsh, Parke, Wang, & Strand, 1997; Ryan, 2000; Wentzel & Asher, 1995; Wentzel, Barry, & Caldwell, 2004; Woodward & Fergusson, 2000). Although ethnic minority children have been found to show increased social-behavioral problems in school (Grünigen et al., 2010; Keiley et al., 2000; Ladd & Burgess, 2001; Lubbers, 2006; Stevens et al., 2003; Strohmeier & Spiel, 2003), and social-behavioral adjustment is predictive of school success (Arnold, 1997; Caprara et al., 2000; Hinshaw, 1992a, 1992b; Ladd et al., 1999; Ryan, 2000; Wentzel & Caldwell, 1997), few studies have been conducted to examine the contribution of social and behavioral adjustment on ethnic minority children’s academic underachievement while accounting for SES and cognitive factors. The final study presented in this thesis (Chapter 5) therefore investigated the research question:
DOES SOCIAL-BEHAVIORAL ADJUSTMENT CONTRIBUTE TO ETHNIC DISPARITIES IN END OF ELEMENTARY SCHOOL ACHIEVEMENT ABOVE AND BEYOND COGNITIVE SKILLS?

STUDY DESIGN

The research questions of this thesis were addressed within a longitudinal study conducted in the Netherlands in which 759 elementary school-age children from the general population were annually assessed in their psychological and social adjustment (Witvliet et al., 2009). In 2004, children were recruited from 30 schools that were situated in two urban areas (Rotterdam & The Hague) and one rural area (Winterswijk). Although the sample used in this study was not selected with the specific goal of studying ethnic differences in adjustment, the study’s setting, sample size, and prospective set-up, provided the unique opportunity to gain more insight in the early psychosocial development and academic performance of non-Western minority children. This opportunity has multiple angles, ranging from the chance to take a look at their early psychological problems and social functioning from a longitudinal perspective, from the view of school teachers as well as classroom peers, to examine whether their social-behavioral adjustment contributes to their externalizing and academic problems. Filling in these gaps may help clarify the influence of the social context, the robustness of effects, and possible escalation of problem behaviors. With this information, empirically based starting points for the design and implementation of school (preventive) intervention programs may be improved and made more effective.

In the present thesis (Chapter 2 - Chapter 5; see Table 1.1.), children were included if data on ethnicity and/or family SES information was available. A non-Western minority status was defined as having at least one parent originating from Morocco, Turkey, Netherlands Antilles, Surinam or another non-Western country that has migrated to the Netherlands for settlement (Statistics Netherlands, 2014c). Children were categorized as having a Dutch ethnicity if both parents originated from the Netherlands or if one parent was native Dutch and the other parent originated from another Western country (Statistics Netherlands, 2014d, 2014e). Based on these criteria, 56% of the children had a Dutch ethnicity. The remainder of
the study sample fell under the category of having a non-Western ethnicity. Non-Western minority children had a Moroccan (11%), Turkish (10%), Surinamese (6%) or Netherlands Antillean (5%) origin or another non-Western ethnicity (8%) such as Pakistan and Somalia.

The central objective of the present thesis was to obtain a better understanding of the psychosocial and educational adjustment of non-Western minority elementary children in the Netherlands. In Chapter 2, with teachers and peers as informants, repeated measures of various variables in the developmental domains of behavioral, emotional and social functioning were used as outcome measures to investigate possible ethnic differences in their level and change across elementary school. In Chapter 3, it was examined whether ethnic differences in externalizing problem behaviors may be confounded by an ethnic bias in teacher assessment of child behavior across the elementary school years. In Chapter 4, the possible moderating role of ethnicity in the link between peer social preference and early elementary school externalizing problem behavior was studied. Finally, in Chapter 5 it was examined if and to what extent social-behavioral adjustment may contribute to ethnic differences in end of elementary school achievement.

### Table 1.1 Overview of Study Design, Sample Size and Study Aim by Chapter

<table>
<thead>
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<th>Chapter</th>
<th>Study design</th>
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<td>583</td>
<td>7-12</td>
<td>Ethnicity as a predictor of level and growth differences in externalizing, internalizing, and social outcomes</td>
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<td>Teacher bias in reports of externalizing problem behavior as a function of children's ethnicity</td>
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<td>Longitudinal;</td>
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<td>Ethnicity as a moderator in the link between peer social preference and the development of externalizing problem behavior</td>
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<td>5</td>
<td>Longitudinal;</td>
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<td>583</td>
<td>7-12</td>
<td>Social-behavioral adjustment as a mediator of ethnic differences in academic outcome</td>
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