

Minority children and academic resilience in the Nordic welfare states

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Acknowledgments:

The authors acknowledge Aleris Care Norway for financial support. In addition, the authors thank one anonymous referee for constructive criticism and valuable comments and proposals.

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Compliance with ethical standards:

The authors declare that there are no conflicts of interests regarding this paper.

Minority Children and Academic Resilience in the Nordic Welfare States.

Abstract

Purpose

– The purpose of this paper is to summarize and analyse empirical research on protective factors that promote academic resilience in ethnic minority children mainly aged between 13 –18 years attending schools in the Nordic countries.

Design/methodology/approach

- This paper was opted for a literature review of 23 peer-reviewed quantitative articles published between 1999 and 2014. The analysis entailed protective factors at both the personal and environmental levels in ethnic minority children.

Findings

– Some minority children`s school performance may be just as good if not better than majority children when having similar or even lower socioeconomic status than majority children. Protective factors at the personal level included working hard, having a positive attitude towards school, and having high educational aspirations. Protective factors at the environmental level included supportive school systems, supportive schools, and supportive networks including parental qualities and support. The findings are comparable to findings outside the Nordic countries with one exception; minority children in the Nordic countries performed better than expected despite socio-economic disadvantages.

Research implications

- Protective factors affecting academic resilience need further attention in a time with an increased global migration. Research implications may be related to how schools and policy makers develop supportive school systems, supportive schools and supportive networks to contribute to making a difference for minority children`s educational opportunities in the Nordic countries.

Originality/value

- Academic resilience is a relatively new research field in Nordic countries. This review is the first review which has summarized and analysed existing findings on academic resilience in Nordic countries in minority children.

Keywords Welfare state, Academic resilience, Ethnic minority children, Nordic countries, School success

Paper type Literature review

Introduction

The rapid increase in immigration to the Nordic countries (Berggren, 2013, Jackson et al., 2012, Djuve and Grodem, 2014) highlights the need for research on education for ethnic minority children. The large numbers of people immigrating to the Nordic countries adds a new dimension to academic and political discussions related to educational opportunities for ethnic minorities (Jackson et al., 2012). Specifically, migration brings unique challenges to the welfare system, which depends on participation in working life and a relatively equal income distribution that maintains the generous and universal welfare state (Norwegian Ministry of Children Equality and Social Inclusion, 2011a). In the Nordic countries, welfare models are characterised by a high degree of state responsibility in securing welfare for its citizens. For example, school systems are an integral part of the welfare state system in Nordic countries (Telhaug et al., 2006, Arnesen and Lundahl, 2006). Children from ethnic minority backgrounds are overrepresented among those with lower socioeconomic status (SES) in the Nordic countries (Statistics Norway, 2015a), which may affect children's school achievement (Bradley and Corwyn, 2002, McLoyd, 1998). However, education may counteract or equalize inequalities between minority and majority groups (Olsen, 2012). Education serves an important function regarding the development of a sense of mastery in the present as well as the promotion of future and educational opportunities (Stefansen, 2004). Education also contributes to integration because it promotes knowledge of and a sense of belonging to the surrounding society (Fekjaer, 2006). Research that compares academic achievement between minority and majority children outside the Nordic countries has found mixed results. Several studies show that minority children struggle academically compared to majority children (Azzolini et al., 2012; Clauss and Nauck, 2010; Colding et al., 2009; Kao and Tienda, 1995). As such, research has shown that majority students outperform minority students by more than 40 points in most OECD countries (OECD, 2012a). Having a primary language different from the majority students is a well-established risk factor (Perez et al. 2009). Having a minority status may cause stress and is another risk factor (van Geel and Vedder,

2011). However, resilience research has examined persistence and academic success despite stressful events and conditions during childhood and adolescence (Alva, 1991, Wang et al., 1994).

Academic resilience

The last decade, research on resilience has grown rapidly (Kumpfer, 2002). Recently, some researchers have considered resilience as a domain specific concept (Novotny, 2011, Jowkar et. al, 2014). One of these concepts is *academic resilience*, which is defined as the heightened likelihood of educational success despite personal vulnerabilities and adversities brought about by environmental conditions and experiences (Wang et al., 1994). This definition highlights how success in school may be protective factors which counteract or eliminate risk factors that are faced by ethnic minority children in the school system compared to majority children. However, educational success related to academic resilience does not include 'everyday adversities' such as challenges, pressure and isolated poor grades which is a part of a more regular academic life (Martin and March, 2009). According to Masten et al. (2006), success in school in this matter means that students should be performing consistent with developmental task expectations, including performing similar to or better than majority children as well as not dropping out of school. In addition, success in school includes receiving grades that are comparable to majority children to ease future adaptation into the receiving society (Motti-Stefanidi et al., 2012, Motti-Stefanidi and Masten, 2013).

Academic resilience among children from minority families has been examined in many countries; however, most of these studies have been published in the United States (Cappella and Weinstein, 2001; Perez et al., 2009; Kao and Tienda, 1998; Kao, 2004) and the United Kingdom (see, e.g. Ghuman, 2002; Verma and Ashworth, 1986; Strand and Winston, 2008). In the Nordic countries, academic resilience is a relatively new research field. Although academic resilience is of clear importance to teachers and the government, no review has summarised existing findings on academic resilience in the Nordic countries.

The aim of the present paper is to summarise and analyse existing research on academic resilience among minority children, compared to majority children, who attend schools in the Nordic countries.

The process and theory of academic resilience

Academic resilience is not a static construct (Eccles, 2009; Pianta, 2006); rather, the process results of a cluster of ecological factors that predict positive human development more than individual traits (Ungar, 2012), which is consistent with bioecological models claiming that academic resilience involves mutual interactions between the person and the environment over time (Bronfenbrenner, 1986; Bronfenbrenner and Ceci, 1994). Academic resilience is an indicator of concurrent and longitudinal positive adaption from both developmental (Eccles, 2009; Pianta, 2006) and acculturation perspectives (Berry et al., 2006). Research on academic resilience has highlighted risk and protective factors at the personal (see, e.g. Werner and Smith, 1992; Bernard, 1995) and environmental levels (see, e.g. Jozefowicz-Simbeni and Allen-Meares, 2002). Protective factors promoting academic resilience can be categorised into internal (personal) and external (the environment) (Jowkar et al., 2014). At the *personal level*, protective factors include e.g. focussing on school achievement (Johnson et al., 2011), having a positive attitude towards school (Hvistendahl and Roe, 2009; Hvistendahl and Roe, 2004; Epstein and Krasner, 2013), and having high aspirations that include engagement and educational ambitions (Kao and Tienda, 1998; Peng et al., 1992, Strand and Winston, 2008). At the *environmental level*, bioecological models hold that the child's development is affected and modified by several ecological levels called the micro, meso, exco- and the macro-system levels (Bronfenbrenner, 1979; Bronfenbrenner and Ceci, 1994; Bronfenbrenner et al., 2005; Bronfenbrenner and Morris, 1998). The development of the child is also affected by e.g. transitions and shifts during his or her lifespan called the *chrono-system level* (Bronfenbrenner and Ceci, 1994).

On a daily basis the child interacts within different microsystems. It is crucial however, that these different microsystems involve mutual transactions called proximal processes based on shared values to act as protective factors promoting academic resilience. This is called the mesosystem level (Kvelling, 2013; Bronfenbrenner, 1986; Bronfenbrenner and Ceci, 1994). Furthermore, political and economic conditions at the exosystem level as well as attitudes and culture shared by members of society in the macrosystem level affect and modify the child's development.

Protective factors at the environmental level include e.g. being enrolled in effective and supportive schools, having a supportive immigrant peer group network both at school and in the community (Bernard, 1995; Verma and Ashworth, 1986), and having a supportive network including parental support (Maccoby, 1980; Hango, 2007; Kao, 2004). The outcomes that are related to academic resilience are 'completing upper secondary education', 'positive educational choices', 'positive school adjustment', and 'better-than-expected achievement'. In sum, research has found that minority children utilise specific resources both at the personal and environmental levels to circumvent and to handle different stressors to become successful in academics (Perez et al., 2009). Our study focusses on the following research question: Which protective factors at the personal and the environmental levels are identified related to academic resilience among minority children in the Nordic countries?

Methods

To identify studies that have focused on academic resilience among minority children attending schools in the Nordic countries, we conducted a literature review between January and March 2015. We searched the following electronic databases: ProQuest, Web of Science (through the Core Collection), ERIC, Idunn, and Norart. These sources were selected because of their prominence in education and psychological areas at international and national levels. In the databases that had descriptors or a controlled vocabulary (thesaurus), thematic filters were formed with Medical Subject Headings (MeSH) terms and keywords. In Web of Science, we used keywords as natural words that were searched in specific fields marked as "topic" -title and summary-.

Four thematic filters were developed: a) Geographic (country): Scandinavia*, Nordic*, Norway, Sweden, Finland, Iceland, Greenland, Denmark; b) Ethnic minority children: Immigrant*, minorit*, ethnic*, Migrant*, 'second generation', 'second-generation', '2ND generation', '2nd-generation'; c) School: School*, 'elementary school*', 'compulsory school*', 'primary school*', 'secondary school*', 'secondary education', 'vocational education', 'higher education', 'PISA'; and d) Academic Resilience: resilienc*, aspir*, achievement, 'school success', psychological*, adapt*, academic*, motivation, 'completing education', 'school satisfaction', 'academic attainment', 'academic competence.' The search was conducted according to database characteristics, and the Boolean operators "AND" and "OR" were used to retrieve the available scientific literature.

In our study, the term 'children' refers to all participants. 'Children' is all young people age 0 up to 18 years according to the UN General Assembly (1989). The target population in our study is children of age group 13-18 years. 'Minority children' refer to children from ethnic minority background, which involves *immigrant children* described as a) *first-generation* immigrants as well as b) *second-generation* immigrants or *children of immigrants*. First-generation immigrants are children born outside the country of assessment and whose parents were also born in a different country, while second-generation immigrants are children who themselves are born in the country of assessment but whose parents were born in a different country, i.e. children who are following/have followed all their pre-school/schooling in the country of assessment (OECD, 2009, p. 5).

Protective factors associated with academic resilience in our study on the personal level were operationalized with key terms such as 'aspirations' and 'positive attitude', while on the environmental level key terms were e.g. 'supportive network', and 'supportive schools.' For information on inclusion criteria, see Table 1.

Table 1. Inclusion and exclusion criteria

(Insert Table 1 about here)

The identification and screening of article titles and abstracts was conducted by one researcher (A.J.). Selected full text articles were independently screened to assess eligibility. The analysis entailed protective factors at both the personal and environmental levels. First, we categorised themes into main headings based on similarities. At the personal level, we created the following heading: (I) children's *own efforts* affecting school success. Subcategories were created in the main headings in which they crystallised. Second, we categorized factors at the environmental level into the following main heading: (II) *support from networks and other environmental factors* affecting children's school success. The main heading was divided into subcategories at the environmental level using the same principles as the personal level. Next, we analysed the articles that contained protective factors at the personal level, beginning with *what the studies investigated*, e.g., 'attitudes toward school,' specifying *how each study measured* the factors e.g., by self-reports, and *the findings*. We conducted the same analysis on protective factors at the environmental level. We identified a total of 946 studies. After removing duplicates, studies not meeting the inclusion criteria and all studies that were not related to our aim, 141 studies in full-text were assessed for eligibility. A total of 23 records were included in the final analysis (see Figure 1).

Figure 1: Flow diagram for study selection

(Insert Figure 1 about here)

Results

The present review resulted in 23 articles on academic resilience from Nordic countries for analysis. All studies that were included in the literature review had been published between 1999 and 2014. In total, 15 studies had a cross-sectional design, while eight studies had a longitudinal or cohort design. Most included studies had large sample sizes that ranged from $n = 218$ to $> 100,000$, with high response rates. Nine Norwegian, two Danish, five Swedish, and four Finnish studies were included in the literature review. In addition, 3 studies were collaboration studies that included countries outside the Nordic

countries. We included these studies while the results from the Nordic countries were clearly separated from the results from the countries outside the Nordic countries. These studies contained findings from Norway (two), Sweden (two), and Finland (one).

Nine studies contained protective factors at the personal level. These studies investigated the influence of *working hard*, *having a positive attitude* and *having high aspirations*, which included engagement and ambition. Two studies contained protective factors at both the personal and environmental levels (Hvistendahl and Roe, 2004; Jackson et al., 2012).

I. Children's own efforts affecting school success

We categorised this main heading into three subcategories: 'working hard', 'positive attitude', and 'high aspirations, including engagement and educational ambition'.

Working hard

Two studies reported how *working hard* at the personal level affected academic resilience (Lauglo, 1999; Borg, 2013). Lauglo's (1999) study investigated how attitudes affected hard working among minority compared to majority children, measured by questionnaires on attitudes towards school and hours spent with homework. The results suggested that minority children had a more positive attitude towards school and spend more time with homework than majority children. Controlling for social class, the findings showed that minority children performed at the same level as the majority, except in Norwegian language. Borg's (2013) study investigated *working hard*, as measured by time spent on homework, with a primary focus on gender differences in relation to school effort for minority compared to majority children. Both studies showed that, in general, minority children worked harder, as they spent more hours on homework, than majority children. Borg's study suggested that minority girls made the strongest effort on homework; however, majority girls had better outcomes as measured by time spent on homework per day combined with self-reported reflections on how often students did not do their homework and their attitudes and behaviours towards work in school. Minority girls had increased

school achievement compared to both majority and minority boys, which was only exceeded by the majority girls.

Positive attitude

A study by Hvistendahl and Roe (2009) investigated the influence of *attitudes* on reading skills and how attitudes affect academic resilience. The results suggested that minority girls were more likely than boys to have a positive attitude related to reading habits and attitudes towards reading. Furthermore, their study indicated that girls from middle-class and ethnic minority backgrounds had the highest educational aspirations as measured by self-reports of positive attitudes towards reading and the amount of time spent each day on reading. Hvistendahl and Roe (2004) investigated protective factors at the personal level through attitudes towards school with a focus on the effect of immigrant background and SES on literacy achievement. In general, minority children had higher motivation, effort, and perseverance in school than majority children.

High aspirations, including engagement and educational ambitions

Research on how educational *aspirations* for higher education affect academic resilience has been conducted by Hegna (2010). This study found that minority children had higher aspirations for education than majority children with similar social backgrounds. The aspirations measure was a questionnaire that was administered in both ninth and tenth grade about the student's future educational plans after high school. This study also found that nearly half of the children with minority backgrounds had increases in educational aspirations. Jackson et al. (2012) investigated aspirations for educational success as measured by grades on public examinations in mathematics and the English language. The results showed that some minority groups performed extremely well. Overall, minority groups performed at the same level as the majority, which was defined as school success and higher aspirations than the majority group after controlling for ethnic origin. In a separate study, Högdin (2007) investigated academic resilience through the influence of engagement on completing primary school, which was measured with a questionnaire on how students care about and engage in their own schoolwork. This

study reported that minority children experienced greater engagement in school work compared to majority children. Regarding gender differences, minority girls were the most engaged, minority boys were the second most engaged and majority children were engaged the least. Støren (2011) investigated academic resilience through student's choice of prestigious education programmes on higher educational (HE) enrolment, as measured by an accepted offer and commencement in the specific programme. This study found that the enrolment rate among second-generation minority children was higher than among majority children. These results suggest that there is a specific propensity for choosing the most prestigious education among second-generation immigrants compared to majority children who had more success in school. Jonsson and Rudolphi (2011) found similar results in Sweden: in general, minority children had higher transition rates that reflected school success on the personal level compared to majority children, as assessed by grades in grade nine and their concurrent choice of upper secondary programmes. Furthermore, the study found that some second-generation minority groups, i.e. Asian and Iranian second-generation students, performed better than the majority group, and especially the girls performed extremely well.

Concerning the environmental level, fourteen studies included protective factors at the environmental level. Seven studies investigated the influence of family resources, such as having a supportive network with parental qualities, including family support and family socioeconomic status (SES). In addition, one study investigated the influence of cultural identity and perceived discrimination on school outcomes (Liebkind et al., 2004). Four additional studies investigated the influence of supportive schools and environments on school outcomes, including immigrant concentration and neighbourhood effects (Andersen and Thomsen, 2011; Brannstrom, 2008; Bygren and Szulkin, 2010; Jensen and Rasmussen, 2011). Two additional studies investigated the influence of political decisions, such as early school start (Reform 97) and the Nordic welfare state's impact on reducing differences in school outcomes between minority and majority groups (Bakken, 2009; Reisel and Brekke, 2010). The

final study examined the influence of citizenship and how citizenship in immigrants may lead to better school outcomes compared to majority groups (Kilpi-Jakonen, 2014).

II. Supportive schools and networks and other environmental factors affecting children's school success.

This main heading was divided into three subcategories; 'school and neighbourhood effects, including policy decisions and citizenship', 'supportive networks, including parental qualities and support', and 'family SES'.

School and community effects, including policy decisions and citizenship

One study investigated community and school effects on the environmental level on individual educational outcomes as measured by the student's exit certificate (Brannstrom, 2008). The main findings suggest that characteristics of the school such as school practices (schools with experience in teaching students with immigrant background) and schoolmates have a larger influence on the variability in achievement than the neighbourhood or the community. Nevertheless, this study evidenced that being a first-generation immigrant in a school with a higher density of first-generation immigrants had advantages. A study by Andersen and Thomsen (2011) investigated the influence of immigrant concentration in schools on children's educational outcomes as measured by grades on standardised written examination tests. This study did not find negative immigrant peer group effects for majority or minority children in Danish lower secondary schools. Thus, the findings suggested that being enrolled in schools that had less than 10 per cent immigrants increased educational outcomes. In addition, the study suggests that second-generation immigrants performed significantly better than first-generation immigrants. Utilizing the mechanisms connected to educational choice, Jonsson and Rudolphi (2011) investigated educational careers as measured by minority children's grades. The results showed that school systems in which choice played a significant role affected academic resilience for most minority groups, specifically the high-aspiring second-generation. Another study investigated the effects of

immigrant concentrations in schools on the environmental level on minority and majority children's reading and math skills as measured by the students Programme for International Student Assessment (PISA) reading and math scores (Jensen and Rasmussen, 2011). The findings showed that immigrant concentrations in schools have a stronger effect for majority children than minority children. Although the result for minorities was not significant; the findings suggest that immigrant concentrations did not influence math scores for minority children. Regarding community effects on academic resilience, Bygren and Szulkin (2010) found a positive effect of neighbourhood on academic resilience, as measured by the highest achieved educational level. Thus, the finding was only valid for minorities who grew up in neighbourhoods that had educationally successful young co-ethnics. In addition, the findings showed that the effect of the ethnic environment was mediated by results from compulsory school. Two additional studies contained protective factors on the environmental level that were related to policy decisions that had been embodied in legislation. First, Bakken (2009) examined the influence of earlier and prolonged education for minority language students based on the Norwegian school reform; Reform 97 (implying children starting school at the age of six instead of seven, ten years of schooling instead of nine and a new curriculum). Academic resilience was measured by children's grades and showed that the gap between minority and majority children in Norwegian schools was reduced when all children started school as six-year-olds compared to cohorts who started one year later. Kilpi-Jakonen (2014) investigated the influence of Finnish citizenship on academic resilience, as measured by minority children's average grades, which suggested that citizenship may reflect identity and integration. Furthermore, the results suggested that minority children who had citizenship had better educational outcomes than non-citizens.

Supportive networks, including parental qualities and support

Liebkind et al. (2004) found that parental support promoted school adjustment in minority children by enhancing their ethnic identity. Furthermore, the results showed that minority children had more success in school as measured through self-assessment and school adjustment through children's personal

feelings towards school compared to the majority despite perceived discrimination and a disadvantaged SES. Fekjaer and Leirvik (2011) investigated family resources on school outcomes such as grades. This study examined whether family relations and parental education explained academic resilience in children from minority compared to majority origin. The results suggested that parental education did not explain high performance in minority children. However, family relations (having an open relationship with parents) were positively correlated with school grades for minority children. Kilpi-Jakonen (2012) examined achievement, measured by the average grade, of minority children in school at the end of compulsory education. The findings suggested that minority children tend to have lower levels of achievement than majority children, with the exception of one specific minority group that was very successful showing academic resilience by outperforming the majority.

Family SES

A collaborative study by Sam and colleagues (2008) investigated the influence of the immigrant paradox, which refers to better adaptation outcomes among particularly first-generation immigrants compared to their majority peers, in relation to socio-cultural adaptation (school adjustment). The paradox was measured with a seven-item scale that focussed on how satisfied the student was with school in general and with his or her school achievement. This study included several European countries, including Nordic countries such as Finland, Norway, and Sweden. The results suggested that first-generation minority children with low SES across countries, compared to both majority children and second-generation minority children, reported better school adjustment compared to the two other groups. However, in Norway, the results showed that second-generation immigrants had higher scores on school adjustment than majority children, while in Finland and Sweden, both first- and second-generation immigrant children had better school adjustment than majority children. Berggren (2013) described the transitions of three birth cohorts through the educational system and into the labour market focusing on those in their early thirties who received a Swedish education. The results suggested that minority children who had academically educated parents and majority students were

more likely to complete upper secondary school (both categories were above 85 per cent). In general, this study suggests that children with an academic family background are two to three times more likely to complete two years of tertiary education compared to those from less educated backgrounds. There was one exception for a minority group in which the difference was only 20-35 per cent. This means that this particular minority group (the Asians) did not follow the pattern in which the other minority groups' parental educational level was the most important factor explaining completion of 2 years of tertiary education compared with those with less educated backgrounds. For this particular ethnic group, lower educated parents seemed to be pro-education irrespective of their educational level. Furthermore, according to transitions into the labour market based on ethnic origin, one group of tertiary educated minority women from the western parts of Asia (e.g. Iran, Pakistan and the West Bank) in particular were more successful than their male counterparts. Kilpi-Jakonen (2011) investigated academic resilience measured by continuation versus dropping out and choice of upper secondary school type (general versus vocational) in minority children compared to majority children. Continuation was measured one year after completing upper secondary school. Although minority children had a higher probability of dropping out of school than majority children, the results suggested that minority children's probability of continuing in general schools was higher than the majority after controlling for SES. Fekjaer (2007) investigated academic resilience by looking at educational differences between minority and majority groups in Norway and the extent to which these differences could be explained by SES. The findings indicate that a lower SES does not have the same negative impact, as measured by the probability of completing upper secondary school, on educational attainment for certain minority groups in Norway compared to majority children. Hvistendahl and Roe (2004) examined academic resilience by investigating family background and reading habits on literacy achievement in school with data from PISA 2000. This study found that minority students born in Norway performed nearly as well than majority students in mathematical literacy. Similar results were found in Sweden where minority students born in Sweden seemed to perform almost as well as the majority students in reading and

scientific literacy (Hvistendahl and Roe, 2004). However, in Denmark the gap between minority students and majority students was bigger in disfavour of the minority students. Another collaborative study investigated academic resilience by comparing dropout rates between majority and minority students in higher education in the USA and Norway (Reisel and Brekke, 2010). Both countries followed a group of students for eight years from their first year of post-secondary enrolment. In contrast to the results from the USA, in Norway, minority children did not dropout more than majority children despite being socioeconomic disadvantaged. As such, minorities in Norway had more success in school compared to minorities in the USA. Furthermore, this study suggested that the Norwegian welfare state system acts as an environmental protective factor that alleviates some of the disadvantages associated with low SES and having a minority background.

Discussion

This review found that the study of academic resilience among minority children compared to majority children in the Nordic countries is a relatively new research field. Most research has focused on disadvantaged majority children from 'child welfare' systems (Hansen et al., 2011; Hesjedal et al., 2015, Hojer and Johansson, 2013; Skilbred et al. 2017; Seeberg et al., 2013; Weyts, 2004) and not specifically on minority children. In contrast to studies outside the Nordic countries, no research in the present review uses the term 'academic resilience,' except one study from Finland that uses 'educational resilience' (Kilpi-Jakonen, 2011), and one Norwegian study that uses 'resilience' (Lauglo, 1999).

The primary finding on protective factors at the personal level was that minority children work harder in school than majority children. Several groups that have minority backgrounds work so hard that some of the groups outperform majority children's school performance with similar or higher SES background. Working hard may be a protective factor because minority children must succeed in school despite adversity and overcome disadvantages, such as having a lower SES and language barriers. Lauglo (1999) refers to this as the 'harder drive.' Working hard in school is generally associated with positive attitudes, values, and behaviours in classrooms (Bakken, 2003; Lauglo, 2000). In addition,

working hard is related to the amount of homework students complete (Trautwein et al., 2006). Martin (2008) distinguished between adaptive behaviours and cognitions. As such, a Norwegian study based on in-depth interviews with 23 second-generation immigrant children found that the children worked hard in gratitude to their parents (Leirvik, 2010). Thus, working hard is associated with adaptive cognitions such as aspirations, ambitions, and engagement. High aspirations, ambitions, and engagement promote educational success is supported by studies outside the Nordic countries (Motti-Stefanidi and Masten, 2013; Sewell et al., 1970; Kao and Tienda, 1998). Furthermore, engagement is associated with academic self-efficacy, which predicts the extent to which a child engages in learning or “the degree to which students are ‘connected’ to what is going on in their classes” (Steinberg et al., 1996). Self-efficacy is a key protective factor in relation to higher academic performance (Suarez-Orozco et al., 2009) and highlights the extent to which a student believes that his or her own actions may lead to the desired result (Bandura, 1997; Bandura et al., 1996; Britner and Pajares, 2006).

The main findings on protective factors at the environmental level in the Nordic countries related to academic resilience in minority children were that supportive schools and appropriate school policies promoted school success in minority children. Our study suggests that the security nets of the Nordic welfare state act as a protective factor on the environmental level in the exosystem. The Nordic welfare state system contains a high degree of state responsibility, as explained by Esping-Andersen (1990, 2002). Examples are supportive schools and school systems as well as political decisions regarding educational policies and school reforms (cf. the Norwegian Reform 97). Furthermore, minority children in Norway seem to internalise their parents’ education preferences and positive attitudes towards education (Leirvik, 2010). Similar preferences were found in studies outside the Nordic countries (Kao, 2004; Siantz, 1997; German et al., 2009). The empirical literature shows that there are high expectations and aspirations among most minority parents, including the least educated (Portes, 2012). As such, studies have found that there is a stronger sense of family obligation among minority children than majority children on positive school achievements (van Geel and Vedder, 2011; Fuligni et al.,

1999). Minority parents may value education to a greater extent than majority parents because they know that access to education is worse or sometimes non-existent in their 'home' countries (Martin et al., 2012; Tevlina, 2012). Bakken (2010) claims that parental education may be the strongest predictor in SES and that SES have the greatest impacts on school performance in school children. However, other studies from the Nordic countries suggest that SES may not have the same impact on school performance in children with minority background than for majority children (Fekjaer, 2007; Liebkind et al., 2004). Despite being disadvantaged by SES, most minority children in the present study performed as well as the majority (Fekjaer, 2007, Sam et al., 2008, Kilpi-Jakonen, 2011). Moreover, minority children from the Nordic countries do not drop out of school more than majority children despite being SES disadvantaged, which is in contrast to findings from the USA (Reisel and Brekke, 2010). Moreover, the present study shows that SES disadvantages – in relation to schools and low SES (e.g. schools with higher density of immigrant concentration and low family SES) – apparently have a smaller negative effect on minority children's school achievement in the Nordic countries compared to findings outside the Nordic countries. However, other Norwegian studies highlight that minority children in Nordic countries still struggle related to school outcomes (Lødding, 2009; Markussen et al., 2011). Similar findings are supported by information from public registers (Statistics Norway, 2015b) and Government information (NOU, 2010), which may highlight that there still are challenges and barriers related to academic resilience and completing school in the Nordic countries for minority children compared to majority. Furthermore, a thematic review on migrant education from Norway shows that a high proportion of children with immigrant background have a weaker rate of completing upper-secondary school than majority children (OECD, 2009).

Although the present study did not focus on gender differences in academic resilience, the literature suggests that minority boys struggle compared to minority girls (Berggren, 2013; Borg, 2013, Hvistendahl and Roe, 2009; Högdin, 2007; Norwegian Ministry of Children Equality and Social Inclusion, 2011b; Statistics Norway, 2015b), which is consistent with studies outside the Nordic countries (OECD,

2012b). Furthermore, minority girls may have more parental supervision and stronger family obligations than boys (Sam et al., 2008; Fuligni, 1997; Steinberg et al., 1996; van Geel and Vedder, 2011) which may explain the gender gap that the present study found among minority children.

According to Bronfenbrenner (1986), individuals change and develop in a dynamic relation between processes on different levels. Moreover, protective factors operate across levels, and it is crucial to understand how individual capacity at the personal level interplays with external protective factors (Lee et al., 2012). However, Bronfenbrenner (2005) argued that in addition to process as a key concept in bioecological models, the characteristics of the individual, such as skills and abilities, could have a direct impact on proximal processes. As such, having high aspirations and working hard might be crucial personal protective factors to emphasize when promoting school success in ethnic minority children.

This study has several limitations. A central limitation of the literature, and consequently this review, is that some studies did not specify the country of origin for the minority groups. Following this, there are large differences in the educational achievement of minority groups from different countries of origin (Fekjaer, 2007). In addition, this study did not differ between minority children who emigrated themselves to the country and minority children to immigrant parents (first- and second-generation immigrants) due to limitations in most of the included studies. Other Nordic studies show that second-generation immigrants perform significantly better than first generation immigrants (Lødding, 2003; Statistics Norway, 2015b).

Third, this study did not contain information about the students' backgrounds such as differences among language minority students compared to minority students from a refugee background. The latter group may face challenges related to pre- and post-migration experiences causing mental health problems and poorer well-being, which may have an impact on the development of academic resilience. Another limitation is that some studies included Nordic countries in the minority groups. However, the Nordic minority groups were small compared to minority groups from countries

outside the Nordic countries. Therefore, we do not believe that those studies affected the results of the present review. Furthermore, two studies included children in the minority group with only one parent born abroad, categorized as 'mixed' in addition to two parents born abroad (Jonsson and Rudolphi, 2011; Kilpi-Jakonen, 2012). This constitutes 5,1 per cent of the minorities ($n= 30437$) in the first study and 15,6 per cent of the minorities in the second study ($n= 3597$).

Concluding Remarks

Academic resilience is in sum conceptualised of continuous interaction between the individual and the environment, which through interventions enhance children's learning, develop their competencies and talents, and buffer them against environmental adversities (Wang et al., 1997). To a large extent, the same protective factors in the Nordic countries have been identified in countries outside the Nordic countries. One exception in the Nordic studies, however, is that minority children perform better than expected and some minority groups perform even better than majority children despite SES disadvantages. Our study suggests that the security nets of the Nordic welfare states act as a protective factor. This may explain why SES disadvantages do not influence school success to the same extent that was found in studies outside the Nordic countries. Protective factors affecting academic resilience thus needs further attention in a time with an increased global migration. In this matter, minority children's educational opportunities and how they achieve at school compared to majority children represents an important issue. Research implications may be related to how schools and policy makers can contribute to making a difference for minority children's educational opportunities in the Nordic countries and how they achieve at school by developing supportive school systems, supportive schools and supportive networks. In this matter schools also may contribute by improving school-home collaboration and parents' involvement, as well as providing assistance with homework. In addition, schools should both support and encourage students who struggle, emphasizing that hard work and steady efforts at school may lead to academic success despite language barriers and disadvantaged

social and economic backgrounds. Furthermore, personal factors such as the particular challenges refugee students face, may guide future studies.

Acknowledgements

In addition, the authors thank one anonymous referee for constructive criticism and valuable comments and proposals.

References

- Alva, S. A. (1991), "Academic invulnerability among Mexican American students: The importance of protective resources and appraisals", *Hispanic journal of behavioral sciences* 13,18-34.
- Andersen, S. and Thomsen, M. (2011), "Policy Implications of Limiting Immigrant Concentration in Danish Public Schools", *Scandinavian Political Studies*, 34, 27-52.
- Arnesen, A.-L. and Lundahl, L. (2006), "Still Social and Democratic? Inclusive Education Policies in the Nordic Welfare States", *Scandinavian Journal of Educational Research* 50, 285-300.
- Azzolini, D., Schnell, P. and Palmer, J. R. B. (2012), "Educational Achievement Gaps between Immigrant and Native Students in Two "New" Immigration Countries: Italy and Spain in Comparison", *Annals of the American Academy of Political and Social Science*, 643, 46-77.
- Bakken, A. (2003), "*Minoritetsspråklig ungdom i skolen. Reproduksjon av ulikhet eller sosial mobilitet?*" [Minority Language youth in school. Reproduction of inequality or social mobility?], Oslo, NOVA.
- Bakken, A. (2009), "*Nye tall om ungdom. Tidlig skolestart og skoleprestasjoner for språklige minoritetselever*" [New figures on youth. Early school and school performance of linguistic minority students], *Tidsskrift for ungdomsforskning*, 9, 79-89.
- Bakken, A. (2010), "*Prestasjonsforskjeller i kunnskapsløftets første år*" [Differences in performance during the the first year of the knowledge promotion], Oslo, NOVA.
- Bandura, A. (1997), "*Self-efficacy: The exercise of control*", New York, Freeman.
- Bandura, A., Barbaranelli, C., Capra, G. V. and Pastorelli, C. (1996), "Multifaceted impact of self-efficacy beliefs on academic functioning", *Child Development*, 67, 1206-1222.
- Berggren, C. (2013), "The influence of gender, social class and national background on education and work career?", *Nordic Journal of Migration Research*, 3, 135-144.
- Bernard, B. (1995), "*Fostering resiliency in kids: Protective factors in the family school and community*", San Francisco, West Ed Regional Educational Laboratory.
- Berry, J. W., Phinney, J. S., Sam, D. L. and Vedder, P. (eds.) (2006), "*Immigrant youth in cultural transition: Acculturation, identity and adaptation across national contexts*", Mahwah, NJ: Erlbaum.
- Borg, E. (2013), "Does Working Hard in School Explain Performance Differences between Girls and Boys? A Questionnaire-based Study Comparing Pakistani Students with Majority Group Students in the City of Oslo", *Young*, 21, 133-154.
- Bradley, R. H. and Corwyn, R. F. (2002), "Socioeconomic status and child development", *Annual Review of Psychology*, 53, 371-399.
- Brannstrom L. (2008), "Making their mark: The effects of neighbourhood and upper secondary school on educational achievement", *European Sociological Review*, 24, 463-478.
- Britner, S. L. and Pajares, F. (2006), "Sources of science self-efficacy beliefs of middle school students",

Journal of Research in Science Teaching, 43, 485-499.

Bronfenbrenner, U. (1979), "*The Ecology of Human Development: Experiments by Nature and Design*", Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1986), "Ecology of the family as a context for human-development - Research perspectives", *Developmental Psychology*, 22, 723-742.

Bronfenbrenner, U. (2005), "The bioecological theory of human development", Bronfenbrenner, U. (ed) *Making human beings human: bioecological perspectives on human development*, Thousand Oaks, Calif: Sage Publications.

Bronfenbrenner, U. and Ceci, S. J. (1994), "Nature-nurture reconceptualized in developmental perspective - a bioecological model", *Psychological Review*, 101, 568-586.

Bronfenbrenner, U., Lerner, R. M., Hamilton, S. F., and Ceci, S. J. (2005), "*Making human beings human: bioecological perspectives on human development*". Thousand Oaks, Calif.: Sage Publications.

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology, Volume 1: Theoretical models of human development* (5 ed., pp. 993-1028). New York: Wiley.

Bygren, M. and Szulkin, R. (2010), "Ethnic Environment During Childhood and the Educational Attainment of Immigrant Children in Sweden", *Social Forces*, 88, 1305-1329.

Capella, E. and Weinstein, R. S. (2001), "Turning around reading achievement: Predictors of high school students' academic resilience", *Journal of Educational Psychology*, 93, 758-771.

Clauss, S. and Nauck, B. (2010), "Immigrant and Native Children in Germany", *Child Indicators Research*, 3, 477-501.

Colding, B., Husted, L. and Hummelgaard, H. (2009), "Educational progression of second-generation immigrants and immigrant children", *Economics of Education Review*, 28, 434-443.

Djuve, A. and Grodem, A. (2014), "*Innvandring og arbeidsmarkedsintegrering i Norden*" [Immigration and labor market integration in the Nordic countries], *Fafo-rapport 2014:27. NordMod 2030. Delrapport 11*, Oslo, NordMod.

Eccles, J. S. (2009), "Schools, academic motivation and stageenvironment!", Lerner, R. M and Steinberg, L. (eds.), *Handbook of Adolescent Psychology*. 3rd ed. Hoboken, NJ: Wiley.

Epstein, R. M. and Krasner, M. S. (2013), "Physician Resilience: What It Means, Why It Matters, and How to Promote It", *Academic Medicine*, 88, 301-303.

Esping-Andersen, G. (1990), "*The three worlds of welfare capitalism*", Princeton, Princeton University Press.

Esping-Andersen, G. (2002), "A child-centered social investment strategy", Esping-Andersen, G, Duncan, G, Anton, H and John, M. (eds.), *Why we need a new welfare state*. Oxford, UK: Oxford University Press.

- Fekjaer, S. N. (2006), "Education among second-generation minority youth in Norway", *Tidsskrift for Samfunnsforskning*, 47, 57-93.
- Fekjaer, S. N. (2007) "New differences, old explanations - Can educational differences between ethnic groups in Norway be explained by social background?", *Ethnicities*, 7, 367-389.
- Fekjaer, S. N. and Leirvik, M. (2011), "Silent Gratitude: Education among Second-Generation Vietnamese in Norway", *Journal of Ethnic and Migration Studies*, 37, 117-134.
- Fuligni, A. J. (1997), "The academic achievement of adolescents from immigrant families: The roles of family background, attitudes, and behavior", *Child Development*, 68 261-273.
- Fuligni, A. J., Tseng, V. and Lam, M. (1999), "Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds", *Child Development Perspectives*, 70, 1030–1044.
- German, M., Gonzales, N. A. and Dumka, L. (2009), "Familism Values as a Protective Factor for Mexican-Origin Adolescents Exposed to Deviant Peers", *Journal of Early Adolescence*, 29, 16-42.
- Ghuman, P. A. S. (2002), "South-Asian adolescents in British schools: a review", *Educational Studies*, 28, 47-59.
- Hango, D. (2007), "Parental investment in childhood and educational qualifications: Can greater parental involvement mediate the effects of socioeconomic disadvantage?", *Social Science Research*, 36, 1371-1390.
- Hansen, K. Y., Rosen, M. and Gustafsson, J. E. (2011), "Changes in the Multi-Level Effects of Socio-Economic Status on Reading Achievement in Sweden in 1991 and 2001", *Scandinavian Journal of Educational Research*, 55, 197-211.
- Hegna, K. (2010), "Endringer i utdanningsaspirasjoner gjennom ungdomsskolen – kjønn, klasse og minoritetsbakgrunn" [Changes in aspirations through middle school - gender, class and minority background], *Tidsskrift for ungdomsforskning* 10, 89-104.
- Hesjedal, E., Hetland, H. and Iversen, A. C. (2014), "Interprofessional collaboration: self-reported successful collaboration by teachers and social workers in multidisciplinary teams", *Child & Family Social work*. doi: 10.1111/cfs.12093.
- Högdin, S. (2007), "Studieengagemang i grundskolan – Betydelsen av kön, etnicitet och lärarstöd" [Student Involvement in primary schools - the importance of gender, ethnicity and support from teacher], *Nordic Studies in Education*, 27, 291–311.
- Hojer, I. and Johansson, H. (2013), "School as an opportunity and resilience factor for young people placed in care", *European Journal of Social Work*, 16, 22-36.
- Hvistendahl, R. and Roe, A. (2004), "The Literacy Achievement of Norwegian Minority Students", *Scandinavian Journal of Educational Research*, 48, 307-324.
- Hvistendahl, R. and Roe, A. (2009), "Leseprestasjoner, lesevaner og holdninger til lesing blant elever

fra språklige minoriteter" [Reading Performance, reading habits and attitudes towards reading among students from linguistic minorities], *Norsk Pedagogisk Tidsskrift*, 4, 250–263.

Jackson, M., Jonsson, J. O. and Rudolphi, F. (2012), "Ethnic Inequality in Choice-driven Education Systems: A Longitudinal Study of Performance and Choice in England and Sweden", *Sociology of Education*, 85, 158-178.

Jensen. P. and Rasmussen, A. (2011), "The effect of immigrant concentration in schools on native and immigrant children's reading and math skills", *Economics of Education Review*, 30, 1503-1515.

Johnson, T. G, Prusak, K. A, Pennington, T. and Wilkinson, C. (2011), "The Effects of the Type of Skill Test, Choice, and Gender on the Situational Motivation of Physical Education Students", *Journal of Teaching in Physical Education*, 30, 281-295.

Jonsson, J. O. and Rudolphi, F. (2011), "Weak Performance—Strong Determination: School Achievement and Educational Choice among Children of Immigrants in Sweden", *European Sociological Review* 27, 487-508.

Josefowicz-Simbeni, D. M. H. and Allen-Meares, P. (2002), "Poverty and schools: Intervention and resource building through school-linked services", *Children & Schools*, 24, 123-136.

Jowkar, B., Kojuri, J., Kohoulat, N. and Hayat, A. A. (2014), " Academic resilience in education: the role of achievement goal orientations", *Journal of Advances in Medical Education & Professionalism* 2(1): 33-38.

Kao, G. (2004), "Parental influences on the educational outcomes of immigrant youth", *International Migration Review*, 38, 427-449.

Kao, G. and Tienda, M. (1998), "Educational aspirations of minority youth", *American Journal of Education*, 106, 349-384.

Kao, G. and Tienda, M. (1995), "Optimism and achievement: The educational performance of immigrant youth", *Social Science Quarterly*, 76, 1-19.

Kilpi-Jakonen, E. (2011), "Continuation to upper secondary education in Finland: Children of immigrants and the majority compared", *Acta Sociologica*, 54, 77-106.

Kilpi-Jakonen, E. (2012), "Does Finnish Educational Equality Extend to Children of Immigrants?", *Nordic Journal of Migration Research*, 2, 167-181.

Kilpi-Jakonen, E. (2014), "Citizenship and Educational Attainment amongst the Second Generation: An Analysis of Children of Immigrants in Finland", *Journal of Ethnic and Migration Studies*, 40, 1079-1096.

Kumpfer, K.L. (2002), "*Factors and processes contributing to resilience*". New York, Plenum Publishers.

Kvello, Ø. (2013), "Bioøkologisk teori. Personer og systemer i gjensidig påvirkning", K. Ragnheidur and Ø. H. Lysø (Eds.), *Læring, utvikling, læringsmiljø: en innføring i pedagogisk psykologi* [Learning, development, learning environment: an introduction to educational psychology], Trondheim: Akademika, 139-158.

Lauglo, J. (1999), "Working harder to make the grade: Immigrant youth in Norwegian schools", *Journal of Youth Studies*, 2, 77-100.

Lauglo, J. (2000), "Social Capital Trumping Class and Cultural Capital? Engagement with School Among Immigrant Youth", Baron, J. F. and Sculler, T. (eds.), *Social Capita: Critical Perspectives*. London: Oxford University Press.

Lee, T. Y., Cheung, C. K. and Kwong, W. M. (2012), "Resilience as a positive youth development construct: A conceptual review", *Scientific World Journal*, 2012.

Leirvik, M. S. (2010), "«For mors skyld». Utdanning, takknemlighet og status blant unge med pakistansk og indisk bakgrunn" [For my mother. Education, appreciation and status among youth of Pakistani and Indian background], *Tidsskrift for Ungdomsforskning* 10, 23-47.

Liebkind, K., Jasinskaja-Lahti, I. and Solheim, E. (2004), "Cultural identity, perceived discrimination, and parental support as determinants of immigrants' school adjustments: Vietnamese youth in Finland", *Journal of Adolescent Research*, 19, 635-656.

Lødding, B. (2003), "*Frafall blant minoritetsspråklige: Om frafall og norsk som andrespråk blant minoritetsspråklige elever i overgangen fra 10ende klasse til videregående opplæring*" [Dropouts among minorities: On dropout on Norwegian as second language among minority youth in the transition from lower to upper secondary transition], Skriftserie 29, Oslo: NIFU.

Lødding, B. (2009), "*Sluttere, slitere og sertifiserte: Bortvalg, gjennomføring og kompetanseoppnåelse blant minoritetsspråklige ungdommer i videregående opplæring*" [Quitters, strugglers and the certified: Voting down, implementation and achieving competence among minority youth in secondary education], Rapport 13/2009, Oslo: NIFU/STEP.

Maccoby, E. E. (1980), "*Social development: Psychological growth and the parent-child relationship*", San Diego, CA, Harcourt Brace Jovanovich.

Markussen, E., Frøseth, M. W. and Sandberg, N. (2011), "Reaching for the Unreachable: Identifying Factors Predicting Early School Leaving and Non-Completion in Norwegian Upper Secondary Education", *Scandinavian Journal of Educational Research* 55(3): 225-253.

Martin, A. J. (2008), "Enhancing student motivation and engagement: The effects of a multidimensional intervention", *Contemporary Educational Psychology*, 33, 239-269.

Martin, A. J., Liem, G. A. D., Mok, M. M. C. and XU, J. (2012), "Problem Solving and Immigrant Student Mathematics and Science Achievement: Multination Findings from the Programme for International Student Assessment (PISA)", *Journal of Educational Psychology*, 104, 1054-1073.

Martin, A. J. and Marsh, H. W. (2009), "Academic resilience and academic buoyancy: multidimensional and hierarchical conceptual framing of causes, correlates and cognate constructs", *Oxford Review of Education*, 35(3): 353-370.

Masten, A. S., Burt, K. and Coatsworth, J. D. (2006), "Competence and psychopathology in development", Cicchetti, D. and Cohen, D. (eds.) *Developmental psychopathology: Risk disorder and psychopathology*. 2nd ed. New York, NY: Wiley.

- McLoyd, V. C. (1998), "Socioeconomic disadvantage and child development", *American Psychologist*, 53, 185-204.
- Motti-Stefanidi, F., Asendorpf, J. and Masten, A. S. (2012), "The adaptation and well-being of adolescent immigrants in Greek schools: A multilevel, longitudinal study of risks and resources", *Development and Psychopathology*, 24, 451-473.
- Motti-Stefanidi, F. & Masten, A. S. 2013. School Success and School Engagement of Immigrant Children and Adolescents A Risk and Resilience Developmental Perspective. *European Psychologist*, 18, 126-135.
- NOU 2010 - Norwegian Ministry of Education and Research (2010), "NOU 2010: 7. Mangfold og mestring. Flerspråklige barn, unge og voksne i opplæringssystemet" [Diversity and mastering. Multilingual children, adolescents and adults in the education system]. Oslo: Ministry of Education and Research.
- NOU 2011 - Norwegian Ministry of Children Equality and Social Inclusion (2011a), "NOU 2011:7. Velferd og migrasjon - den norske modellens framtid" [Welfare and migration: Perspective and summary]. Oslo: Ministry of Children Equality and Social Inclusion.
- NOU 2011 - Norwegian Ministry of Children Equality and Social Inclusion (2011b), "NOU 2011:14. Bedre integrering — Mål, strategier, tiltak" [Better integration. Goals, strategies and actions]. Oslo: Ministry of Children Equality and Social Inclusion.
- Novotny, J. S. (2011), "Academic Resilience: Academic Success as Possible Compensatory Mechanism of Experienced Adversities and Various Life Disadvantages", *New Educational Review* 23(1): 91-10
- OECD (2009), "Thematic Review on Migrant Education - Country Background Report for Norway", OECD Publishing.
- OECD (2012a), "*Education at a Glance 2012: OECD Indicators*", OECD Publishing.
- OECD (2012b), "Untapped Skills. Realizing the potential of immigrant students. Programme for International Student Assessment. Where Immigrant Students Succeed - A Comparative Review of Performance and Engagement in PISA 2003", OECD Publishing.
- Olsen, B. (2012), "*Unge med innvandrerbakgrunn i Skandinavia. Hvor mange er i arbeid eller utdanning?*" [Young people with immigrant backgrounds in Scandinavia. How many are working or in education?], Oslo - Kongsvinger, Statistics Norway.
- Peng, S. S., Wang, M. C. and Walberg, H. J. (1992), "Demographic Disparities of Inner-city 8th graders", *Urban Education*, 26, 441-459.
- Perez, W., Espinoza, R., Ramos, K., Coronadi, H. M. and Cortes, R. (2009), "Academic Resilience Among Undocumented Latino Students", *Hispanic Journal of Behavioral Sciences*, 31, 149-181.
- Pianta, R. C. (2006), "Schools, schooling and developmental psychopathology", Chicchetti, D. and Cohen, D. J. (eds.), *Developmental Psychopathology: Theory and method* 2nd ed. Hoboken, NJ: Wiley.

Portes, A. (2012), "ensions that make a difference: Institutions, interests, and the immigrant drive", *Sociological Forum*, 27, 563-578.

Reisel, L. and Brekke, I. (2010), "Minority Dropout in Higher Education: A Comparison of the United States and Norway Using Competing Risk Event History Analysis", *European Sociological Review*, 26, 691-712.

Sam, D. L., Vedder, P., Liebkind, K., Neto, F. and Virta, E. (2008), "Immigration, acculturation and the paradox of adaptation in Europe", *European Journal of Developmental Psychology*, 5, 138-158.

Seeberg, M. L., Winsvold, A. and Sverdrup, S. (2013), "Skoleresultater og utdanningssituasjon for barn i barnevernet. En kunnskapsoversikt" [*School Results and the educational status for children in the child welfare. A knowledge review*]. NOVA Note 4/13, Oslo, NOVA.

Sewell, W. H., Archibald O. H. and George, W. O. (1970), "The Educational and Early Occupational Attainment Process: Replication and Revision", *American Sociological Review*, 35, 1014-27.

Siantz, M. (1997), "Factors that impact developmental outcomes of immigrant children", Booth, A., Crouter, A. C. and Landale, N. (eds.), *Immigration and the family: Research and policy on U.S. immigrants*. Hillsdale, NJ: Lawrence Erlbaum.

Skilbred, D., Iversen, A. C., & Moldestad, B. (2017). Successfull academic achievement among foster children: whar did the fosterparents do? *Child Care in Practice*, 23(4), 356-371.
doi: 10.1080/13575279.206.1188764

Statistics Norway (2015a), available at www.ssb.no/inntekt-og-forbruk/artikler-og-publikasjoner/flereokonimisk-utsatte-barn (accessed 15 March 2015).

Statistics Norway (2015b), "The population with an immigrant background in 13 municipalities in Norway", available at: <https://www.ssb.no/en/befolkning/artikler-og-publikasjoner/the-population-with-an-immigrant-background-in-13-municipalities-in-norway> (accessed 8 March 2016).

Stefansen, K. (2004), "Barns skolehverdag: Prestasjoner, sosiale relasjoner og trivsel", Sandbæk, M. (ed.). *Barns levekår. Hva betyr familiens inntekt* [*Children's level of living: Family income and children's standard of living over time*]. Nova Rapport 11/2004, Oslo, NOVA.

Steinberg, S., Brown, B. B. and Dornbusch, S. M. (1996), "*Beyond the classroom*", New York, Simon & Schuster.

Støren, L. (2011), "Pursuing educational ambitions? Higher education enrolment and the choice of study programmes among immigrant and non-immigrant youth in Norway", *Irish Educational Studies*, 30, 159-177.

Strand, S. and Winston, J. (2008), "Educational aspirations in inner city schools", *Educational Studies*, 34, 249-267.

Suarez-Orozco, C., Rhodes, J. and Milburn, M. (2009), "Unraveling the Immigrant Paradox Academic Engagement and Disengagement Among Recently Arrived Immigrant Youth", *Youth & Society* 41, 151-185.

Telhaug, A. O., Mediås, O. A. and Aasen, P. (2006), "The Nordic Model in Education: Education as Part of the Political System in the Last 50 Years", *Scandinavian Journal of Educational Research*, 50, 245-83.

Tevlina, V. V. (2012), "Migration of children from northwest Russia to northern Norway in the 1990s and the beginning of the 2000s", *Polar Record*, 48, 235-239.

Trautwein, U., Luedtke, O., Karstens, C. and Köeller, O. (2006), "Effort on homework in grades 5-9: Development, motivational antecedents, and the association with effort on classwork", *Child Development*, 77, 1094-1111.

Ungar, M., (2012), "*Social ecologies and their contribution to resilience*", Ungar, M. (Ed.), *The Social Ecology of Resilience: A Handbook of Theory and Practice*. NY, Springer, London, 13–32.

UN General Assembly (1989). Convention on the Rights of the Child, 20 November, United Nations, Treaty Series, Vol. 1577, p. 3. Available at www.refworld.org/docid/3ae6b38f0.html (accessed 9 September 2017)

Van Geel, M. and Vedder, P. (2011), "The Role of Family Obligations and School Adjustment in Explaining the Immigrant Paradox", *Journal of Youth and Adolescence*, 40, 187-196.

Verma, G. K. and Ashworth, B. (1986), "*Ethnicity and Educational Achievement in British Schools*", London, Macmillan.

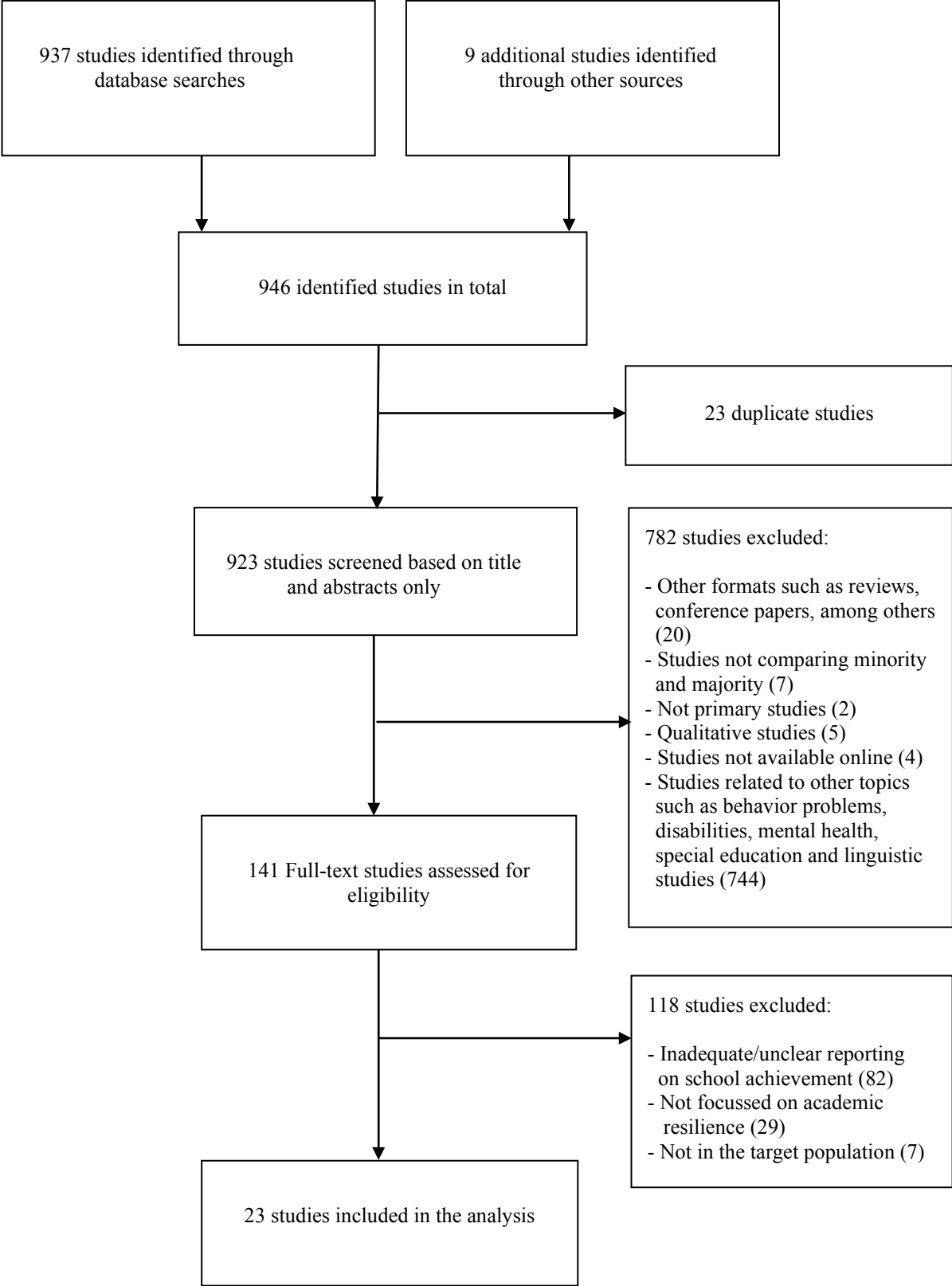
Wang, M. C., Haertel, G. D. and Walberg, H. J. (1994), "Educational resilience in inner cities", Wang, M.C and Gordon, E. W. (eds.), *Educational resilience in inner-city America: Challenges and prospects* Hillsdale, NJ: Lawrence Erlbaum, 45-72.

Wang, M. C., Haertel, G. D. and Walberg, H. J. (1997), "*Fostering Educational Resilience in Inner-City School*", Publication Series No. 4.

Werner, E. E. and Smith, R. (1992), "*Overcoming the odds: High-risk children from birth to adulthood*", Ithaca, NY, Cornell University Press.

Weyts, A. (2004), The educational achievements of looked after children. Do welfare systems make a difference to outcomes? *Adoption & Fostering* 28, 7-19.

Figure 1: Flow diagram for study selection



	Included	Excluded
Databases	ERIC, ISI Web of Science, ProQuest, Norart and Idunn	All other databases
Time frame	Prior to March 2015	Articles not available before 2001 in the Nordic database Idunn, or before 2004 in Norart (between 2004 and 2009, peer-reviewed articles were limited in a small numbers of journals from Norart)
Publication types	Peer-reviewed original articles available online in full-text	Articles not available online in full text. Books and book chapters, conference proceedings, short papers, editorials Grey literature (e.g., reports, notes, preprints, master`s theses and newsletters)
Types of studies	Studies that included the predefined search terms (MeSH and key words) from one of the stated databases Other peer-reviewed studies from reference list or recommended by experts	Studies that did not include any of the predefined search terms Studies that had unclear findings/inadequate reporting, including findings that did not distinguish between minority and majority children
Focus	Studies focussed on academic resilience in ethnic minority children compared to majority children in the Nordic countries Studies that compared minority children with majority children across countries (worldwide) when at least one country included was from a Nordic country	Studies that focussed on other outcomes, such as poor educational outcomes, psychopathology, behaviour problems, disabilities and linguistic studies Studies that only consisted of children from non-Nordic countries Studies that did not compare minority and majority students
Study method	Quantitative studies	Qualitative studies
Language	English, Norwegian, Swedish, and Danish	All other languages
Target population	Age group between 13 and 18 years (cross-sectional studies) or studies where the target population was between 6 and 18 years at the beginning of the study (only including cohort and longitudinal designs)	Studies that only included special education, disabilities, or linguistic research Studies where the target population was < 7 years or >19 years at the beginning of the study
Target school level	Elementary, secondary, upper secondary and vocational schools	Kindergarten, pre-school, University/higher education and adult school (when not retrospectively reporting in studies with cohort or longitudinal designs)