Nordic research on boys’ learning and school performance: A systematic literature review

Ingela Åhslund

SAMMANFATTNING

I de nordiska länderna ökar betygsskillnaderna mellan pojkar och flickor mer än i OECD-länderna i allmänhet, trots att de nordiska länderna har en lång tradition av att sträva efter likvärdighet och jämställdhet i utbildningen. Omfattande internationell forskning har gjorts som visar på olika aspekter av pojkars beteende, sociala förhållanden och villkor, men det finns fortfarande områden som rönt lite uppmärksamhet inom pedagogisk forskning. Syftet med den här litteraturogranskningen har därför varit att beskriva vad nordiska studier publicerade mellan 2000-2018 har fokuserat på avseende skolpojkars prestationer, inlärning och förutsättningar. Denna systematiska litteraturöversikt gjordes för att dels få en översikt av det nordiska forskningsfältet, dels identifiera eventuella luckor, och behov av framtida forskningsstudier. I analysen kunde två huvudområden identifieras: Sociala förutsättningar som påverkar pojkarnas prestationer, samt Krav och förutsättningar i klassrummet som påverkar pojkarnas prestationer. Analysen visar att de nordiska studierna ytterligare fördjupar och problematiserar bilden av pojkar i skolan, men trots den fördjupade bilden av fältet framträder en tydlig betoning på sociala förhållanden och maktstrukturer i studierna. Eftersom analysen även visar att endast ett litet antal studier har undersökt förhållanden i lärmiljön och undervisningen i förhållande till pojkarnas underprestationer och lärande pekar detta mot luckor i forskningsfältet, samt behovet av ytterligare forskning inom området.

Nyckelord: litteraturöversikt, lärande, lärmiljö, pojkars underprestationer, sociala villkor

INGELA ÅHSLUND
Licentiate Student of Education
Department of Education
Mid Sweden University
E-mail: ingela.ahslund@miun.se
ABSTRACT

Although the Nordic countries have a long tradition of striving for equality in education, gender differences are increasing more in the Nordic countries than in the OECD countries in general. Previous international research has shown a complex of interrelated ideas concerning boys’ performance, behaviour, social conditions, and learning environment in school. However, some aspects have attracted little attention in the field of pedagogical research. The aim of this review is to describe what Nordic studies, published between 2000 and 2018, have highlighted regarding schoolboys’ achievements, learning, and prerequisites. The method is a systematic literature review with an integrative approach. It was also used to identify gaps in the research field in order to point out a future research agenda. In the analysis, two main areas of interest were found: Social prerequisites affecting boys’ performance, and Requirements in the classroom affecting boys’ performance. An emphasis on social conditions and identity processes linked to boys’ underachievement in school was found, often with a visualization of conditional gender structures among the boys. There was also a consensus in the studies about how boys were perceived in school; as troublesome, disruptive, and dominant. However, Nordic studies nuance and problematize this picture, showing further aspects of this behaviour. Nevertheless, only a small number of studies have focused on conditions in the learning environment in relation to boys’ underachievement and learning, which points to a gap in the research field and to the need for further research.

Keywords: boys’ underachievement, literature review, learning environment, social conditions

INGEÅHLUND
Licentiate Student of Education
Department of Education
Mid Sweden University
E-mail: ingela.ahslund@miun.se
INTRODUCTION

As is the case in the rest of the Western world, girls outperform boys in school in the Nordic countries. Based on comprehensive research Arnesen, Lahelma and Öhrn (2008) discuss the so-called boy problem, consisting of boys’ lower grades and underachievement in school. In the article they discuss how this phenomenon, which has appeared in different forms at different times and in different countries, has become a more serious issue in the last decade in relation to changes in the labour market. A change that leaves, for the most, boys lacking complete schooling without alternatives, making the issue of boys’ underperformance in school rather urgent. This is a question that is further reinforced by statistics from the OECD (2015) showing that gender differences in the Nordic countries are also increasing more in the OECD countries in general, despite a long tradition of striving for equality in education (cf. Evalueringsinstitut, 2005; Gordon, et al., 2004; Sørensen, 2010; Wernersson, 2010). In the research review Lentz (2006) also shows that the differences in reading ability are even greater in the Nordic countries than they are in the rest of Europe, which is especially alarming for boys from socioeconomically vulnerable homes, who have the lowest results and who also run the greatest risk of social exclusion later in life.

There is extensive research, and reports of various kinds, as well as a number of government investigations showing a variety of underlying reasons, both biological and social, for why boys may underachieve in school (cf. Evalueringsinstitut, 2005; Gordon, et al., 2004; Sørensen, 2010; Wernersson, 2010; Öhrn & Holm, 2014). Together they conclude that the teaching of boys and girls, combined with the issue of gender differences in school, is a large and complex area. They show relatively coherently that there are differences between how boys and girls relate to the learning culture of the school. In addition, one assumption that can be made is that despite extensive research in the area, the difference in academic outcomes between boys and girls is increasing (OECD, 2015) indicating that there could well be unexplored areas. This also forms the background for this study, and endorses the need for a comprehensive and holistic review of the research field. Hence, the aim of this integrative literature review is to describe what has been highlighted (or the areas interest has been directed towards) regarding schoolboys’ achievements, learning, and prerequisites in Nordic studies published between 2000 and 2018. The questions that guided the review process were: (a) Which aspects (themes) of boys’ achievement in relation to school are described?, (b) Are there trends emerging over time?, and (c) Are there still areas to be discovered (a future research agenda)?

PREVIOUS RESEARCH

The presentation of previous research has shown different aspects, existing concepts and theories in the research field that various researchers have provided regarding boys’ performance in school. All the research presented has an educational angle, but focuses on different areas: first, research with an emphasis on boys’ school achievements in relation to social conditions; second, research focusing on boys’ learning prerequisites; and finally, conditions in the learning environment.

The aspect of social conditions in relation to boys’ situations and performance in school is often explored. Several important studies have shown that power games, social positioning, norms and values are created in school and form social hierarchies among boys, to which individual students must relate (Connell, 1995; Epstein, Elwood, Hey, & Maw, 1998; Wernersson, 2010). Connell’s (1995) research, which has been of importance for later studies, shows that schoolboys perceive
masculinity and manhood (proper boyhood) as synonymous with hardness, aggression, and confrontation. Connell, along with Adler, Kless, & Adler (1992) shows that athletic skill, as well as being cool and socially successful (also in relation to girls), gives high status among boys, whereas girls’ status is more assessed in relation to appearance and socioeconomic conditions. Boys who deviate from the norm risk social exclusion, abuse, and harassment (Connell, 1995; Epstein et al., 1998; Jackson, 2002; Mac an Ghaill, 1994). To sum up, the harsh social climate and the perceptions of proper boyhood can give rise to boys’ fear of failing in school. Their studies also highlight that the fear of not being perceived as masculine enough might result in boys opposing schoolwork more than girls do.

The second aspect of boys’ underachievement in school is the specific learning prerequisites concerning the boy group. One of these prerequisites is the general lower linguistic ability of boys as compared to girls, identified by Rutter et al. (2004). This lower linguistic ability results in boys’ slower reading and writing development, and consequently boys are overrepresented among students with reading problems. This becomes even more problematic when Ingvar (2010) in a metastudy shows that a student’s reading ability is crucial to the outcome of their schooling, and the students’ reading ability in the fourth grade can often predict the students’ grades in the ninth grade, to a large extent. Another interesting aspect of boys’ language development is discussed in the research done by Sundqvist and Wikström (2015) concerning boys’ greater interest in computer games. Their study shows that when boys reach lower secondary school many of them have better skills in the English language than girls. However, a reflection in relation to this greater language ability and training is that it has not yet made a major impact on the boys’ grades.

The final aspects of previous research concern the relation between the boys’ school performances, and the conditions in the learning environment. International studies concerning this area are not particularly extensive. However, a study by Altermatt, Jovanovich, and Perry (1998) show that boys often get more attention in the classroom, but the attention is often concentrated on a few boys who dominate classroom communication. However, although boys generally talk more with their teachers, Jones and Dindia (2004) noted that these interactions often aim to correct undesirable behaviour. Conversely, girls’ interactions with their teachers are more often supportive of their learning (Younger, Warrington, & Williams, 1999). A number of studies also show that schoolboys’ learning is dependent on the relationship with the teacher, this link being particularly evident in younger boys in primary school (Patrick, Kaplan, & Ryan, 2011; Skelton et al., 2009). Furthermore, Jackson (2006) shows in her research that under socially insecure conditions, competition between boys increases and more boys exhibit avoidance strategies; in other words, they dare not try their best in school for fear of failure.

Frosh, Phoenix and Pattman, (2001) show that most teachers believe they treat girls and boys equally, even though they generally have lower expectations of boys’ school performance and behaviour in school. In addition Mørck (2003) argues that teachers appear to have little awareness of their own positioning as carriers and producers of school tradition and culture, or of specific educational values based on curricula and equality. In Younger et als. (1999) study, the teachers stated that girls were more hard working and their work was of higher quality than the boys. Girls are also associated with greater communicative ability, organizational skills, and independence. Boys, on the contrary, are perceived as ill-prepared, less motivated, and childish. Furthermore, a study by Jones & Myhill
(2004) also shows that boys are often assessed based on what they cannot do, or do not want to do, whereas girls are assessed based on what they accomplish, and on their compliant behaviour.

In summary, previous research has shown a variety of different theories explaining boys’ underachievement in schools. The research is somewhat fragmentary, as the phenomenon has been studied from different angles and perspectives, which complicates the establishment of a complete picture of what causes boys’ lower performance in school. There is research showing that resistance to school and schoolwork is formed in the interactions between the boys in school. However, it is also an effect of the learning environment and of teachers’ expectations of the academic outcomes of the boys. This line of inquiry, where social prerequisites are the focal point, is carried out in a school context and within the framework of pedagogy. However, it intertwines with the field of gender research. For the other line of inquiry, prerequisites in the learning environment, the research is scarcer: boys dominate communication in the classroom, yet have lower reading and writing skills and inferior learning strategies. Boys’ relative underachievement and lower grades in school not only remain, but are also increasing slightly. In the light of this, an overview of the research field needs to be created in order to understand what research is still needed.

METHOD
The aim of this study was to describe what Nordic studies in the area published between 2000 and 2018 have highlighted (or the areas their focus is directed towards) regarding boys’ performance and their prerequisites in school, and to describe the findings of the research. The study used an integrative approach described by Whittemore and Knafl (2005) allowing studies made with diverse methodologies to be included and combined. An integrative review method is used to evaluate previous research to determine what is known about a subject and to identify gaps in the research, and also to provide a more comprehensive understanding of a particular phenomenon (cf. Russell, 2005; Whittemore & Knafl, 2005). The choice of conducting this type of review, was based on the need to create an overview of the research field, as well as an understanding of what research is still needed since boys’ underachievement in school not only remains, but is also increasing slightly.

Search Methods and Data
Whittemore and Knafl’s (2005) five steps guided the methodological approach and framed the review design (Whittemore & Knafl, 2005). In the first step, problem identification, aim, and research questions are defined, followed by four thoroughly described steps which constitute the base of a robust design, if they are taken into account (Russell, 2005). In this study, these steps were considered and followed as closely as possible.

In the integrative approach, at least two or three search strategies were used in order to achieve a comprehensive result (Whittemore & Knafl, 2005). The primary search was made in the Gender Studies Database (GSD), which provides indexing and abstracts covering the full spectrum of gender-related research, including gender inequality, masculinity, post-feminism, and gender identity. This was followed by a second search in the Education Resources Information Center database (ERIC), which is an authoritative database of indexed and full-text education literature and resources. Three journals were also searched systematically, Gender and Education (G&E), Nordic Journal of Feminist and Gender Research (NORA), and Nordic Magazine for Masculinity Studies (NORMA). During the review process, additional articles were chosen from the reference lists. Five
dissertations were also retrieved from the Nordgente database. The following keywords were used in different combinations and to varying extents: *boys, boys’ underachievement, gender, gender differences, teaching, primary school, and secondary school*. Only articles that had been published in a peer-reviewed journal between the years 2000 and 2018 were chosen. The studies also had to meet the following criteria to be selected: the study had to have been conducted in the context of a Nordic primary or secondary school, and the study had to carry possible explanations for boys’ underachievement or gender differences. Studies were excluded if they did not contain empirical data. Table 1 shows information regarding the databases searched, Nordgente excluded.

Table 1. Literature Review Databases and Search Information

<table>
<thead>
<tr>
<th>Search area</th>
<th>Coverage</th>
<th>Keywords</th>
<th>Hits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERIC</td>
<td>Title, abstract, keywords</td>
<td>2000–2018 boys, boys’ school performance, boys’ underachievement, gender differences, teaching, primary school, secondary school</td>
<td>189</td>
</tr>
<tr>
<td>GSD</td>
<td>Title, abstract, keywords</td>
<td>2000–2018 boys, boys’ school performance, boys’ underachievement, gender differences, teaching, primary school, secondary school</td>
<td>46</td>
</tr>
<tr>
<td>NORA</td>
<td>Title, abstract, keywords</td>
<td>2000–2018 boys, boys’ school performance, boys’ underachievement, gender differences</td>
<td>4</td>
</tr>
<tr>
<td>NORMA</td>
<td>Title, abstract, keywords</td>
<td>2000–2018 boys, boys’ school performance, boys’ underachievement, gender differences</td>
<td>2</td>
</tr>
<tr>
<td>G&amp;E</td>
<td>Title, abstract, keywords</td>
<td>2000–2018 boys, boys’ school performance, boys’ underachievement, gender differences, teaching</td>
<td>77</td>
</tr>
</tbody>
</table>

With this search strategy, 235 articles were found in the EBSCO databases ERIC and GSD. In the journals (NORA, NORMA, G&E), 83 articles were found. The search also includes five dissertations, four Swedish and one Finnish. The dissertations were found through the Nordgente database (Nordic research on gender in teacher education). Of the 318 articles (ERIC, GSD, NORA, NORMA, G&E) generated from the initial search, 59 were excluded because the article was published before 2000. Eight were identified as duplicates; a duplicate was defined as a paper that had been recorded in both the databases, or in one of the journals, at the same time. After this adjustment, 251 articles plus five dissertations remained. In the next step, articles were excluded if the studies were not from the Nordic context. The exclusion was carried out by reading the title and the abstract of each article, and by examining the name of the researcher and the university at which the researcher worked. In some cases, the study was also more carefully investigated for guidance on the researcher’s place of residence. Articles were also excluded if the study did not emphasize the Nordic school context and more specifically primary and secondary school contexts. A total of 226 articles were excluded. A total of 35 articles remained including five articles picked up in the reference lists during the review process. In the following step, thirty full-text articles were read, and articles were excluded if the study did not relate to boys’ underachievement or to gender differences, and if the study did not contain empirical data. Each article was also critically evaluated to determine the methodological
quality of the study. Hopia, Latvala and Liimatainen (2016) describes how evaluation is an essential element of the integrative literature review, as the inclusion of poor quality studies could affect the validity of the review, and weaken the overall conclusions.

In this study, the emphasis lay on peer-review, the articles’ informational value, and the context of the studies. A quality review template from the Swedish Council on Medical Assessment (SBU) was used (Rosén, 2014). The SBU review template provides a wide-ranging checklist to enable the reviewer to assess the methodological quality of a study. After applying a critical assessment of the studies included, a total of 24 sources remained (n=24), 19 articles and five dissertations from the Nordgente database. Figure 1 shows an overview of the review process:

**Figure 1. Review strategy.**
Analysis

In this study, a qualitative content analysis was used in order to illustrate and synthesize how boys’ performance, achievements, social positions, and learning were described in the retrieved articles (cf. Cohen, Manion, & Morrison, 2011). In the analysis, common themes in the studies were emphasized to identify patterns and common areas of interest. Initially, a descriptive summary of the data was generated and presented (Appendix). Then the findings of the studies were condensed, as closely as possible to the way the findings were presented in the original studies, and then sorted (coded) according to the aspects they described. Several codes with similar content were grouped forming sub-categories, which then formed categories.

Limitations of the Study

This study used an integrative approach, which means that both qualitative and quantitative research was included. This can be problematic, as different research methods do not have the same knowledge requirements. Despite an extensive literature search, no claim is made that the selection of articles chosen provides a complete picture of the research field, but hopefully it reflects some key themes. There have been limitations such as time constraints and some linguistic constraints regarding Finnish and Icelandic research. This may have affected the results when several articles had to be excluded even though they covered, or may have held explanations for, boys’ underachievement in school. This has been most problematic in relation to dissertations, as these can be difficult to identify since their titles are written in the researcher’s first language. Consequently, the articles included can only be seen as representations of Nordic research with a focus on the school situation and performance of boys.

FINDINGS

In this section, the findings will be presented according to the research questions and what Nordic studies, published between 2000 and 2018, have highlighted (or the areas interest has been directed towards) regarding schoolboys’ achievements, learning, and prerequisites. First, some characteristics of the studies included are presented.

Characteristics of the Studies Included

When the selection process was completed, 19 articles and five dissertations met the inclusion criteria. The 24 studies included in the review are presented in the appendix. There were approximately the same number of studies using quantitative methods as studies using qualitative methods. In recent years, the number of studies concerning boys’ school performances has increased, especially studies using surveys (Borg, 2013; Grøgaard & Arnesen, 2016; Samuelsson & Samuelsson, 2016). The results of the searches also indicate that an increasing number of researchers are using several methods, for example, ethnographic studies and studies using both observations and complementary interviews (Asp-Onsjö & Öhrn, 2015; Gustafsson, 2018; Holm, 2010; Lahelma, 2002; Manninen et al., 2011).
Themes
In the analysis, two areas appeared, on which the Nordic research was mainly focused. These areas formed the basis of the themes that constitute the results of this study. The major themes were social prerequisites affecting boys’ performance and requirements in the classroom affecting boys’ performance.

Social Prerequisites Affecting Boys’ Performance
A common emphasis in the qualitative research within the selected studies was the socialization, social conditions, and identity processes linked to boys’ underachievement in school, especially from the students’ own experiences (Appendix), such as how boys and girls socialize in school practice, and the visualisation of conditional gender structures. Contemporary studies in the Nordic context suggest that boys’ social positions and their striving for power (power games) affects and limits the scope of action for all boys. Boys constantly have to show themselves as worthy of belonging to the discourse of proper boyhood, and no boy manages to avoid the effects and ramifications of this (Manninen, Hukki & Sunnari, 2011). Boys are willing to risk their academic success as long as their image is positively evaluated by their peer group, and alienation from the group must be avoided at all costs (Halldórsson & Ólafsson, 2009; Holfve-Sabel, 2011).

In addition, boys engage in a strategy of complex parallel positioning to balance school demands and peer-group expectations; they appear to distance themselves from swotting, yet, at the same time, devote themselves to schoolwork (Asp-Onsjö & Öhrn, 2015). The high-achieving boys often police what is deemed as acceptable male behaviour in class. These boys regulate the framework for how much space other boys can take academically, and they do so without compromising their own social status. In this urge for power, the use of humour was often seen as an organizing principle, a strategy for obtaining and maintaining a masculine status (Huuki, Manninen & Sunnari, 2010). Middle-class boys are the ones most likely to manage these social power games and to be regarded as high achieving. Boys from working-class and immigrant families more frequently have difficulty performing well in school, and have a more uncertain social position in their peer groups (Asp-Onsjö & Öhrn, 2015; Lyng, 2009). The boys who are targets of this relational aggression seem to be unable to talk about it, as they do not want to be regarded as victims (Eriksen & Lyng, 2017).

Studies also show that boys’ learning is more dependent on a tolerant classroom climate. Competition and avoidance strategies increase among boys who experience insecure social conditions, and there is a risk that some boys will not try their best due to the fear of failing, or of being regarded as a failing student (cf. Jonsson, 2014). School-rejection behaviour could therefore be interpreted as self-preservation or a self-protection mechanism that enhances masculinity (Lyng, 2009).

Requirements in the Classroom Affecting Boys’ Performance
Nordic studies have indicated that there are unequal learning conditions for boys and girls. The following aspects of boys’ situations in school and in the classroom appear: boys’ domination of classroom communication, teachers’ use of hegemonic gender structures between the boys to manage classroom work, a school situation that requires boys to handle complex parallel positioning between academic expectations and social demands from their peer groups, and the boys’ need for leadership and supportive structures in school.
Boys dominate the communication in the classroom. In their research, Eliasson, Sørensen, and Karlsson (2016), Einarsson (2003) and Lundgren (2000) show that boys get more attention and interact more often with their teachers. The researchers suggest that boys control two-thirds of the communication in the classroom. However, this does not apply for all boys; Asp-Onsjö and Öhrn (2015) noted in their study that the teachers gave more (positive) attention to academically high-achieving boys than to other students. In addition, several studies show that low-achieving boys are reprimanded and referred to special education more frequently (Arnesen, 2000; Borg, 2015; Holm, 2008; Holm, 2010). In general, boys are seen as more disruptive, competitive, and more associated with behaviour problems by their teachers (Arnesen, 2000; Samuelsson, 2008).

Asp-Onsjö and Öhrn (2015) also show that teachers use hegemonic gender structures and power games between the students in order to control the classroom. Eriksen and Lyng, (2017) show in their study that the harsh social climate among boys is often regarded by teachers as self-evident, especially some boys’ harassing behaviour towards other boys and girls. They also show that the teacher turns a blind eye to these harassments, and the bullying becomes a blind spot not only for the teachers, but also for the boys themselves. Furthermore, in his dissertation Lunabba (2013) shows teacher perceptions that can constitute obstacles for boys’ success at school. One example is the perception of boys’ weaker motivation as being typical of boys in general, and therefore not necessarily something to address. There is also the perception of ill-behaved boys, which gives rise to negative emotions, and finally the perception of shy or quiet boys who become invisible in school, and do not receive the support they need.

Asp-Onsjö and Öhrn, (2015) show in their study that the hierarchy can leave boys balancing between being popular and being successful academically. Boys need to manage complex parallel positioning between academic expectations and social demands from their peer groups. Successful boys show a carefully balanced approach where active participation in schoolwork is managed in order not to affect their position within their peer groups, and where these boys carefully watch and defend their position with relatively subtle gestures and comments. The teachers participate in this process by showing appreciation of these successful boys in the classroom. The boys perceive that interaction with each other and with the teacher, the teachers’ guidance, and the disciplinary climate in the classroom are all-important for their performance in school. Above all, the interaction gives the boys a sense of having more influence over, and involvement in, their schoolwork. As an example of this, boys increase their homework effort if they are satisfied with their teacher’s guidance (Hopland & Nyhus, 2016; Samuelsson & Samuelsson, 2016).

**Trends in the Research Field**

The number of articles concerning boys’ situation in school has increased over the past nine years. In most of the studies identified, the researchers used various qualitative methods in the collection of empirical data (Arnesen, 2000; Asp-Onsjö & Öhrn, 2015; Lyng, 2009). In particular, the analysis shows an increase in the number of studies that used questionnaires and results from different international assessments of students, such as the Program for International Student Assessment (PISA), for example, Borg (2013), Gøgaard & Arnesen (2016), Holm (2010). As mentioned before, the results indicate an increase in studies using several methods, such as ethnographic studies using both observations and follow-up interviews (Asp-Onsjö & Öhrn, 2015; Gustafsson, 2018; Holm, 2010; Lahelma, 2002; Manninen et al., 2011).
In relation to social conditions that affect the boys’ performance, an emerging trend is that the previous focus on power structure and hegemonic masculinity theory has become more nuanced, for example as shown in a study by Lahelma (2002). Contemporary studies also show a more complex and multi-faceted picture of the social conditions that prevail for boys in school, even though middle-class boys remain in a more favourable position, because they more successfully manage the double positioning needed to prosper both academically and socially in school (Asp-Onsjö & Öhrn, 2015; Eriksen & Lyng, 2017; Lyng, 2009).

Nordic studies, for example Arnesen (2000), Borg (2015), Eliasson et al. (2016), Holfve-Sabel (2011), Holm (2010) and Samuelsson (2008), have also described boys as dominant, disruptive and troublesome in the classroom. These descriptions are relatively constant over time. Besides being associated with troublesome behaviour, boys are also associated with characteristics such as immaturity, poorer language skills, and competitive behaviour. However, Samuelsson and Samuelsson’s (2016) study on students in the ninth grade showed that boys perceive themselves as having more influence than girls, and being more involved during lessons.

In summary, boys are often perceived as troublesome in the classroom. In the studies, there is an emphasis on socialization, social conditions, and identity processes linked to boys’ underachievement in school, often with a visualization of conditional gender structures among boys. Teachers contribute to, maintain and reproduce these gender structures. Another theme is educational quality and the relationship between teachers and students. Studies show that boys are perceived as disruptive and dominant in the classroom. In spite of their loud and dominant appearance, or in contrast to it, many boys are more dependent on secure relationships, and supportive structures in the classroom, and in school in general. A notable trend in the Nordic research is that this picture of schoolboys has become more nuanced and problematized, and reveals more complex and multifaceted aspects of boys’ situations in school.

DISCUSSION
This study aims to describe what has been highlighted in Nordic research regarding schoolboys’ achievements, learning, and prerequisites. The analysis showed that social prerequisites and requirements in the classroom were common themes in the studies. The analysis also showed that some aspects have received little attention. The results show that only a few studies have approached the differences between boys and girls with a focus on teaching and learning. This points to the necessity for future research, as will be discussed later in this section. First, the different aspects (themes) of boys’ achievement and school performance will be presented.

Social Prerequisites Affecting Boys’ Performance
This theme could also be seen as the dominant discourse within the Nordic research field. Nordic studies have shown similar results to studies done in the rest of the Western world. For instance, social interactions at school condition the boys’ school performances and these performances are often seen in relation to a hegemonic masculinity. In other words, that being cool, athletic, and naturally intelligent is important, and achievement without effort is a primary goal that is applauded within the group of boys. Furthermore, boys have to constantly show themselves worthy of being a proper boy (proper boyhood; cf. Asp-Onsjö & Öhrn, 2015; Epstein et al., 1998; Eriksen & Lyng, 2017; Frosh et al., 2002; Halldórsson & Ólafsson, 2009; Holfve-Sabel, 2011; Huuki et al., 2010; Jackson,
However, contemporary Nordic research succeeds in showing a more problematic and multifaceted picture of boys' social conditions in school. For example, Asp-Onsjö and Öhrn's, (2015) study shows how boys engage in a strategy of complex parallel positioning to manage school demands and peer-group expectations, and how they are willing to risk their grades to maintain a positive image in the peer group. They also note that this is a game middle-class boys are most likely to manage well, and therefore they are more likely to be regarded as high achieving by their teachers. Eriksen and Lyng (2017) and Lahelma (2002) show that boys who are targets of relational aggression deny being harassed in order to maintain their self-worth. Something they argue is a blind spot for teachers but also for the boys themselves. In addition, Asp-Onsjö and Öhrn’s study shows that many teachers use the hierarchical structure among boys to maintain power in the classroom by forming an allegiance with the most popular boys to control the classroom with their help.

Requirements in the Classroom That Affect Boys’ Performance

Concerning the second theme, requirements in the classroom that affect boys' performance, several Nordic studies have shown boys' need for leadership and supportive structures in school (Halldórsson & Ólafsson, 2009; Hopland & Nyhus, 2016; Samuelsson & Samuelsson, 2016). In contrast to creating supporting structures and secure relationships, Asp-Onsjö and Öhrn, (2015) show that, teachers use the hegemonic gender structure among boys to manage the classroom. One assumption that could be made is that the teacher’s approach might be the reason for the complex parallel positioning of boys, as they need to position themselves between academic expectations and social demands from their peer group. Regarding the behaviour of boys in school, Nordic and international research shows a relatively consistent picture; for example, that boys are associated with dominance, behaviour problems and violence to a larger extent than girls (Arnesen, 2000; Altermatt et al., 1998; Borg, 2015; Eliasson et al., 2016; Einarsson, 2003; Holm, 2010; Jones & Myhill, 2004; Lundgren, 2000). On the other hand, even though boys dominate classroom communication, this communication does not always benefit learning; instead, it reproduces power structures, and social positions. Asp-Onsjö and Öhrn (2015), Holm (2010) and Lyng (2009) point out that this primarily benefits popular middle class boys, who are perceived as high achieving. Boys who are perceived to be low-achieving receive little attention and appreciation. The analysis indicates that if these boys are noticed it is often in the context of being reprimanded for disruptive behaviour. Jonsson (2014) also problematized boys’ troublesome and disruptive behaviour and he raises the question, could the behaviour be one expression of protection strategy, where the boy strives to escape being labelled as a failing student?

Are There Any Trends in the Field of Boy Research in the Nordic Countries?

Descriptions of boys as disruptive and troublesome in the classroom are relatively consistent and unchanged in the studies over time. Also, there is an overall tendency to examine gender differences in school performance, especially boys’ achievements, primarily on the basis of the characteristics of the individual student. However, Nordic research concerning boys' school situations has increased. This may indicate that interest in boys’ lower grades and their school situation is growing, possibly due to the serious effects of incomplete schooling. Nordic researchers show that the underachievement of boys is a multifaceted issue that cannot solely be explained by the male identity process and
power structures. The sometimes narrow discussion of boys’ social situation in school, in relation to power games and structures, has broadened through the use of multiple methods. Still, the responsibility for gender differences and underachievement is attributed to boys’ prerequisites, their behaviour, and their strategies (motivation and learning strategies).

Areas Still to be Considered (A Future Research Agenda)

The findings also show that only a small number of the Nordic studies have focused on conditions in the learning environment as a factor in boys’ underachievement, which is consistent with previous studies (Öhrn & Holm, 2014). Research conducted in the Nordic context suggests that teachers have little awareness of their own positioning as carriers and producers of school culture and educational values (Mørck, 2003). Among the studies retrieved, only a few focused on teachers (Arnesen, 2000; Lunabba, 2013; Samuelsson, 2008). When it comes to boys’ underachievement and gender differences in results, the research shows that there are no easy answers to be found. Therefore the question must be raised, could the analysis of the dilemma have been too restrained, thus making the dilemma too narrowly interpreted? Could the support and the measures taken have gone in the wrong direction as a consequence? Thus, the findings indicate that more research is needed to grasp the dilemma of boys’ poor attainment in school, particularly research focusing on how teaching and conditions in the classroom contribute to boys’ lower grades and poorer achievement in school.
REFERENCES


## APPENDIX

### Summary of Identified Nordic Articles Published Between the Years 2000 and 2018 Relating to Boys’ Academic Achievements

<table>
<thead>
<tr>
<th>Reference</th>
<th>Study design/sample</th>
<th>Focus of research/Aim</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arnesen (2000)</td>
<td>Observations</td>
<td>This article explored and showed how educators' perceptions and beliefs about various student behaviours affect their actions.</td>
<td>The analysis showed that there is a consensus among the teachers on what should count as success and failure, who are insiders and outsiders, high and low achievers, normal and deviant students, and where to set the line concerning the students' right to be included.</td>
</tr>
<tr>
<td>Lahelma (2002)</td>
<td>Ethnographic</td>
<td>This article discussed relationships and conflicts between girls and boys during the high school years.</td>
<td>The results showed that sex-based harassment acts as a form of social control. Lahelma noted that these harassments constitute, maintain and control the gender boundaries and hierarchies.</td>
</tr>
<tr>
<td>Lyng, (2009)</td>
<td>Multi-method</td>
<td>The aim of this article was to describe a more multifaceted picture of diverse student identities.</td>
<td>The analysis shows a large variety of gender identities and there are a number of different abilities (e.g. being sporty, being smart) that give higher rank in the peer group. The analysis also shows a local perception of what is considered to give status and popularity, which, gives the students a discourse to relate to.</td>
</tr>
<tr>
<td>Halldórsson &amp; Olafsson (2009)</td>
<td>Survey</td>
<td>The aims of this article were to present gender differences in a national and international context and to report on a number of attempts to explain them.</td>
<td>The analysis shows that various psychological factors, such as anxiety and self-esteem have higher association with academic performance for boys than for girls.</td>
</tr>
<tr>
<td>Kristjansson &amp; Sigfusdóttir (2009)</td>
<td>Survey</td>
<td>This study examined the relationship between parental support, parental monitoring, and time spent with parents and academic achievement.</td>
<td>In the study, structural equation models were used to show that parental factors could be linked to academic achievement among both boys and girls. The analysis shows that boys receive lesser parental support and also are less monitored than girls.</td>
</tr>
<tr>
<td>Holm (2010)</td>
<td>Survey</td>
<td>This article analysed students’ perceptions of gender relations.</td>
<td>The results show that the students perceive certain classroom behaviours as gendered, boys are seen as more disruptive, troublesome and more reprimanded by the teacher. The girls are perceived as being responsible for order in the classroom, for example, by helping others and being silent, but also as more actively career oriented than before. Overall, the analysis shows that the students perceived being male more favourably than being female.</td>
</tr>
<tr>
<td>Huuki, Manninen, &amp; Sunnari (2010)</td>
<td>Interviews</td>
<td>This study explored the interplay of humour, status, violence, gender, and age in the social dynamics of boys’ peer interactions during middle childhood and adolescence.</td>
<td>The study shows that humour among boys is often used to gain power and status. The results show that the boys constantly have to show themselves worthy of a ”proper boyhood” by using social relations, sexuality, humour and violence.</td>
</tr>
<tr>
<td>Reference</td>
<td>Study design / sample</td>
<td>Focus of research / Aim</td>
<td>Findings</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------</td>
<td>-------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Holfve-Sabel (2011)</td>
<td>Survey</td>
<td>This article focused on gender differences in attitudes towards school, teachers, and classmates over time.</td>
<td>The analysis showed that girls were more positive towards schoolwork than boys were. The results also showed that the importance of boys’ peer relations increased and the boys’ levels of anxiety reduced (lack of anxiety).</td>
</tr>
<tr>
<td>Manninen, Hukki, &amp; Sunnari (2011)</td>
<td>Multimethod</td>
<td>This study aimed to show complex masculinity with the purpose of changing and decreasing power relations based on violence.</td>
<td>The analysis shows that boys use humour as an act of violence and a resource and strategy to gain power. The analysis also shows that humour has an important influence in constructing masculinities and the social status of boys. Furthermore, the status of a boy defines the value of his humour among his peer group.</td>
</tr>
<tr>
<td>Borg (2013)</td>
<td>Survey</td>
<td>This was a comparative study between Norwegian and Pakistani pupils with a view to studying.</td>
<td>Analyses show that reported school effort explains a significant degree of the gender differences in school achievement for the Pakistani sample, but not as much of the gender variation in the ethnic Norwegian sample. Working hard in school is characteristic for the Pakistani sample, especially the girls.</td>
</tr>
<tr>
<td>Jonsson (2014)</td>
<td>Ethnographic</td>
<td>This study explored how the theory of boys’ anti-school culture can be interpreted as a master narrative that is reproduced, but also contradicted and subverted, by students and teachers in social interaction within the local school context.</td>
<td>The study questions whether boys’ lower school performance could be linked to the narrative of the anti-school culture, or whether the thinking of an anti-school culture may have become an unconscious way of thinking and talking about boys’ school performance. Another question is whether the discourse hides and explains away some boys’ fear of being perceived as a failing student.</td>
</tr>
<tr>
<td>Asp-Onsjö &amp; Öhrn (2015)</td>
<td>Ethnographic</td>
<td>This study investigated boys’ strategies for coping with the demands placed on them at school.</td>
<td>The results show that boys engage in a strategy of complex parallel positioning to master school demands and the expectations from the peer-group. Boys seem to distance themselves from swotting and at the same time dedicate themselves to their schoolwork. The results show that this is particularly important for boys in the beginning of the semester. Furthermore, the analysis also shows that there are teachers who use the hierarchical structure between boys to control the classroom. The teacher creates a loyalty between them and the most popular high achieving boys, boys who then control the classroom with the help of subtle taunts and gestures.</td>
</tr>
<tr>
<td>Borg (2015)</td>
<td>Survey</td>
<td>The aim of this study was to identify different categories of self-reported student behaviour in the classroom and behaviour in relation to gender, ethnicity, socioeconomic status, academic achievement, and scholastic competence.</td>
<td>The study shows that gender could better predict the students’ school performance than different classroom behaviours. The analysis showed that although behaviours such as withdrawal, diligence and disturbance contribute to variations in the students’ grades, the differences were in any case more closely linked to gender.</td>
</tr>
<tr>
<td>Reference</td>
<td>Study design/sample</td>
<td>Focus of research/Aim</td>
<td>Findings</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Grøgaard &amp; Arnesen (2016)</td>
<td>Survey</td>
<td>This study examined whether girls and boys perform differently in school because girls' intellectual maturation happens earlier than boys', in accordance with puberty.</td>
<td>The results showed that the differences between girls and boys' performances are small in primary school, but escalate in lower secondary school, and then reduce again during the first year of upper secondary school. These are differences in performance that are caused by boys' later maturation.</td>
</tr>
<tr>
<td>Eliasson, Sørensen, &amp; Karlsson (2016)</td>
<td>Observations</td>
<td>This study examined the question of whether it is possible to identify new patterns in teacher–student interaction in science classrooms.</td>
<td>Boys still have greater access to space for interaction in science classrooms. The analysis shows that the two-thirds rule for communication in science classrooms still applies. The most significant change in the allocation of the talk space could be identified in a reduction of the teacher's time to the benefit of the students' time.</td>
</tr>
<tr>
<td>Samuelsson &amp; Samuelsson (2016)</td>
<td>Survey</td>
<td>The purpose of this study was to disclose some of the gender differences between boys' and girls' perceptions of the classroom setting.</td>
<td>The results showed that boys feel they have more influence over the content than the girls do. The boys also comprehend that they are more involved during lessons, and feel they use group work more than girls do. This study shows that boys regard mathematics to be more important than girls do.</td>
</tr>
<tr>
<td>Hopland &amp; Nyhus (2016)</td>
<td>Survey</td>
<td>The purpose of this paper was to explore the relationship between satisfaction with the learning environment and student effort, both in class and with homework assignments.</td>
<td>The analysis showed that girls' classroom efforts seem to be less sensitive to the amount of bullying and harassment than boys' efforts. Boys' efforts and their feeling of satisfaction are also more dependent on the relation to the teacher.</td>
</tr>
<tr>
<td>Eriksen &amp; Lyng (2017)</td>
<td>Interviews</td>
<td>The aim of this study was to describe how boys' relational aggression can be left unnoticed by school staff.</td>
<td>The analysis shows that there is a gap between the experiences boys have of being victims of relational aggression, and their expression of this. The boys do not want to acknowledge that they are subjected to abusive treatment. The analysis shows a possible blind spot for school staff but also for the boys themselves. Stereotypical gender perceptions contribute to reproducing the invisibility of relational aggression among boys.</td>
</tr>
<tr>
<td>Gustafsson (2018)</td>
<td>Ethnographic</td>
<td>The study aims to contribute to our understanding of curriculum differentiation and individualisation as a classroom practice.</td>
<td>The results show how a curriculum model on differentiation and individualisation has created and reproduced a system in which different knowledge is available to different groups of pupils. The analysis shows that some students are perceived as successful, some as adequate, and some as failing. The group that is perceived as high achieving largely consists of girls. There are few boys who dare to be part of the group focused on the highest grade.</td>
</tr>
</tbody>
</table>
Summary of Identified Nordic dissertations Published Between the Years 2000 and 2018 Relating to Boys’ Academic Achievements

<table>
<thead>
<tr>
<th>Reference</th>
<th>Study design/sample</th>
<th>Focus of research/Aim</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lundgren, A. S.</td>
<td>Ethnographic, participant observations and interviews</td>
<td>This thesis deals with questions concerning ongoing constructions of sex/gender amongst pupils in lower secondary school: its conditions and meaning, its physical patterns of movement, and how the pupils understand, form and mediate gender experience. The study also considers how the pupils experience and negotiate the circumstances in school.</td>
<td>The results suggest that the body serves as a marker of gender. The student’s movements were identified as gender-specific. When today’s school fosters the students in a flexible manner, the teaching must be individualized, adapted to each person's own individuality. However, this way of leading classroom work seems to be easier for middle-class children to handle than for working class children. The masculine and feminine aspects are also repeatedly reproduced in the everyday schoolwork, while students who are “culturally unconstrained” have more liberty to negotiate their identity.</td>
</tr>
<tr>
<td>Einarsson, C.</td>
<td>Observations and focus group interviews</td>
<td>The aim of this thesis was to investigate classroom interaction. Of central importance were the following questions; Does gender of pupil, gender of teacher, age of pupils, subject taught and class size have any importance for the classroom interaction? What conceptions of interaction with pupils do teachers have?</td>
<td>The study shows that boys dominate the classroom, and this pattern is visible in both primary and lower secondary school. The study also shows that female primary and male lower secondary school teachers are best at distributing the talk space in the classroom. The domination of the boys in the classroom was most prominent during fourth to sixth grade and here the sex of the teacher did not matter. The analysis shows that the interaction between the students and the teacher was more intense the younger the students were, mainly with the teachers’ intention to control the classroom. Among the students, there was a big difference between the numbers of interactions. There were students who had little contact with their teachers and among them was a group of shy and silent boys. The results also show that the teachers regarded the students as the ones who create, maintain and preserve the interaction patterns in the classroom. The teachers perceive that the students, and foremost the boys, cause the differences in the classroom.</td>
</tr>
<tr>
<td>Reference</td>
<td>Study design/sample</td>
<td>Focus of research/Aim</td>
<td>Findings</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Holm, A.-S. (2008).</td>
<td>Observations and interviews</td>
<td>This thesis aims to explore the range of femininities and masculinities that emerge among pupils in school. It also aims to examine local variations in gender pattern in two secondary school classes.</td>
<td>The results show that gender construction is influenced by contextual factors and has a local connection, that is, although there are common traits in the two schools studied, there are differences that Holm interprets as being linked to urban versus rural contexts. The teachers are often co-designers in the students’ identity processes as well in maintaining the prevailing gender patterns. The analysis shows that boys and girls adopt different positions of masculinity and femininity in the gender hierarchy according to the contextual demands. The analysis also shows that the students highly value being strong and confident with success in both social relations and study attainment. These characteristics can also be seen in relation to masculinity and femininity, where pressure is put on both boys and girls to broaden their gender repertoires. However, among the students there is a glorification of Swedish male middle class activities and relations.</td>
</tr>
<tr>
<td>Lunabba, H. (2013).</td>
<td>Ethnographic study</td>
<td>The aim of this thesis, is to realistically describe how the need for help and support among boys is expressed and recognized, as well as to show how relationships between boys and adults condition the way boys are approached in school.</td>
<td>The study shows that there are teacher-student relationships in school that do not enable constructive encounters, which can also constitute obstacles for boys succeeding at school. For example, the perception of boys’ weaker motivation as derived from something that is typical for boys, and therefore is not a problem that the teacher needs to address. There are also perceptions of boys that give rise to negative emotions due to their behaviour and finally there is a large group of boys who are neither particularly loud nor overly quiet, that the teacher often leaves unnoticed.</td>
</tr>
<tr>
<td>Samuelsson, M. (2008).</td>
<td>Fieldwork, observations</td>
<td>The aim of this study is to investigate rules and teachers’ expectations that are described by teachers and documents, the sorts of pupil disorder that teachers attend to, in what way teachers are correcting pupils’ misbehaviour as well as how female and male teachers correct boys and girls</td>
<td>The result shows that teachers give a lot of attention to students’ unauthorized talk, disturbing activities, disturbing objects and disturbing peculiarities. The most common correction was a request intended to return the student to work or to get the students to follow the rules. Sometimes the request was made in order to get the students to show respect for the teacher. The teacher corrects the students’ behaviour by appealing or exercising social pressure on the students. The teacher could also distance himself or herself from the student. In these cases, the teacher used the relationship with the student in order to make the student change his or her behaviour. The analysis showed that it was mainly boys who were noticed as disturbing, and therefore boys were the most corrected.</td>
</tr>
</tbody>
</table>
Förberedd för högskolestudier? En studie av hur "vetenskapligt grundat arbetssätt" tar skriftspråklig form i svenska gymnasiearbeten inom samhällsvetenskapsprogrammet

Eva Svärdemo Åberg, Maria Calissendorff & Ylva Ståhle

Gör det någon skillnad? Universitetslärares erfarenheter av en verksamhetsintegrerad lärarutbildning

Jens Gardesten & Ulla-Karin Nordänger

Nordic research on boys’ learning and school performance: A systematic literature review

Ingela Åhslund

Bortom horisonten: Litteraturläsandets kroppsliga och bildande dimensioner

Djamila Fatheddine & Catarina Schmidt

Förändringsprocesser i förskola och skola belyst genom ett implementeringsperspektiv

Désirée von Ahufeldt Nisser & Maria Olsson