Introduction

School systems have an important role in promoting equity, as recognized in the national Swedish curriculum. A report from the Swedish National Agency for Education (SNAE) describes how the various needs of students must be taken into account: ‘Education must adapt to students’ circumstances at home and other circumstances such as having Swedish as a second language, gender, possible disabilities etc.’ (SNAE, 2014, p. 9).

However, statistics from SNAE show that regardless of the adaptations made, there are differences in grade levels between different groups of students. For many years, SNAE has reported that overall grades are higher for students who are female, have parents with higher education, attend an independent school and have lived in Sweden during all years of school attendance. Until 2016, physical education (PE) grades were an exception in being the only subject that moved to Sweden after school start than in the group that had lived in Sweden since school start. In addition, the results point to substantial inequalities between students with a combination of the highest odds and those with a combination of the lowest odds. Bernstein’s concept of the pedagogic device is used to discuss ways of understanding what knowledge becomes valued in PE and which groups have better possibilities to assimilate this valued knowledge.

In 2011, a new national curriculum was implemented, shifting the focus from ‘doing’ to ‘knowing’ (Wahlström, 2014). In PE, this means that movement is now described in terms of movement qualities, and the PE syllabus no longer mentions any specific sport or sport results. The focus has shifted from competitive sports to a health discourse. These changes have the potential to alter the possibilities for different groups of students to succeed in PE.

PE grades have been reported in different groups of students (SNAE, 2016), but little is known about how the background factors interact. Flintoff, Fitzgerald, and Scraton (2008) point to the single-issue focus in PE research, where gender, race, class, sexuality and disability are studied separately, and Azzarito and Solomon (2005) suggest there is a need to consider the intersection of gender, ethnicity and socio-economic status, due to the fluidity and contradictory nature of these categories.

Against this background, the aim of this article is to identify and study factors that contribute to the success of students when it comes to getting a high grade in Swedish PE. Specifically, we will focus on how gender, parents’ education, migration background and type of school attended (municipal or independent) impact PE grades, both separately and together. Data are drawn from the SNAE national register of all students.
graduating from Swedish compulsory school in 2014, as described in the ‘Methodology’ section.

In addition, we will discuss and problematize the results in relation to previous research and use Bernstein’s concept of the pedagogic device as a tool for understanding what knowledge is valued in PE and which groups have better possibilities to assimilate this valued knowledge. Bernstein’s pedagogic device suggests that the construction of school subjects demonstrates the particular interests of the dominant social order. We will therefore discuss the factors affecting the construction of valued knowledge in PE, and the consequences for different groups of students in a context of school marketization.

**Background**

To better understand the conditions for equity in the Swedish school system, we begin with a short summary of recent developments in the Swedish school system, followed by a description of how groups of students succeed in Swedish school and in PE. We then present the pedagogic device (Bernstein, 1996, 2003) and different ways to understand variation in success in education and PE in relation to sociological background factors.

**The Swedish school system**

The Swedish school system has been transformed from one of the most regulated to one of the most deregulated (Duan, 2006; von Greiff, 2009). Schools compete for students, who are seen as customers, and municipalities compete for applicants with publicly funded independent schools. At the same time as government over schools has been decentralized, several parallel movements point in the opposite direction (Nordin, 2014), for instance, the state’s increased control by means of results. Grades function as a tool for selection of students to higher education, and are now also used to measure school success. To meet new demands for evaluation of schools, grades have to be equivalent and goal-referenced. Grades are published at a school level, and made available to students and parents when deciding which school to attend. In that sense, they can be regarded as marketing tools for the school.

In 1994, a goal-referenced grading system was introduced in Sweden as part of a transnational policy trend of standards-based curricula (Lilliedahl, Sundberg, & Wahlström, 2016). However, the grading criteria were criticized for being too vague (Selghed, 2004), thereby leaving space for teachers’ interpretations that could jeopardize the coordination of schools in an equal way (SOU, 2007). In PE the teachers’ grading also included non-criterion aspects such as motivation and effort (Svennberg, Meckbach, & Redelius, 2016; Tholin, 2006). A new national curriculum, known as Lgr11, was introduced in 2011 (SNAE, 2011). One new aspect of this, focusing on students’ performance, is knowledge requirements, with a progression between different grade levels. Lgr11 states that only the specified knowledge is to be considered legitimate to grade. According to Sundberg and Wahlström (2012), these guidelines claim to be standardized, measurable and comparable, and to codify a specific conception of knowledge. This national knowledge requirement has increased state regulation of what to grade, and thereby the content of the syllabus. As a result, teachers’ grading practices have changed to focus more on students’ performance (Lilliedahl et al., 2016; Svennberg et al., 2016).

**Equity in Swedish schools and in PE**

The shift to steering by results and a goal-referenced grading system has not increased equity in Swedish schools. School segregation has increased (SNAE, 2006, 2014), as has the influence on grades of moving to Sweden after school start (SNAE, 2014). School results of students who were born abroad deteriorated between the beginning of the 1990s and 2010, even after controlling for socio-economic background (SNAE, 2014). In addition, there has been an increase in the school effect due to students being born abroad; that is, a high proportion of students with a foreign background has a negative effect for all students at that school (SNAE, 2014).

The importance of socio-economic background is still high (SNAE, 2014). No increase in the impact of socio-economic background on grades can be seen in the period 2003–2012. Nevertheless, school segregation due to students’ background has increased; that is, the phenomenon where a large proportion of students with high socio-economic background has a positive effect on school results for all students at that school (SNAE, 2014). Evans and Davies (2008) draw our attention to the ‘shadowy presence’ of social class in PE research, and call for a more central place to achieve understanding of ‘what PE is for, what achievements and “abilities” are to be valued and what we as researchers and teachers can reasonably be expected to achieve’ (p. 199).

Gender differences favour girls, who perform better in all subjects; PE has been the only exception, where boys have higher grades on average than girls. Some researchers explain this in terms of the masculine values embedded in competitive sport, which has dominated the content of the lessons (Kirk, 2010; Redelius, Fagrell, & Larsson, 2009). The PE syllabus in Lgr11 does not focus on performance in sports but instead emphasizes knowledge in the three areas of **movement, health and lifestyle** and **outdoor life and**
activities. Moreover, the knowledge requirements describe movement in terms of movement qualities rather than sport results. The arguments mentioned for boys’ better grades are therefore questionable in this context.

**Understandings of decrease in equity**

In order to use Bernstein’s concept of the pedagogic device as a tool to better understand inequalities in PE grades, we here give a short description of the device and then present several different understandings of influences on equity in relation to the device. Neo-liberal influences on the school system and on assessment instructions are described, as well as two major influencing discourses on PE content: a sport and a health discourse.

**The pedagogic device**

Bernstein’s (1996, 2003) concept of the pedagogic device can be used to help visualize how interests striving for influence over what is to be considered valued knowledge in PE affect different students’ possibilities to be considered able in the subject. The pedagogic device recognizes the complexity in the transformation of knowledge between different fields: the primary field where knowledge is produced in universities and research centres, the recontextualizing field where the selection of knowledge that is to be included in the curriculum takes place and the secondary field where knowledge is reproduced in schools in the meeting between teachers and students. The recontextualizing field also concerns issues related to the government of the national school system. As knowledge is transformed between the different fields, it is reordered, selected and refocused. In the transformation between the primary field and the recontextualizing field, agents struggle for influence over what should be included in the curriculum and how it should be transmitted. The selected knowledge in the curriculum and in teachers grading practice will influence the possibilities for different groups of students to be considered able, and mirrors the interests of the dominant social order. In the following sections, we will elaborate on influences on the recontextualizing field and the secondary field in the ‘Influences on the Swedish school system’ and ‘PE content in Swedish schools’ sections.

**Influences on the Swedish school system**

Influences on the school system can be considered to be influences on the recontextualizing field. The transformation of the Swedish school system and the state steering by results is part of an international trend. In PE, global neo-liberalism has been discussed in terms of the impact on the subject’s status, the work of the teachers, a student-centred curriculum, and inclusion and equity (e.g. Azzarito, MacDonald, Dagkas, & Fisette, 2016; Evans, 2014; Evans & Davies, 2015; Kirk, 2010; Macdonald, 2014; Macdonald, Hay, & Williams, 2008; Williams, Hay, & Macdonald, 2011). The discussion about the impact of marketization of schools on equity highlights concerns about how inclusion can be preserved in a privatized education system (Azzarito & Solomon, 2005; Evans, 2014; Evans & Davies, 2015). Criticism of neo-liberalism also includes concerns that discrimination on the basis of race, gender and class will increase (MacDonald, 2014). Equal opportunities to choose a school will not automatically mean that all parents are able to make well-informed choices, and so differences between schools may accelerate, meaning that not all students will have the same opportunities (Evans, 2014).

In Sweden, the free choice of school has led to aggregation of students with the same background in the same schools (SNAE, 2015). Charter schools, which in many ways are similar to the Swedish concept of independent schools in the sense that they are publicly funded and free for anyone to choose, have existed for more than two decades in the USA. A review of the research regarding these schools shows that charter schools fail to achieve expected equity outcomes, and instead there is a self-sorting effect where minority groups choose the same schools. Educated families and families that place more value on education more often make use of their possibility to choose (Lubienski, 2013).

Individual responsibility has been explored by Arneback and Quennerstedt (2016), who studied policy documents from the chain of actors leading from the United Nations to Swedish schools. They found that the location of racism gradually shifts from an institutional (structural) level to an individual (interpersonal) level. In the same spirit, the responsibility moves from a national level to the individual student. The authors expressed concerns for the consequences:

> If this is taken to mean that teachers and schools (the institutions, or structures) do not have to change very much in order to counteract racism, because the problem is seen to lie with the students (individuals), we believe that the implications for educational practice can be severe. (p. 13)

**PE content in Swedish schools**

There has also been discussion of how the content in the subject impacts who has the opportunity to succeed. Legitimate content is not necessarily the same in the steering documents on the normative level (the recontextualizing field) and in practice (the secondary field). In the steering documents, where the state is steering by prescribing core content and knowledge requirements, there has been a shift from a sport
discourse towards a health discourse; this shift is also visible in the name of the subject, which has changed from ‘physical education’ to ‘physical education and health’. Nevertheless, in the transformation from the recontextualizing field to the secondary field, the content of the subject is interpreted and negotiated into what is actually realized in the secondary field. Historically, a sport and a health discourse have been identified as influencing the content in Swedish PE. Sport federations have contributed to shaping the subject by providing literature, equipment and in-job training courses for PE teachers (Lundvall & Meckbach, 2008). Furthermore, both students (Thedin Jakobsson, Lundvall, Redelius, & Engström, 2012) and PE teachers (Lundvall & Meckbach, 2010) often have a background as active participants in different sport federations. This could favour those who have experience from sport federations. In an ordinal regression analysis performed as part of a national evaluation ( Eriksson et al., 2005), leisure-time participation in sport activities had the highest odds ratio (OR) for a higher grade in PE out of all the background factors investigated (parents’ education, gender, cultural capital and ethnicity) even if sport results were not mentioned in the grading criteria.

When the logic of youth sports is adopted in PE, achievements and performing well in sports become valued in PE grades (Redelius et al., 2009). The purpose of Swedish PE has at times been understood as developing skills in different sports (Larsson & Redelius, 2008). Masculine values embedded in competitive sports are visible; for instance, Fagrell, Larsson, and Redelius (2012) found that ball games during the lesson were dominated by several boys, and that ball-playing girls were placed in positions where they underperformed. This was interpreted as an attempt to be perceived as a ‘normal’ girl. Neither teacher nor students question the boys’ higher grades, and the superiority of boys in PE looks like a taken-for-granted assumption (Redelius et al., 2009).

As a health discourse has been gaining influence on the normative level (the recontextualizing field), PE has sometimes been considered part of the solution to public health problems and child obesity (Kirk, 2010; Quennerstedt, 2006). In the Swedish PE syllabus, one of the reasons for teaching the subject is the aim for students to continue to be physically active later on in life (SNAE, 2011, p. 50). Evans (2014) has suggested that giving PE the responsibility for health issues results in a repacking of exclusion, privileging students who meet the requirement to be healthy (which is considered equivalent to being slim and fit). This enables reproduction of existing social hierarchies, ‘not despite our profession’s best intentions to address the wellbeing of children, but because of them!’ (p.321). Azzarito et al. (2016) have proposed a way out from reproducing the normative body ideal, by analysing the media’s hegemonic and racialized representations of the body. Problematizing can raise awareness of differences and inequalities, and shift the focus from equality to difference and pluralism. The authors argued that this is especially important in light of today’s intensification of diversity. O’Flynn (2010) has pointed out how health is differently constructed in government schools and private schools. In government schools, teachers constructed PE health education as a means for saving at-risk or disadvantaged students, while private school teachers invited students to become independent and responsible. Students were therefore positioned differently as ‘classed’ subjects in the meeting between students and teachers, thereby giving students different possibilities to assimilate the concept of health.

**Methodology**

Sweden keeps a national register of all students attending compulsory school and upper secondary school. This register is handled by SNAE, and contains information about students’ grades in all subjects, school choice, gender, parents’ education and migration background.

The data used in this study concern all students graduating from compulsory school (year 9) from all schools in Sweden in 2014 (n = 95,317). Data were provided by SNAE after coding for personal information, school and municipality (randomly numbered, with no key existing) to protect students’ anonymity. The data retrieved were originally collected by Statistics Sweden (SCB), using information from the Total Population Register (TPR) and the Register for Education (UREG). TPR is an excerpt from the population register handled by the Swedish tax agency, and gives information on gender, age and year of national registration (SCB, 2016). UREG gives information on education originating from registers from compulsory school, upper secondary school and university. Data on education outside Sweden are taken from Population and Housing Censuses (FoB) and a yearly survey of newly arrived immigrants whose information on education is not included in UREG (SCB, 2011).

The response variable, PE grades, is classified on a scale from A to F. Pass grades are designated A, B, C, D or E, with A as the highest grade and E as the lowest. A fail grade is designated F. A classification of NG is given to students who have not been awarded any grade in PE due to an insufficient basis for a decision. The binary explanatory variables used in the calculations regarding parents’ education, migration background, school choice and gender are defined in Table 1. For gender, a value of ‘no’ corresponds to female, and for school choice, a value of ‘no’ corresponds to a municipally operated school.
Most of the students graduated from municipally operated schools (83.1%) and the rest graduated from independent schools. There was a slight overbalance of boys (51.7%) and students that had at least one parent with higher education (51.5%). Only a small proportion of the students (7.6%) had arrived in Sweden after the school starting age of 7 (Table 2).

The data are described by frequencies and percentages, and by bar charts showing the relative frequencies as percentages within each background factor. To study the impact of the background factors on the response variable, PE grades, we used ordinal regression analysis since the measurement scale of PE grades is ordinal. The form of ordinal regression was the proportional odds model, which assumes a constant OR for all cumulative split of the range of PE grades. The interpretation of the OR is the odds of getting a higher grade rather than a lower grade when comparing two students belonging to one or the other category of a given background factor. We first conducted univariate analyses in which each of the four background factors were analysed separately. We then conducted a multivariate analysis in which all four background factors were analysed simultaneously, so the effect of one of the background factors was estimated while controlling for the other background factors. To see if the effects were homogenous across the classification of each of the four factors, we also performed stratified analyses for each of the classifications of that factor. Specifically, we studied whether the effects of gender, type of school and parents’ education were homogenous across migration background by running a separate multivariate analysis for each of the migration background classifications.

All results from ordinal regression analyses were summarized by the estimated regression coefficients, their standard errors, OR and 95% confidence intervals (95% CI). Nagelkerke’s $R^2$ was used to quantify the predictive power of the models. A score test of parallel lines was used to test the proportional odds assumption. Although the tests most often turned out to be statistically significant, we accepted the proportional odds model in order to keep the models simple and because the large sample size meant that even small departures from the null hypotheses would become significant. We used version 22 of IBM SPSS Statistics for the descriptive statistics, bar charts and ordinal regression analyses.

### Results

The distribution of PE grades among the 95,317 students graduating from Swedish compulsory school in 2014 is shown in Table 2, along with the distribution of the four background factors investigated: gender, parents’ education, migration background and type of school.

Being a boy, going to an independently operated school, having at least one parent with higher education and living in Sweden at school start all seemed to have a positive effect on PE grades (Figures 1–4). However, it is important to remember that Figures 1–4 do not control for the other factors. The influence of gender on PE grades has been known to differ from its influence on other school subjects, and it is still obvious that in 2014 more boys than girls received the two highest grades (A and B) while more girls received the lower grades, failed, or were

### Table 1. Definition of the binary explanatory variables.

| Variable                  | Definition of value                                              | Value 1 | Value 0 |
|---------------------------|-------------------------------------------------------------------|---------|---------|
| Gender                    | Boy                                                               | Yes     | No      |
| Parents’ education        | At least one parent has education beyond upper secondary school   | Yes     | No      |
| Migration background      | Living in Sweden at ordinary school start (age seven)            | Yes     | No      |
| School choice             | Independent school                                               | Yes     | No      |

NG indicates that no grade was given.

### Table 2. Description of the students.

|                          | $n$ | Proportion (%) |
|--------------------------|-----|----------------|
| Total number of students | 95,317 |                |
| PE grade                 |     |                |
| A                        | 14,951 | 15.7           |
| B                        | 19,104 | 20.0           |
| C                        | 23,932 | 25.1           |
| D                        | 16,425 | 17.2           |
| E                        | 14,178 | 14.9           |
| F                        | 4,589  | 4.8            |
| NG                       | 2,138  | 2.3            |
| Gender                   |     |                |
| Boys                     | 49,255 | 51.7           |
| Girls                    | 46,062 | 48.3           |
| At least one parent with education beyond upper secondary school | | |
| Yes                      | 49,281 | 51.7           |
| No                       | 46,036 | 48.3           |
| Living in Sweden at ordinary school start (age 7) | | |
| Yes                      | 88,061 | 92.4           |
| No                       | 7,256  | 7.6            |
| Independent school       |     |                |
| Yes                      | 16,100 | 16.9           |
| No                       | 79,217 | 83.1           |

NG indicates that no grade was given.
not awarded a grade (Figure 1). The same trend, with differences being bigger in the highest and the lowest grades, is also visible in the other variables (Figures 2–4). Parents’ education and migration background showed the biggest differences (Figures 3 and 4). To find out the impact of the other variables on each individual variable, multivariate ordinal regression analyses were performed.

Univariate and multivariate analyses are reported in Table 3. All four background factors were associated with higher grades, both separately and simultaneously.

In the multivariate analysis, where the effect of one of the background factors was estimated while controlling for the other background factors, the odds of getting a higher grade in PE were almost three times higher (OR: 2.721, 95% CI: 2.604–2.844) for those who lived in Sweden for all years of school attendance in comparison to those who moved to Sweden after school start. For students with at least one parent with education beyond upper secondary school, the odds of a higher grade were more than doubled (OR: 2.270, 95% CI: 2.218–2.324) in comparison to students with no parents with such education. Attendance at an independent school gave almost one and a half times higher odds of getting a higher grade (OR: 1.446, 95% CI: 1.403–1.491) than attending a municipal school, and boys had higher odds of a higher grade (OR: 1.229, 95% CI: 1.202–1.257) than girls. Migration background and parents’ education were the two factors with the highest OR for getting a higher grade in PE.

Stratified analyses were performed to see if the effects of the predictor variables were homogenous across classification. The differences in the estimated ORs for the variable migration background are shown in Table 4. The most noticeable result is the difference between boys’ and girls’ odds for getting a higher grade in PE: OR = 1.972 in the group that moved to Sweden after the usual school starting age and OR = 1.179 in the group that had been living in Sweden since school start. The OR for type of school was also higher in the group that had moved to Sweden after school start, but the same group showed a lower OR for parents’ education.
To study the effect of students belonging to a postulated category with the best opportunity to receive high grades compared to the category with the poorest opportunity, we created a new dichotomous variable. Students were classified as having the highest odds if they were boys who attended independent schools, had at least one parent with education beyond upper secondary school, and had lived in Sweden during the full period of compulsory school \((n = 7350)\). Students were classified as having the lowest odds if they were girls who attended municipal schools, had no parent with education beyond upper secondary school and had immigrated to Sweden after the usual school starting age \((n = 2003)\). The two new categories together included 9353 students. An ordinal regression analysis was then performed.

The distribution of the grades in these two categories is shown in Figure 5. The category with lowest odds was over-represented in the grades D, E and F, and also had a larger percentage lacking a grade (NG). The category

Figure 3. Distribution of PE grades in relation to parents’ education. A is the highest grade, F represents a fail and NG indicates that the student was not awarded any grade.

Figure 4. Distribution of PE grades in relation to migration background. A is the highest grade, F represents a fail and NG indicates that the student was not awarded any grade.
with highest odds was over-represented in grades A, B and C. The differences also became greater when the grades were more extreme. The highest grades, A and B, were awarded to almost 43% of the highest-odds category, while only 7% of the lowest-odds category received the same grade. The lowest grades, E and F, were awarded to around 10% in the highest odds category and 34% in the lowest-odds category.

Boys in independent schools with at least one parent educated beyond upper secondary school who had been living in Sweden since school start had almost six times higher odds of a higher grade (OR: 5.805, 95% CI: 5.296–6.362) than girls in municipal schools with no parent educated beyond upper secondary school who had moved to Sweden after school start (Table 5).

### Table 3. Estimates of regression coefficients, standard errors and odds ratios for the predictor variables associated with higher grades in PE.

| Predictor variables                                      | Univariate analyses | Multivariate analysis |
|----------------------------------------------------------|---------------------|-----------------------|
|                                                          | B      | Se B | OR          | 95% CI          | B      | Se B | OR          | 95% CI          |
| Gender, Boy = 1, Girl = 0                                | 0.179  | 0.011 | 1.196       | 1.169–1.223     | 0.206  | 0.012 | 1.229       | 1.202–1.257     |
| At least one parent with education beyond upper secondary school | 0.884  | 0.012 | 2.422       | 2.366–2.478     | 0.820  | 0.012 | 2.270       | 2.218–2.324     |
| Yes = 1, No = 0                                          | 1.141  | 0.022 | 3.129       | 2.995–3.269     | 1.001  | 0.022 | 2.721       | 2.604–2.844     |
| Migration background                                     | 0.502  | 0.015 | 1.652       | 1.603–1.703     | 0.369  | 0.016 | 1.446       | 1.403–1.491     |

### Table 4. Estimates of regression coefficients, standard errors and odds ratios for the predictor variables associated with higher PE grades, stratified by migration background.

| Predictor variables                                      | Yes | B      | Se B | OR          | 95% CI          | No    | B      | Se B | OR          | 95% CI          |
|----------------------------------------------------------|-----|--------|------|-------------|-----------------|------|--------|------|-------------|-----------------|
| Gender, Boy = 1, Girl = 0                                |     | 0.165  | 0.012 | 1.179       | 1.152–1.297     |      | 0.679  | 0.042 | 1.972       | 1.816–2.142     |
| At least one parent with education beyond upper secondary school |     | 0.839  | 0.012 | 2.314       | 2.259–2.371     |      | 0.560  | 0.044 | 1.751       | 1.606–1.909     |
| Yes = 1, No = 0                                          |     | 0.343  | 0.016 | 1.409       | 1.366–1.454     |      | 0.924  | 0.075 | 2.252       | 2.176–2.919     |
| School                                                   |     | 0.065  |       |              |                 |      | 0.081  |       |              |                 |

### Figure 5. Percentage distribution of grades among students with lowest odds (n = 2003) and highest odds (n = 7350).
Table 5. Estimates of regression coefficients, standard errors and odds ratios for the predictor variable highest versus lowest odds associated with higher PE grades.

| Predictor variable | B      | Se B   | OR    | 95% CI          |
|--------------------|--------|--------|-------|-----------------|
| Highest versus lowest, highest = 1, lowest = 0 | 1.759  | 0.047  | 5.805 | 5.296-6.362     |
| Nagelkerke $R^2$  |        |        |       | 0.150           |

Discussion

The aim of this study was to examine how sociological background factors impact PE grades. The results show that the chances of gaining a high grade in PE are affected by (in decreasing order) migration background, parents’ education, school choice and gender, and that this also holds true after controlling for the other background factors. In addition, the results point to substantial inequalities between students with a combination of the highest odds and students with a combination of the lowest odds, and also show that the results for the whole population do not always apply to all groups of students.

In order to contribute to the understanding of the persistent inequalities in the results, they will now be discussed in light of Bernstein’s concept of the pedagogic device. PE grades reflect what is regarded as valuable in teachers’ grading in schools (the secondary field in Bernstein’s terminology) and the goals and knowledge that have gained importance in the national curriculum (the recontextualizing field). We will here focus the discussion on the possible impact of different interests in the two fields. The pedagogic device is a useful tool to detect patterns in influences that might affect the possibilities for different groups of students to get a high grade in PE. It puts focus on which knowledge is considered valuable in different fields, and the impact of the transformation between fields. Therefore, the school system, the curriculum and other influences on content in PE and teachers’ grading decisions will be discussed as possible ways to interpret the results. The social and cultural outcome must be considered in light of who has the power to decide and control what should be valued. It has to be recognized that other groups do not have the same social and cultural resources as the group that sets the rules (Hay & Penney, 2013, p. 3).

A free school choice

Neo-liberal-influenced political decisions have introduced a free school choice and concurrence between schools, with the aim of guaranteeing quality. The free school choice is supposed to give individuals the education that is best adapted to their needs. This concept relies on the strong individual, able to make informed choices. Independent schools have sometimes been considered to contribute to increased segregation. Concerns have been raised that not all students might be able to realize the opportunity to make informed choices (Evans, 2014), and that social justice and market effectiveness are two distinct goals with their own values that sometimes coincide and sometimes are in opposition (Lubienski, 2013). In this study, students in independent schools achieved higher PE grades than students in municipal schools, even after controlling for the other background factors (OR = 1.446). In the stratified regression analyses, the group that moved to Sweden after school start had more than double the odds of a higher PE grade (OR = 2.252) if they attended an independent school rather than a municipal school. The results in the present study could be interpreted to support concerns that even if all students have the opportunity to choose, not all students are able to actualize that opportunity, especially in the group that have moved to Sweden after school start.

However, compared to background factors such as migration background and parents education, school provider had a lower OR for a higher PE grade. In addition, reports from SNAE show that differences between schools have increased regardless of school type, and that there is also segregation between classes in the same school (SNAE, 2014). Initiatives to avoid segregation and increased inequities have been undertaken. OECD (2009) recommends that school choice should be managed by, for instance, introducing controlled choice schemes to combine parental choice with ensuring a more diverse distribution of students, making disadvantaged students attractive to high-quality schools and improving disadvantaged families’ access to information and support. In order to manage the school segregation in Sweden, in spring 2016 Skolkommissionen (SOU, 2016) announced that it was considering suggesting an obligatory school choice combined with the provision of relevant information to students and parents.

One difference between municipal and independent schools is that independent schools sometimes do not have access to their own gymnasium. This implies that they have the opportunity to find new spaces for PE, and thereby have a chance to challenge the traditional content. This can allow other groups to be considered able in PE.

In 2014, there were slightly lower differences in general grade levels between girls and boys in independent schools than in municipal schools (SNAE,
One possible reason for this could be teachers’ expectations; teachers may position students differently as ‘gendered’ subjects, similarly to how they position students differently as ‘classed’ subjects in private and municipal schools (O’Flynn, 2010). The pedagogic device helps us to identify implications of political decisions, such as a free school choice, on both the recontextualizing and the secondary field, thus pointing at the complexity and interactions between the fields.

**From doing to knowing**

In the recontextualizing field, the Swedish curriculum has changed focus from doing to knowing (Wahlström, 2014). Swedish PE has thus changed from using one’s body for motor learning and promoting sport skills (doing), to promoting reflective action and insights into health questions and promotion (knowing) (Annerstedt, 2005, 608). National knowledge requirements are supposed to make grades comparable, and thus meet the societal need for accountability via assessment (Remesal, 2011); they also strengthen the state’s regulation of what is legitimate to grade. It might be expected that the shift of focus from doing to knowing (Wahlström, 2014), which requires the ability to analyse and express oneself in speech and writing, should work in the favour of girls, students whose parents have education beyond upper secondary school, students who have been living in Sweden since school start and students attending an independent school, as these students have higher grades in all academic subjects (SNAE, 2015). The results of the present study confirm that students whose parents have education beyond upper secondary school, who have been living in Sweden since school start and students attending an independent school, as these students have higher grades in all academic subjects (SNAE, 2015). The results of the present study confirm that students whose parents have education beyond upper secondary school, who have been living in Sweden since school start and who attend an independent school, as these students have higher grades in all academic subjects (SNAE, 2015). The results of the present study confirm that students whose parents have education beyond upper secondary school, who have been living in Sweden since school start and who attend an independent school, as these students have higher grades in all academic subjects (SNAE, 2015). The results of the present study confirm that students whose parents have education beyond upper secondary school, who have been living in Sweden since school start and who attend an independent school, as these students have higher grades in all academic subjects (SNAE, 2015).

The results in the present study show that PE grade differences between boys and girls are bigger in the group that moved to Sweden after school start (OR = 1.972) than in the group which had lived in Sweden since school start (OR = 1.179). Girls with foreign background have been shown to be less active in sport federations than boys with foreign background (Norberg, 2016). The results in this study indicate that girls with foreign background are disadvantaged in physical activities not only in their leisure time but also in school.

The stronger regulation of what to grade (knowledge) can also be considered to work against girls and students with less-educated parents, who had previously been advantaged by the grading of a common grade factor which took aspects other than content knowledge into consideration (Thorsen & Cliffordbor, 2012). However, the stronger regulation has not ended the practice of using factors such as motivation as a basis for PE grades (Svennberg et al., 2016). This illustrates how the knowledge which is legitimate to grade in the knowledge requirements is reorganized and refocused in the transformation to the secondary field.

**From a sport discourse to a health discourse**

Another possible explanation for the results is the decreasing impact of a sport discourse. PE as a school subject has traditionally been closely associated with competitive sports and sport federations (Londos, 2010; Lundvall & Meckbach, 2010; Schenker, 2011). Säfvenbom, Haugen, and Bulie (2015) hypothesized that PE and competitive youth sport have similar logic, that youth participation in sport mediates gender differences and is beneficial in PE and that PE may be one source of differentiation in health behaviour. Boys’ higher grades can in this context be considered an outcome of the masculine values embedded in the competitive sports dominating the content in PE (Kirk, 2010; Redelius et al., 2009).

Since 1994 (Lgr94) there has been a shift of focus from a sport discourse to a health discourse in Swedish steering documents (the recontextualizing field). Even though health is emphasized on the normative level, the sport discourse has been resistant to changes in practice on the secondary field (Redelius et al., 2009; Svennberg, 2017). A national evaluation of PE conducted in 2003 showed that the educational aspect is difficult for teachers to apply in pedagogic practice (Quennerstedt, Öhman & Eriksson, 2008), and an activity and sport discourse is still visible. However, a recent study by Svennberg et al. (2016) showed that the implementation of a grading system with knowledge requirements in 2011 has improved PE teachers’ alignment with the knowledge requirements, and that these teachers have also integrated health aspects in their grading in a new way. While taking focus off the masculine values embedded in competitive sports might favour girls, we do not know how focus on a health discourse might work on the background factors studied. Evans (2014) has discussed the possibility that when health is
interpreted as being slim and fit, this might reproduce hierarchies by favouring students who meet these demands. Slimness and fitness are associated with high socio-economic status. High social position is associated with higher activity levels among adults (Engström, 2008), as well as more frequent active membership in sport clubs (Elofsson, Blomdahl, Lengheden, & Åkesson, 2014; Norberg, 2016). This is not something unique to Sweden. For instance, in Finland, adolescents from families with high socio-economic status are more often active sport club members (Kantomaa, Tammelin, Näyhäa, & Taanila, 2007), and in the USA, adolescents with higher socio-economic status participate more in organized physical activity programmes (Sallis, Zakarian, Hovell, & Hofstetter, 1996). In Sweden, Thedin Jakobsson et al. (2012) have shown a positive relation between grades in Swedish PE and participation in a sport club.

The influence of parents’ education on PE grades was lower in the group which moved to Sweden after school start than in other groups (OR = 1.751 vs. OR = 2.314). There are probably many reasons for this; one could be that attending a foreign school system make it hard to understand the Swedish school code: ‘the talk, the values, the rituals, the codes of conduct are biased in favour of the dominant group’ (Bernstein, 2003, 171).

There are obvious reasons for some of the difficulties in meeting the expectations of the curriculum when coming from a cultural background other than Nordic and Western society. For instance, swimming and outdoor activities in different seasons are required to receive a pass grade in Swedish PE, which can be a challenge for those who are not accustomed to water, spending time in nature or winter conditions (cf. Eriksson et al., 2005). These difficulties illustrate how minority groups with little or no influence on what is valued for grades are disadvantaged when someone with a different social and cultural background is setting the rules.

**Discussion of method**

One advantage of secondary analysis of official statistics is that a reanalysis can offer new interpretations; however, one disadvantage can be that key variables are missing (Bryman, 2012, 315). An advantage of the present study is that the register provided data on the whole population of students graduating from compulsory school in 2014 \( n = 95,317 \). These data were collected by Statistics Sweden from different registers (TPR and UREG) and not individually reported, with the exception of cases of foreign education in UREG. This is an advantage, since it means flaws are less likely. In a multivariate ordinal regression analysis, the effect of one of the background factors is estimated while controlling for the other background factors. However, it must be remembered that this does not control for any other possible factors that may co-vary with the four background factors analysed. The predictive power \( (\text{Nagelkerke's } R^2) \) in the models used is about 0.1, suggesting that other factors might impact PE grades. Hopefully, it can be assumed that most of the variance in PE grades is explained by the students’ knowledge and performance. Other factors that have previously been shown to influence the variation in grades are extracurricular sporting experience, which impacts the variation in PE grades (Eriksson et al., 2005), and an increasing school effect, which impacts the variance in overall grade level (SNAE, 2014). It is not only important what school the student attends; the variation between classes in the same school has also increased. The factors discussed by SNAE as probably contributing to the between-school variation and the between-class variation in the same school are students’ motivation, peer effects, teachers’ expectations and possible quality differences between schools (SNAE, 2014). It is difficult to tell whether the results depend on changes in the school system or changes in society. It could be that the school system has succeeded in decreasing the inequalities, but this is not visible because inequalities have increased in society.

**Conclusion**

This study makes several contributions to the literature. Firstly, it highlights equity aspects in the subject of PE. Secondly, it also puts focus on how the sociological factors studied sometimes have different impact on PE grades for different groups of students, suggesting the need for an intersectional approach in further research. Thirdly, the pedagogic device can contribute to our understanding of the persistent inequalities by recognising the complex web of influences on the different fields and how these influences might impact different students’ possibilities to achieve a high PE grade. The changed balance between a sport discourse and a health discourse as well as the stronger regulation of what to grade (equal to knowledge) have been suggested to impact equity in PE. The persistent inequality revealed in the present study indicates that attempts to achieve a compensatory education have succeeded in the case of gender, but failed to override the influences of power structures framed by parents’ education and migration background. Attending an independent school in Sweden during all years of compulsory school and having educated parents still give an advantage in obtaining high grades in PE.
Note

1. Data from SNAE about students graduating from compulsory school in 2016 show that girls now have slightly higher grades than boys in PE. This is a new situation, and is likely the result of a complex web of influencing factors which may include the focus on knowledge and decreased influence of competitive sports.

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