



<http://www.diva-portal.org>

This is the published version of a paper published in .

Citation for the original published paper (version of record):

Larsson, H., Mattsson, T., Ferry, M. (2022)
(Non-)Diversity and cultural (re)production in physical education teacher education: a Swedish example
Curriculum Studies in Health and Physical Education, 13(1): 3-18
<https://doi.org/10.1080/25742981.2021.1979416>

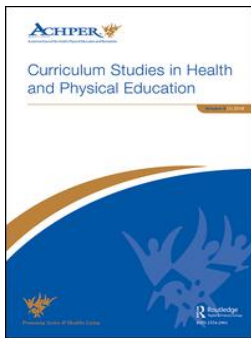
Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

(c) 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:gih:diva-6801>



(Non-)Diversity and cultural (re)production in physical education teacher education: a Swedish example

Håkan Larsson, Torun Mattsson & Magnus Ferry

To cite this article: Håkan Larsson, Torun Mattsson & Magnus Ferry (2021): (Non-)Diversity and cultural (re)production in physical education teacher education: a Swedish example, Curriculum Studies in Health and Physical Education, DOI: [10.1080/25742981.2021.1979416](https://doi.org/10.1080/25742981.2021.1979416)

To link to this article: <https://doi.org/10.1080/25742981.2021.1979416>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 18 Sep 2021.



Submit your article to this journal [↗](#)



Article views: 47



View related articles [↗](#)



View Crossmark data [↗](#)

(Non-)Diversity and cultural (re)production in physical education teacher education: a Swedish example

Håkan Larsson ^{a,b}, Torun Mattsson^b and Magnus Ferry ^c

^aSwedish School of Sport and Health Sciences, Stockholm, Sweden; ^bDepartment of Sports Science, Malmö University, Malmö, Sweden; ^cUmeå University, Umeå, Sweden

ABSTRACT


Research about physical education teacher education (PETE) indicates that the education program attracts homogeneous groups of students, consisting mainly of young men originating from the country in question and who have academic backgrounds. The purpose of this article is, through a case study of one Swedish PETE institution, to explore a cohort of 60 students regarding background characteristics (gender, social and migration background) and secondary characteristics (school success, experience of sport and physical activity cultures, and perceived physical ability). The case study indicated that the students have slightly more diverse backgrounds than is found in previous PETE research, but at the same time, they remain fairly homogeneous regarding, e.g. such as school success, the experience of sport and physical activity, and perceived physical ability. Attracting a more diverse group of students does not mean necessarily that the students are equally diverse when it comes to experiences of movement culture, and the abilities and knowledge that they have gained from participation in this culture.

KEYWORDS

Physical education teacher education (PETE); PETE students; social background; secondary characteristics

Introduction

Research about physical education teacher education (PETE) has indicated that the education program largely attracts rather homogeneous groups of students, consisting mainly of young men with an origin in the country in question, who have academic backgrounds (e.g. Dodds et al., 1992; Dowling, 2011; McCullick, Lux, Belcher, & Davies, 2012). Moreover, most students have extensive experience in competitive sports and physical exercise (e.g. Ferry, 2018; Ferry & Romar, 2020). Perhaps as a consequence of this homogeneity, research also consistently reports on difficulties to challenge and change what is taken for granted regarding both the content of PETE (e.g. Brown & Evans, 2008; Larsson, Linnér, & Schenker, 2018) and the necessary professional knowledge of physical education (PE) teachers (Backman, Nyberg, & Larsson, 2020; Mordal-Moen & Green, 2014). Apparently, PETE largely contributes to a cultural reproduction of tastes and values in the school

CONTACT Håkan Larsson  hakan.larsson@gih.se  Swedish School of Sport and Health Sciences, Stockholm 114 86, Sweden

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

subject PE that contributes to marginalise some groups of students as well as making it difficult for teachers to keep up with policy changes (Larsson et al., 2018).

To level the playfield regarding access to higher education, Swedish universities are, through the Higher Education Act (SFS 1992:1434), mandated to implement what is in Swedish termed *breddad rekrytering*, literally 'broadened recruitment'. Broadened recruitment designates deliberate and structured attempts to counteract gender, social and ethnic bias in recruitment (Government bill, 2004/05:162). Typically, the aim is to have recruitment of students that reflects the composition (in terms of gender, and social and ethnic background) of the population. The primary objective of broadened recruitment is thus related to equal opportunities for all individuals regardless of background to be eligible for a particular education program. While this may be a good enough objective for broadened recruitment, we speculate that broadened recruitment is sometimes given an even broader meaning.

At times, it is suggested in research (e.g. Dowling, 2011; Richards, Housner, & Templin, 2018; Sirna, Tinning, & Rossi, 2010) that more diverse groups of teachers would be more fit to teach diverse groups of pupils. However, it remains to be explored how broadened recruitment relates, for example, to sports and physical activity habits among prospective teachers. As the focus of broadened recruitment increases, it is imperative that PETE institutions gain more insight into how broadened recruitment affects cultural reproduction within the education program. The question that drives the study is: is broadened recruitment enough to challenge what is taken for granted about PETE and 'useful' PE teacher knowledge?

Through a case study of one Swedish PETE institution, the purpose of the article is to explore a cohort of 60 students regarding background characteristics (gender, social and migration background) and secondary characteristics (school success, experience of sport and physical activity cultures, and perceived physical ability). While this is only a small study, it may give food for thought regarding the effects of broadened recruitment and what other potential measures must be taken in order to challenge what is taken for granted about PETE.

Physical education teacher education

The history of Swedish PETE is strongly associated with the rise and fall of Swedish gymnastics. The creation in 1813 of The Royal Gymnastics Central Institute (presently The Swedish School of Sport and Health Sciences) contributed to a crystallisation of some of the values that have come to be associated with both PE and PETE (Lundvall, 2015). These values, which were during the nineteenth and early twentieth centuries 'exported' world-wide through the spread of Swedish Gymnastics, embraced to quite some extent a conservatism that attracted people from privileged social groups to become PE teachers (Bolling & Yttergren, 2015; Pfister, 2009). Moreover, the system of Swedish Gymnastics was based on a gender dualism, which meant a strong differentiation of PE curricula according to gender. Even after the fall of Swedish Gymnastics in the mid-1900s, PETE in Sweden remained a high-status education with high admission requirements (Lundvall & Meckbach, 2003). Paradoxically, it was not until PETE, along with other teacher education specialisations, was integrated into the university system in 1977 that the high status began to fade away. About the same time, the previously strong separation between male and female

PETE students was abandoned (Carli, 2004). Moreover, the number of PETE institutions in the country gradually multiplied from only one to about a dozen. Despite that the high societal status of PETE has disappeared, some of the core values, including the gender dualism, have remained markedly tenacious (Larsson et al., 2018).

Currently, Swedish secondary school subject teacher education is a five-year education composed of three basic parts, general education (two semesters, 60 ECTS), main subject studies (main subject, four semesters, 120 ECTS; secondary subject studies, three semesters, 90 ECTS), and practicum (one semester, 30 ECTS). Typically, the education program starts with subject studies in the students' main subject. In this structure, the PETE acronym typically refers to the four or three semester subject studies. In most Swedish universities, PETE is located at a Sport Science department. This is the case in the present study. The Department of Sport Sciences, in turn, is located at a fairly recently founded university in one of Sweden's main cities. This 'young' university currently presents itself as 'an innovative, urban and international university that contributes to the development of society through research-based knowledge, critical reflection and action power' (Anonymised reference). It endeavours to be 'an inclusive university by creating good conditions for broadened recruitment and broadened participation in education, postgraduate education and research' (Anonymised reference). At the time of the study, roughly one-third of all students enrolled at the university had a migration background (Anonymised reference). However, while the PETE staff consists to an equal extent of women and men, all teachers are white and the majority has a Swedish background.

PETE research consistently paints a picture where the education is characterised by a strong reproduction of tacitly accepted common beliefs (Larsson et al., 2018; Mordal-Moen & Green, 2014). In Larsson and colleagues' (2018) study, students are strongly affected by previous (positive) experiences of both PE and sport participation. Hence, they favour PETE content such as human biology, sport activities and practicum, that is, content that does not challenge the foundations of the education program. Potentially challenging content, such as socially critical perspectives, including critical pedagogy, are typically seen as 'unnecessary' or 'unusable' by the students. This conclusion can also be drawn from international research (e.g. Brown & Evans, 2004; Dowling, 2011; Mordal-Moen & Green, 2014). The studies by Brown and Evans (2004) and Dowling (2011) indicate that PETE as a whole has become highly masculinised (see also Knez & Mattsson, 2018), which means that 'being a man' is sometimes considered in itself to be a valuable asset in the PE teacher profession.

Parallel to the reproduction of tacitly accepted common beliefs, research has indicated that Swedish PETE students are still a rather homogeneous group, with the majority of students having a Swedish and academic family background (Ferry, 2018; Ferry & Romar, 2020). This homogeneity is also mirrored in international research, where Dodds and colleagues (1992) and Placek and colleagues (1995) found some time ago that American PETE students mainly had white and academic middle-class backgrounds. Later, McCullick and colleagues (2012) have confirmed the same pattern. In their study, the homogeneous background of PETE students was associated with positive experiences of sport participation and traditional values regarding health, family and religious beliefs. Richards and colleagues (2018) conclude that maintenance of *status quo* in PETE is at least partly because teachers and coaches encourage students who resemble themselves to pursue a teacher degree. Furthermore, Sirna and colleagues (2010) hold that PETE

students and teachers, who to a great extent resemble each other, create strong social bonds, thereby contributing to the maintenance of *status quo*.

The homogeneous character of PETE students may well explain why these students have rather similar perceptions about what constitutes a ‘good PE teacher’ and a ‘good PE lesson’ (Ferry & Romar, 2020), as well as what constitutes ‘useful knowledge’ for PE teachers (Backman et al., 2020; Larsson et al., 2018; Mordal-Moen & Green, 2014). According to Dowling (2011), this homogeneity means that student teachers are poorly equipped to teach diverse groups of students. In her study, the student teachers seemed to prefer to teach students who resembled themselves.

We conclude from the previous research that PETE, for the most part, is populated by rather homogeneous groups of teachers and students who hold quite strong views about the purpose and content of PE; views that make teaching PE to diverse groups of students a great challenge. This highlights a need for further studies of the efforts to broaden the recruitment of students.

Theoretical framework

Previous research about the links between student backgrounds and what is valued in PETE has often drawn on the work of French cultural sociologist Pierre Bourdieu (see, e.g. Brown & Evans, 2004; Ferry, 2018; Ferry & Romar, 2020; Sirna, Tinning, & Rossi, 2008). Arguably, this is because Bourdieu offers a comprehensive theoretical account that allows for the understanding of the dynamic relationships between the embodied dispositions of individuals and groups of people, and the social reproduction – or re-constitution – of what is valued in a certain social field. One key concept sometimes referred to in research about PETE is *doxa* (Larsson et al., 2018). *Doxa* designates taken-for-granted assumptions and beliefs (Bourdieu, 1990). According to Deer (2008, p. 119), it denotes ‘the misrecognition of forms of social arbitrariness that engenders the unformulated, nondiscursive, but internalized and practical recognition of that same social arbitrariness’. This means that when made explicit, the content of *doxa* may well be denounced by the same people who recognise it ‘in practice’.

Doxa is linked to *habitus*, which according to Bourdieu (1984, 1990), is influenced by different social agents (e.g. the family) and formed through experiences from participating in different social fields. *Habitus* is Bourdieu defined as ‘[a] system of durable, transposable dispositions, structured structures predisposed to function as structuring structures’ (1990, p. 53). *Habitus* designates processes, in the sense that it is always open to change, at the same time as it can be seen as something that individuals and groups of individuals ‘have’. It enables – or complicates – action in different social contexts, and is typically expressed as taste – or distaste – for the different features of any practice. In movement culture, this may mean a preference – or distaste – for competitive sports, dance, outdoor activities and more. In a similar way, *habitus* influences PETE students’ views and attitudes towards the purpose and content of PETE (Mordal-Moen & Green, 2014). *Doxa* may or may not be an integral part of the *habitus* of individuals or social groups. Both, however, operate on the level of the unconscious, which means that while they are acted out in practice, they are difficult to articulate, also – or specifically – for those concerned. This contributes to that social structures are reproduced although social actors may maintain that they are positive to change.

Doxa and *habitus* have consequences for the social reproduction – or change – of various social *fields*. A field in Bourdieu's (1984) terms exists when 'a limited group of agents and institutions struggle over something that is common to them' (Broady, 1996, p. 42; author translation). This definition highlights that social fields do not arise and persist because people agree on certain arrangements. Rather, it is the struggle that constitutes a field, although it may well be that the agents of a particular field have similar *habitus* and, to a great extent, share a common *doxa*. *Habitus* may then have the function of symbolic capital. More generally, symbolic capital refers to that which is recognised by social groups as valuable (Bourdieu, 1984). Symbolic capital exists in many forms, such as economic, social and cultural capital. To the extent that *habitus* gains the function of symbolic capital on a certain social field, it can be regarded as cultural capital, that is, a set of embodied dispositions that function as assets. *Habitus* enables an agent to successfully operate on that field, and is also recognised by other agents on the field.

In this article, since the empirical study is quite small, we will use Bourdieu's 'tool box' of concepts (Isahunter, Smith & Emerald, 2015) to *discuss* the results of the empirical study rather than attempting at conducting a full-fledged 'Bourdieuian' analysis.

Method

The study draws on information from questionnaires answered by 60 newly enrolled PETE students at a major University in the south of Sweden; 38 men, 19 women and 3 students reporting a non-binary gender identity. The questionnaire used in the study is based on previous research in the area (Meckbach & Wedman, 2007). In order to allow for comparison with previous studies, we refrained from altering the response options, although it might be the case that this, to some extent, reinforces what is taken for granted about PETE, for example regarding what capabilities are highly valued. The questionnaire consisted mainly of questions with pre-defined answers. It included more questions than what was used for analysis in the study. To answer our purpose, we have used information about the students' background (e.g. gender, parents' education levels, migration background), their previous and present physical activity and sport habits, their previous experiences of PE and school more generally, the recruitment process to the program, and their ratings of their own abilities and knowledge in various areas related to PE and sports before enrolment.

The questionnaire was handed out in connection with one of the first lessons during the very first semester of the program. The students were informed that this was part of a specific research project and not part of their education. Participation was voluntary, anonymous and not part of a graded assignment. The questionnaire was distributed by a third part, that is, a Ph.D. student from the department who was not a teacher in the course nor part of the research project. All students opted to participate in the study.

To find comparable statistics on PE teachers, statistics from the Swedish National Agency for Education have been used (SNAE, 2020). As with all government statistics, SNAE uses a specific definition of what is 'migrant background': a person has a migrant background if he or she is born abroad, or if both parents are born abroad. Of course, this is a very broad category, which says nothing about ethnicity. Thus, the analysis should not be interpreted as being about ethnicity, but migrant background and its relationship to PETE recruitment.

Data analysis

IBM SPSS Statistics version 26 was used for calculations and statistical analysis. In the calculations of the students’ place of birth, the two categories defined by the Swedish National Agency for Education (SNAE, 2005) was used; Swedish (born in Sweden and at least one parent born in Sweden) and non-Swedish (born outside of Sweden or both parents born outside of Sweden). In this article, we refer to these categories as students with Swedish or migration backgrounds. The students’ ratings of their abilities ($n = 8$) and knowledge in different areas ($n = 17$) before enrolment were answered on a 4-point scale from *did not master* (1) to *completely mastered* (4). Before comparisons between groups, the knowledge areas were categorised following Fenstermacher (1994) into two groups: propositional knowledge and performance knowledge (see Figure 1), and thereafter the mean values for each area were calculated.

In the analysis, all items with answers on a 4- or 5-point scale are treated as if they are on a ratio scale. The statistical analysis was done with the use of Fischer’s exact test, chi-square test and t -test depending on the type of question. In addition, effect sizes were measured with Phi coefficient (Φ), Cramer’s V (w) and Cohen’s d (d) (Cohen, 1988; Lakens, 2013). Due to small numbers, students who reported a non-binary gender identity are not included in the statistical analysis in comparisons between genders.

Results

The PETE students’ background characteristics

Similar to earlier studies on Swedish PETE (Ferry, 2018), in this study, there is a higher proportion of male students (63%). In comparison to all PE teachers in Swedish compulsory schools (43%) the proportion of male students in the study are significantly higher ($p < .05$, $\Phi = .03$). However, the proportion is similar to PE teachers in Swedish upper-secondary schools (67%) (SNAE, 2020).¹

Propositional knowledge
How smoking, food and sleep affects health
The connection between health, lifestyle, and the environment
How your own body functions at work and at rest
Ergonomics of different work environment contexts
Connection between the environment and human health in a historical and contemporary perspective
Impact of work environments on human health
Development of children and young people
Learning processes
Equality
Democracy
Norm critical approaches
Performance knowledge
Plan, implement, evaluate an exercise program
Different relaxation and stress management methods
Combine movements to music
Lead, organize, carry out and evaluate sports activities
Outdoor life during different seasons
A sports activity that is important for the cultural heritage

Figure 1. Categorisation of propositional and performance knowledge.

Table 1. Swedish or migration background, frequencies.

	Swedish	Migration
Women	14	5
Men	31	7
Non-binary ^a	1	2
All	46	14

^aNot included in the statistical analysis.

In relation to migration background (Table 1), there were no significant differences in the proportion of newly enrolled female (26%) and male (18%) students with a migration background ($p > .05$). In total, 23% of the newly enrolled students had a migration background, which is lower than all students at the University; however, similar to the proportion of pupils in Swedish compulsory schools (26%) and upper-secondary schools (31%). In total, 7% of the PETE students were born outside Sweden, which is similar to the proportion of PE teachers in compulsory school (10%) and upper secondary schools (9%) (SNAE, 2020). A clear majority of the students (78%) have at least one parent with tertiary education (university studies).

Experiences of physical activity and sport

As seen in Table 2, most PETE students have parents with at least some experience from club sports (77%) with no significant difference between female and male or students with Swedish and migration backgrounds ($p > .05$). This result shows that most students grew up in homes where sport has been an interest among the parents, which thereby has influenced the *habitus* of the students.

Furthermore, the PETE students themselves have been and still are involved in a variety of club sports and physical exercise (Table 3). A clear majority of all students (83%) have experience in club sports before enrolment, with no significant gender differences ($p > .05$). However, there is a significantly higher proportion of students with a Swedish background (91%) compared to students with migration backgrounds (57%) with experience from club sports before enrolment ($p < .05$, $\Phi = .39$). In total, the students have experience of 22 different sports, mainly from large team sports ($n = 39$, 65%), such as football ($n = 24$) and floorball ($n = 6$). Fifteen students (25%) also have experience in a total of 13 different individual sports, with boxing ($n = 3$), taekwondo, badminton, orienteering, tennis and table tennis ($n = 2$ each) as the most common ones. In addition, eight students have experience in both team sports and individual sports. In relation to gender and migration status, there are no significant

Table 2. PETE students' parents' experience of club sports as participants or leaders, frequencies.^a

	No experience	Some experience	Large experience
Women	3	6	10
Men	10	14	14
Non-binary ^b	1	2	0
Swedish background	9	17	20
Migration background	5	5	4
All	14	22	24

^aDue to small numbers the analysis is done with Fishers Exact test between no/some and large experience.

^bNot included in the statistical analysis.

Table 3. PETE students' previous and present experiences of physical activity and sports, percentage.

	Past experiences of competitive sports ^a	Present experiences in		
		Competitive sports	Physical exercise	Both
Women	79	32	58	11
Men	87	21	69	9
Non-binary ^b	67	0	100	0
Swedish background	91	27	61	11
Migration background	57	17	83	0
All	83	25	66	9

^a $p < 0.05$ differences between students with Swedish and migration backgrounds.

^bNot included in the statistical analysis.

differences in the proportion of students with experience of a team or individual sports ($p > .05$).

The result also shows that PETE students are presently involved in different kinds of sports and physical exercise (Table 3). The largest proportions of students were at the time of enrolment engaged in different forms of physical exercise (75%), where the most common activities were strength training ($n = 29$) and cardio training/running ($n = 15$). Among the students, 34% were also involved in club sports, with football ($n = 10$) as the most common one. Notable is that apart from one, all male students who are presently active in club sports participate in a team sport, while most of the females participate in an individual sport. None of the students with a non-binary gender identity are involved in club sports. In relation to migration background, there are no significant differences in the participation patterns in club sports ($p > .05$).

Table 4 shows that the physical exercise mostly preferred by the PETE students are Spinning and strength training ($m = 3.82$), Walking ($m = 3.39$) and Running ($m = 3.16$) and the least preferred activity is Yoga ($m = 1.84$). In relation to preferred exercise among female and male students, Aerobics and similar activities scored higher among women ($m = 3.06$) compared to men ($m = 1.66$, $p < .05$, $t(51) = 3.70$, $d = 1.07$) and Unorganised team games scored higher among men ($m = 2.89$) compared to women (m

Table 4. PETE students' preferred physical activities, 1 = totally disagree, 5 = totally agree (mean values and standard deviations).

	Women		Men		Non-binary ^a		Swedish background		Migration background		All	
	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD
Spinning and strength training	3.61	1.38	3.89	1.47	4.33	0.58	3.75	1.38	4.08	1.51	3.82	1.40
Walking	3.56	1.29	3.33	1.24	3.00	2.00	3.24	1.25	3.92	1.31	3.39	1.28
Running	3.00	0.91	3.29	1.23	2.67	2.08	3.07	1.17	3.50	1.17	3.16	1.17
Organised team games	2.50	1.62	3.09	1.70	3.00	2.00	2.95	1.76	2.67	1.37	2.89	1.68
Un-organised Team games ^b	1.61	1.04	2.89	1.41	3.33	0.58	2.62	1.45	2.08	1.16	2.51	1.40
Swimming	2.50	1.29	2.31	1.25	3.00	2.00	2.27	1.25	2.92	1.38	2.41	1.29
Outdoor activities/ adventure sports	2.17	0.99	2.50	1.23	2.33	2.31	2.40	1.12	2.33	1.56	2.39	1.21
Aerobics and similar activities ^b	3.06	1.47	1.66	1.21	2.33	2.31	1.95	1.40	2.83	1.64	2.14	1.48
Yoga	2.06	1.21	1.69	0.99	2.33	2.31	1.82	1.06	1.92	1.44	1.84	1.14

^aNot included in the statistical analysis.

^b $p < .05$ difference between women and men.

Table 5. PETE students' reason to applying to the study programme, 1 = totally disagree, 5 = totally agree (mean values and standard deviations).

	Women		Men		Non-binary ^a		Swedish backgr.		Migration backgr.		All	
	<i>m</i>	<i>SD</i>	<i>m</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>m</i>	<i>SD</i>	<i>m</i>	<i>SD</i>	<i>m</i>	<i>SD</i>
Interested in the subject ^b	4.79	0.42	4.55	0.92	5.00	0.00	4.54	0.86	5.00	0.00	4.65	0.78
I want to become a teacher	4.47	0.70	4.47	0.95	4.50	0.71	4.46	0.86	4.54	0.88	4.47	0.86
Interested in children/youth	4.58	0.61	4.16	1.03	4.67	0.58	4.33	0.92	4.29	0.91	4.32	0.91
Interested in teaching	4.00	1.16	4.18	0.98	4.67	0.58	4.11	0.99	4.29	1.14	4.15	1.02
Easy to get work ^b	3.68	1.16	3.42	1.22	4.00	1.00	3.33	1.16	4.21	1.05	3.53	1.19
The program has good reputation ^b	3.11	1.15	2.56	1.32	3.00	2.83	2.32	1.09	4.33	0.78	2.75	1.32
The program is available where I live ^b	2.33	1.53	2.55	1.43	4.00	1.73	2.18	1.30	3.79	1.42	2.56	1.49
Friends have/are going	1.89	1.45	1.71	0.90	2.33	2.31	1.63	1.00	2.36	1.50	1.80	1.16

^aNot included in the statistical analysis.^b $p < .05$ difference between students with Swedish and migration backgrounds, respectively.

= 1.61, $p < .05$, $t(52) = 3.41$, $d = 0.99$). For all other activities there is no significant gender difference ($p > .05$). In relation to preferred activities among students with Swedish and migration backgrounds, respectively, there is a tendency that students with migration background score Aerobics and similar activities higher ($m = 2.83$) compared to students with a Swedish background ($m = 1.89$, $p = .068$, $t(54) = 1.86$, $d = 0.61$). For all other activities no significant difference exists ($p > .05$).

Experience of school

Most PETE students have enjoyed both compulsory and upper-secondary school as pupils, with no significant difference between women and men or students with Swedish and migration backgrounds, respectively ($p > .05$). In total, 50% of all students experienced compulsory school as very good and 45% indicated the same regarding upper-secondary school.

Regarding grades, most students were also successful during upper-secondary school, with medium and high grades on average (76%) with no significant differences between students with Swedish and migration backgrounds, respectively ($p > .05$). However, in relation to gender, a higher proportion of male students had low grades in average (34%) compared to female students (6%, $p < .05$, $\Phi = .30$). Specifically, concerning PE, 47% of the students had a high grade (Pass with Special Distinction), while 46% had a medium grade (Pass with Distinction), and only 7% had a low grade (Pass), with no significant gender difference ($p > .05$). There is, however, a tendency that a higher proportion of students with a Swedish background have high grades (55%) compared to students with a migration background (23%, $p = .061$, $\Phi = .26$).

Recruitment to PETE

Analysing the students' reasons for applying to the education program (Table 5), 'Interested in the subject' ($m = 4.65$) and 'I want to become a teacher' ($m = 4.47$) scored high among all students. Gender is highlighted only in the sense that women tend to a greater extent than men favour an interest in children/youth ($m = 4.58$ vs. 4.16, $p = 0.058$, $t(55) = 1.94$, $d = 0.54$). Students with Swedish background score several reasons significantly

Table 6. PETE students' support and encouragement from their surroundings and significant others, 1 = totally disagree, 5 = totally agree (mean values and standard deviations).

	Women		Men		Non-binary ^a		Swedish background		Migration background		All	
	<i>m</i>	SD	<i>m</i>	SD	<i>M</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD
Family ^b	4.30	0.84	3.26	1.47	3.00	2.82	3.75	1.31	3.08	1.65	3.60	1.41
Other relatives ^c	3.47	1.61	2.83	1.50	3.00	2.82	3.36	1.42	1.92	1.68	3.05	1.58
Partner ^c	3.00	1.97	2.86	1.79	3.00	2.82	3.27	1.77	1.73	1.62	2.92	1.84
Friends ^c	3.37	1.42	2.80	1.32	3.00	2.82	3.20	1.29	2.25	1.60	3.00	1.40
No support ^b	1.18	0.60	1.84	1.28	1.00	0.00	1.48	1.01	2.00	1.41	1.62	1.14

^aNot included in the statistical analysis.^b $p < 0.05$ between women and men.^c $p < .05$ between students with Swedish and migration backgrounds, respectively.

higher than students with migration backgrounds: 'Interested in the subject' ($m = 5.00$ vs. 4.54, $p < .05$, $t(58) = 3.59$, $d = 1.10$), 'Easy to get work' ($m = 4.21$ vs. 3.33, $p < .05$, $t(58) = 2.57$, $d = 0.78$), 'The program has good reputation' ($m = 4.33$ vs. 2.32, $p < .05$, $t(54) = 5.96$, $d = 1.94$) and 'The program is available where I live' ($m = 3.79$ vs. 2.18, $p < .05$, $t(58) = 3.95$, $d = 1.21$).

In the process of choosing education, the PETE students stated that they have received support and encouragement from their surroundings and significant others (Table 6). This is especially true in terms of support and encouragement from family members (a combination of support from mother, father, and siblings, $m = 3.60$), where the results show that women have received significantly higher support compared with men ($m = 4.30$ vs. 3.26, $p < .05$, $t(53) = 3.33$, $d = 0.94$). Students with a Swedish background have indicated receiving significantly higher support compared to students with migration backgrounds from other relatives ($m = 3.36$ vs. 1.92, $p < .05$, $t(54) = 3.02$, $d = 0.99$), their partner ($m = 3.27$ vs. 1.73, $p < .05$, $t(46) = 2.58$, $d = 0.89$), and friends ($m = 3.20$ vs. 2.25, $p < 0.05$, $t(54) = 2.16$, $d = 0.70$). Furthermore, the male students indicate experiences of 'no support' to a greater extent than female students ($m = 1.84$ vs. 1.18, $p < .05$, $t(34) = 2.10$, $d = 0.76$), while there is no significant difference between students with Swedish and migration backgrounds ($p > .05$).

Perceived abilities and knowledge before enrolment

Regarding how PETE students rate their own physical abilities, Table 7 indicates that there are no significant gender differences at the time of enrolment ($p > .05$). However, students with a Swedish background score significantly higher mean values compared to students with migration backgrounds ($m = 3.09$, vs. 2.79, $p < .05$, $t(58) = 2.02$, $d = 0.62$). The highest scores are noted concerning the Ability to swim 200 m of which 100 on the back ($m = 3.85$), followed by Ability to play a team ball game ($m = 3.63$). The lowest scores concern Handstand without support ($m = 2.05$) and Three couple dances ($m = 2.17$), where female students tend to rate their ability higher than male students ($m = 2.53$ vs. 1.97, $p = 0.060$, $t(55) = 1.92$, $d = 0.54$). Abilities ranked significantly higher among students with a Swedish background compared to students with migration backgrounds are: ice-skating ($m = 3.20$ vs. 2.36, $p < .05$, $t(58) = 2.21$, $d = 0.67$) and Orienteering with the use of a map ($m = 2.96$, vs. 2.29, $p < .05$, $t(58) = 2.12$, $d = 0.70$).

Table 7. PETE students' ratings of their abilities in different areas before enrolment, 1 = did not master, 4 = completely mastered (mean values and standard deviations).

	Women		Men		Non-binary ^a		Swedish background		Migration background		All	
	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD
Swim 200 m of which 100 on back	3.89	0.32	3.87	0.47	3.33	1.15	3.93	0.33	3.57	0.76	3.85	0.48
Play a team ball game	3.53	0.61	3.71	0.65	3.33	1.15	3.72	0.50	3.36	1.01	3.63	0.66
Create a warming-up program	3.47	0.77	3.29	0.84	3.33	1.15	3.39	0.83	3.21	0.80	3.35	0.82
Create a strength training program	3.26	0.99	3.32	0.84	3.67	0.58	3.33	0.87	3.29	0.91	3.32	0.87
Ice-skating ^b	3.21	0.92	2.95	1.09	2.33	1.53	3.20	0.88	2.36	1.34	3.00	1.06
Lifesaving/first aid	3.05	0.62	3.00	1.01	2.67	1.53	3.04	0.84	2.86	1.17	3.00	0.92
Orientate using a map and compass ^b	2.68	0.89	2.87	1.04	2.67	1.15	2.96	0.92	2.29	1.07	2.80	0.99
Three couple dances	2.53	1.02	1.97	1.03	2.33	1.53	2.15	1.03	2.21	1.19	2.17	1.06
Handstand without support	2.05	1.18	2.11	1.20	1.00	0.00	2.09	1.17	1.92	1.26	2.05	1.18
Sum ^b	3.08	0.34	3.01	0.56	2.78	0.61	3.09	0.46	2.79	0.57	3.02	0.50

^aNot included in the statistical analysis.^b $p < .05$ between students with Swedish and migration backgrounds, respectively.

The students were also asked to rate their own knowledge of different areas, propositional knowledge as well as performance knowledge (see Figure 1 for a description). Table 8 shows that students with migration backgrounds rate their abilities higher compared with students with a Swedish background both for performance knowledge ($m = 3.00$ vs. 2.69 , $p < .05$, $t(58) = 2.07$, $d = 0.63$) and in total ($m = 3.05$ vs. 2.79 , $p < .05$, $t(58) = 2.16$, $d = 0.66$). However, there are no significant gender differences ($p > .05$). Comparing the two knowledge areas, the students rate their propositional knowledge to be significantly higher compared with their performance knowledge ($p < .05$, $t(59) = 2.47$, $d = 0.29$). When analysing these differences separately for women and men, there are no significant differences ($p > .05$). And when analysing the differences separately for students with Swedish and migration backgrounds, respectively, they are significant only for students with a Swedish background ($m = 2.84$ vs. 2.69 , $p < .05$, $t(45) = 2.72$, $d = 0.33$).

The propositional knowledge with the highest scores were How smoking, food and sleep affect health ($m = 3.57$) and the Connection between health, lifestyle, and the environment ($m = 3.42$). Concerning performance knowledge, the knowledge with highest scores were Plan, implement, evaluate an exercise program ($m = 3.15$) and

Table 8. PETE students' ratings of their propositional and performance knowledge before enrolment, 1 = did not master, 4 = completely mastered (mean values and standard deviations).

	Women		Men ^a		Non-binary ^b		Swedish backgr. ^a		Migration backgr.		All ^c	
	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD	<i>m</i>	SD
Propositional Knowledge	2.99	0.32	2.83	0.47	3.11	0.19	2.84	0.44	3.07	0.33	2.89	0.43
Performance Knowledge ^d	2.83	0.32	2.70	0.59	3.00	0.50	2.69	0.49	3.00	0.53	2.76	0.51
Sum ^d	2.93	0.24	2.79	0.47	3.07	0.31	2.79	0.42	3.05	0.32	2.85	0.41

^a $p < .05$ difference between the two types of knowledge for men.^bNot included in analysis.^c $p < .05$ difference between the two types of knowledge for all.^d $p < .05$ difference between students with Swedish and migration backgrounds, respectively.

Lead, organise, carry out and evaluate sports activities ($m = 2.90$). When comparing women's and men's knowledge in specific areas, women scored significantly higher compared to men on Combining movements to music ($m = 3.42$ vs. 2.61 , $p < .05$, $t(55) = 3.70$, $d = 1.04$) and Norm criticism ($m = 3.05$ vs. 2.47 , $p < .05$, $t(55) = 2.39$, $d = 0.67$). Students with migration backgrounds tend to rate their knowledge of How smoking, food and sleep affects health ($m = 3.79$ vs. 3.50 , $p = .061$, $t(58) = 1.91$, $d = 0.58$), Equality ($m = 3.36$ vs. 2.93 , $p = .051$, $t(58) = 1.99$, $d = 0.61$), Lead, organise, carry out and evaluate sports activities ($m = 3.21$ vs. 2.80 , $p = .056$, $t(57) = 1.95$, $d = 0.60$), and A sport activity that is important for the cultural heritage ($m = 2.71$ vs. 2.22 , $p = .081$, $t(57) = 1.78$, $d = 0.54$) higher than students with a Swedish background.

Discussion and conclusion

The purpose of the article was to explore a cohort of 60 students regarding background characteristics and secondary characteristics. We speculated that information about this relationship might give food for thoughts regarding the effects of broadened recruitment and what other potential measures must be taken in order for the education to prepare PETE students for their future profession, including teaching diverse groups of pupils.

Overall, the results indicate that the students have slightly more diverse backgrounds than is found in previous PETE research (Ferry, 2018; Dodds et al., 1992; McCullick et al., 2012), specifically regarding migration backgrounds (but not so much regarding social background). Whether this is a direct result of broadened recruitment is not easy to tell. It would have also required other information than what we have collected in this study. Nevertheless, despite a somewhat more diverse background, the students remain fairly homogeneous regarding secondary characteristics, such as school success, experience of sport and physical activity, and perceived physical ability. Hence, the student cohort may have diverse backgrounds, but to a great extent share the same secondary characteristics (cf., Backman et al., 2020; Brown & Evans, 2004; Ferry, 2018; Ferry & Romar, 2020; Larsson et al., 2018; Mordal-Moen & Green, 2014). A migrant background may not be a critical aspect of broadened recruitment of PETE students, at least not if it is not taken into account in tandem with other aspects, such as social background. Consequently, the overall ambition to challenge cultural reproduction within PETE remains despite a broadened recruitment.

Relating the above results to Bourdieu's conceptual tools, it seems as if the PETE education attracts students who have developed a *habitus* with a strong taste for sports (Larsson et al., 2018; Mordal-Moen & Green, 2014), which means that the mostly male students with a Swedish background, and the relatively fewer female students and students with migration backgrounds all have developed similar embodied dispositions prior to enrolment by gaining similar experiences. This schooling specifically into the culture of club sports and physical exercise seems to be required for students to feel a taste for PETE. Despite that PETE staff aspire to challenge the *doxa* (Backman et al., 2020; Larsson et al., 2018), it may well be that these teachers misrecognise the unformulated and practical recognition of the social arbitrariness of PETE (Bourdieu, 1990; Deer, 2008). Consequently, despite that new groups of students may be drawn to PETE, their *habitus* matches well the *doxa* of PETE, which may contribute to its reproduction. However, this is a matter for further research to investigate.

Although the students differ only to a small extent regarding secondary characteristics, they do differ to some extent regarding, for example, their reasons for applying to the program (especially between students with Swedish and migration backgrounds, respectively), their perceived abilities (women rate their dance abilities higher than men, students with a Swedish background rate their abilities in ice-skating and orienteering higher than students with migration backgrounds), their previous experience of competitive sports (students with a Swedish background have more experience than students with migration background), and their preferred physical activities (women in aerobics and men in un-organised team games). These differences are by no means unexpected. On the contrary, they correspond with traditional notions of participation patterns within movement culture (Fahlén & Ferry, 2018; Serra, Rey-Cao, Camacho-Miñano, & Soler-Prat, 2021). However, these differences mean that the young women and students with migration backgrounds, to a greater extent than their male peers with a Swedish background, may need the support of family and significant others to apply to PETE. For the young men with a Swedish background, merely being just that – a man, and the related experiences, knowledge and abilities, and interest in sport and physical activity, is enough asset. In fact, the low level of encouragement from family and significant others that the male students report, perhaps signifies that PETE is not generally a highly valued education program – anymore. In fact, we speculate that the *doxa* of PETE, which was established at a time when the education was highly esteemed in society, has become even harder to change as it has fallen on the social ladder.

Before we conclude, a note of caution regarding this study's methodology and the issue of *doxa* should be considered. Since we used a previously designed questionnaire, it may well be that we have ourselves contributed to the *doxa* of PE and PETE. For example, many of the physical abilities (such as handstand and three couple dances) that the students were asked about could be considered to be taken for granted activities within the realm of Swedish PE and PETE. Or perhaps rather, the focus of movement skill could be considered to be *doxa*. Still, we decided to keep these alternatives in the questionnaire, primarily because they were studied in previous studies, and secondly because there are few other conceptualisations of 'movement capacity' (a concept used in the Swedish PE syllabus) that would be intelligible to beginner students.

We conclude that the university in this small study, which should be followed up on a broader empirical basis, has succeeded in attracting a somewhat more diverse group of students to PETE, specifically regarding migration backgrounds. This may or may not be a result of initiatives for broadened recruitment. Nevertheless, this does not mean necessarily that the students are equally diverse when it comes to their experiences of movement culture, and the abilities and knowledge that they have gained from participation in this culture. Consequently, nor does it necessarily mean that these students will in the future be more fit to teach PE to diverse groups of students. Indeed, it may well be challenging to counteract the *doxa* of PETE with students from a non-traditional background who have actually succeeded in gaining access to the field of PETE. Thus, while broadened recruitment is in itself something valuable, since it increases access to education, we cannot rely on that recruitment of new student groups will help challenging the *doxa* of PETE. Changing the *doxa* of PETE will require other efforts.

Note

1. In Sweden, secondary school is organisationally divided in the sense that the first three years (grades 7–9; students aged 13–16) are part of nine-year compulsory schooling, while the three years of upper-secondary school is voluntary (although most youths aged 16–19 attend) and constitute a school form of its own.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported there is no funding associated with the work featured in this article.

Notes on Contributors

Håkan Larsson is professor of Sport Sciences, specialisation Education, at The Swedish School of Sport and Health Sciences, Stockholm. His major research interest's concerns equality issues in sports and physical education, and teaching and learning in physical education. Currently, he is a guest professor at Malmö University. He recently published the edited book *Learning Movements. New perspectives of movement education* with Routledge.

Torun Mattsson is a senior lecturer in Sport Sciences, specialisation Pedagogy, at The Department of Sport Sciences, Malmö University. Her major research interest concerns teaching and learning with a focus on aesthetics and embodiment in sports and physical education.

Magnus Ferry is an associate professor in Pedagogy at the Department of Education, Umeå University. His research interest concerns socialisation processes in the fields of sports and education through which individuals are formed, and the social circumstances in which these processes are embedded.

ORCID

Håkan Larsson  <http://orcid.org/0000-0002-0638-7176>

Magnus Ferry  <http://orcid.org/0000-0002-0748-7144>

References

- Backman, E., Nyberg, G., & Larsson, H. (2020). Moving beyond rigid orthodoxies in the teaching and assessment of movement in Swedish physical education teacher education: A student perspective. *European Physical Education Review*, 26(1), 111–127.
- Bolling, H., & Yttergren, L. (2015). Swedish Gymnastics for export: A study of the professional careers and lives of Swedish female gymnastic directors, 1893–1933. *The International Journal of the History of Sport*, 32(11–12), 1437–1455.
- Bourdieu, P. (1984). *Distinction. A social critique of the judgement of taste*. London: Routledge.
- Bourdieu, P. (1990). *The logic of practice*. Cambridge, MA: Polity Press.
- Broady, D. (1996). Kapital, habitus och fält. In A. Gustavsson (Ed.), *Kunskapsmål, teori och empiri [Knowledge goal, theory and empirical material]* (pp. 41–72). Uppsala: Etnolore. 17.
- Brown, D., & Evans, J. (2004). Reproducing gender? Intergenerational links and the male PE teacher as a cultural conduit in teaching physical education. *Journal of Teaching in Physical Education*, 23(1), 48–70.

- Carli, B. (2004). *The making and breaking of the female culture. The history of Swedish physical education 'in a different voice'*. PhD diss. Gothenburg: Gothenburg University.
- Cohen, J. (1988). *Statistical power analysis for the behavioral science* (2nd ed.). New York: Academic Press.
- Deer, C. (2008). 7 – Doxa. In M. Greenfell (Ed.), *Pierre Bourdieu. Key concepts* (pp. 119–130). Cambridge: Acumen Publishing.
- Dodds, P., Placek, J. H., Doolittle, S., Pinkham, K. M., Ratliffe, T. A., & Portman, P. A. (1992). Teacher/coach recruits: Background profiles, occupational decision factors, and comparisons with recruits into other physical education occupations. *Journal of Teaching in Physical Education*, 11(2), 161–176.
- Dowling, F. (2011). 'Are PE teacher identities fit for postmodern schools or are they clinging to modernist notions of professionalism?' A case study of Norwegian PE teacher students' emerging professional identities. *Sport, Education and Society*, 16(2), 201–222.
- Fahlén, J., & Ferry, M. (2018). Sports participation in Sweden. In K. Green, T. Sigurjónsson, & EÅ Skille (Eds.), *Sport in Scandinavia and the Nordic countries* (pp. 136–172). Abingdon: Taylor & Francis.
- Fenstermacher, G. D. (1994). The knower and the known. *The Nature of Knowledge in Research on Teaching. Review of Research in Education*, 20(1), 3–56.
- Ferry, B. M., & Romar, J. E. (2020). Physical education preservice teachers' physical activity habits and perceptions of the profession and subject: Development during teacher education. *Journal of Physical Education and Sport*, 20(6), 3108–3119.
- Ferry, M. (2018). Physical education preservice teachers' perceptions of the subject and profession: Development during 2005–2016. *Physical Education and Sport Pedagogy*, 23(4), 358–370.
- Government bill. (2004/05:162). *Ny värld – ny högskola*. Sveriges Riksdag.
- Knez, K., & Mattsson, T. (2018). Putting gender back on the agenda: women in sport pedagogy: Workshop 'Equality at stake: What can we do within the physical education and sport science degrees', University of Catalonia, INEFC Barcelona, Barcelona, Spain, 9–10 June 2016. *European Journal for Sport and Society*, 15(1), 111–113.
- Lakens, D. (2013). Calculating and reporting effect sizes to facilitate cumulative science: A practical primer for t-tests and ANOVAs. *Frontiers in Psychology*, 4, 863.
- Larsson, L., Linnér, S., & Schenker, K. (2018). The doxa of physical education teacher education – set in stone? *European Physical Education Review*, 24(1), 114–130.
- Iisahunter, Smith, W., & emerald, e. (2015). Pierre Bourdieu and his conceptual tools. In Iisahunter, W. Smith, & e. emerald (Eds.), *Pierre Bourdieu and physical culture* (pp. 3–23). London: Routledge.
- Lundvall, S. (2015). From Ling gymnastics to sport science: The Swedish School of Sport and Health Sciences, GIH, from 1813 to 2013. *The International Journal of The History of Sport*, 32(6), 789–799.
- Lundvall, S., & Meckbach, J. (2003). *Ett ämne i rörelse: gymnastik för kvinnor och män i lärarutbildningen vid Gymnastiska centralinstitutet/Gymnastik-och idrottshögskolan under åren 1944 till 1992*. PhD diss. Stockholm: HLS Förlag.
- McCullick, B. A., Lux, K. M., Belcher, D. G., & Davies, N. (2012). A portrait of the PETE major: Re-touched for the early twenty-first century. *Physical Education and Sport Pedagogy*, 17(2), 177–193.
- Meckbach, J., & Wedman, I. (2007). *Idrottslärarstudenten vid GIH*. Malmö: Idrottsforum.
- Mordal-Moen, K., & Green, K. (2014). Physical education teacher education in Norway: The perceptions of student teachers. *Sport, Education and Society*, 19(6), 806–823.
- Pfister, G. (2009). Epilogue: Gymnastics from Europe to America. *The International Journal of the History of Sport*, 26(13), 2052–2058.
- Placek, J. H., Doolittle, S. A., Ratliffe, T. A., Dodds, P., Portman, P. A., & Pinkham, K. M. (1995). Teaching recruits' physical education backgrounds and beliefs about purposes for their subject matter. *Journal of Teaching in Physical Education*, 14(3), 246–261.

- Richards, K. A. R., Housner, L. D., & Templin, T. J. (2018). Addressing physical education teacher socialization through standards-based reform of physical education teacher education. *Quest*, 70(3), 334–353.
- Serra, P., Rey-Cao, A., Camacho-Miñano, M. J., & Soler-Prat, S. (2021). The gendered social representation of physical education and sport science higher education in Spain. *Physical Education and Sport Pedagogy, iFirst*. doi.org/10.1080/17408989.2021.1879768
- Sirna, K., Tinning, R., & Rossi, T. (2008). The social tasks of learning to become a physical education teacher: Considering the HPE subject department as a community of practice. *Sport, Education and Society*, 13(3), 285–300.
- Sirna, K., Tinning, R., & Rossi, T. (2010). Social processes of health and physical education teachers' identity formation: Reproducing and changing culture. *British Journal of Sociology of Education*, 31(1), 71–84.
- SNAE. (2005). *Elever med utländsk bakgrund. En sammanfattande bild*. Stockholm: Swedish National Agency for Education.
- SNAE. (2020). *Statistik*. Stockholm: Swedish National Agency for Education.