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## Physical education classes – a double-edged sword: a qualitative study of Norwegian high-school students' experiences

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### ABSTRACT

**Aim:** The aim of this study was to explore students' experiences of physical education (PE) and to gain insight into what contributes to engaging them in PE.

**Methods:** A total of 316 second-year high-school students from five schools participated by completing a school assignment. The data were analyzed according to content analysis.

**Findings:** Two main themes were developed. The first was One-sided emphasis on performance, bodily skills, and assessment with the corresponding sub-themes: Skills and performance; and Assessment, tests, and grading. The second was Wish for play, respite, co-determination, and togetherness with the sub-themes: Play and spontaneity; Respite, Togetherness and cooperation; and Co-determination and engagement. Our findings reveal a wide range of student experiences with PE classes, from a welcome respite in an otherwise sedentary and theoretically dominated day at school and enjoying being physically active with classmates, to frustration about extensive use of tests, lack of mastery, and feelings of exclusion.

**Conclusion:** To be consistent with the values of the Ministry of Education in Norway, we conclude that the content and mode of delivery of PE in schools would benefit from being rethought if the intent is to facilitate children to stay physically active. Norwegian physiotherapists are promoters of health and physical activity across the lifespan. As part of health services in schools, they are in a prime position to optimize the PE experience for students.

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## Introduction

Physical education (PE) is a core subject for children and adolescents in Norway, from primary school through secondary school, and PE is the only subject in school where physical activity and the body are key (Eriksen, 2012; Kerner, Haerens, and Kirk, 2018; Slagstad, 2015). In this study, we sought insight into how Norwegian high-school students experience PE and how their experiences influence their perceptions of and participation in PE classes.

Since the 1930s, by law the Norwegian school system has been built on the idea of comprehensive schools, that education should be provided for all children, and that everyone should be integrated into the same school system. The idea of comprehensive schools is built on social democratic values such as creating equitable education opportunities for children regardless of gender, social background, ethnicity, and religion.

Since PE became a mandatory subject in Norwegian schools in 1936, the subject's content and purpose have changed several times due to government policies,

influence from the sports culture emphasizing competition and performance, and other perspectives in society related to social formation of the individual's health and physical activity in general (Augestad, 2003; Evans, 2014; Slagstad, 2015). Today, PE is characterized in government documents and curricula as a practical subject with many components in which movement and play, sports, dance, outdoor life, and fair play are included (Norwegian Directorate for Education and Training, 2015b). The subject's main purpose is ... "that PE shall contribute to helping students experience joy, inspiration and a sense of mastery by being physically active and by interacting with others. The subject shall also contribute to helping children and young people develop a sense of self awareness, a positive perception of the body and their own developing identity. Further, to provide students with a point of departure for lifelong enjoyment of physical activity and a sense of mastery based on own skills and ability levels" (Norwegian Directorate for Education and Training, 2015b).

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The subject's purpose is in line with recommended guidelines for the promotion of mental and physical health among the young. By legislation, physiotherapists in Norway are part of primary health care and therefore play an important role in health promotion as part of interdisciplinary health services in schools (Norwegian Directorate of Health, 2018). An increasing number of municipalities in Norway have put resources into the inclusion of physiotherapists in school health services, where they collaborate with PE teachers to support students' movement development, to assess students' motor skills, to adapt students' workplaces, and to advise on the procurement of equipment and assistive devices (Norwegian Physiotherapist Association, 2015).

Enhancing young people's predispositions toward lifelong participation in physical activity has been a long-standing priority in many western countries. For example, in the United States the purpose of PE is stated to help children develop skills, knowledge, and a desire to enjoy a lifetime of physical activity. However, PE as a school subject in the United States is being marginalized due to lack of resources, as well as less time for physical activity during the school day (Solmon, 2015). On the other hand, the belief that PE contributes to good health among students has long been held (Green, Smith, and Roberts, 2007; Kirk, 2005; Solmon, 2014, 2015), and the evidence is unequivocal that sedentary behavior contributes to ailments such as obesity and that physical activity reduces them (Norwegian Department of Health and Care Services, 2003, 2011, 2013; Norwegian Institute of Public Health, 2018; Sallis et al., 2012; World Health Organization, 2018).

At a system level, Norwegian physiotherapists might take part in interdisciplinary teams, both locally and nationally, to work on long-term measures such as facilitating physical activity across segments of the population, especially when it comes to planning outdoor areas, playgrounds, hiking areas, and sports fields as well as offering health-promoting interventions for various patient groups at Healthy Life Centers (Norwegian Directorate of Health, 2016).

Education authorities assign institutional responsibility to schools and PE teachers when it comes to promoting health and giving youth a starting point for good habits and practices concerning physical activity throughout life (Green, Smith, and Roberts, 2007; McCuaig et al., 2016; Norwegian Department of Health and Care Services, 2013). As such, PE is key to supporting children and adolescents in developing interest in and the confidence to participate in sports and physical activity. For many children, PE might be the only time during the week that they are physically active. Accordingly, it is deemed to be of great importance to

ensure that PE curricula and classes focus on health-related physical activity and fitness (Green, Smith, and Roberts, 2007; Sallis et al., 2012). Further, it is suggested that for PE to be inclusive, one should think of PE classes as "a diverse community of learners with various skills" (Tripp, Rizzo, and Webbert, 2007). As such, the focus should be on students learning to lead a healthy and active lifestyle. Accordingly, creating an environment in PE classes that involves students and that focuses on capability, diversity, and recognition of individual strengths and weaknesses is paramount (Tripp, Rizzo, and Webbert, 2007). A compelling way to increase participation in PE seems to be through activities that provide opportunities for students to learn (Azzarito and Katzew, 2010) but that also stand out as legitimate and meaningful to the students (Munk and Agergaard, 2015). Hence, PE should engage and include students regardless of their physical abilities and should provide them with "knowledge, skills, abilities and confidence to be physically active for life" (Sallis et al., 2012), which is in accordance with the Norwegian PE curriculum.

Physiotherapists' knowledge about the body, physical activity, training principles, and movement possibilities despite ailments is essential as a basis for promoting fitness-related health among school children. In November 2017, the Norwegian Parliament adopted a minimum of one hour of daily physical activity for children in primary and lower secondary school (Norwegian Parliament, 2017). The decision was supported by the Norwegian Physiotherapist Association, a partner in the Alliance for Physical Activity at School (Norwegian Physiotherapist Association, 2017). Further, the Norwegian Institute of Public Health (2018) prepared a knowledge base for a new action plan for physical activity. The first goal is to reduce the occurrence of non-communicable diseases and early death due to physical inactivity by 10% within the next 10 years. At present, 300,000 Norwegian children and young people do not meet the health recommendations for physical activity, underpinning the importance of creating physical environments where children and young people can develop and grow.

The overbearing attention given in education policies to sport and performance-based curricula seems to be a common feature in many western countries, although how this affects the lives of PE teachers and students might differ. One common effect is the endorsement of a goal-targeted pedagogy with instrumental learning outcomes at the expense of formative learning (Evans, 2014; Leirhaug, 2016). Further, that traditional sport-based programs are said to promote "a form of masculinity that reproduces the dominant gender order" (Azzarito, Solmon, and Harrison, 2006; Kirk, 2005). In

Norway, it seems that PE as a school subject is under pressure from competing perspectives and national standards that must be followed and tested, and teachers and students might therefore have fewer possibilities to craft PE content to their needs and interests, with similarities to what Azzarito (2016) suggested is the case for school PE programs in the United States.

There are students who do not participate in PE classes and some drop out. This is problematic because lack of participation can limit young people's development and their physical activity over their lifespans (Azzarito, Solmon, and Harrison, 2006). Because the subject is mandatory for receiving a school graduation diploma in Norway, dropping out of PE delays completion of early education and reduces access to higher education (Falch, Johannesen, and Strøm, 2009).

Internationally, there are studies from a first-person perspective that suggest that, unlike other school subjects, PE may contribute to students' experiencing vulnerability with respect to exposure of their physical appearance and skills (Kerner, Haerens, and Kirk, 2018; Ridgers, Fazey, and Fairclough, 2007; van Daalen, 2005). Negative experiences with PE have been reported to be mainly due to psychological and/or social challenges among students, for example, body dissatisfaction, perceived bodily competence, body image, and feelings of inferiority (Kerner, Haerens, and Kirk, 2018; Strandell, Bergendahl, and Kallings, 2002). It is important that professionals working with students in schools have knowledge about students' experiences of PE classes, and of physical activity in general, including essential variations among students. Such knowledge can be used to facilitate dialogue with young girls and boys and thereby enable modification of PE to better meet the needs of students and to maintain their interest in participating. This is especially the case for PE teachers, school physiotherapists, and school nurses.

Research on PE in Norway from a first-person perspective is scarce. Insight into students' perspective and exploring their experiences with PE therefore seems to be imperative, and the purpose of the present study was to explore high-school students' experiences with PE classes in the Norwegian context.

## Methodology and Method

We used qualitative research methods that were anchored in hermeneutics. Philosophical hermeneutics capture the interpretive character of human beings' way of understanding their world. According to Gadamer (2012), a horizon of meaning furnishes our understanding and affects how we understand new situations and

other humans. This includes tradition and language, as well as the specific history of the individual, and our pre-understanding becomes the starting point to understanding something new. In research, this calls for reflective practices throughout all stages of the research process in order to challenge researchers' pre-understandings. To understand something, hermeneutical philosophy introduces a general rule that one has to understand the whole from the parts and the parts from the whole. The purpose of a hermeneutic approach is to widen the understood meaning of the phenomenon in concentric circles; the hermeneutical circle, which means that what is understood is evolving through an ongoing interplay between one's own pre-understanding and one's new understanding, between the whole and the part. This is also a general rule for the analysis of qualitative research materials such as ours. According to Gadamer (2012) a satisfactory understanding is ensured when the parts are coherent with the whole. This is an iterative process with each turn leading to a deeper understanding of the phenomenon under study.

## Recruitment and participants

Participants were recruited from five high schools in Bergen, Norway. The schools where we were permitted to conduct the study were a purposeful mix, one having only a general studies direction, the second only having vocational studies, the third mainly having vocational studies and some general studies direction, and schools four and five having both a general studies direction and some vocational studies.

A fifteen-minute oral presentation about the project's background and purpose was given by the primary investigator to the chosen classes approximately one week before data collection. This presentation was also published on the schools' intranets. Written information about the project and declaration of consent was handed out after the oral presentation was given to the students. Written informed consent was obtained prior to answering the assignment. The only information registered about the participants was gender, age, and an informant number to distinguish the submitted responses from each other. The Norwegian Center for Research Data approved the study (Project Number 48432). The project was presented to the Norwegian Regional Ethics Committee by a disclosure review (Reference Number 2016/740), and the committee concluded that the project was not disclosure-mandatory.

## Data production

During one school hour, participants answered a written assignment in Norwegian with three main topics: 1) experiences with and thoughts about PE classes; 2) about physical activity; and 3) about one's own body (Appendix). The first topic had four open-ended questions, and the last two had three questions each. Participants were encouraged to write as honestly as possible and not to limit themselves in regard to how much they wrote. They were told that there were no responses that were more correct than others. Most importantly, however, was that they wrote exactly what they wanted to, that they used full sentences to help the research team to understand what they wrote, and that they used examples to underscore their stories and thoughts.

The students used their own laptops when answering. The primary investigator administered the data collection and was available to clarify uncertainties that arose when the students read the assignment. The written responses were then copied to memory sticks brought by the primary investigator. Data production started in September 2016 and was terminated in November 2016. Of 327 second-year high-school students who had volunteered and consented to participate, 316 took part, including 152 boys and 164 girls with a mean age of 17 years. The excerpts from the students' responses in the Findings were translated from Norwegian to English by the primary investigator, commented on by the other members of the research team, and finally checked by a professional translator.

## Analysis

The data material consisted of 316 responses, of which some were brief and only consisted of one or a few sentences per question, while others were long and elaborated on experiences, situations, and thoughts. Thematic analysis (TA) according to Braun and Clarke (2006) is a qualitative analysis method that is sometimes included under content analysis, but which is also claimed to be a method in its own right. TA allows the researcher to identify, analyze, and report themes within qualitative data such as interviews and written stories. Some of the method's benefits are its flexibility and theoretical freedom, and as such it can be a useful research tool that can provide both rich, detailed, and inductively based thematic analysis and, if appropriate, a complex and more or less theoretically based account of the qualitative data (Braun and Clarke, 2006). Even though there are distinct phases in the analytic process, the analysis is meant to include,

according to Braun and Clarke (2006) ... "a constant moving back and forwards between the entire data set, the coded extracts of the data set that you are analyzing, and the analysis of the data you are producing".

The process of moving back and forth, the phases described, and the flexibility when it comes to the role of theory in TA met our criteria with regard to the purpose of the study and the characteristics of the data. A bottom-up analysis was chosen in order to ensure that the themes were identified from the data, and further emphasis was placed on ensuring a thorough analysis in the search for coherence between the themes while at the same time allowing for further interpretation of the themes in relation to relevant theory and/or perspectives.

Four investigators participated in the analysis process, with all four taking part in one face-to-face meeting and three taking part in two additional meetings. The primary investigator was in contact with the research team by e-mail and phone, and the last investigator was more involved in discussions than the others. The investigators were physiotherapists, and three were senior researchers while the primary investigator was a Ph.D. candidate.

TA consists of the following six phases: 1) Familiarizing yourself with the whole data material; 2) Generating initial codes; 3) Searching for themes; 4) Reviewing themes; 5) Defining and naming themes; and 6) Producing the report (Braun and Clarke, 2006), and these stages were followed as described below.

First, members of the research team read the data corpus. The primary investigator read the whole corpus, while the other three each read approximately a fifth of the material, randomly drawn from the data corpus. The main focus was to become familiar with the content in order to identify meanings and patterns. The goal was to reveal the specifics of the material, and discussions within the research team were important in order to reach this goal. Second, investigators discussed what had caught their attention and formulated possible codes and patterns. The fact that more readers were involved in this process ensured that the primary investigator's pre-understanding and initial coding was challenged, as well as the other investigators' preconceptions, especially their being acquainted with theoretical frameworks of possible relevance. The discussion resulted in a long list of codes identified across the data corpus. The next step was directed at identifying possible themes that these different codes might lead to when the investigators tried to sum up what the codes might express. This resulted in four preliminary themes that were considered especially interesting with regards to the research questions, namely: 1)

assessment; 2) play and expression; 3) sociality; and 4) respite. Relevant coded extracts were then sorted and collated within these identified data themes. In this process, the data set concerning students' thoughts and feelings about one's own body was set aside. Third, a review was made of the four themes with regard to internal and external heterogeneity looking for a coherent pattern within each theme and in relation to the entire data corpus. In the scrutiny, one theme got a new name, but the rest were unchanged. A fifth theme was identified that was considered both interesting and relevant to the research questions. We started a new coding process for this theme, which confirmed our assumption. The five themes were now: 1) assessment; 2) play and spontaneity; 3) togetherness; 4) respite; and 5) co-determination. In the fourth step, the five themes were reviewed by the research team. Strong arguments were agreed upon for these themes being different aspects of two broader themes: 1) One-sided emphasis on performance and bodily skills, assessment, and tests; and 2) Wish for play, respite, co-determination, and togetherness. The five original themes were placed as sub-themes under these broader themes. A sixth theme related to assessment appeared in this process, namely skills and performance. The sub-themes in the first main theme were Skills and performance and Assessment, tests, and grading, and the sub-themes in the second main theme consisted of Play and spontaneity, Respite, Togetherness and cooperation, and Co-determination and engagement. Fifth, a full presentation of these two themes with corresponding sub-themes was developed. Sixth, a deepened understanding of the findings is outlined in the discussion of the present article in which we draw on important discourses in PE as well as in society at large with regards to health and physical activity.

## Findings

### **One-sided emphasis on performance and bodily skills, assessment, and tests**

Students reported that compared to before they now experienced greater demands on physical skills and bodily achievements, and as a consequence assessment and testing had become more serious. They felt they had to perform and deliver their best every time. This inspired some students, mainly those who described themselves as more able. However, most found this to be problematic. The students distinguished clearly between those who were able to perform in PE classes and those who were not. Students who believed

themselves to be less able experienced that in some activities they were not included because of the possibility of ruining the achievements of others. Through testing of skill level and physical form, it became evident to students and teachers which students had mastered the activities and which students had not, a kind of visibility that could be problematic for many students. Nearly 90% of the students responded by highlighting aspects of this core theme. B stands for boy and G stands for girl. The number corresponds to the informant.

### **Skills and performance**

With regard to expectations of skills and performance, students expressed that being met with high demands was not okay.

*PE classes are quite difficult – there are far too many requirements and expectations, so sometimes I dread participating in PE. B113*

*... what I do not like about the subject is that I always have to think about performing my best and doing everything right considering that I get a grade in the subject. G293*

The first quote points to how it can be experienced to dread failing to perform the expected activities in PE, and the second shows that such a focus might lead to undesirable pressure to perform. The students expressed the desire to succeed in the subject, but when they did not, they often felt uncertainty and shame. The experience of not performing as well as other students was described as follows.

*I don't look forward to PE classes. I'm not as able as my peers in sports and physical activity in general. The classes are a "true hell"; that's not a nice feeling and I often dread PE. B87*

A boy described how a situation like this could negatively affect his willingness to participate, although he initially had a desire to do his very best.

*The classes are mostly fun and demanding. Not demanding in the way that it's too difficult, but it pushes me to perform at my best, something I like. Unfortunately, when your best is not good enough and classmates are yelling at you for not succeeding, it's no fun and you might feel a bit depressed for the rest of the day. The remainder of the class does not matter anymore, and you lose the desire to perform at your best and to have fun, and instead you replace that desire with the thought that you must perform at your best "because you have to". I wish the PE classes were not always associated with competition, but that we instead can concentrate on performing at our best without constantly being assessed. I doubt this will ever change. B327*

Watching classmates fail could also instill difficult feelings among those who witnessed this.

*I wish physical tests were dropped because testing places unnecessary pressure on those students who are not so able at PE. For example, half of the class is watching and the rest of the class runs the Beep test<sup>1</sup> and the first one that fails to complete the distance before the beeper goes off gets the attention, maybe only for a few seconds, but those are some unpleasant seconds. G126*

There seemed to be a delicate balance between experiencing mastery and a desire to participate in PE and feeling sad, unsuccessful, and like a failure. Mastery of PE was crucial, but when the students did not fulfill the expected level of achievement (from the teacher or other students) they expressed disappointment and lost interest in the activities.

They also described how those who were less able and did not have sufficient skills in some activities were not included in the activities by the most able students:

*There are some things I like to do more than others. For example, I do not like playing soccer because there are many high-performing students in my class and it is very rare to get the ball if you are not very good. G67*

The consequence of being excluded from particular activities was that the students concerned did not participate actively in some parts of the PE classes because they perceived that their participation could ruin the performance of others. The same students believed that this could affect the ability to develop their skills in PE and the teacher's assessment of their performance. The girl in the statement below described unintended consequences of not being actively included in activities.

*I think it's stupid when we play sports that there is a lot of focus on the boys<sup>2</sup> and that the boys are going to show off, which prevents many of the girls from performing at their best. G284*

The students had thoughts about factors that could promote participation in PE classes, including what could make the students feel more comfortable when participating. They suggested the opportunity to exercise at their own pace and to work on the skills and activities they themselves enjoyed and wanted to improve in.

*I wish that PE classes were adapted to the students' different skill levels. Also, I would have liked if the activities you participate in weren't graded so that the students didn't feel pressured to perform. I believe that the main reason for many students to dread PE classes is based on the feeling of being assessed on the basis of how good their physical form is. G292*

About half of the students responded by highlighting this sub-theme (54.4%).

### **Assessment, tests, and grading**

The students perceived that there was little room for assessing them on individual terms, looking for progress, effort, and physical requirements.

*I wish you were evaluated by the efforts you show in the PE classes and not how good you are at doing different things. G233*

*I want more focus on personal development in PE than assessment based on requirements. Not everyone is able to jump 5 meters in the long jump to get grade 6 – people are different! B70*

*To get grade 5 or 6, you have to exercise several times a week and be in good physical shape. This fact makes it impossible for someone like me to get those grades, and it shouldn't be like this. It might be a bit more difficult for me to reach that goal, but it should be possible. Now, this will never happen because I'm not interested in exercising in my leisure time. G145*

Grading in PE ranks the students primarily according to tests and measurements of bodily performance, and bodies being different and performing at the lower levels of standardized tests seemed to be a sensitive matter. “Misunderstood”, “unnecessary”, and “unreasonable” were words used to describe this kind of assessment, and giving a grade in a subject so different from other school subjects was problematized by the students. That teachers' assessments were based largely on physical tests of skills made it even more problematic, as described below.

*I wish there was less focus on who is the better student in PE. Not everyone has an athletic body and therefore the ability to perform the exercises, and thus cannot get as good grades as others. My opinion is that we should not have grades in this subject, but absence from PE classes should be registered. Instead, there should be more focus on physical activity and less pressure on grades. G66*

A change of the main focus when grading from assessment of achievement and skill level to effort would, in their opinion, contribute to a fairer assessment. This quote draws attention to what students wanted PE to be.

*I want more focus on education and less on how much a student can perform, for example, less focus on how fast a student manages to swim 100 meters and more focus on how to swim properly. Something that I think is important is that effort should count more. To grade just on the basis of how physically strong a student is not fair. B169*

About a quarter of the students responded by highlighting this sub-theme (23.1%).

### **Wish for play, respite, togetherness, and co-determination**

Students described PE classes as a necessary and long-awaited break in the school day, a diversion, and a variation that made up for the sedentary time and theoretical subjects. Words that were used to describe PE were “break”, “unwinding”, “relaxation”, and “leisure time”. On days when they had PE on the schedule, they felt more awake and better about themselves, and it became easier to concentrate on other subjects afterward. Being physically active was appreciated by the students and was followed by a positive attitude toward PE in general. Despite their positive attitudes, though, the students wanted a change of focus in PE. At the core of this change was the desire for play, fun, and spontaneity to have a more dominant place along with a desire for greater emphasis on effort and the possibility to have some influence on what activities are included in PE. It was argued that having more fun together in PE classes might give students greater enjoyment of being physically active, even if heavy and tiresome exercises were part of it. This could affect the students’ engagement, effort, and participation in the subject.

The social aspects of PE were also highlighted as a strength. The classes represented a unique opportunity to get to know one’s classmates and to learn something new about them, simply because they were physically active together. Almost all of the students responded by highlighting aspects of this core theme (95.6%).

#### **Play and spontaneity**

Students wanted more focus on play, fun, and spontaneity in PE classes. They stated that what was most important to them was to engage in various activities with fellow students. Further, they expressed there should be no contradiction between playing games and having fun and at the same time training stamina and strength, for example, when they were warming up before starting on heavier exercises in PE classes.

*I wish PE classes were filled with laughter, play, and fun in addition to seriousness. G23*

*I wish we had a lot of cool games that at the same time were a bit difficult to perform. G44*

Further, it was reported that the use of play and games could contribute to more students wanting to participate in PE, mostly because the classes would not be perceived as equally serious. The students highlighted that play facilitated spontaneity and made them more socially engaged.

*I wish we had several playful activities that engaged the students at the social level, and team play, instead of regular physical training, to get the mind off how you are only participating to get a good grade. B263*

The desire for more playful activities was thus based on experiences with one-sided training and the seriousness that came with a focus on grading. Good PE experiences were connected to play and having fun together.

*That we can play games like we did when we were much younger, like hide and go seek, tag, and chase, and can feel free and adrenaline flowing in a good way. G24*

Students pointed out that age was not an obstacle for having fun with play. It even felt good to sometimes play the games they had played when they were younger.

*I think it is fun to play games despite the fact that we are in our second year of high school. G44*

*I wish we had several classes with a little more play and fun, a little childish play. G43*

Not least, the desire for more playful training was based on the observation that fellow students struggled in the PE classes or that students themselves experienced shortcomings in the quest for high performance.

*I wish it was not just about achievements and how good you are, but also that you learned new things. I wish it were more about having fun with physical activity because then I think more people would have been involved. G143*

*The PE activities should be varied and an opportunity for everyone to join in and have fun. B81*

More than 60% of the students responded by highlighting this sub-theme (61.1%).

#### **Respite**

The students themselves described the positive function of PE in terms of variation in the school day, a longed-for break from sedentary time, and feeling refreshed and energized afterward. The quotes below express this.

*PE is just not a school subject; PE is also a place where I can lower my shoulders and relax a bit. I get a break from school at the same time as I still have school. It’s fun and play instead of paper and pen. G231*

*I like PE because then I get to be more active than in the other school subjects. The days we have PE classes do not feel as tiresome and heavy compared to the rest of the school days. G303*

As the quotes above describe, students looked forward to PE classes because they enjoyed being physically active, and PE created an opportunity for the variation



that they wanted in an otherwise academic school day. The quotes below elaborate on this.

*I enjoy the classes very much; it is a relaxing subject that takes my mind away from other subjects. Often it is the highlight of the week. B71*

*A fun and active hour that is very different from the other school subjects of the week. The classes give me more diversity in my everyday life. B30*

The students described how PE helped to give the school day a different content and a variation that they liked. They were given an opportunity to release their pent-up energy by being physically active, something that made them feel less tired and sharpened their minds.

*It is a good alternative to have when you are tired of regular classroom teaching. The days we have PE, I am less tired and feel more alert. G41*

*To me, the classes mean quite a lot. It gives me a break in the school day where I have the opportunity to be active. This break often makes it easier to concentrate in the classes afterwards<sup>3</sup>. G311*

Students described how the classes helped them feel better about themselves. If they felt bad about themselves, were worried, restless, or sad, PE classes helped them to unwind, feel competent, and get themselves back on track.

*PE classes, I think, are very nice. I like to do different activities and to engage in physical activity. Being physically active makes me feel better about myself. G10*

*It's through activity and sports that I forget my worries; it's my sanctuary where I can disconnect from everything else. B247*

About a quarter of the students responded by highlighting this sub-theme (24.4%).

### **Togetherness and cooperation**

The social aspects and opportunities of PE classes were emphasized as a strength. PE gave the students a unique opportunity to get to know their classmates in a new way, an opportunity they seldom had in other school subjects. Having fun and at the same time doing activities together as a class was something that united the class as a group, and the social aspects of PE were what they appreciated most.

*I think the PE classes are a chance to socialize with schoolmates and friends while learning something new about them. B194*

Students told that PE classes contributed positively to the school environment. They were together in

a different way than in the classroom and during recess, and they engaged in common activities.

*The classes mean physical activity and play together with the others in the class. I like it very much and feel it brings the class closer together. G298*

*I connect the classes with being with friends and cooperating. It is fun to train, to collaborate, and to help each other. G136*

*The PE classes are a time where the whole class comes together and has to work as a team, and I think that's good. G111*

The PE classes were particularly valuable because these represented an opportunity where students came in close contact with other young people and were social.

*PE classes mean a lot to me because they are a way for young people to get in close contact with other students in social situations. B178*

*Besides being a break from regular school, the classes mean a lot for my social life. G39*

PE as a social arena for building togetherness and fellowship came across both as a positive experience for several students and as an aspect that should be strengthened. About a fifth of the students responded by highlighting this sub-theme (17.8%).

### **Co-determination and engagement**

Students expressed a desire to have a certain degree of co-determination in relation to the type of activities they were going to spend time on in the PE classes, and it was further emphasized that having influence on the classes' contents and activities might affect the students' involvement in the classes such that more students might want to participate.

*I would have liked the PE classes to be more varied and that we were not always repeating the same activities. Young people need to experience different physical activities. G123*

*The classes should be varied in terms of what we do so that we do things that everybody can enjoy, and that we don't always do the same things. G10*

As the above quotes express, students had thoughts about the importance of every pupil wanting to participate in PE. Further, they reported that varied activities, games, and play, where everybody joined in and worked on activities together, could be an important factor that could stimulate greater participation and engagement among the students.

*I think it is important to have a variety of activities so that everyone experiences that they can master some parts of PE, if not all of it. G40*

Last but not least, the possibility to influence the content, having options so that sometimes students could decide on activities, and having a variety of activities to choose from were highlighted as positive and something that could engage students further.

*The classes are okay as they are now, but sometimes students might have the opportunity to decide for themselves what to do or manage the classes with their own activities. G116*

*I would have liked if we could sometimes choose for ourselves what to do in PE classes. For instance, if we were handed out next week's competence aims, the students could come up with ideas on what to do to fulfill those specific goals. B245*

This sub-theme was highlighted by 13.9% of the students.

## Discussion

We will discuss the study's core findings in light of theory from the field of PE and then discuss societal perspectives on PE and previous research. Methodological reflections make up the last part of the discussion.

### **Curricular intentions and students' experiences – a paradox?**

In this study, students described their experiences with PE classes, both good and bad, and their wishes for and thoughts on what could be done in order for more students to engage and participate in PE. Strong findings were the students' wishes for everyone to be able to grow and develop on their own terms and according to their own physical capabilities and to be given room for play, enjoyment, and togetherness. The students' perspectives on what is lacking in PE have parallels to key points found in governmental documents (Norwegian Directorate for Education and Training, 2015b). This means that what the students are asking for in PE is already included by the education authorities in the subject's curriculum. However, in practice, and according to our students, the content and values dominating in PE do not fulfill the curriculum's intentions.

The Norwegian comprehensive school is characterized by democratic values such as involvement, fair play, equality, and personal growth, giving room for each student to take part on his or her own terms, including the room to compete with oneself. The students are meant to be physically challenged in PE

and are encouraged to stretch their limits in both organized and spontaneous activities (Norwegian Directorate for Education and Training, 2015b). This is also the foundation for using tests in order to motivate and visualize progress. However, the students in our study told about extensive use of tests and assessments with the purpose of grading performance, and this gave a certain meaning to their experiences. They connected testing with norms related to individualism and competitiveness, and this made them preoccupied with how to get a good grade. These aspects of testing dominated the PE experiences, and according to the students this use of tests did not inspire or engage them to participate, but rather seemed to limit their desire to participate in PE classes.

These experiences correspond well with findings from other studies on PE, where testing regimes and the use of standardized tests to provide better performance outcomes were contested (Azzarito, 2016; Solmon, 2014). Solmon (2014) suggests a link between testing regimens and disengaged students in PE, a link that might represent a warning about PE practices that might be ineffective, and at worse negative or harmful. Neither the curriculum in Norwegian PE nor the regulations in the Education Act provide methodical recommendations on the use of physical tests or testing. Standardized tests are often based on comparisons with other students and/or normal distributions of test results in a class, and the use of standardized tests in PE classes can be problematic and can violate other principles of assessment such as assessment based on acquired competence and effort. Previous research in the United States revealed that for students who are not that able in PE, testing is associated with humiliation, ridicule, and poor performance on test items (Solmon, 2014). A direct comparison between students' PE experiences in Norway and the United States is problematic, however, given the differences in the organizational frameworks of the educational systems in the countries. Nevertheless, similar reactions to testing were present in our data. Solmon (2014) also points out that PE teachers might feel pressured to optimize test results in order to avoid being penalized for poor performance in their class. This is not the case in Norway. According to the Norwegian Directorate for Education and Training (2015a), tests are relevant and useful for students' learning because students obtain new experiences and insights into their own progression and thereby pave the way for further development. Based on this, tests used in certain ways might work as a motivational factor. This indicates that more specific guidelines for when and how to use tests in PE are needed in order to enhance students' participation.

In this study, students experienced that individual progression and effort had little effect on the grade they received, and it was pointed out that the basis for grading should turn from one-sided emphasis on performance in sports activities to include more emphasis on effort. What the students called for is stated in the curricular intentions, that the students' effort in PE should be part of the basis for assessment. This is to ensure that students have the opportunity to achieve a good grade in the subject regardless of their physical abilities (Norwegian Directorate for Education and Training, 2015b). Again, the current study's findings indicate that curricular intentions are not reflected in students' PE experiences, but do match their wishes for what PE should be like. The students mainly responded negatively to being rated by grades in PE. The perception of PE as a subject totally different from other subjects in school was underscored because testing and grading bodily skills and performance was perceived as a sensitive and problematic matter. Similar findings are pinpointed in other studies (Kerner, Haerens, and Kirk, 2018; Ridgers, Fazey, and Fairclough, 2007; Strandell, Bergendahl, and Kallings, 2002).

### ***Formative versus summative learning in PE***

The experiences reported by the students in our study indicated that teacher-centered pedagogy still prevails in PE. This is a teaching form that focuses on performance and is built on a goal/target rationality inspired in large part by a multi-activity, sports-based tradition and the use of a direct teaching style (Solmon, 2015; Svendby, 2013; Tinning, 2015). Teaching style and behaviors within PE that support the development of physical competence in students have been shown to be crucial. This means providing students with clear guidelines on how to complete an activity combined with a clearly defined purpose of the activity and expressing expectations and providing feedback on performance (Kerner, Haerens, and Kirk, 2018). Solmon (2015) also underscores the importance of learning activities being structured so that students view success as a realistic possibility. Students asked for more "deep learning" of specific skills and sport activities, focusing more on education (to learn) and less on standardized performance (to do). One could also ask if more individually tailored specific learning, with a clearly and jointly defined purpose and feedback, might work positively for these students and for students who do not perform well in PE. Despite the authorities' guidance regarding assessment, which aims to support and increase students' formative learning in PE, it is claimed that the assessment of summative learning

still dominates in PE in the Norwegian schools (Leirhaug, 2016), which our study adds support to.

### ***Conflicting perspectives***

The students' experiences with PE classes point toward conflicting perspectives that influence PE's content and teaching. The dominating influence of sports and competition in PE reduces the opportunities for including non-competitive activities such as dance and playful games. Characteristic of sports is a performance-oriented practice that is attached to what can be measured instrumentally and is based on objectively comparable criteria. Several studies have shown that the sports perspective is dominant in Norwegian PE (Augestad, 2003; Leirhaug, 2016; Quennerstedt and Larsson, 2015; Slagstad, 2015), and this dominance might contribute to legitimizing and normalizing values such as high performance, individualism, competition, and efficiency and might contribute to PE teachers' giving them priority. The professional argument for sports and the use of sports techniques in PE classes is the assumption that children and young people will continue to engage in sports and physical activity for the rest of their lives if they experience mastery of the necessary skills (Evans, 2014; Norwegian Directorate for Education and Training, 2015b; Svendby, 2013). This tendency to offer students a range of exercises that are supposed to develop their technical abilities to practice different sports is criticized by some researchers. The critics point to exercises often being decontextualized, that too little time is devoted to a particular skill, and that teachers' competences in different sports tend to be too shallow (Larsson and Karlefors, 2015). Students in our study told us that an emphasis on learning sports techniques did indeed inspire them. However, it did not necessarily inspire them to engage further in sports unless they were already heavily engaged in sport.

Physical activity is often considered uncritically as a means for health promotion, and such a perspective on health in PE at school and generally in society is strong. The health perspective in PE might strengthen the argument for including a variety of physical activities in the PE subject, as well as the subject's goal of paving the way for individual mastery and the establishment of lifelong practice of being physically active. Globally, public health is an area of interest, and culturally there are some common features when it comes to body ideals, although there are different social and organizational frameworks in different countries. Solmon (2015) points out that PE at school cannot address the problems of public health on its own and that this work requires a unified effort across multiple levels, influencing behavior choices through the

interactions between individuals and their environment in a complex dynamic. This is also a debate in Norway. Asking for joint efforts across several public sectors goes hand in hand with underscoring the individual's responsibility for one's own health. However, the health perspective promotes "the tyranny" of today's dominant body ideal; the healthy and beautiful body that is slender, fit, firm, well-behaved, and practicing the right healthy habits, which signifies status, morals, emotional stability, self-discipline, and control (Azzarito, 2016; Lupton, 2003; Svendby, 2013). If the focus on health in PE is dominated by these ideals, PE might unintentionally contribute to assigning different students' bodies different statuses and thus exclude those bodies that do not meet society's expectations and ideals. If so, this might cause objectification of one's own body in a negative sense and suffering among young people, and students in our study described situations where this was happening. More specifically, the students described situations where not having the required bodily skills or the desired athletic body was at the core of one's own and others attention followed by experiences of being marginalized. Obviously, students are vulnerable in situations like this and can easily feel inadequate, which again might cause them to dread participating in PE classes. Feelings of being left out, being different, and even being excluded from the fellowship in PE have been found to be important reasons for students not to engage in PE, and negative experiences in PE can promote inactivity (Beltrán-Carrilo, Devís-Devís, Peiró-Velert, and Brown, 2012).

### ***PE as an arena for social development and fellowship***

The students expressed a wish to be introduced to a diversity of activities and a mix of sports, games, and play and to some extent be able to negotiate what activities to include in PE classes. Together with the opportunity to perform and grow on one's own terms, these factors could possibly, according to the participants in our study, lead to increased engagement. This corresponds to earlier research that highlights that students engage in PE if they find the activities relevant and personally meaningful (Enright and O'Sullivan, 2012). The students claimed that PE classes could work as a social arena for fellowship through physical activities based on inclusion, growth, and developing together. They also expressed a caring attitude toward each other, wanting every student to experience a level of mastery and success in PE classes. They asked for greater inclusion of a social perspective in PE, where values such as fellowship, solidarity, democracy, equality, and diversity are recognized and viewed as

resources. Predetermined and instrumental learning outcomes such as vocational skills might counteract goals related to the social development of the individuals in PE, thus affecting other schooling goals such as *Bildung*, which is a focus on transforming the whole person (Quennerstedt and Larsson, 2015). In Crum's (1993) article about movement culture, it is argued that *Bildung* can be equated with what he calls a "pedagogistic ideology", where movement is seen as "an outstanding medium for exploration, communication, personal development and character building". The importance of forming the students' character and directing them to becoming upstanding citizens in the community is also targeted in the PE subject curriculum (Norwegian Directorate for Education and Training, 2015b). It is difficult to see how PE can provide students with a starting point for lifelong practicing of physical activity if many students are experiencing an absence of joy, inspiration, and inclusion in meaningful physical activity in PE classes, as well as lack of coping on their own terms.

In Norway, PE is an important part of the schooling, and health promotion is a core intention of the subject. According to our findings, PE is also a particularly meaningful space for interaction between students, and being active together was valued and longed for by the students in our study. Physiotherapists are specialized in working with body and movement in a health perspective, and in Norway there are physiotherapists who, as part of their position, work with children and young people in school. This makes it possible for physiotherapists to contribute to strengthening PE as a space for healthy development based on their knowledge about exploiting movement resources in meaningful interactions between children and their environments. Physiotherapists can work systematically in partnership with PE teachers, school health services, students, and parents to influence PE, for example, by engaging in planning and curriculum development.

It is important to underscore that what we see in Norway today is a general and deep concern for an increasing number of students with weak scholastic achievements, which has led to increased demands from the education authorities for improving learning outcomes at school and documenting them. Raising the quality of the subject-specific education is part of this, but there is also a much stronger focus on standardization, testing, performance goals, and specified documentation requirements. An instrumentalist understanding of teaching seems to be increasingly emphasized in today's schools at the cost of formative teaching focusing on the students' social development. This contributes to cementing the current status quo in the PE subject. It is

important to understand that the PE teachers as well as the students seem to be “caught” in between these conflicting perspectives in the PE subject – not without room to act, but where the necessity of being aware of and negotiating the what and how of PE seems paramount.

### **Methodological reflections**

The purpose of the study was to investigate Norwegian high-school students’ experiences with PE classes from a first-person perspective. To gather data, a school assignment with open-ended questions was chosen. The students submitted the responses anonymously. The students were outspoken, telling quite thoroughly about good and bad experiences with PE classes. The use of an assignment made it possible to include a large number of informants from a diversity of high-schools and different study directions. Further, the focus on variation and diversity among the informants increased the chance of saturation of the data material, which is an important factor in qualitative research. However, there are no guidelines or rules for estimating the sample size or for deciding when saturation is obtained, other than that saturation is reached when no new information is obtained or nothing new is being learned (Morse, 1995; Patton, 2015). The responses to the assignment gathered a rich material that provided a broad scope regarding students’ experiences with PE classes. Using an assignment in class could also be considered a strength because the data production represented a situation that was familiar for the students and did not require a face-to face encounter with a researcher, and this might have contributed to participation. The study design might also have facilitated honest answers because the students knew in advance that they could submit their responses anonymously and that what they wrote would have no consequence for their relationship with the school.

The assignment resulted in thorough responses, but also short ones. The choice of an assignment could be a limitation because the opportunity to go deeper into the individual’s experiences and thoughts, as in qualitative in-depth interviews, was not an option. It was also challenging to analyze such a large and varied material thoroughly and creatively. In the analysis, all of the themes were considered to be important regardless of the frequency of their occurrence, valuing variation of occurrences over quantity, which is considered important in the saturation process. It is underscored that what is most important for the investigator is to identify all aspects of what is being reported in order to find that “infrequent gem that puts other data into perspective” (Morse, 1995). Braun and Clarke (2006) also underscore

that themes or patterns are not something that emerge or are discovered passively in the process of analysis, but are a result of the investigator’s active role in identifying patterns or themes and selecting which are of interest regarding the research question. In our study, the analysis was performed by the research team in collaboration in order to ensure an overview of the data and discussion of important and interesting topics. The research team had varying personal experiences with PE classes, from good to bad and from feeling able or less able with regard to mastery. They were also aware of core aspects of today’s health discourse with an increased focus on standardized testing and documentation in school in general. These aspects were addressed in our discussions when analyzing the data in order to challenge them. In the process of analysis, Braun and Clarke (2006) were not followed to the letter, and neither they nor we see TA as a strict method. Furthermore, a full inductive analysis was not performed because it is not possible in daily life, in clinical contexts, or in research to set oneself at a zero point and to be as unconditional as a blank sheet – a *tabula rasa*. As historically situated community members, physiotherapists, and researchers interested in the topic, our vantage point included our own experiences with and preconceptions about PE and physical activity. Our horizon contributed to what we saw, and asked for, and this is in line with the hermeneutic anchoring of the study (Gadamer, 2012). However, challenging preconceptions in the face of the experiences and thoughts in the material was crucial. Kvale and Brinkmann (2015) recommend reflecting objectively on one’s own preconceptions, and this guided the analysis in the research team and helped them to challenge each other not to jump to conclusions.

In this study, the students’ experiences with PE classes were discussed in light of the Norwegian education authority’s curricular intensions, the specific learning outcomes in the subject, and competing perspectives that influence PE. Similar competing perspectives are found to influence PE and students’ experiences in other contexts, for example in a broader Norwegian context, but also in other western countries, for example in the United States and the United Kingdom. Accordingly, the themes and discussions related to these competing perspectives raised in the present study could be of relevance in a broader educational context despite differences as to what perspectives are the most dominant and the different framework conditions for the PE subject. Justified assessment of the extent to which the findings and perspectives from one study might be deemed relevant for understanding another situation (here students’ experiences of PE in other Norwegian school contexts) relates to

analytic generalization and pragmatic validity (Kvale and Brinkmann, 2015). Knowledge on Norwegian students' experiences with PE, and the complexity of competing perspectives, values, and conditions in which these experiences are interwoven, must be deemed relevant by the participants in the field in order to influence the understanding of and practices in PE, including educational authorities, PE teachers, physiotherapists, and the students themselves. In Norway, if deemed relevant, action might be taken with regard to changes in practice. Pragmatic validity, according to Kvale and Brinkmann, is related to action and improvement of practice and might also involve ethical, educational, and political questions (Kvale and Brinkmann, 2015).

## Conclusion

The Norwegian education authority's aspirations for PE in school are in line with what the students in the present study wanted PE classes to be about – a social arena for fair play and respect for each other, where they can experience joy and mastery by being physically active together and in individually tailored activities. Although students experienced PE as a source of well-being and increased energy, they experienced the dominance of competition and performance in PE as problematic. In this study, competing perspectives influencing the what and how of PE are highlighted, and a discrepancy is described and discussed between the curricular intentions of personal learning, mastery, and evaluation of effort and individual progress and the use of standardized measurements and assessments of physical skills and performances based on instrumentally inspired learning outcomes. This discrepancy made it difficult for students to really enjoy being physically active within the framework of PE, potentially influencing their engagement to stay physically active later in life.

The students in this study also called for co-determination in PE. To elaborate further on the PE curriculum's content and development, it would be of interest to involve students in participating in local curriculum development in partnership with PE teachers (at their local high-school) and perform research on students' as well as teachers' perspectives on the experienced outcomes. User involvement in health and care research in Norway is laid down in national guidelines, and the main objective of user involvement is to contribute to research having a high degree of relevance and utility for the target group in question. In this case, students having self-experience with taking part in PE and the PE teachers actively in charge of this education were both target groups for the research project and are the ones who are intended to utilize

the knowledge that has been generated. For designing future research on the PE subject, it will be relevant to involve both groups.

There seems to be a need for rethinking Norwegian PE when it comes to the subject's content and the delivery of the PE programs in school if the aspiration is to facilitate children staying physically active and continuing with lifelong physical activity, and the curricular intentions need to be better reflected in the learning outcomes and learning environments. As practitioners promoting health, well-being, and active living across the lifespan, physiotherapists are in a good position to initiate and contribute to discussions about PE and to work together with educators and other public health professionals and policy makers to optimize the contribution of PE to health.

## Notes

1. Also called the bleep test, multi-stage fitness test, pacer test, Leger-test, or 20-m shuttle run test. The test can be performed with several people at the same time. The person must run between two markings of 20 m with increasing speed within a given audio signal (beep). If they do not reach the mark on the other side within the time limit, the test will be terminated for the individual and the number of beeps/completed lengths will be recorded. In Norway, the test is often used in PE at different educational levels. The duration of the test depends on the performer's endurance, but usually lasts between 10 and 20 minutes.
2. As mentioned in the analysis, the data corpus includes different aspects of gendered meanings. These aspects were set aside for the purpose of this article. Also, there appear to be sufficient data to compare findings from different types of schools. This was also part of the pre-conceptions, that there could be differences between schools. Through scrutinizing the data sets from the five schools, there were no clear differences between the schools that stood out as to what the students were saying, making a comparison between schools redundant.
3. We are well aware of the strong tendency of today's society to reduce the value of PE to a means of better learning (cf. the debate about play being good for learning mathematics) and do not to dismiss the research that has found positive associations between PE and various academic outcomes.

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No potential conflict of interest was reported by the authors.

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### Appendix: Assignment – High-school students' thoughts on physical education classes, and physical activity, and view on own body

Below you will find questions first and foremost connected to your thoughts on physical education classes, then some questions on physical activity and view on own body. Please spend some time answering each question, and answer as best you can. There are no particular answers that are more correct than others.

- (1) Experiences with physical education classes
  - (A) What does the physical education classes mean to you?
  - (B) What do you associate with physical education classes?
  - (C) How do you experience the physical education classes in high-school?
  - (D) How would you want the physical education classes to be?
- (2) Physical activity
  - (A) What do you associate with physical activity?
  - (B) What does it mean for you to be physically active?
  - (C) Do you miss anything in physical education classes in terms of physical activity you like?
- (3) Body- and self-perception (s) in adolescents – especially related to physical education classes
  - (A) What do you think of your own body?
  - (B) What does it mean to you what others think about your body?
  - (C) Does your perception of your body affect participation in physical education classes?