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Norwegian Physical Education Teachers' Reflections on Their Teaching Practices Related to Public Health and Life Skills

A Narrow or Broad Approach?

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Abstract

This article focuses on the concept of health in physical education from a teacher's perspective. Qualitative in-depth interviews were conducted with four PE teachers, aiming to explore their reflections on the concept of health in relation to the interdisciplinary topic of public health and life skills. The research question guiding the study is: How do physical education teachers reflect on their teaching practice related to public health and life skills, seen through the lens of Antonovsky's salutogenic perspective?

The data material was analyzed using thematic analysis and is presented through four overarching themes: general health, the PE subject, students and health, and public health and life skills. The theoretical framework is based on Antonovsky's understanding of health, in which he distinguishes between a narrow, pathogenic perspective – focused on the absence of disease – and a broader, salutogenic perspective, where health is seen as a process and a continuum.

The results indicate that the informants have a broad understanding of health. They include physical, mental, and social dimensions of health and demonstrate various ways of integrating these aspects into their teaching. By applying Antonovsky's theory of Sense of Coherence, it becomes clear how elements such as lifelong joy of movement and social and democratic values can be connected to the aims of promoting health and life skills in physical education.

Keywords: Antonovsky, pathogenic perspective, salutogenic perspective, Sense of Coherence, self-determination theory, curriculum, qualitative interviews.

Introduction

Historically, physical education (PE) has been closely associated with health and well-being in many countries, including within the Scandinavian context. International policy frameworks such as UNESCO's International Charter of Physical Education, Physical Activity and Sport (2015) emphasize PE as a key arena for promoting lifelong physical activity and health. Similarly, global health promotion frameworks such as the Ottawa Charter for Health Promotion conceptualize health as a dynamic resource shaped by social, environmental, and educational factors (World Health Organization [WHO], 2010).

Consequently, health has long functioned as a central source of legitimacy for PE. At the same time, scholars have questioned the strong alignment between PE and public health agendas, suggesting that such connections may contribute to an instrumental understanding of the subject in which physical activity is primarily justified through its health outcomes (Evans, 2003; O'Sullivan, 2004; Armour & Harris, 2013).

Within the broader field of PE research, authors such as Kirk (2010) and Tinning (2010) have argued that debates about the purpose and content of PE are closely linked to wider social and political discourses about health, education, and the body. As a result, the role of PE within broader public health efforts remains an ongoing topic of discussion in both national and international research (Penney, 2013).

Within this discussion, Antonovsky's salutogenic perspective has gained increasing attention. In contrast to pathogenic approaches that focus on disease prevention and risk factors, salutogenesis emphasizes the resources and processes that support health, particularly individuals' Sense of Coherence (Antonovsky, 1979, 1987). In PE research, scholars have argued that a salutogenic perspective may support a broader pedagogical understanding of health, where students' experiences, participation, and sense of meaning in movement activities are central (Quennerstedt, 2006, 2008). Such an approach may help shift the focus from narrow concerns with physical performance and fitness toward learning about health in a more holistic sense.

In Norway, these issues have gained relevance following the introduction of interdisciplinary themes such as public health and life skills in the national curriculum (Utdanningsdirektoratet [Norwegian Directorate for Education and Training], 2017, 2020). These themes aim to support students' physical and mental well-being, their capacity to make informed

decisions, and their ability to lead meaningful lives. However, research suggests that PE teachers interpret and implement these curriculum intentions in different ways, and that translating broad health policy ambitions into everyday teaching practice can be challenging (Vinje et al., 2024).

Moreover, the concepts of public health and life skills remain loosely defined and open to interpretation within educational contexts (Skaalvik & Skaalvik, 2021). Despite growing interest in salutogenic perspectives in PE research, there is still limited knowledge about how PE teachers themselves reflect on health within their teaching practice. Ahead of the new curriculum, experts (Moen et al., 2019) warned against a narrow interpretation of this theme, where PE is primarily seen to get students moving and "in shape." They encouraged the field to reflect more deeply on what these concepts entail.

Research question

This study therefore explores these issues from a teacher perspective. Drawing on qualitative in-depth interviews with four PE teachers, the study is guided by the following research question: *How do physical education teachers reflect on their teaching practice related to public health and life skills, seen through the lens of Antonovsky's salutogenic perspective?*

Public health and life skills in Norwegian policy documents

The interdisciplinary theme of public health and life skills has been central in several Norwegian policy documents. According to the overarching part of the curriculum (LK20; Utdanningsdirektoratet, 2017), the theme of public health and life skills is intended to support students in promoting both mental and physical health and making responsible life choices. It is rooted in society's need to strengthen young people's ability to cope with increasing information, individualization, and personal decision-making (NOU 2015, p. 8). The report emphasizes the need for better knowledge of the body and health, including mental health, lifestyle, personal finances, and consumption.

In the PE curriculum (Utdanningsdirektoratet, 2020), the theme of public health and life skills involves promoting mental and physical health,

strengthening self-image and identity, and providing insight into different perspectives on movement and health. Students should learn to manage health as a resource – for themselves and others – and to make informed health-related decisions throughout their lives.

The subject is intended to foster lifelong enjoyment of movement and a physically active lifestyle adapted to individual conditions. It emphasizes bodily learning, motor development, and awareness of the relationship between the body, exercise, and health. Students should experience movement both individually and collectively, explore their identity, and reflect on body ideals, health, and lifestyle.

Furthermore, PE should promote values such as cooperation, respect, and equality. Through participating in various physical activities, students should learn to collaborate, contribute, and take responsibility within the learning community. The resource "Hva er nytt i kroppsøving?" (Norwegian Directorate for Education and Training, 2019) shows that the subject has shifted toward a broader focus on play, exploration, and student participation – with a stronger connection between physical activity and mental health.

It should be added that, according to Skaalvik and Skaalvik (2021), the meaning of the concept of life skills may vary from school to school and from teacher to teacher (p. 16). While LK20 uses the terms life skills and "managing one's own life," Skaalvik and Skaalvik use the term agent in one's own life to emphasize students' capacity for autonomy and the ability to influence their own life intentions. Being an agent in one's own life involves setting personal goals, evaluating one's actions, and adjusting or changing goals when necessary (Skaalvik & Skaalvik, 2021, pp. 16–17).

Previous research

International research on health in physical education (PE) reveals a persistent tension between biomedical and pedagogically oriented perspectives, reflecting fundamentally different understandings of what constitutes health. Biomedical approaches reduce health to the absence of disease, body control, and measurable performance, with an emphasis on risk prevention and physical capacity (Quennerstedt, 2008; Webb et al., 2008). Analytically, this constructs students as responsible for achieving a normative bodily ideal, while marginalizing the social, cognitive, and reflective dimensions of learning. Such a perspective risks instrumentalizing

PE and limits the subject's potential to foster critical understanding and embodied competence. In Sweden, the dominance of fitness- and risk-focused discourses illustrates how institutionalized norms can shape both pedagogy and student expectations, creating a feedback loop in which PE is primarily evaluated based on measurable outcomes rather than holistic development.

In contrast, salutogenic and pedagogical frameworks problematize the limitations of the biomedical tradition by foregrounding resource development, coping, and life skills (Quennerstedt, 2008; Mong & Standal, 2019; Ommundsen, 2008). These approaches reconceptualize health as a multidimensional and socially mediated process, where reflection, student participation, and embodied experience are central. Empirical examples, such as CrossFit-inspired activities, demonstrate that structured yet flexible training can simultaneously support physical development, social cohesion, and democratic participation (Sæle et al., 2025). Analytically, these findings challenge the assumption that health promotion in PE must be reducible to measurable outcomes and highlight that pedagogical design – more than content alone – determines the extent to which PE can promote holistic health.

Peter Arnold (1991) distinguishes between three interrelated aspects of movement learning: Learning about movement – understanding principles, techniques, and how the body functions; learning through movement – acquiring knowledge and skills by actively engaging in movement, where the body itself is the medium of learning; and learning in movement – reflecting on the experience of moving, including problem-solving, decision-making, and awareness of one's own bodily and motor capabilities. This framework emphasizes that physical education should integrate theory, practice, and reflection, allowing students to develop cognitive, social, and motor skills simultaneously. Movement is thus both a practical activity and a medium for holistic learning.

Norwegian research shows similar patterns. Health has long been used as an argument to legitimize PE within the school curriculum (Ommundsen, 2008), and national initiatives, including WHO recommendations and the introduction of the elective "Physical Activity and Health," have aimed to increase physical activity among children and youth (Evans, 2003; Borgen et al., 2018). Analyses, however, indicate that unclear distinctions remain between PE as a school subject, public health interventions, and physical activity as a pedagogical method, and that the concepts of physical and mental health are often poorly defined (Borgen et al., 2020; Engelsrud

& Nordtug, 2017). Empirical studies suggest that adolescents, particularly girls, internalize fitness discourses, prioritizing efficient training over traditional sports and seeking teachers who act as personal trainers, which may reduce PE to body control (Walseth et al., 2017). At the same time, research indicates that activities such as CrossFit can be combined with principles of differentiation, community, and democratic learning, thereby supporting physical, social, and moral development (Sæle et al., 2025).

Mong (2023), in a multi-method doctoral study of health teaching in Norwegian lower-secondary physical education, found that teachers' understanding and conceptualization of health shapes the didactic choices they make, and that differing perspectives on health produce considerable variation in what is actually taught. An accompanying action-research component of the same project showed that when teachers were given space to discuss professional questions about health, this could prompt genuine didactic change: planning health teaching explicitly, rather than treating it as an incidental by-product of physical activity, made both the purpose of the lesson and what students had learned clearer to teachers and students alike (Mong & Standal, 2022). The dissertation concludes that health can be taught as a didactic phenomenon in its own right, rather than an instrumental one, provided teaching is grounded in didactic theory rather than in teachers' subjective understanding of health alone. Mong (2019) also examined how Norwegian physical education teachers understand health in relation to their teaching. The study shows that teachers describe health as a complex phenomenon, often referring to the World Health Organization's distinction between physical, mental, and social health.

Syvertsen (2014) investigated how Norwegian physical education teachers at a secondary school understand and enact health in their teaching through a case study involving group interviews, individual interviews, and observations. The study found that teachers are strongly influenced by the health discourse, with lessons largely focused on physical training and preventive exercise rather than broader health aspects. Students' interest in body shape reflects a dominant fitness discourse, which teachers deliberately seek to moderate by emphasizing the "health debate" and promoting enjoyment and social cohesion. Overall, the findings suggest that teachers hold a more pathogenic than salutogenic understanding of health, prioritizing physiology and physical activity over social and mental dimensions.

As noted, there are a few studies that explore how physical education teachers reflect on health in their teaching, but research in this area remains limited, and a clear knowledge gap persists. This study aims to ad-

dress part of this gap by examining how Norwegian PE teachers reflect on health, public health, and life skills, and how they perceive students' engagement with these dimensions. An original contribution of this study is that it uses a self-developed sketch/model to relate the participants' reflections (the study's findings) to Antonovsky's perspective on health.

It should be emphasized that while teachers' reflections do not necessarily mirror actual teaching practice – which require observations or other research methodological approaches – they nevertheless provide a valuable analytical perspective on how teachers understand and approach health in physical education. Such reflections shed light on how broad health ideals shape teaching intentions, curriculum choices, and the experiences offered to students, thereby contributing knowledge about pedagogical strategies, priorities, and potential challenges in implementing holistic health in the subject.

Theoretical framework

This study is grounded in Antonovsky's (1979, 1987, 2012) salutogenic framework, which contrasts pathogenic and salutogenic perspectives on health. The pathogenic perspective focuses on why people become ill and is rooted in traditional biomedical thinking, emphasizing absence of disease, bodily function, and risk prevention, inspired by Descartes' dualistic understanding of the body as a machine to be optimized and controlled (Engelsrud, 2010; Boorse, 1977). The salutogenic perspective, in contrast, emphasizes health-promoting resources, coping, and well-being, viewing health as a dynamic continuum.

Central to Antonovsky's salutogenic framework is the concept of Sense of Coherence (SOC), which comprises three interrelated components that explain why some individuals remain healthy despite stressors: comprehensibility, manageability, and meaningfulness. Comprehensibility refers to the extent to which individuals perceive the stimuli they encounter as structured, predictable, and understandable, allowing them to make sense of life events rather than experiencing them as chaotic or random. Manageability reflects the degree to which individuals feel they have the resources – personal, social, or material – to cope effectively with challenges and exert some control over outcomes. Finally, meaningfulness represents the extent to which individuals perceive life's demands as worthy of engagement, investment, and commitment, providing motivation to

cope and participate actively in life. Together, these components form a dynamic framework that helps explain how individuals navigate stressors and maintain or enhance their health, emphasizing the role of perception, resources, and purpose in well-being.

In this study, SOC is applied analytically as a set of categories for interpreting and organizing teachers' reflections on health. Comprehensibility addresses how teachers perceive health as structured and understandable, manageability concerns which resources teachers consider necessary to promote health, and meaningfulness focuses on how health work is made relevant and engaging for students.

To supplement Antonovsky's framework, the study draws on two further, constructive perspectives. Nordenfelt's (1995, 2007) action-theoretical understanding of health – health as the ability to realize one's vital goals under standard circumstances – extends the same lineage as Boorse and Antonovsky and connects directly to the curriculum's concept of life skills (*livsmestring*). It is used analytically to interpret teachers' statements about equipping students with transferable, long-term capacities rather than momentary experiences of health. Self-determination theory (Deci & Ryan, 2000; Ryan & Deci, 2017) specifies autonomy, competence, and relatedness as the needs that must be supported for internalized motivation to develop, and is used to distinguish autonomy-supportive pedagogical strategies from controlling ones, such as enforcing behaviour through grades.

Alongside these constructive additions, one critical perspective is retained to keep the analysis from simply confirming the fit between practice and theory. Grue (2016) shows that norms of bodily normality – such as what counts as a healthy weight – carry moral as well as biological weight, so that health-promoting practices oriented toward normative body ideals can carry an implicit judgment about individual responsibility and worth. This perspective is used in the Discussion section to interrogate, rather than assume, the fit between teachers' salutogenic-oriented practices and their intended effects on students.

By combining pathogenic and salutogenic views, the study establishes a broader theoretical framework – particularly relevant considering the cross-curricular theme public health and life skills in Norwegian schools. The two perspectives are used as analytical lenses to explore how physical education teachers reflect health. While the pathogenic perspective highlights aspects of prevention, physical training, and bodily control, the salutogenic perspective emphasizes coping, social, and emotional resources.

SOC provides a conceptual tool to interpret and evaluate whether teachers' reflections and practices support holistic health promotion, thus integrating broad health ideals into the analytical approach.

Method

The second author conducted the interviews in this study, using semi-structured in-depth interviews. This method allowed for a flexible dialogue, guided by a thematic interview guide, giving participants the opportunity to elaborate on their own experiences and perspectives (Krumsvik, 2014).

Participants were selected based on strategic criteria: they had to be physical education teachers at the lower secondary level. Formal qualifications in PE were not required, as the aim was to gather diverse experiences and reflections related to the concept of health in school. Recruitment began with emails sent to the principals of 29 lower secondary schools in Western Norway. Only two principals forwarded the information to their teachers, and from these, only one teacher responded that they were able to participate. Eight principals replied that they chose not to forward the information because they believed the teachers were already sufficiently burdened; no response was received from the remaining schools. The other three teachers were recruited through familiarity with specific school environments (snowball sampling) and through "gatekeepers" who facilitated contact with the relevant teachers.

Four interviews were therefore conducted. The informants had diverse experience and backgrounds: one had more than ten years of experience and 60 ECTS credits in sport studies, one had formal education equivalent to 30 ECTS credits and extensive teaching experience, one was newly qualified with no formal subject-specific competence, and one held a master's degree with a focus on physical education and a background in elite sport. The interviews were conducted face-to-face in empty classrooms or group rooms at the informants' own schools to create a safe and comfortable setting for the conversation.

It should be noted that three of the four informants did not hold full formal qualifications specific to physical education. We regard this variation as analytically informative rather than simply a limitation: the informant without formal subject-specific competence, for instance, was for that reason the teacher most often assigned responsibility for students

who are disengaged from the subject, offering a distinctive and pedagogically relevant vantage point that a sample restricted to formally qualified teachers would not have captured. At the same time, we acknowledge that this composition constrains the extent to which the findings can be assumed to transfer to formally qualified PE teachers as a professional group specifically; we return to this point in the concluding remarks.

It would have been desirable to include more informants, but given the circumstances, this was not possible. At the same time, it is emphasized that in qualitative interview studies, the aim is not statistical generalization but to achieve an in-depth understanding of participants' experiences and meaning making. Consequently, sample size is determined by the richness and relevance of the data rather than by numerical considerations alone (Kvale & Brinkmann, 2015). Methodological literature emphasizes that a small, strategically selected sample may be sufficient when the research question is clearly defined and the participants possess relevant and varied experience (Patton, 2015). Malterud et al. (2016) introduce the concept of information power, suggesting that fewer participants are needed when the study has a narrow focus, strong theoretical grounding, and informants with high relevance to the research aim. In the present study, the informants' diverse yet pertinent backgrounds within physical education contributed to a high level of information power.

Each interview followed a three-part structure:

- Warm-up with background questions on education, experience, and interests.
- A reflection section where participants discussed their understanding of health, health in PE, and how students perceive health. A keyword support sheet was used to aid reflection.
- A closing phase allowing participants to clarify or withdraw statements. The interviews lasted between 53 and 74 minutes and were audio-recorded and manually transcribed shortly afterward.

The process was inductive and data-driven, moving from individual descriptions to broader patterns. Initial coding was done in NVivo, starting broadly to maintain context. A visual model (fig. 1, see Results and analysis) was developed to organize codes into categories related to physical, mental, and social health, as well as subjective and objective perspectives. The original 286 codes were refined down to 104 through repeated review.

A thematic analysis was conducted following Braun and Clarke's (2006) six-phase model. The first phase involved manual transcription of the in-

terviews shortly after they were conducted. This process facilitated familiarization with the data and enabled initial reflections. In the second phase, systematic coding was conducted using NVivo. Coding was intentionally broad in the first round to avoid premature thematization, and larger text segments were included to preserve the context of the participants' statements.

In the third phase, the codes were grouped to identify overarching themes. A visual model was developed to categorize the codes according to physical, mental, and social health, as well as subjective and objective perspectives. This model helped structure the extensive dataset, which initially consisted of 286 codes but was reduced to 104 following a subsequent review. In the fourth and fifth phases, the themes were reviewed, refined, and named. The categories were assessed in relation to the research question, and the most relevant themes were retained for the results section.

In later phases, themes were refined and linked to the research question. Representative quotes were selected to illustrate findings. The analysis involved continuous reflection and interplay between empirical material and theoretical perspectives. Four main themes emerged:

- *General perspectives on health* – including two subcategories, this theme explores how the teachers define and interpret health.
- *Physical education* – especially relevant as three teachers tied their reflections on public health and life skills directly to the PE subject.
- *Students and health* – how teachers perceive students' views on health, often categorized into "fit" and "unfit" groups.
- *Public health and life skills* – how teachers understand and plan to implement the interdisciplinary theme in their teaching, presented through two subcategories.

Ethical considerations

We followed established ethical principles for research, including the guidelines of the Norwegian National Research Ethics Committee for the Social Sciences (NESH), as well as general principles of informed consent and confidentiality (Kvale & Brinkmann, 2015). The study was reported to and approved by Sikt (Norway's nation l acentre for research data). Participants received information about the study's purpose, the voluntary nature of participation, and their right to withdraw, along with a consent

form via email. We emphasized that personal health information should not be disclosed, in accordance with Sikt approval. Data was anonymized, with no names of participants or schools included, and transcriptions were standardized to prevent identification.

We were conscious of the asymmetrical power relationship in interviews and ensured that questions were open and non-leading. We clarified meanings during and after the interviews. Quotes presented in the study were edited only to protect anonymity, while the content and meaning of statements were preserved.

To strengthen validity and reliability, we conducted pilot interviews, used a semi-structured interview guide, applied an inductive analytical approach, and clearly separated results from discussion. Generalizability is limited due to the small sample size (four participants) and the phenomenological approach, but the findings provide insight into how health is understood and reflected upon in physical education.

Generative AI (Claude, Anthropic) was used to assist with language editing and producing the figure. All AI-assisted content was reviewed and verified by the author(s), who take full responsibility for the accuracy and integrity of the final manuscript.

Results and analysis

The findings are presented through four main themes with corresponding subcategories. The analysis is explicitly grounded in Antonovsky's salutogenic framework, using Sense of Coherence (SOC) as a guiding conceptual tool, alongside pathogenic considerations to highlight contrasts between teachers' implicit and explicit understanding of health.

General health

Participants described health as a multidimensional concept, including physical, mental, and social aspects, aligning with Antonovsky's view of health as a continuum rather than a binary state. Informant 1 stated: "It's physical, mental, and social health. I think it's important to have all those components." Informant 2 added: "You have both physical and mental health." Informant 3 emphasized social conditions: "When you talk about mental health, that includes everything from family situations to how you're doing at school." Informant 4 reflected on habits and heredity:

"Some inherit good habits... and some inherit bad ones – both in terms of diet and health."

Participants highlighted physical activity, diet, and sleep as key factors for health. Informant 2 stated: "I link health to food and diet... health is a concept I spend a lot of time on, work with, and think about in everyday life." Informant 4 added: "No, well – I think of diet, activity, sleep..." and Informant 3 elaborated: "Yes, I think of sleep. It has a big impact on your health – the choices you make about food and movement. Not necessarily training itself, training is important, but at least maintaining some form of movement throughout the day." Informant 1 connected health more broadly to social stability: "I think having a job you enjoy, or friends you can rely on, and good structures around you that give you a sense of security in life – that's important," and noted that the same holds for students, since exclusion from peer groups affects their ability to focus at school. These statements are interpreted through Antonovsky's SOC, illustrating comprehensibility (understanding what affects health), manageability (providing students with tools and strategies), and meaningfulness (valuing social and lifestyle factors in maintaining well-being). The pathogenic perspective is present in concerns about inactivity or unhealthy habits.

The physical education subject

PE was understood as both a learning subject and a vehicle for promoting health. Informant 1 emphasized bodily learning: "It's not important to me that the students come out of class dripping with sweat... but that they've learned something." He elaborated on how this is scaffolded in practice: "We build it up by teaching students concepts. For example, when practicing a cartwheel or a forward roll, students might say, 'I can't do it.' We then give them concepts related to motor development and technique, so instead of saying 'I can't,' they can say, 'well, I'm at the gross-coordination stage, so I need more practice.'" Informant 2: "I try to vary activities so everyone can experience success and enjoyment." Informant 3 focused on engagement: "You don't have to give your maximum effort, but you must do something. That's better than doing nothing," explaining this in relation to his own role: "Since I don't have that formal competence in specific sports, I've ended up with more responsibility for students who don't really want PE – getting them going." Informant 4 highlighted cooperation: "You should be able to cooperate with everyone, not just the kids on the soccer team," and connected this explicitly to values beyond the subject

itself: "I think these are good qualities to carry with you in life... and fair play – not cheating, treating others well."

Read together, these excerpts show three distinct strategies for building comprehensibility and manageability – shared conceptual language (Informant 1), explicit values transfer (Informant 4), and lowering participation thresholds (Informant 3) – rather than a single, uniform pattern. Comprehensibility is seen in teaching students concepts about bodily learning and strategies for movement. Manageability is evident in structuring activities and lowering thresholds so students of varying abilities can participate. Meaningfulness appears in fostering joy, cooperation, and social belonging. Pathogenic concerns arise in addressing fewer active students and preventing dropout or disengagement.

Joy of movement

Informants emphasized creating a positive experience in PE. Informant 1: "I want them to enjoy moving so they continue being active outside school," describing this as a matter of building transferable competence rather than relying on any single activity to "land": "I can never expose them to every activity they'll encounter in life in a way that makes it land. But if I can give them the tools to get good at something later in life, I've done my job." Informant 2 pursued meaningfulness through a different route, describing a concrete example: "We had a four-week fencing course with instructors from the fencing federation. Afterwards, four students started fencing on their own." Informant 3: "I try to introduce activities they might continue on their own time." Informant 4: "For me, it's about joy – joy in movement... and they should encounter activities they want to continue with."

This illustrates Antonovsky's meaningfulness, where teachers aim to cultivate intrinsic motivation and lifelong engagement. Read through Nordenfelt's (2007) concept of vital goals, Informant 1 reframes the aim of PE away from any single activity toward students' long-term capacity to realize their own goals – health as a standing capacity rather than a momentary experience. Notably, Informant 1 and Informant 2 pursue meaningfulness through different strategies – building general, transferable competence and self-efficacy versus direct exposure intended to spark enthusiasm for a specific activity – a difference in pedagogical reasoning worth noting rather than collapsing into a single pattern. The theme also bridges salutogenic and pathogenic perspectives: joy and engagement can prevent stress and

promote long-term health, while attention to students who struggle ensures that health risks associated with inactivity are addressed.

Fit and unfit students

Teachers distinguished between active and less active students, reflecting a combined pathogenic-salutogenic lens. Informant 1: "Way too much focus on six-packs and skinny bodies… very one-sided." Informant 2: "You can be big and strong if you're well-trained… I think that's a healthy direction," situating this within a broader shift he has observed over time: "A few years ago the focus was on how the body should look… now I feel it's shifted – you can be big and strong as a girl if you're well-trained… I think that's a healthy direction, that training is good." Informant 3: "They don't want to; they get tired quickly… they drop PE as a result of never being active otherwise." Informant 4: "It's healthy to a certain degree… and then it can tip into being unhealthy."

Notably, the informants do not agree among themselves on this point: where Informant 2 reads the current fitness orientation among students as a positive development, Informant 1 and Informant 4 read a similar phenomenon more critically, as one-sided or potentially unhealthy. We treat this disagreement as analytically significant in its own right, rather than resolving it into a single conclusion. Here, SOC is applied to understand how teachers support students' comprehensibility (awareness of health), manageability (encouraging achievable participation), and meaningfulness (helping students find value in movement and social interaction), balancing salutogenic promotion with pathogenic risk management.

Public health and life skills

Participants linked PE to broadening public health and life skills. Informant 2 described a concrete pedagogical initiative introduced that autumn: "We've had student-led lessons, where students plan, carry out, and evaluate a teaching sequence in groups of three, after getting a topic approved by me in advance." Informant 4: "Belonging is important for health… and PE can contribute to that when it works at its best." Informant 3: "Many students understand more about physical health than mental health, so we talk about both," adding that beyond conversation, "that's really the main tool I have" – a comment we read as reflecting some uncertainty about

how to operationalize this theme in practice, rather than a fully developed pedagogical strategy.

These examples illustrate how Antonovsky's SOC provides a framework for interpreting teachers' strategies in promoting holistic health, while also revealing differences in how confidently teachers can articulate a strategy for this theme specifically. Comprehensibility is reflected in raising students' understanding of physical, mental, and social health. Manageability is supported by delegating control to students, as in Informant 2's student-led lessons – which, read through self-determination theory, functions as a clear instance of autonomy-supportive teaching – and by providing diverse activities that students can apply independently. Meaningfulness appears in emphasizing belonging, cooperation, and social connection. At the same time, Informant 3's comment suggests that not all teachers feel equally equipped to translate this cross-curricular theme into concrete pedagogical practice – a limitation in teachers' own confidence that the analysis should not smooth over.

A critical case: classroom climate, manageability, and autonomy support

Informant 1 also described active work on classroom climate: "I work very hard on the classroom climate when I teach PE. There's no acceptance of negative feedback, comments, or ridicule. If you want a good grade in this subject, you need to be a supportive student who helps and builds others up." Read through Antonovsky's SOC, this admits two readings: it aims to build a predictable, safe environment (comprehensibility) and cooperative resources (manageability), but read through self-determination theory (Deci & Ryan, 2000), enforcing prosocial behaviour through grades is a controlling rather than an autonomy-supportive strategy – motivation becomes externally regulated rather than internalized, and is therefore less likely to transfer once the teacher and the grade are absent. This also sits uneasily with manageability as Antonovsky defines it, since the relevant resource remains with the teacher rather than the student. We flag this as an instance where a well-intentioned strategy does not straightforwardly align with either goal, illustrating that the fit between practice and theory should be interrogated rather than assumed.

In summary, we may argue that the informants' reflections suggest that they largely share a holistic understanding of health. Values such as joy of movement, embodied learning, student participation, and collaboration

are emphasized – consistent with the aims of the curriculum (Utdanningsdirektoratet, 2020). Figure 1 (see below) visualizes these nuances through a division into physical, mental, and social health, where health resources are placed at the center, inspired by Aaron Antonovsky's (2012) salutogenic perspective. In this view, health is understood as a continuum, with attention directed toward resources that can promote mastery and support students' development. In this way, the model allows for an interpretation in which physical education is not only concerned with preventing ill health but also with strengthening quality of life and Bildung (personal formation).

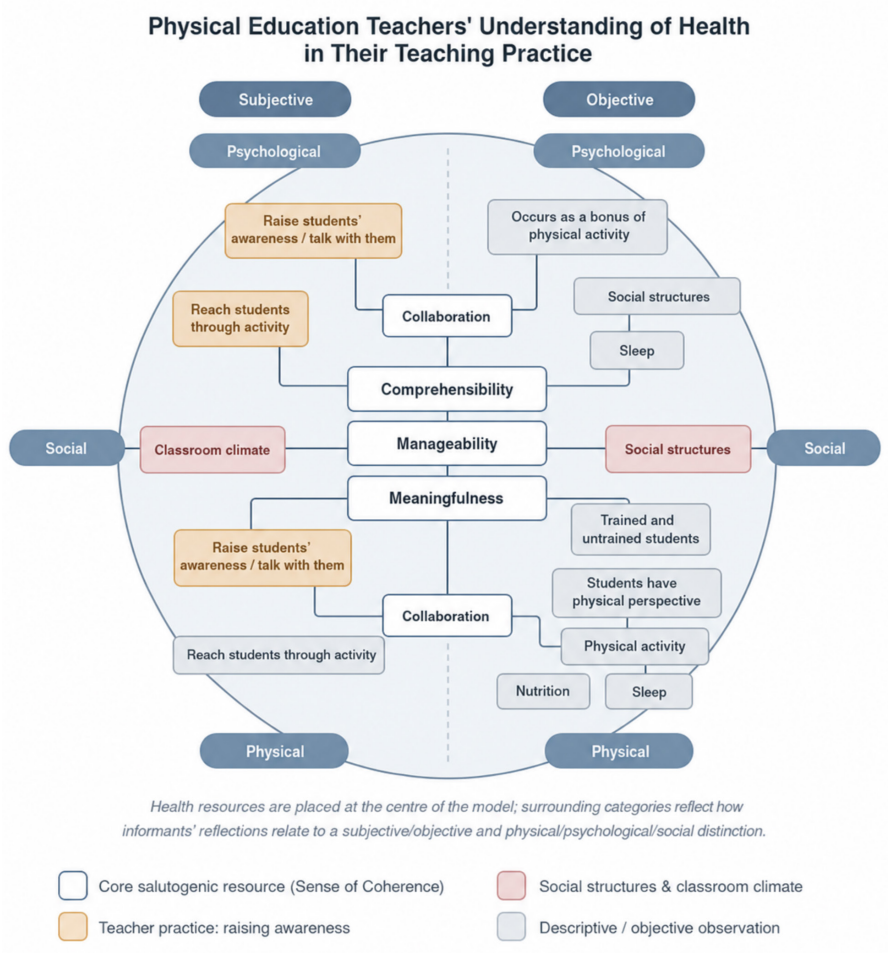


Figure 1. *Physical education teachers' understanding of health in their teaching practice.*

Discussion

The findings from this study indicate that physical education (PE) teachers navigate a balance between a pathogenic perspective, focused on bodily performance and disease prevention, and a salutogenic perspective, which promotes mastery, social belonging, and enjoyment of movement. Teachers described a clear distinction between students who are physically active in their leisure time and those who are not, affecting participation and engagement in PE. This aligns with previous research showing that normative body ideals and physical capital influence students' participation and health experiences, and that PE often favors students with a sports background (Moen et al., 2018; Säfvenbom et al., 2015; Rønbeck & Rønbeck, 2012; Walseth et al., 2017). A narrow focus on body and performance can also contribute to social and health-related marginalization, which has implications for public health in the long term (Grue, 2016; Ommundsen, 2008).

The study shows that teachers actively seek to promote a broader understanding of health that includes life skills and public health perspectives. Through activity adaptation, variation, and student participation, teachers strengthen students' experience of mastery and control – core elements of Antonovsky's (2012) Sense of Coherence (SOC). This aligns with prior research demonstrating that flexible teaching and appropriately adapted challenges contribute to inclusion and enhanced mastery, particularly among students with low physical capital (Quennerstedt, 2008; Mong & Standal, 2019; Syvertsen, 2014; Lyngstad, 2010; Säfvenbom et al., 2015). The results illustrate how pedagogical practice can support individual health, social participation, and life skills, all of which are central to public health (Borgen et al., 2020; Engelsrud & Nordtug, 2017).

Regarding students' understanding of the purpose of PE, findings indicate that teachers work to make the subject comprehensible and relevant. By linking activities to learning about motor development and theoretical understanding of movement, students' comprehensibility is strengthened. Prior studies have shown that students often perceive PE as unclear in terms of goals and purpose, creating uncertainty, particularly among students with low physical capital (Moen et al., 2018; Säfvenbom et al., 2015; Lyngstad, 2010). Clarifying learning objectives and connecting activities to mastery and understanding also contributes to students' life skills and their capacity to take responsibility for their own health (Mong, 2019; Mong & Standal, 2022).

The study also shows that teachers aim to create meaningful experiences by offering activities that are motivating and relevant for students' lives, such as introducing activities students may continue outside school. This reflects salutogenic principles, where meaningfulness enhances students' intrinsic motivation and ability to take responsibility for their health (Antonovsky, 2012; Quennerstedt, 2008). Linking enjoyment to bodily learning, as discussed by Arnold (1991) and Lyngstad (2010), ensures that joy of movement is not merely situational but connected to understanding and reflection. This approach supports the development of life skills and long-term engagement in physical activity, while also addressing public health goals.

However, findings also highlight that meaningfulness can sometimes be linked to physical performance or normative ideals, emphasizing the need for conscious pedagogical guidance to promote a holistic perspective on health and life skills (Mong & Standal, 2019; Walseth et al., 2017).

Concerning manageability, the study shows that teachers deliberately adapt activities to support students' sense of mastery and control. Differentiation, variation, and student participation strengthen students' sense of control over their learning and engagement, which is essential for both health and life skills (Antonovsky, 2012; Bjerke et al., 2016; Moen et al., 2018; Säfvenbom et al., 2015). This is consistent with prior research demonstrating that adapted teaching and student involvement foster mastery, well-being, social inclusion, and can prevent physical and mental health issues (Ommundsen, 2008; Syvertsen, 2014; Sæle et al., 2025).

At the same time, the findings highlight challenges related to normative body ideals and fitness discourses, which can reinforce a reductionist view of health and marginalize students who do not conform to these ideals (Walseth et al., 2017; Webb et al., 2008). Teachers must therefore balance supporting student initiative with guiding toward a broader, more inclusive understanding of health.

These tensions point to a broader need to move beyond Antonovsky's framework alone. As shown in the Findings section, Informant 1's use of grading to enforce supportive behaviour is controlling rather than autonomy-supportive in self-determination theory terms, and sits uneasily with manageability as Antonovsky defines it, since the relevant resource remains with the teacher rather than the student. By contrast, Informant 1's emphasis elsewhere on transferable tools for later life exemplifies Nordenfelt's (2007) constructive alternative: health-promoting practice aimed at students' standing capacity to pursue their own goals, rather than compli-

ance in the moment. Grue's (2016) account of the moral weight attached to body norms is, in turn, relevant to the disagreement among informants over the current fitness orientation among students: what one teacher frames as healthy, another frames as one-sided, suggesting that teachers' judgments about students' bodies carry an implicit normative charge that none of these frameworks fully resolve on their own.

Arnold's (1991) framework of movement learning also provides a useful lens to interpret these findings in relation to Antonovsky's SOC. The study shows that teachers facilitate learning about movement by helping students understand motor development and principles behind physical skills, which strengthens comprehensibility. When students engage in diverse activities and experience success, they engage in learning through movement, supporting manageability by enhancing students' sense of mastery and control. Finally, teachers encourage reflection and link enjoyment to meaningful experiences, reflecting learning in movement, which promotes meaningfulness and connects joy of movement to personal growth, social belonging, and life skills. Integrating Arnold's concepts highlights how PE teaching can simultaneously develop physical skills, psychosocial resources, and life skills, aligning closely with the salutogenic framework (Antonovsky, 2012; Lyngstad, 2010; Säfvenbom et al., 2015).

Overall, the study demonstrates that PE teachers operate within a framework combining pathogenic and salutogenic understandings of health. Pedagogical strategies such as adaptation, variation, and student participation enhance students' Sense of Coherence, contributing to holistic health, social inclusion, life skills, and public health, while challenges related to normative body ideals and performance orientation remain. The findings illustrate how salutogenic theory can be applied in practice to foster life skills and holistic health in PE, emphasizing the need for a conscious pedagogical approach that integrates physical, mental, and social health (Quennerstedt, 2008; Mong & Standal, 2019; Arnold, 1991).

Concluding Remarks

This study shows that our participants reflect on health in ways that combine both pathogenic and salutogenic perspectives. The findings indicate that health is often understood through physical activity and bodily performance, while teachers also recognize the importance of social interaction, mental health, and mastery. Furthermore, our teachers reflect on

life skills and public health by considering how varied activities, student participation, and experiences of competence can support physical, social, and emotional development.

The study highlights that teachers are aware of the influence of dominant fitness and performance discourses on students' perceptions of body and health, and that they actively consider how to balance these with broader conceptions of well-being, life skills, and social inclusion.

As a contribution to knowledge, this study illuminates how some physical education teachers reflect on the interrelated dimensions of health, public health, and life skills. By applying Antonovsky's salutogenic perspective, the study demonstrates how teachers' reflections can be understood in terms of Sense of Coherence, including comprehensibility, manageability, and meaningfulness. These reflections provide valuable insights into the pedagogical reasoning and priorities that shape how health and well-being are conceptualized within the subject of physical education.

Given the small and heterogeneous sample, these findings should be read as an in-depth illustration of how a varied group of PE teachers reason about health, rather than as representative of Norwegian PE teachers as a whole; readers with formally qualified PE teachers specifically in mind should treat the transferability of these findings with corresponding caution.

Overall, the study contributes to the field by clarifying teachers' perspectives on health-promoting work, highlighting the ways in which they integrate considerations of physical activity, social competence, and life skills in their reflections, thereby enriching our understanding of holistic health in physical education.

References

Antonovsky, A. (1979). *Health, stress, and coping*. Jossey-Bass.

Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and stay well*. Jossey-Bass.

Antonovsky, A. (2012). *Helsens mysterium: Den salutogene modellen* (A. Sjøbu, Translation.). Gyldendal Akademisk.

Armour, K., & Harris, J. (2013). Making the case for developing new PE-for-health pedagogies. *Quest, 65*(2), 201–219. https://doi.org/10.1080/00336297.2013.773531

Arnold, P. J. (1991). The preeminence of skill as an educational value in the movement curriculum. *Quest, 43*(1), 66–77. https://doi.org/10.1080/00336297.1991.10484011

Bjerke, Ø., Lyngstad, I., & Lagestad, P. (2016). Trivsel i kroppsøvingsfaget blant elever med lavt og høyt oksygenopptak. *Nordisk tidsskrift for pedagogikk og kritikk, 2*(2), 1–13. https://ntnuopen.ntnu.no/ntnu-xmlui/handle/11250/2436688

Boorse, C. (1977). Health as a theoretical concept. *Philosophy of Science, 44*(4), 542–573. https://www.jstor.org/stable/186939

Borgen, J. S., Gjølme, E. G., Hallås, B. O., Løndal, K., & Moen, K. M. (2018). Kroppsøving mer enn «fysisk aktivitet». *Bedre Skole, 4*, 21–28. https://www.utdanningsnytt.no/files/2019/06/27/Bedre%20Skole%204%202017.pdf

Borgen, J. S., Hallås, B. O., Løndal, K., Moen, K. M., & Gjølme, E. G. (2020). Problems created by the (un)clear boundaries between physical education and physical activity health initiatives in schools. *Sport, Education and Society, 26*(3), 239–253. https://doi.org/10.1080/13573322.2020.1722090

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp0630a

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Engelsrud, G. (2010). Betydninger av teori(er) om kroppen. In K. Steinsholt & K. P. Gurholt (Eds.), *Aktive liv: Idrettspedagogiske perspektiver på kropp, bevegelse og dannelse* (pp. 35–50). Tapir Akademisk.

Engelsrud, G., & Nordtug, B. (2017). Fysisk aktivitet for bedre psykisk helse – noen betraktninger. *Bedre Skole, 4*, 28–34. https://www.utdanningsnytt.no/files/2019/06/27/Bedre%20Skole%204%202017.pdf

Evans, J. (2003). Physical Education and health: A polemic or "let them eat cake!" *European Physical Education Review, 9*(1), 87-101. https://doi.org/10.1177/1356336X03009001182

Grue, L. (2016). *Normalitet*. Fagbokforlaget.

Krumsvik, R. J. (2014). *Forskingsdesign og kvalitativ metode: Ei innføring*. Fagbokforlaget.

Kirk, D. (2010). *Physical education futures*. Routledge.

Kvale, S., & Brinkmann, S. (2015). *Det kvalitative forskningsintervju* (3rd ed.] Gyldendal.

Kvikstad, I., Berg-Johnsen, E., Kruken, A. H., Lund, J. L., Aasland, O. E., & Aasland, M. (2024). *Et forståelig kroppsøvingsfag? Kroppsøvingsfaget etter fagfornyelsen – erfaringer fra elever og lærere på ungdoms- og videregående trinn. Rapport fra FUSK-undersøkelsen 2022*. Universitetet i Sørøst-Norge. https://openarchive.usn.no/usn-xmlui/bitstream/handle/11250/3119936/2024_139_Vinje%20et%20al_rapport.pdf

Lyngstad, I. (2010). Bevegelsesgleden i kroppsøving. In M. Stene (Eds.), *Forskning Trøndelag 2010* (pp. 65–78). Tapir Akademisk.

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research, 26*(13), 1753–1760. https://doi.org/10.1177/1049732315617444

Moen, K. M., Westlie, K., Bjørke, L., & Brattli, V. H. (2018). *Når ambisjon møter tradisjon: En nasjonal kartleggingsstudie av kroppsøvingsfaget i grunnskolen* (5.–10.

trinn) (Oppdragsrapport nr. 1 – 2018). Høgskolen i Innlandet. http://hdl.handle.net/11250/2482450

Moen, K. M., Westlie, K., Teksum, T. N., & Bjørke, L. (2019, 27. februar). Tverrfaglige tema – episode 1: Alt blir nok bedre med folkehelse og livsmestring i skolen(!?). *Kroppsøvingsforskning*. https://blogg.forskning.no/kroppsoving/tverrfaglige-tema--episode-1-alt-blir-nok-bedre-med-folkehelse-og-livsmestring-i-skolen/1299737

Mong, H. H. (2019). "I kroppsøving så tenker jeg nok mest på det fysiske" – En studie om kroppsøvingslæreres forståelse av helse. *Journal for Research in Arts and Sports Education, 3*(2), 34–45. https://doi.org/10.23865/jased.v3.1463

Mong, H. H., & Standal, Ø. F. (2019). Didactics of health in physical education – A review of literature. *Physical Education and Sport Pedagogy, 24*(5), 506–518. https://doi.org/10.1080/17408989.2019.1631270

Mong, H. H. (2023). *Helse som didaktisk fenomen i kroppsøvingsfaget: En multimetodisk studie om undervisning om helse på ungdomstrinnet* [Doctoral dissertation, Norges idrettshøgskole]. NIH Brage. https://nih.brage.unit.no/nih-xmlui/handle/11250/3071703

Mong, H. H., & Standal, Ø. F. (2022). Teaching health in physical education – an action research project. *European Physical Education Review*. https://doi.org/10.1177/1356336X221078319

Nordenfelt, L. (1995). *On the nature of health: An action-theoretic approach* (2nd ed.). Kluwer Academic Publishers.

Nordenfelt, L. (2007). *Rationality and compulsion: Applying action theory to psychiatry*. Oxford University Press.

NOU 2015: 8. (2015). *Fremtidens skole – fornyelse av fag og kompetanser*. https://www.regjeringen.no/no/dokumenter/nou-2015-8/id2417001/

O'Sullivan, M. (2004). Possibilities and pitfalls of a public health agenda for physical education. *Journal of Teaching in Physical Education, 23*(4), 392–404. http://hdl.handle.net/10344/3189

Ommundsen, Y. (2008). Kroppsøving: Danning eller helse? om to ulike begrunnelser for faget og deres konsekvenser. In P. Arneberg & L. G. Briseid (Eds.), *Fag og danning – mellom individ og fellesskap* (pp. 193-208). Fagbokforlaget.

Patton, M. Q. (2015). *Qualitative research & evaluation methods*. Sage.

Penney, D. (2013). *Physical education and health: Concepts, issues, and challenges*. In D. Kirk, D. Macdonald, & M. O'Sullivan (Eds.), *The handbook of physical education* (pp. 105–118). SAGE Publications.

Quennerstedt, M. (2006). *Att lära sig hälsa* [Doktorgradsavhandling, Örebro universitet]. DiVA. https://www.diva-portal.org/smash/record.jsf?pid=diva2:136837

Quennerstedt, M. (2008). Exploring the relation between physical activity and health – A salutogenic approach to physical education. *Sport, Education and Society, 13*(3), 267–283. https://doi.org/10.1080/13573320802200594

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.

Rønbeck, A. E., & Rønbeck, N.-F. (2012). Disiplinering av kropp og sinn i kroppsøvingsfaget. In A. E. Rønbeck (Eds.), *Inspirert av Foucault: Diskusjoner om nyere pedagogisk empiri* (pp. 112–129). Fagbokforlaget.

Sæle, O, O, Stakseng, V. F. & Gundersen, H. (2025). Å lede crossfit-inspirerte aktiviteter i kroppsøving med vekt på differensiering og sosialisering. In S. Loland & O. O. Sæle (Eds.), *Åløpe en risiko – etiske refleksjoner om å lede praksis i kroppsøving, idrett og friluftsliv* (pp. 275-302). Fagbokforlaget.

Skaalvik, E. M., & Skaalvik, S. (2021). *Skolen som læringsarena: selvoppfatning, motivasjon, læring og livsmestring*. Universitetsforlaget.

Syvertsen, K. A. (2014). Hvordan forstås helse av kroppsøvingslærere? [Master thesis]. Høgskolen i Oslo og Akershus.

Säfvenbom, R., Haugen, T., & Bulie, M. (2015). Attitudes toward and motivation for PE: Who collects the benefits of the subject? *Physical Education and Sport Pedagogy, 20*(6), 629–646. https://doi.org/10.1080/17408989.2014.892063

Tinning, R. (2010). *Pedagogy and human movement: Theory, practice, research*. Routledge.

UNESCO. (2015). *International Charter of Physical Education, Physical Activity and Sport*. UNESCO.

Utdanningsdirektoratet. (2020). Læreplan i kroppsøving (KRO01-05). https://www.udir.no/lk20/kro01-05

Utdanningsdirektoratet (2017). Overordnet del – verdier og prinsipper for grunnopplæringen. https://www.udir.no/lk20/overordnet-del/

Utdanningsdirektoratet. (2019, 18. november). *Hva er nytt i kroppsøving?* https://www.udir.no/laring-og-trivsel/lareplanverket/fagspesifikk-stotte/nytt-i-fagene/hva-er-nytt-i-kroppsoving/

Vinje, E. E., Haugen, F. L., Vagle, M., Aaring, V. F., Fon, K. P., Brattenborg, S., Sandell, M. B., Walseth, K., Aartun, I., & Engelsrud, G. (2017). Girls' bodily activities in physical education: How current fitness and sport discourses influence girls' identity construction. *Sport, Education and Society, 22*(4), 442–459. https://doi.org/10.1080/13573322.2015.1050370

Webb, L., Quennerstedt, M., & Öhman, M. (2008). Healthy bodies: Construction of the body and health in physical education. *Sport, Education and Society, 13*(4), 353–372. https://doi.org/10.1080/13573320802444960

World Health Organization. (2010). *Global recommendations on physical activity for health*. https://www.who.int/dietphysicalactivity/global-PA-recs-2010.pdf