


Perspectives

The need for adolescents' agency in salutogenic approaches shaping physical activity in schools

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Summary

Physical activity (PA) contributes to health throughout life. In particular, young people can benefit from this. Schools can play a key role in providing learning conditions to experience meaningful PAs aimed at inspiring students to lifelong PA. In this article, we argue the need for a salutogenic approach in schools focussing on respecting and enhancing adolescents' agency with regard to their PA. This approach entails listening to adolescents' perspectives and inviting them to participate in actively designing and carrying out PA as a prerequisite for their inclusive engagement. We unpack the concept of agency by drawing on insights from the Capability Approach. This provides input for the integration of agency in health promoting schools and salutogenic approaches, to enhance PA-related agency. Finally, we outline a research agenda to, eventually, create opportunities for students in schools to expand their PA-related agency.

Lay Summary

Physical activity (PA) contributes to health throughout life. Schools can play a key role in fostering meaningful PA experiences to inspire students to lifelong PA. This requires schools to focus on students' personal aspirations, providing them with the space to develop their autonomy and find opportunities to decide and act upon expanding their agency with respect to the physically active lifestyles they deem meaningful.

Key words: salutogenesis, adolescents, physical activity, agency, capability approach

INTRODUCTION

Being physically active contributes to health throughout the lifespan (Poitras *et al.*, 2016; World Health Organization, 2018). Regular physical activity (PA) improves physical health, and contributes to mental health, quality of life and well-being (World Health Organization, 2018). Young people can benefit from being physically active both for their current and future health and well-being because of the biological benefits, such as improved muscular and cardiorespiratory fitness and reduced risk of diabetes, and psychosocial benefits, such as self-esteem and well-being (Cavill *et al.*, 2001; Devis-Devis *et al.*, 2015; Poitras *et al.*, 2016). Guidelines were developed and recently updated to recommend that children and youth should engage in an average of 60 min of moderate-to-vigorous PA daily (Bull *et al.*, 2020). However, despite the availability of a wide variety of PA programmes and activities, still many adolescents do not choose (more) physically active activities (Guthold *et al.*, 2020).

Schools can play a key role in providing multiple PA opportunities, as most young people spend large amounts of time there (McMullen *et al.*, 2015). Whole-of-school multiple component approaches have been successful in increasing student PA, reaching the recommended 60 min (McDonald *et al.*, 2018; Van de Kop *et al.*, 2019). This is facilitated by, amongst other things, the formal curriculum, PA enhancing school policies, physically attractive school environments, participatory pedagogies, safe infrastructure around the school and community links (McMullen *et al.*, 2015). These components, also integrated in the Health Promoting Schools (HPS) framework, facilitate PA in different school settings such as physical education classes, transport to school, recess, classroom activities and pre- and after school programmes [Okely, 2011; McDonald *et al.*, 2018; International Society for Physical Activity and Health (ISPAH), 2020].

In addition to providing sufficient PA opportunities, schools should strive to educate and inspire young people for lifelong PA—having their short-, middle- and long-term health and well-being at heart (Fairclough *et al.*, 2002). This entails, amongst other things, that young people discover enjoyable PA experiences and learn to integrate PA in their daily lives and contexts. To be able to relate to that, it is important that schools recognize that adolescents' PA perspectives and behaviour are

influenced by their biological endowments, as well as their socio-ecological contexts (e.g. Devis-Devis *et al.*, 2015; Beni *et al.*, 2017; Perez *et al.*, 2017; Abdelghaffar and Siham, 2019; Umstätt Meyer *et al.*, 2019). Moreover, conditions in which adolescents grow up not only determine the possibilities they recognize in their social and physical environment; they also attenuate their aspirations regarding what they deem inaccessible to them (Hart, 2012; Elster, 2016; Terlazzo, 2016).

The HPS framework acknowledges this and explores health issues within the context of the students' lives and communities, putting emphasis on aspects such as student participation and sense of ownership (Turunen *et al.*, 2017; Dadaczynski *et al.*, 2020). The importance of these aspects is underlined among findings of several authors. Some contend that negative experiences or a rather passive role of adolescents in shaping PA is reason for concern in terms of preparing adolescents for lifelong PA (O'Connor *et al.*, 2012; Devis-Devis *et al.*, 2015; Ladwig *et al.*, 2018). Other authors report successful experiences when involving students in the design and decision-making concerning PA in schools (McMullen *et al.*, 2015). This emphasizes the importance HPS puts on developing student competencies to understand and influence their behaviours and school contexts and advocate students' active participation (Turunen *et al.*, 2017; Dadaczynski *et al.*, 2020).

Additionally, empirical research supports the notion that for students to engage in PA, it is important they perceive these activities as meaningful, resonating with their core values, appealing to their drivers and made possible by facilitating contextual factors (Okely *et al.*, 2011; Beni *et al.*, 2017; Boonekamp *et al.*, 2020a). These studies show that students are able to recognize resources in themselves, their social and their physical environment that encourage or hamper their PA. These resources become assets for PA when students are able to recognize, understand and employ them in a meaningful way (Pérez-Wilson *et al.*, 2020). To educate and inspire young people to live physically active lives, it appears essential to develop meaningful PA experiences and expand their realistic choice options.

For young people to aspire to what is not readily available, they need to be able to form conceptions of what they desire, and to perceive themselves as having the potential for goal-oriented action towards its achievement (Hart, 2012; Meesters, 2018). This aligns with the notion of 'agency' as a driving force in striving

to lead a flourishing life (Sen, 1985, 2001; Nussbaum, 2009; Claassen, 2017). In the school context, agency translates into students learning to become aware of and reflect upon their context and recognize what they want to change and which opportunities they have or need to be able to pursue their life goals. This requires that they understand the situation, feel capable to act, and that actions are deemed meaningful in light of those goals. Moreover, they need to perceive they have a certain freedom to act, which requires assuming the responsibility to reflect and be responsible for their own choices (Sen, 2001).

This resonates with the salutogenic model of health underpinning health promotion action. This model argues that in the process leading to a person's health and quality of life, one's ability to manage life events is key (Lindström and Eriksson, 2010a; Bauer *et al.*, 2019). This ability is referred to as sense of coherence and can be described in three dimensions—comprehensibility, manageability and meaningfulness—(Antonovsky, 1987). *Comprehensibility* entails a person's belief that they can understand events and challenges in their life. *Manageability* comprises a person's belief that the resources are available and within their control to deal with issues that cross their path. *Meaningfulness* stands for a person's belief that things in life are interesting, motivating and a source of satisfaction. Thus, the salutogenic model clarifies the relation of adolescents' appreciation of PA and their comprehension (comprehensibility) and management of their PA options (manageability) and whether they are related to the aspects they consider important (meaningfulness) (Quennerstedt, 2008; Boonekamp *et al.*, 2020a). Some studies confirm the effectiveness of interventions aiming at increasing sense of coherence, which led to an increase in frequency of leisure PA on the short and middle term (Bronikowski, 2010; Thedin Jakobsson, 2014); these results are promising.

Additionally, Self-Determination Theory (SDT) acknowledges that increasing PA behaviour for many people is not intrinsically motivating or enjoyable. To engage and internalize new behaviour, people must value PA and embrace it as important (Ryan *et al.*, 2008). Instead of imposing some externally defined interest of PA, relating PA to what people themselves deem valuable in their lives may be more effective. SDT argues that to internalize behaviour, three psychological needs are vital: the sense of autonomy, competence and relatedness (Ryan *et al.*, 2008). SDT considers autonomy as self-governance, which continually evolves while being influenced by biological and social conditions (Ryan and Deci, 2006). Thereby, the autonomy to act

forms a continuum ranging from controlled regulation to true self-regulation. The second basic psychological need is the sense of confidence and competence; a person needs to feel capable and able to choose and act, having the skills and tools and support. The third psychological need, relatedness, refers to a need to feel respected, understood and cared for by others. Addressing these needs in a whole-of-school approach is important to motivate young people to become and stay physically active (White *et al.*, 2021).

HPS, salutogenesis and SDT provide theoretical frames that, although from different angles and at different abstraction levels, connect implicitly with the relation between agency and individual well-being. Moreover, they do not form mutually exclusive theoretical perspectives. From a socio-psychological perspective, the three psychological needs that motivate an individual to self-initiate behaviour explained in the SDT, resonate with the salutogenic notion of sense of coherence. However, within SDT, the term human agency refers to the motivated behaviours that emanate from a person's integrated self (Deci and Ryan, 1995), but it appears less well-developed as an integral view of the person compared to the salutogenic model of health. Moreover, neither the salutogenic theory nor the HPS approach consider whether and how students will act in the ever-changing socio-economic, cultural and physical contexts of their daily lives or within the health facilitating school context.

In sum, the main existing frameworks for enhancing PA touch on, but seem unable to provide full coverage of the scope of adolescent agency into meaningful PA experiences in and outside the school environment. We will develop this further by exploring the concept of agency and proposing to integrate agency in the salutogenic model of health and HPS framework.

AGENCY

The concept of agency is used in various disciplinary fields and has many meanings. As we are interested in how adolescents can achieve agency within the school setting, we found the conceptualization of agency in studies into teacher agency very helpful (Biesta and Lawy, 2006). In this context, agency is considered the result of the interaction between individuals and ecological conditions. Rather than an isolated property or capacity, agency is viewed as a capacity that occurs under certain conditions.

[T]his concept of agency highlights that actors always act by means of their environment rather than simply in their

environment [so that] the achievement of agency will always result from the interplay of individual efforts, available resources and contextual and structural factors as they come together in particular and, in a sense, always unique situations. (Biesta and Tedder, 2007, p. 137)

This ecological conceptualization can, implicitly, also be found in the Capability Approach (CA; see Sen, 1985, 2001; Nussbaum, 2001, 2008) which paints a nuanced picture of agency. Sen (2001) puts forward the notion that individuals strive to live the lives they want to live according to what they value and that the degree to which they are able to do so by virtue of their personal endowments and their circumstances determines one's sense of well-being and health. As Sen argues, this not only concerns experiences of—and having—well-being, but also recognizing people as responsible persons: we can decide to act or not to act 'and can choose to act one way rather than another' (Sen, 2001, p. 190). Sen defines an *agent* as 'someone who acts and brings about change, and whose achievements can be judged in terms of [their] own values and objectives' (Sen, 2001, p. 19). To be able to live life in such a way it is important a person has the resources, freedom, and opportunities (capabilities) to make choices that fit with these values (Venkatapuram, 2013; Jansen et al., 2018a).

The way in which the CA explains and develops agency seems to fit well with our context of PA, health and quality of life and the theoretical frameworks of HPS, salutogenesis and SDT. Agency can be viewed as an assessment of 'what a person can do in line with [their] conception of the good' (Sen, 1985, p. 206), in (Alkire, 2008, p. 3). This includes both the element of being able to reason about what one values and has reason to value, as well as the element of directing one's actions. Agency in itself is an intrinsic property of every human being which is influenced by one's personal endowments and needs, physical and social contexts (Venkatapuram, 2013). An individual's agency skills are thus influenced by [their] social position and by the choice options their physical and social environments offer. Claassen (2017) has further developed the conceptualization of agency and argues that an agent is someone who acts while trying to realize the ends which they value. An agent needs to perceive having both the autonomy and the freedom to realize these ends thus considering autonomy and freedom as the main constituents of agency. In Claassen's rationale autonomy forms an initial logical stage of agency in which 'an agent deliberates [their] goals and chooses adequate means to realize these goals' (Claassen, 2017, p. 1282). Freedom thus acts as a 'second stage when an agent tries to realize his/her/their

goals in practice'. To be able to act, an individual needs both the capacities to act, as well as the opportunities to access options and resources to pursue their goals without others interfering, and thus 'full agency requires both freedom and autonomy' (Claassen, 2017, p. 1282). In other words, whereas autonomous agency means being able to set your own goals, free agency means being able to act upon and pursue these goals. For our present argument, this implies that adolescents should want to (autonomy) and be able to (capacity) pursue their own PA goals, and feel encouraged by their social and physical context to include PA in their own set of life goals (experience freedom) in order to engage in lifelong PA.

An individual's perceptions and capacities of autonomy and freedom are in general influenced by and inherited from the socio-historical and political contexts they move in. Many, if not most, options people have, are socio-historically constructed (Claassen, 2017). Thus, they will set and realize many of their goals based on and within the social contexts they live, work, study and play in. This can be referred to as their *participatory* agency (Claassen, 2017), which aligns with the definition of Biesta and Lawy (2006). However, with respect to fostering their agency it is also necessary that people are aware of their options and can consider options even beyond their direct social contexts. This led Claassen (2017) to reference this as *navigational* agency: the ability to move between different social contexts, as well as to reform existing social contexts or to create new practices. Furthermore, to experience full agency individuals need to perceive themselves as being really free to choose the options according to their values, without being manipulated by others.

Table 1 shows an adaptation of Claassen's components of agency to our context of PA in schools (Claassen, 2017). Navigational agency is important for PA programs in schools because in school contexts students in general do not have realistic control over choosing to switch classes, change or leave school. Therefore, we question whether students experience navigational agency sufficiently for them to exercise autonomy. Whereas exiting school practices may be impossible or difficult, having students reflect upon, contribute to, influence and co-create PA, is indeed a way of providing them with the freedom to exercise autonomy and supports them in becoming true navigational agents, ensuring their engagement now and in the future.

The components of agency in Table 1 are implicitly or explicitly part of the mentioned theories and frameworks. However, the explicit focus on agency reveals the need for professionals to provide conditions for students to learn to reflect upon what makes PA experiences meaningful and how they can choose and organize

Table 1: The components of individual agency in PA in schools (Adapted from Claassen, 2017)

	Autonomy (rational deliberation)	Freedom (freedom to act)
Intrinsic endowments, skills and talents of students	(1a) Abilities to <i>set</i> personally valued goals and choosing adequate means	(2a) Capacities to <i>realize</i> personally valued goals
Contextual options and resources in schools	(1b) Awareness of options (not manipulated by others)	(2b) Choice options (not-interfered by others)

them autonomously and freely. Co-creating PA in schools would enhance the sense of agency in students and would provide them with the ability to create PA opportunities in and outside school, in their own contexts.

ARGUMENTS TO SHIFT FOCUS TO ENHANCING AGENCY FOR STUDENT ENGAGEMENT

In the section above, we elaborated how enhancing adolescents' agency more explicitly and more intensively could be a promising way forward for lifelong PA engagement. We expand this proposition by summing up at least three arguments why it is important and necessary to engage adolescents in the design and organization of PA, based on more general moral, pedagogical and empowering practice considerations.

The first, and moral, argument is that listening to and respecting children's and adolescents' views is a moral obligation, legally enforced by Article 12 of the United Nations Convention on the Rights of the Child (Assembly, 1989). This Article is centred around two key elements: (i) the right to express a view, and (ii) the right to have the view given due weight on issues that concern them. Lundy argues that the remit of this Article 12 is widely cited but often misunderstood, and as a consequence applied incorrectly (Lundy, 2007). The successful implementation of Article 12 of the UNCRC requires the consideration of the implications of four separate factors and their relationships with the two key elements: Space, Voice, Audience and Influence (Lundy, 2007):

- i. Space: children must be given the opportunity to express a view;
- ii. Voice: children must be facilitated to express their views;
- iii. Audience: the view must be listened to.
- iv. Influence: The view must be acted upon, as appropriate.

Thus, children and adolescents should not only be listened to, serving right to Fricker's conception of epistemic justice—fully acknowledging them in their human capacity as persons that have knowledge; they should

be encouraged and given the opportunity to influence decisions that concern them (Fricker, 2007).

A second, pedagogical, argument is that active participation of adolescents renders developmental benefits both on an individual and wider social level (Head, 2011). Active participation and meaningful engagement have a positive effect on adolescent motivation, ownership and health-related issues. They can also increase their skills, competencies and knowledge, enhancing their self-esteem and personal development (Beni *et al.*, 2017; Griebler *et al.*, 2017). On a social level, adolescents learn about democratic processes and develop a moral sense through their interactive participation (Turunen *et al.*, 2017; Dadaczynski *et al.*, 2020). Furthermore, it is important they learn not to accept their circumstances as 'given' but consider how they can act and influence themselves, or the conditions in their context, to improve their possibilities to live the life they want to lead (Freire, 1974; O'Connor *et al.*, 2012; Venkatapuram, 2013; O'Connor, 2019).

A third argument is that active engagement creates more effective strategies and interventions. Studies show that students' active participation has a positive influence on their perspectives, shifting their focus towards their personal, social and environmental assets and potential, rather than on risks, deficits or difficulties (Griebler *et al.*, 2017). Having adolescents reflect upon their assets helps them to make explicit how they perceive their world, what they value and deem possible related to PA. This is important because adolescents' perceptions of their possibilities for PA may differ from how researchers, teachers or other professionals interpret them. These insights are important for both adolescents and PA professionals to guide the better design of meaningful PA interventions and strategies. Several authors recommend facilitating meaningful PA experiences by aligning interventions to mirror needs, preferences and interests of students, choosing student-centred methods and teaching styles which involve students in decision-making (Cale and Harris, 2006; Beni *et al.*, 2017). Thus, schools can play a crucial role when developing PA options with students in an engaging way (Daly-Smith *et al.*, 2020).

Within Health Promotion theory, other concepts similar to agency have been proposed to unravel and explain behaviour and identify influencing determinants; e.g. empowerment, perceived self-efficacy, human agency, perceived behavioural control or locus of control. However, while these concepts offer useful instrumental approaches to PA stimulation, we find that they provide less satisfactory coverage of the moral argument—that adolescents are entitled to having their own views taken seriously—or the pedagogical argument—that encouraging autonomy is an end in itself for education.

A salutogenic and HPS approach to enhance adolescents' PA participation in schools would entail dialoguing with students about their perspectives on social and physical contexts and their own talents, skills, aspirations and passions related to being physically active. Contextually provided options and personal endowments could be considered assets for PA once students are able to recognize and utilize them (Pérez-Wilson *et al.*, 2020). Several studies demonstrated that adolescents are capable of verbalizing the meaningfulness of their PA experiences and how physical education influences their lifestyles (Martins *et al.*, 2018; O'Connor, 2019; Boonekamp *et al.*, 2020a,b). Encouraging students to make their assets to be physically active explicit, helps them to reflect upon their PA wishes, needs and options. Peer conversations about these assets support them to deliberate what they value, both individually and as a group. It sparks awareness of individual and collective opportunities and assets and how these can be employed in personal and school contexts. In terms of the salutogenic model of health this contributes to sense of coherence and enhances students' sense of control over their PA options and decisions (Pérez-Wilson *et al.*, 2020). Hence, schools facilitating students' active participation, should involve them in shared decision-making on PA strategies and options.

AGENCY AND THE SALUTOGENIC MODEL OF HEALTH

Based on the moral, pedagogical and health promotion arguments described earlier, including agency into the salutogenic model of health underpinning health promotion actions, could strengthen its relevance and effectiveness. The Ottawa Charter (World Health Organization, 1986) which describes the principles of health promotion, has respect for human rights; it also considers people as active participating subjects (Lindström and Eriksson, 2006). The salutogenic approach and the Health Promotion Movement (Eriksson and Lindström, 2008) are both strongly based in

Human Rights and strive for equity, empowerment and engagement. Therefore, seeking further alignment between adolescents' own goals and the goals of Health Promoting strategies is a sensible step. After all, the overall aim is to enable individuals and communities to increase control over the determinants of health thereby improving health to live an active and a productive life (Ziglio *et al.*, 2000; Eriksson and Lindström, 2008; World Health Organization, 2018).

The salutogenic model of health and more specifically the sense of coherence direct attention to many aspects relating to agency such as the availability and manageability of resources, the elements of sensemaking and meaningfulness. However, as Antonovsky stated himself 'a strong sense of coherence may be good for one's health but says nothing about one's values' (Antonovsky, 1991). As such the salutogenic model of health does not focus on people realizing their own vital goals, or to the freedom to choose actions to achieve these vital goals. The focus is rather on coping with stressors, which is also seen in other recent approaches to health and well-being. Therefore, integrating agency into the salutogenic model of health recognizes people as actively pursuing their own goals and valued conceptions of a flourishing life, and managing resources accordingly. Furthermore, it shifts emphasis towards human autonomy and the freedom to act towards achieving a range of valuable life goals within the diverse contexts of individual well-being.

With regard to PA in schools, this means that PA experiences should be designed to align with students' personal goals, perspectives and assets. Simultaneously, if activities align with what students would like to achieve for themselves, it could yield shorter and less complex implementation paths for PA and HP interventions. A focus on enhancing agency enables students to better cope with stressors: experiencing the autonomy and freedom to act is instrumental to self-determination and empowerment to strengthen or regain control in pursuing their own life goals. Moreover, a clear focus on agency encourages students to create meaningful PA experiences by searching for opportunities and employing their assets, which reflects an action element not covered by the salutogenic model of health. Including agency into the salutogenic model of health may shed light on this hidden dimension of quality of life extending beyond the focus on resources and assets to deal with stressors and circumstances (Lindström and Eriksson, 2010b).

As described an agency-oriented approach starts from people's personal goals and their capabilities to achieve these goals. However, it is important to

acknowledge that adolescents may only to a limited extent be conscious or able to aspire to and identify their realistic opportunities. A health promotion and salutogenic approach that adequately deals with agency should therefore yield a better understanding of people's perspectives and actions. Furthermore, it should be sensitive to the real choice options people have at their disposal, fostering people's abilities to broadening their horizons and aspire new possibilities extending their choice freedoms. Additionally, individuals also need to learn *how* to expand their own agency for pursuing their life goals and addressing life challenges.

Considering this line of reasoning there is potential in putting people and more specifically adolescents in the lead, respecting their own life goals and supporting them in trying to achieve them. This contrasts sharply with a professional-driven process in which investing in understanding why people do what they do only serves an instrumental purpose of making them do what the professional regards right or just. Therefore, we advocate including an agency-enhancing approach in salutogenic and health promotion strategies in general and an approach enhancing and facilitating students' agency in designing PA experiences, in particular.

AGENCY AND THE HPS

Considering the above, where does this leave the instrumental aims of PA as a means to enhance health and well-being? In the context of students and PA in schools as part of health promoting strategies, enhancing students' agency during their school years, supports them developing their sense of being able to lead the life they want to live. This contributes to the schools' societal task of educating students for the roles they will later play in society as citizens, parents, employers or employees or entrepreneurs, volunteers, or otherwise. It also harks back to the pedagogical argument in line with the motto of the Roman Philosopher Seneca: 'we learn not for school, but for life'.

In that light it is important that schools educate students to become aware of their options in their social contexts and to enable them to act upon their own and common goals without harming others or the environment. Or, in other words, educate them for critical and moral consciousness (Freire, 1974). It is important they learn skills to recognize and create opportunities that might otherwise go unnoticed. Moreover, students' perceptions of being able to change their situation by getting involved, is influenced by the space they are provided with having their voices heard and ideas acted upon. With regard to PA and health promotion in

schools, the inclusive engagement of students to participate in designing PA programs might create more meaningful PA experiences for them, with the overarching goal to enhance lifelong PA behaviour.

AGENCY BASED PA HEALTH PROMOTION: TOWARDS A RESEARCH AGENDA

Our rationale to integrate agency in the salutogenic model of health and in PA and health promotion strategies leaves several crucial questions to be answered. The most important one is: can sense of agency of adolescents be enhanced and if so, how? For this, it is necessary to consider how adolescents' values and preferences are shaped and adapted as a consequence of their aspirations and social norms (Terlazzo, 2014). Considering the wide variety of students' contexts including socioeconomic backgrounds, it is plausible that they objectively differ in the opportunities and choices at their disposal (Peralta *et al.*, 2019). Furthermore, it is also plausible that they differ in their aspirations, dreams, and life goals (subjective opportunities): whereas some may dream great dreams, others may consider it impossible to escape their own backgrounds or disadvantages. What opportunities or capabilities these adolescents actually have, will be some function of what is objectively possible on the one hand and what is subjectively deemed feasible or aspired by them on the other (Jansen *et al.*, 2018b). Apart from expanding objective opportunities, it is therefore also important to gain more insight into how to expand adolescents' horizons toward the lives they aspire to live. This emphasizes the importance to explore strategies to enable and facilitate young people to think about what they would like to achieve and what they need to pursue this, in terms of freedoms and competencies (Hart and Brando, 2018). Participatory strategies in which students deliberate together upon goals, resources, meaning-making and co-design of PA in schools seem promising in this regard (Beni *et al.*, 2017; Walseth *et al.*, 2018). This means a shift in perspective from finding a universal PA enhancing intervention, to a process of engaging adolescents themselves in the design and organization of PA in schools.

A second question is: how can schools provide the environment for such enhancement?

In this article, we have described agency as an aspect intrinsic to being human depending on the space provided by circumstances. Schools can provide the physical, psychological and pedagogical environment where students can gain experience at formulating life goals, aspirations and expanding their agency. This requires that schools provide the spaces where students can

discover and expand their potential for individual and collective agency. This will enable them to become insightful and develop life skills (i.e. critical reflection, deliberating, taking responsibilities in realizing plans) to develop and become resilient and self-conscious citizens (Biesta and Lawy, 2006). But, as we argued, this requires developing both participatory and navigational agency; they should learn how to exert influence on this environment. How to create the environments that allow for this? A first step is adopting a whole-of-school and HPS approach (McMullen *et al.*, 2015). Additionally, for the development of sense of agency of students a specific pedagogical style is needed (Walseth *et al.*, 2018). For (aspiring) teachers, providing the space for agency of students, may feel like they are losing control of the content and dynamics in the classroom. This makes creating the space for student agency not an easy task. It requires (future) teachers to be supportive of student agency as well as feeling able and equipped with the necessary skills and resources to facilitate and enhance agency with their students. A logical and necessary place to address, discuss and learn this would be in the curriculum and courses of (physical education) teacher training programmes. To achieve this, further research to conceptualize teachers' capabilities is necessary.

A third (cluster of) questions concerns the unequal distribution of opportunities for students. An implicit assumption is that students at schools move on a level playing field. However, there is ample evidence that students have unequal starting positions with regard to their own endowments, their socio-economic and physical contexts and that social determinants play an important role in the constitution of health (Hart, 2012; Marmot, 2015; Wang *et al.*, 2020). Schools often select high performing students to be engaged in activities which further develop their agency (Morton *et al.*, 2016). This perpetuates inequities within schools, particularly among students who may already have had a lower starting position regarding socio-economic contexts. Opportunities should be distributed to all students or even targeted towards those who have lower agency to begin with. Therefore, it is vital to include these circumstances in PA and health promotion strategies within schools and in across the school sector.

Finally, we argued that educating students to become agents in/of their own lives will contribute to them being better able to shape and live the lives they want to live, which in turn will lead to them leading healthy and productive lives. If the importance of agency of students is acknowledged, what strategies can health promoters then devise to help students to become agents within

their own lives and social and physical contexts? Further research and development are necessary to shed light on how agency in shaping PA can become part of the standard pedagogical whole-of-school approach in schools.

In closing, following our argument, we think that an agency perspective provides an important contribution for PA and salutogenic health promotion strategies in schools. A focus on agency implies that PA and health promotion interventions share, or shift focus towards students' own life goals—providing them with realistic opportunities to co-create conditions within which they are able to act autonomously and freely to pursue what they consider lives that they genuinely value.

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CONFLICT OF INTEREST STATEMENT

None declared.

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