Learning in networks: individual teacher learning versus organizational learning in a regional health-promoting schools network

Edith Flaschberger*, Lisa Gugglberger and Christina Dietscher
Ludwig Boltzmann Institute Health Promotion Research, Ludwig Boltzmann Gesellschaft, Vienna, Austria
*Correspondence to: E. Flaschberger. E-mail: edith.flaschberger@lbihpr.lbg.ac.at
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Abstract

To change a school into a health-promoting organization, organizational learning is required. The evaluation of an Austrian regional health-promoting schools network provides qualitative data on the views of the different stakeholders on learning in this network (steering group, network coordinator and representatives of the network schools; \( n = 26 \)). Through thematic analysis and deep-structure analyses, the following three forms of learning in the network were identified: (A) individual learning through input offered by the network coordination, (B) individual learning between the network schools, i.e. through exchange between the representatives of different schools and (C) learning within the participating schools, i.e. organizational learning. Learning between (B) or within the participating schools (C) seems to be rare in the network; concepts of individual teacher learning are prevalent. Difficulties detected relating to the transfer of information from the network to the member schools included barriers to organizational learning such as the lack of collaboration, coordination and communication in the network schools, which might be effects of the school system in which the observed network is located. To ensure connectivity of the information offered by the network, more emphasis should be put on linking health promotion to school development and the core processes of schools.

Introduction

Since the development of the healthy settings approach in the field of health promotion (HP), the launch of WHO’s Ottawa Charter [1], and the establishment of the European Network of Health Promoting Schools by WHO-Euro in 1992, now the ‘Schools for Health in Europe’ (SHE)-Network (http://www.schoolsforhealth.eu. Accessed: 29 July 2013), there have been efforts in most European countries to implement HP as a comprehensive approach in schools and school systems [2–4].

In this context, the ‘health-promoting school (HPS) approach’ was developed as a whole-school approach. School HP was defined as any activity undertaken to improve and protect the health of all persons attending schools, working in schools or interacting with schools to enhance both learning and health [5]. Implementing HP in the schools and school systems is a very complex process [6, 7]. Several actors from different sectors need to work together, to develop resources and must be encouraged to contribute, learn about and apply the concept. The whole school should be involved in supporting integrated and more durable changes in the school setting. Thus, not only does the professional performance of individuals need to change, but also it is crucial to target the level of the whole organization [8]. This comprehensive approach of HP would require schools to engage in organizational development efforts, of which one aspect is organizational learning. Organizational learning...
Individual learning—professional development and learning for teachers on school health promotion

Teacher learning can take place in various situations of teacher practice, including professional development [16]. Educational sciences allow some insights into potentially promising approaches in professional development and learning for teachers aiming at school improvement [16–18]. Traditional teacher education and training typically lack an emphasis on collective learning and transferability into practice and thus are often rather isolated endeavors that do not facilitate long-term change in the school setting. Hargreaves [19] concludes that teachers often learn best in their own professional communities, not in off-site locations or without integration into everyday work life in schools. To achieve school improvement, the creation of professional learning communities (PLCs) is recommended. In PLCs, teachers, usually from one school, create a shared vision, engage in reflective professional communication, co-operate and share responsibility for their students’ success.

Organizational learning—networks in school health promotion

After the launch of the Ottawa Charter [1], inter-organizational networks became a central instrument for supporting the transformation of various settings, including schools, into health-promoting settings. According to a narrative review [23], the support of individual learning is one of the most common strategies in HP networks, including networks of HPS. However, supporting individual learning is not enough.

From a sociological systems theory perspective, social systems, of which organizations are one type, are complex and difficult to impact on as they are characterized by self-referentiality [24]. Organizational learning in this perspective can be seen as a process where collective bodies of knowledge are developed further within the system’s own laws [25]. Interventions aiming only at the individual level in this perspective are not enough; a possibility to affect organizational
Learning is the creation of learning networks as subsystems at a formal or informal level. What can be problematic is ensuring that the learning progress attained in the subsystem affects the whole organization. A systematic integration of learning subsystems in the organizational context is seen as a possible solution to this dilemma [25]. The decision for that, however, has to be made in the organization itself, as organizational systems reproduce themselves on the basis of organizational decisions [26].

In a systems theory approach, organizations are considered as embedded in specific environments that impact on the relevance of concepts such as HP, and on their likelihood to consider HP in their organizational decisions [27, 28]. For schools, HPS networks can be one relevant environment in this respect. Such networks among organizational settings can be regarded as loosely coupled inter-organizational structures in which representatives of the organizations involved build a system of interaction that is expected to instigate change in the participating organizations. Thus, such networks are in existence only if the cooperating organizations use the output of the interaction between the network members as a basis for their own organizational decision-making [29]. A study on a school network for school development in Germany refers to this in a similar way, stressing the importance of communication between the network level and the level of operational activities in the respective schools [30].

In a systems theory perspective, however, there is no linear effect caused by changes in the environment, i.e. no information is directly imported from the environment into the system [24, 28]. Irritations from the environment are only meaningful to the system if they can be related or make a difference to the operations of the system [28, 31]. Thus, the connectivity of new information to existing information in the organization is seen as crucial for triggering successful organizational learning [25].

To trigger change toward HP in the participating schools, networks can address the teachers in the schools through individual learning offers. However, they can also aim more directly at impacting organizational change by demanding specific criteria for participation, such as the implementation of organizational HP structures (e.g. a school HP coordinator and a team or annual action plans). In addition, as collective actors, they can apply specific advocacy strategies to create favourable conditions for HP (e.g. in the form of legal regulations) and to increase public awareness of HP so as to make HP as an organizational strategy more attractive [23]. However, there is a lack of studies investigating the connectivity and appropriateness of such offers as those provided by HPS networks.

The regional HPS network

The effective development of the HPS approach depends on the national or regional context [2], with many HPS networks operating on a regional level. One such regional network is in the focus of this study. It was founded in an Austrian city in 1997 with an initial group of 11 schools. In 2011, at the time of data generation for this article, the network comprised 65 network schools. The network was initiated by the respective city as part of the city’s programme as a WHO Healthy City. Today, the steering group consists of members from a municipality-related organization focused on HP, a statutory health insurance provider, the regional University of Teacher Education and the regional school inspectorate. An employee of the University of Teacher Education functions as network coordinator.

The network comprises different school types: primary schools (the majority), schools of nursing, secondary (academic) schools, pre-vocational schools, special needs schools and secondary technical and vocational schools.

In 2011, the participating schools were assigned to three levels of membership: Level 1 represented the lowest level allowing schools to get a first glimpse of the network while focusing on health education in the form of rather isolated projects. Schools in levels 2 and 3 had a more binding cooperation with the network, expressed through the signing of a cooperation agreement. The aim of level
2 schools was to implement school HP as a settings-oriented concept. In level 3, the most sophisticated level, schools worked towards combining school development and HP activities. Network schools in levels 2 and 3 also participated in the evaluation of the network, whereas level 1 schools could not be reached or motivated for participation.

In 2011, the network schools were able to profit from a number of offers: e.g. quarterly network meetings (including lectures and workshops), seminars and on-site coaching (only at level 3). In addition, special network meetings, such as a yearly convention and biannual networking events for health coordinators and headteachers of level 3 schools took place. Network schools in levels 2 and 3, which adhered to specific criteria, could apply for project funding. Schools wishing to join the network first held a ‘health conference’ with a network representative. If the faculty collectively decided to become a member of the network as a level 2 or 3 school, a school HP coordinator and a school health team had to be appointed. Sometimes the headteacher functioned as the school HP coordinator or, in many cases, worked closely with him/her. The ultimate goal of the network is to support schools in the implementation of HP, ideally as a comprehensive settings approach, connected to school development processes.

**Research questions**

This study focused on the question of how different stakeholders of network schools perceive learning in the network: the network coordinator, the steering group, the school HP coordinators/headteachers and other, less network-experienced teachers in the network schools. This included investigating the different stakeholders’ concepts of learning, identifying the most relevant situations for learning, and analysing who actually benefits from learning opportunities in the network. Consequently, another research question was how the situation as described by the stakeholders related to our theoretical presuppositions about the necessity of organizational learning. Therefore, possible barriers to organizational learning were analysed.

**Method**

To investigate the research questions introduced earlier, this article used data generated within the evaluation of the network, which has been ongoing since 1997, using a mix of qualitative and quantitative methods. The general aim has been to evaluate how the steering group and the structure of the network help schools to implement HP.

In 2011, the evaluation focused on learning in the network. Table I gives an overview of the data generated in this context and drawn upon for the specific research questions on which this article focuses. Participation in all stages of data generation was voluntary and the participants’ consent was obtained after informing them about their rights and assuring confidentiality. The semi-structured qualitative interviews were recorded and transcribed.

| Table I. Overview of data generation for the present research focus |
|------------------------|------------------|-------------------------------------------------|
| Method | Number | Participant(s) | Main content |
| Interview | 1 | Network coordinator | Learning in the network, network structure, support by the network for schools |
| Interview | 8 | Teachers from network schools (not members of the health teams) | Knowledge about the network, transfer of knowledge within the schools, (general) cooperation within the schools |
| Group discussion 1 | 6 | Steering group of the network | Network structure, support by the network for schools |
| Group discussion 2 | 5+6 | HP coordinators/headteachers of network schools | Learning in the network, cooperation within schools |
verbatim. They lasted around 20 min (teachers) and 1 h (network coordinator). Teachers not belonging to their schools’ health teams were recruited through their headteachers or HP coordinators.

The group discussions were characterized by the facilitator asking only a few questions and letting the group take over the negotiation of the themes discussed [32]. They were recorded and transcribed verbatim and lasted 30 min with the steering group and approximately 20 min each with the school HP coordinators/headteachers. Although the length of the discussions (due to participants’ time restrictions) is a clear limitation, the group discussions generated rich data.

Some questions in the interview guides and stimuli for the group discussions directly targeted the topic of learning in the network. In addition, many more references to the issue were identified in the other parts of the interviews or group discussions.

To analyse the qualitative data, thematic analysis and two hermeneutic methods—systems analysis and micro-discursive analysis—were used [33]. In line with the used methodology [33], the hermeneutic methods were chosen as we intended to also focus on latent, rather than solely on lexically obvious meaning to analyse social systems.

For thematic analysis, themes/codes were identified within all data (interviews and group discussions) through a combination of inductive and deductive coding. The interviews were then coded following the established code system. In an iterative process, re-coding took place if necessary. Finally, the themes were structured and described.

For systems analysis, group discussions and parts of the interviews were structured into different thematic sections, usually half a page long. These sections were each paraphrased and analysed by a team of three to five researchers in terms of the context and of the (hypothetical) reasons for statements. In this way, hypotheses about the social system and context were developed. The results of systems analysis were then linked to the results of the thematic analysis.

Furthermore, specific sections in the transcripts, defined by the researchers as crucial with respect to the research questions, were analysed with a form of micro-discursive analysis, focusing on linguistic characteristics of the text, primarily the appearance of certain metaphors [34]. The results of this kind of analysis shown in the present article refer mostly to the question of possible barriers to organizational learning.

Two methods were used to ensure the validity and trustworthiness of the data aiming at studying a social system, i.e. the network. On the one hand, data triangulation [35] was used to minimize the possible weaknesses of using only one kind of data and to take the system perspective into account. The data from the different stakeholders were studied for that purpose. On the other hand, analyses and interpretation of results were conducted in teams of up to five researchers.

Results

The different concepts of learning in the network

Data from all stakeholder groups included in the analyses contained references to learning concepts. The members of the steering group, including the network coordinator, stressed the importance of networking in the sense of inter-organizational exchange and sharing experiences between the network schools as one of the main strategies of the network to support schools in their implementation of HP: ‘So that the schools learn from each other, you should enforce that’ (network coordinator). However, they also talked about the difficulties in motivating the schools to engage in exchange and to learn from each other. The network coordinator would especially like to see the more experienced schools support those that are new to the network. In the perception of the steering group, one of the possible reasons for the lack of collaboration between the network schools is an out-dated role perception of teachers: ‘This [the schools not networking] also still relates to the old role perception of teachers that you do not work in a team, that you are working alone’ (steering group).

The network seems to be perceived as more of a service provider than a platform for active
participation and learning. According to the network coordinator and the steering group, the member schools are rather passive when it comes to participation in the network. ‘I think that the dependency of the schools is rather great, but it is also a self-imposed dependency. They simply want to lean back and receive something’ (network coordinator).

The analysis showed a rather traditional understanding of learning on part of at least some of the school representatives in the network. Learning was often understood as primarily a transfer of knowledge by lectures. At least for some school HP coordinators/headteachers, benefiting from the network by, for example, exchanging ideas and learning in the network were two different concepts: ‘There is a difference between benefiting and learning because I think you can often benefit from exchange here (…) this is not really learning for me, it is the collection of ideas’ (school HP coordinators/headteachers).

In contrast to individual learning experiences, school representatives hardly mentioned organizational learning occasioned by the network. As will be elaborated on later, input from the network was rarely transferred to the entire faculties, especially in larger schools.

In conclusion, three forms of learning in the network were identified in the analyses: (A) individual learning through input offered by the network coordination (e.g. through lectures at network events), (B) individual learning between the network schools, i.e. through exchange between the representatives of different schools and (C) learning within the participating schools, i.e. organizational learning initiated by the knowledge, skills or impulses derived from the participation in the network.

Most relevant opportunities for learning in the network

In the eyes of different stakeholder groups, different situations in the network were identified as relevant learning opportunities. The network coordinator named the so-called ‘health conferences’ (A—network input; C—organizational) as one of the primary strategies of the network to implement HP in the network schools. In contrast, the school representatives hardly mentioned these kick-off events when talking about learning in the network or their participation in it.

The network coordinator further identified participation in inter-organizational network meetings (A—network input; B—between schools) as an important aspect of learning with respect to the transfer of information. In these network meetings, representatives from the network schools not only received information relating to the network’s organization but also input on school HP. The school HP coordinators also mentioned the network meetings as relevant learning situations in general, although opinions about their impact differed. Especially the members of the more experienced network schools felt rather under-challenged by the topics of these meetings (in particular, healthy eating and physical activity). Workshops covering more innovative topics, such as health-promoting leadership, were perceived as more popular and effective.

As previously mentioned, learning/exchange between schools (B) was perceived as an important learning opportunity by the steering group and the network coordinator, but not by the school representatives. Teachers not part of the school health teams never even mentioned their schools’ exchanges with other network schools.

In 2011, a specific training course (A—network input, C—organizational) was offered in connection with the network, aiming at supporting the schools in their transformation to HPS. The schools were encouraged to send several teachers to the series of seminars, rather than having only one teacher participating in all the seminars to facilitate broader knowledge dissemination as a background to organizational learning. However, comments from school HP coordinators showed that participation in a team could not be achieved in all the schools. Furthermore, difficulties in transferring knowledge and skills into the school’s work were reported. Contrary to expectations, the implementation of school HP rather ‘stood still’ (school HP coordinators/headteachers).
School representatives also talked about learning through evaluation results, which triggered reflection processes within some network schools (C—organizational). The results of a survey about teachers’ health in the network schools provided impulses to discuss the issue in the whole faculty: ‘This survey regarding teacher satisfaction and teacher health, for me that was almost revolutionary’ (school HP coordinators/headteachers). However, the minimum requirement for this was that enough teachers per school completed the questionnaires, so that a result for the respective school could be conveyed.

In terms of impulses for organizational learning (C), ‘health fairs’ organized by the schools themselves were favored over other approaches by the network coordinator. Health fairs were organized in many network schools as one-day events to put HP in the spotlight for the whole school. Usually, these fairs included different workshops focusing on HP for students and teachers. The network coordinator stressed that organizing a health fair would probably not be immediately successful in bringing about a HPS, but that ‘it’s about small steps’ (network coordinator). This view was confirmed at the school level as health fairs were associated with the network or HP in general by some of the teachers interviewed.

Some school representatives mentioned working in teams of teachers as part of school development processes (C—organizational). Although most of the representatives’ schools had health teams, not all of them seemed to be fully integrated into general school development.

Who was reached by and benefited from learning opportunities in the network?

In the view of the network coordinator, in most cases, the network only reached the school HP coordinator or the health team. This was also confirmed by statements of the school HP coordinators/headteachers, e.g.: ‘There is a lot of input that in the majority of cases gets stuck within the health team’ (school HP coordinators/headteachers).

Even more so, data suggested that school HP coordinators/headteachers experienced severe difficulties in involving the whole faculty in HP activities: ‘(...) coordinators very often have the task of introducing it [school health promotion] to the school team which is totally fighting it’ (school HP coordinators/headteachers).

In some network schools, teachers not directly involved in HP knew about their school’s health team, its activities or workshops in relation to the network. However, teachers from other network schools did not even know who was involved in their health team: ‘Apart from colleague H. (...) there may be one [a health team], that’s not really clear to me’ (teachers outside health teams/TOHT). Thus, HP presented itself as rather insulated in these schools.

In contrast, some schools perceived HP-related seminars as something the whole faculty should be informed about. Teachers who had attended such training were encouraged to tell their peers about what they learned.

‘When it [the teacher training course] is about health promotion, then it is communicated to everyone, because this is something that the whole school supports or should support’ (TOHT)

External support by experts for organizational learning (C), financed by the network for level 3 schools, appeared to be more promising in reaching whole faculties. One teacher, who was not part of a health team, commented: ‘We also had some, I’ll say interventions with Mr. W., for example, where it was about the collection of the straining factors (...) for teachers over the course of the school year (...) and we worked in this direction and I think that it was done well’ (TOHT).

Barriers to organizational learning

Several barriers to organizational learning were identified in the evaluation data. They can be summarized as (i) reducing HP activities to projects and solitary work and (ii) a lack of coordination and communication in the schools.

The terminology in the data around willingness and resources for HP work indicates that HP is often understood as individual contributions and ‘add-on’ rather than as organizational efforts and
‘add-in’. For example, the network coordinator claimed that teachers were too ‘inflexible’ to also work for HP in their ‘leisure time’. Similarly, school HP coordinators/headteachers referred to HP as something ‘additional’ to their regular work, whose implementation was hindered by the lack of time or resources in an already tight schedule. In many cases, ‘inside–outside’ metaphors were used by those school members interviewed to describe the relation between regular school life and school HP. The latter was seen as something that came into the school from the outside, i.e. the network was also understood as something outside the school. The rather passive attitude of network schools about networking and working collaboratively in the network could also be seen in light of the earlier-mentioned remarks. The steering group also saw a connection with the problem of integrating school HP into the teachers’ professional role. Connectivity of the information from the network with most of the schools therefore seems rather limited.

As to communication and collaboration structures, the series of interviews with teachers outside their school’s health teams showed a heterogeneous picture with respect to a broader involvement of the school faculty in HP activities. While some teachers interviewed were even involved in HP activities in their own schools, others had hardly any in-depth knowledge about the network, related activities or the HPS approach as such.

‘I am relatively little concerned with the project or involved with it, thus I can say little, I only know that there are good contacts to the core team in the school, that they also start individual activities time and again. Little reaches me directly’ (TOHT)

In some network schools, teachers outside the health teams did not know what events took place in the network or where they could get informed. In other network schools, teachers received information about network-related training in teacher conferences or knew where to get news. Furthermore, many teachers, who were not members of the health teams, participated in on-site workshops on health-related topics initiated by their school HP coordinator.

Some of these differences seem to be due to school types and size. In secondary schools, which are usually larger than primary schools, the main way for teachers to exchange information and cooperate was within their subject areas. Consequently, information on and commitment to HP often stayed within a rather small group of people, i.e. a subsystem.

‘We, her colleagues from the social management area, are naturally more involved in the whole thing (…) the others did not really get the information’ (TOHT)

Schools of nursing can be considered as a very special school type in the network for various reasons. Teachers in schools of nursing have usually worked as nurses in a hospital before becoming teachers, thus they are used to working in teams: ‘On the ward, ideally you work together with other people and therefore this was not new to me. And I think that (…) we are not really lone warriors like other teachers’ (TOHT). Furthermore, health issues are intrinsic to the job of a nurse, thus an integral part of the curriculum, as is collaborative team teaching in various subject areas. The dissemination of information acquired in teacher training is compulsory. It seems that in the participating schools of nursing, the institutionalization of HP is easier to manage and more comprehensive than in most of the other network school types.

The transfer of information to school subsystems or to the whole school worked better in some schools than in others. The data further strengthen the notion that if a network school embraces a HP approach that includes school development or has already started a school development process and integrates HP within this, organizational learning is far more likely. HP has to become a ‘philosophy’ (TOHT).

Discussion

The analyses showed that traditional concepts of individual learning (A) are prevalent in all stakeholder groups in the network studied. A rather limited understanding and a lack of focus on organizational learning (C), which would also be
important from the perspective of the settings approach as outlined previously, was detected. Exchange between the different school representatives (B) also seemed to be rare.

The lack of emphasis on organizational learning is also reflected in the perceived learning opportunities. Especially at the school level, more traditional individual learning situations were mentioned and favored. It is therefore not surprising that at least in some of the network schools, the diffusion of HP information and active participation in HP activities appeared rather limited.

The analyses identified insufficient communication and collaboration structures and a lack of resources within the schools as barriers to the complex endeavors of organizational learning in some of the network schools. In addition, in some schools, a lack of experience in and willingness for teamwork was detected.

These problems are neither new nor confined to the Austrian situation or to the network in question itself [11]. School HP in its comprehensive form requires an organizational change in thinking and acting, which is obviously difficult to achieve. Concepts of organizational change, which are mostly derived from the managerial sciences, do not seem to work for many schools. The reason for that may be found in the fact that schools are public sector organizations and can be characterized by elements of Mintzberg’s professional bureaucracies [36]: The management is relatively weak due to high autonomy of the teachers and there is hardly any cooperation between the teachers. In many countries in (continental) Europe, particularly the German-speaking countries, schools have a rather low degree of autonomy [37]. The schools are part of the wider school administration system in which headteachers resemble heads of departments rather than chief executives of a firm. Many decisions of relevance to a given school (e.g. with respect to the curriculum, the school building, the budget, the faculty) are taken by the administration, not by the headteachers, so that it is only to some extent that they can take decisions of organizational relevance, including decisions on HP. However, in the organizational learning literature, the management’s role is to ensure coordinated efforts of learning and to create conditions favourable to organizational learning [25].

This might be amongst the main reasons why in many network schools there is still an understanding of HP as an approach focused on individual, unsustainable projects. Concepts such as a tendency of teachers to strive for autonomy in their work, to shy away from cooperation and to be in favor of parity within the faculty are discussed as teachers’ group norms (especially in German-speaking countries) [38], which can be seen as additionally counter-productive to prevalent approaches. Thus, teachers might feel that they have to do something in addition to their jobs, working overtime—unpaid, rather than jointly creating organizational change by integrating HP into their everyday work. Some of these barriers to school-wide and sustained learning for and implementation of a HPS mentioned by the participants in this study have already been described in other publications, e.g. conflicting tasks and demands or working overtime leading to over-exertion [22].

Furthermore, the problems of professional development for teachers identified in educational sciences can also be found in the network studied, as school HP coordinators have difficulty transferring knowledge and skills into their everyday school lives. The ability to build a professional community of teachers does not seem to be developed sufficiently. It appears that the network should have a stronger focus on integrating HP into school routines, rather than on implementing it as add-on measures. As opposed to the bottom–up approach of HP and given the characteristics of the schools at stake, teachers alone can hardly be expected to instigate health-promoting change in their schools. In terms of the theoretical background of this article, this further means that there might not be enough meaningful irritation from the environment, i.e. the network, to be relevant to the participating schools and thus support proliferation of the approach.

One way to tackle the problem would thus be to improve the collaboration between the health and education sectors as required by the HPS approach [5, 39]. This would mean better involvement of
higher administrative levels of the education sector in the activities of the network. In the network studied, the presence of the school inspectorate and the University of Teacher Education in the steering group is a very important and promising, yet apparently insufficient, feature according to the data. As also outlined in the international literature [5, 39], different perspectives on the issue exist in the two fields. It could be argued that, in many cases, the health field provides HP concepts without sufficiently taking into account the characteristics and needs of school settings, while the educational sector seems to have a tendency to adapt HP to current, often traditional educational practices, thus favoring health education and project-like implementation over HP and a school-wide settings approach. In this situation, attempts by a network, such as the one studied, to integrate HP into school development hardly achieve the desired effects, especially in schools without prior experiences in school development.

The earlier-mentioned concept of PLCs, an approach where teachers learn and work collaboratively with a shared vision, has not yet been taken into account in the network in question. It is hardly able to support the formation of teacher teams, not only between but also within schools. The question remains about whether a HPS network is able to overcome the difficult conditions in the school system that hinder organizational learning in schools. Presenting school HP more as a solution to problems than as an intervention that itself creates problems such as teacher over-exertion would be the key approach in line with sociological systems theory. Therefore, the understanding of the possibilities for integrating and profiting from the concept in the core processes of schools, teaching and learning, should be enhanced to improve connectivity.

Further research is needed on the question of how to reach whole schools and not only individual teachers in HPS networks or similar approaches, especially in countries where the school autonomy is low and teacher collaboration is relatively underdeveloped. In addition, more concrete support from higher administrative levels and a stronger focus on health-promoting teaching and learning would be needed.

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Conflict of interest statement

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