Health Education

Guest editorial: Leadership in school health promotion. The multiple perspectives of a neglected research area

Undoubtedly, since the adoption of the Ottawa Charter in 1986, schools have become one of the most developed health promoting settings worldwide. Over the past few decades, holistic intervention approaches have been developed and tested that address not only students but also teachers, non-teaching staff and target groups from outside the school setting (e.g. parents, community stakeholders). Despite the challenges of evaluating complex Health Promoting School (HPS) interventions, several reviews exist that point to positive effects of this holistic approach (Langford *et al.*, 2015; Stewart-Brown, 2006; Weare and Nind, 2011). In addition, in recent years there has been an increased focus on investigating facilitators and barriers to the implementation and thus the success and sustainable anchoring of school health promotion. In this context, the important role of in-school leadership and management practices have repeatedly been emphasized (Dadaczynski and Paulus, 2015; Rowling and Samdal, 2011). While leadership in general aims to stimulate a culture of change based on shared values and visions, management practices include administrative tasks such as planning, resource allocation and monitoring (Samdal and Rowling, 2011). Against this background, health promoting leadership has been defined as "[. . .] as leadership that is concerned with creating a culture for health promoting workplaces and values to inspire and motivate the employees to participate in such a development" (Eriksson *et al.*, 2010, p. 111).

Despite the growing body of research, research on leadership in school health promotion is still fragmented and sporadic. The shift in the role of school leaders within policy toward a greater emphasis on strengthening student well-being as part of a broader policy context linking school leadership, learning and well-being has received insufficient attention in educational or health research. Too often we have seen existing health education research treats schools' physical, social and emotional climate as a given setting (or "environment") in which individual-focused health interventions are implemented (e.g. Hunt *et al.*, 2015; Shackleton *et al.*, 2016). It is no surprise that many struggle to trace longer-term, sustainable impact on practice or policy. Sustained and effective take up of school-wide health interventions – that can result in *sustainable change and improvement* in health and wellbeing of adults and children – is highly unlikely to occur in the absence of strong leadership at the school level (e.g. Herlitz *et al.*, 2020). This is because exceptional leadership shapes, powerfully and profoundly, the organizational values, professional capacity and capabilities, as well as social and intellectual resources that are central to creating a learning-focused, happy and healthy school (e.g. Day *et al.*, 2016). In studies of the implementation of school health promotion policies, school leaders are largely identified as gatekeepers, highlighting the importance of their values and engagement (Deschesnes *et al.*, 2014; Simovska and Prøsch, 2016). The majority of study findings focus on the roles and responsibilities in initiating, supporting and sustaining health promoting change processes in schools. School principal support has shown to be associated with higher implementation and greater intervention effects (Kam *et al.*, 2003; Larsen and Samdal, 2008). However, when talking about leadership in school health promotion, other perspectives also come into play that have received little attention so far. Drawing on their concept of health-oriented leadership, Franke *et al.* (2014)

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developed an integrative approach by focussing on follower-directed leadership and self-directed leadership. While the first dimension refers to the creation of working conditions that maintain or promote the health of followers, the latter focus on internal resources of leaders to cope with own job demands or ensuring health promoting working routines.

Overview of the papers

Against this background, this special issue aims to map the different perspectives on leadership in school health promotion. It comprises six papers from Australia, Denmark, Germany, South Africa and Sweden. They draw on a range of theoretical perspectives and apply qualitative and quantitative methods.

Most papers focus on the role of school leaders in initiating, implementing and sustaining school health promotion. Based on semi-structured interviews, Cassar and colleagues explore barriers and facilitators of school leaders adopting and implementing the physical activity intervention Transform-Us! in primary schools in Australia. The interview guide and analysis approach to coding draws on behaviour change theories and theoretical constructs allowing for the analysis of individual, social and environmental influences on implementation behaviours. Next to four overarching themes (knowledge, goals, implementation factors and leadership), seven recommendations for increased adoption and implementation (e.g. presence of a school/programme champion(s), collaborative knowledge sharing, teacher autonomy in delivery, supportive implementation environment) could be identified.

In another paper, Skott draws on qualitative findings from two interrelated projects to identify the role of Swedish principals in establishing whole school approaches for health and well-being. The author challenges previous research on school leadership and its narrow focus on instructional leadership and school performance, and explores what new aspects of leadership can be made visible when this field of research is merged with research on the whole school approach to health. Five aspects for successful leadership could be summarized. Importantly, not considering health issues as separate from teaching practices made a difference in successfully establishing a whole-school approach. Moreover, actively coordinating professionals and building synchronized teams was identified as important aspects in order to develop structures and to introduce health promoting practices. Setting ground for distributing leadership and linking health promotion with quality development were other aspects identified.

The perceptions and expectations of roles and responsibilities on health promoting leadership were examined in other two papers. In their qualitative study, Kwatubana *et al.* interviewed school principals from South Africa regarding their perceptions of their role in school health promotion. The authors explore how principals perceive their role in implementing health policies related to curriculum-based programmes and promoting healthy school environments, contributing to the discussion of how such roles are enacted. Results indicate that respondents did not differentiate between complex concepts such as the HPS approach and less complex activities on school health promotion, but rather focused on any health improvements. Moreover, school principals highlighted their responsibility to strengthen collaboration and partnerships with health-related professionals and pointed out their managerial role (e.g. allocating resources).

Kostenius and Lundqvist pursue a similar line of research in their paper, drawing on policy enactment theory (focussing on processes of interpretation, translation and negotiation), but shift the focus on expectations for health-promoting leadership from the perspective of Swedish school staff and students. Based on a content analysis of open letters, a number of key issues emerged: Participants argued that health must be prioritized and considered as an educational responsibility (Putting health on the agenda). Moreover, school leaders are expected to make health promotion a common goal for all actors within the school and to devote sufficient time to

it. Collaboration among school staff, students and parents across professions, and school levels was perceived as another important responsibility of school leaders.

Carlsson addresses the role of school leadership in the implementation of a Danish school reform formulating strengthened school well-being as an overall aim, linked to and supporting learning. The paper draws on a distinction between three kinds of educational influence, direct, strategic and distributed leadership, exploring the perspectives these influences offer on expectations for and tensions in school leadership. The analysis identifies expectations regarding school leadership, ranging from aspects of strategic leadership that focus on management by objectives and results to aspects that are closer to teaching, such as curriculum and instructional leadership. It furthermore highlights barriers with regard to realizing policy intentions of strengthening instructional leadership, such as encroaching upon pedagogical and curriculum leadership, which have traditionally been the domain of teachers. Meanwhile, the kind of leadership that can be practiced through data-based management by objectives and results seems to have been perceived as a more viable approach in the implementation of the reform.

Finally, the paper by Dadaczynski and colleagues focuses on aspects of self-related health promoting leadership, drawing on the literature on health literacy and mental health indicators. In their cross-sectional online survey study with German school principals, health literacy of school principals and its association with mental health indicators were examined. Results revealed a limited health literacy for almost 30% of the respondents. Principals aged over 60 years and those from schools for children with special educational needs were less often affected by low well-being as well as frequent emotional exhaustion and psychosomatic complaints. Moreover, limited health literacy was found to be associated with poor mental health.

Perspectives and reflections for future research

The need for drawing on different fields of research when discussing school leadership in school health promotion is highlighted in all six papers in this special issue. Conceptually the papers build on a range of theories, focussing on individual, social and environmental influences on implementation (Cassar and colleagues), policy enactment theories (Kwatubana *et al.*; Kostenius and Lundqvist), school leadership theories (Carlsson) merged with research on the whole school approach (Skott); and the health literacy concept (Dadaczynski and colleagues). As pointed out in the paper by Kwatubana *et al.* context matters, "perceptions on roles [of leadership] in school health promotion might differ as they are linked to context". Although health promotion policy accentuating the role of school leadership is generally in place across the different research contexts in this special issue, policy is not practice, pointing to the relevance of exploring practice through a policy enactment perspective. One of the preconditions for educational policy to be considered in practice is that there is a certain level of consistence between values in practice and values in policy. However, in line with what Kostenius and Lundqvist have argued in their paper, how schools interpret, translate, negotiate and ultimately decide "whether and how to ignore, adapt, or adopt" a particular policy (Spillane *et al.*, 2002, p. 733) reveals not only school leaders' identities, but also their diagnoses of the contexts of the school (Gu *et al.*, 2018).

Overall the papers in this special issue have highlighted school leadership as "relationship work" (collaboration with teachers, students, parents and health professionals) and as "value led work" (e.g. health promotion as a common goal for all actors). Although only pointed out in one paper, health promoting leadership can also be self-directed and be characterized as "self-care value".

However, the limited research base on self-directed, i.e. health-oriented leadership requires more research that examines the working conditions and their links with health related

outcomes. So far, we know little about the health and well-being of leaders, and only a few studies focus on the health and well-being of formal leadership positions such as school principals (Persson *et al.*, 2021; Philips *et al.*, 2008). The same is true for follower-directed leadership, with only very few studies examining the relationship between formal leadership styles and actions and well-being and health of school staff (Harazd and van Ophuysen, 2011; Konu *et al.*, 2010).

Although the three perspectives mentioned at the beginning of this editorial (self-related health-promoting leadership, staff-related health promoting leadership and intervention-related health promoting leadership) do not claim to be exhaustive, they could serve as starting point for more systematic research on school health promotion leadership. As shown in Figure 1, these perspectives cannot be seen in isolation from each other, but are strongly interlinked. For example, the relationship between stress and well-being among leaders (e.g. school principals) and the health of school staff has been completely unexplored so far. Furthermore, the question arises to what extent the school leaders' health and its determinants (e.g. health literacy) serve as facilitator for supporting health-promoting change processes in schools. It should also be taken into account that school health promotion and hence health promoting leadership is highly influenced by political and infrastructural conditions at the school, local and national levels. Amongst others this includes educational policies which are often perceived to contradict or hinder the systematic implementation of health promoting and prevention activities. Moreover, the literature on standards and capacity building in health promotion indicates that an external orientation toward control and producing outcomes that meet national or regional/municipal targets is a common expectation-frame within which leadership in the new accountability-focused environments in public sector institutions.

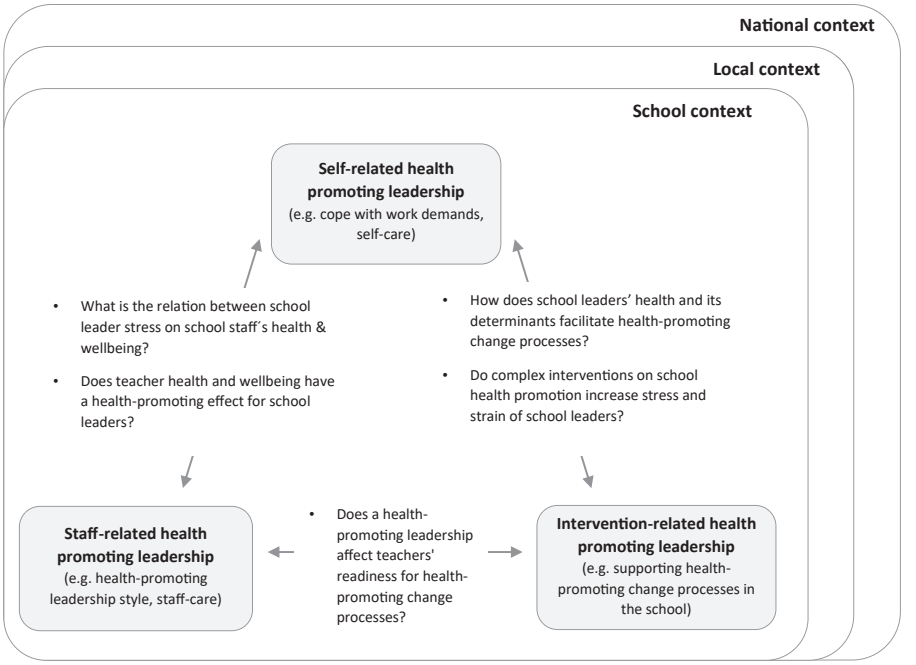

Figure 1.
Multiple perspectives and links of leadership in school health promotion

Concluding remarks

We thank all authors for their valuable contributions and hope that this special issue will advance a neglected field of research. As argued, leadership in school health promotion encompasses different perspectives (self-related, staff-related, intervention/organizational-related) that are closely interrelated and should be considered in their interaction by also taking into account the political and structural context. Although leadership is often associated with the formal organizational position of principal, there are also informal leaders such as teachers or motivated parents, who can contribute with their specific skills and perspectives. Given the complexity of whole-school approaches to health (e.g. the HPS approach), many leaders are needed at many levels to achieve the vision of schools for health. This requires research, policy and practice that is directed at promoting distributed leadership in school health promotion.

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A qualitative study of school leader experiences adopting and implementing a whole of school physical activity and sedentary behaviour programme: Transform-Us!

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Abstract

Purpose – Little is known about the experiences of school leaders adopting and implementing real-world, scaled-up physical activity interventions in the Australian educational system. Transform-Us! is a novel physical activity and sedentary behaviour intervention available to all primary schools in Victoria, Australia, since September 2018. This study explored barriers and facilitators experienced by school leaders during the adoption and early implementation phases of Transform-Us!.

Design/methodology/approach – Qualitative study involving seven semi-structured telephone interviews with school leaders implementing Transform-Us! in primary schools in Victoria, Australia. Interview schedules were developed based on the theoretical domains framework (TDF). Interviews were coded using a framework analysis approach.

Findings – Four key themes emerged relating to ten of the 14 TDF domains. Themes included: knowledge, goals, implementation factors and leadership. School leaders play a central role in creating a positive implementation environment including the delivery setting (classroom) and a supportive culture (knowledge sharing) in the school. The application of the TDF to the study bridges the gap between theory and practice and identifies potential future implementation strategies which may be further tested in professional practice future studies. Recommendations for increased adoption and sustained implementation related to seven core areas: presence of a school/programme champion(s); collaborative knowledge sharing; online training; school-based workshops; promotion of behavioural and mental health outcomes; teacher autonomy in delivery; and a supportive implementation environment.

Originality/value – School leaders have a unique scope to influence the adoption and implementation of physical activity and sedentary behaviour interventions. This study outlines specific barriers and facilitators for implementation of a physical activity programme in the Australian educational setting and offers recommendations for programme optimisation.

Keywords Physical activity, Sedentary behaviour, Implementation, Adoption, School leadership, Children

Paper type Research paper

The authors would like to acknowledge their school leader participants for generously volunteering their time for the betterment of the Transform-Us! intervention.

Ethics approval: The Transform-Us! trial has been approved by the relevant university and educational offices (section removed to comply with author guidelines on anonymity).

Conflicts of interest: The authors declare no conflicts of interest.

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Introduction

The health benefits of physical activity in childhood are well known (Poitras *et al.*, 2016). There is also a growing evidence base that physical activity can significantly improve classroom concentration, behaviour, cognitive function and academic achievement (Singh *et al.*, 2019; Watson *et al.*, 2017). However, the 2018 Global Matrix 3.0 Physical Activity Report Card highlighted that children around the world are not performing sufficient physical activity to meet international guidelines of 60 min of moderate-to-vigorous intensity physical activity per day (Aubert *et al.*, 2018; World Health Organization, 2016). In Australia, fewer than one in ten children are meeting both physical activity and screen time guidelines (Australian Bureau of Statistics, 2013). Considering a significant proportion of a child's weekday is spent in education, schools have long been a target setting for the promotion of physical activity by adopting whole-of-school approaches (World Health Organization, 2008). Despite the known benefits of an active school environment for children (Daly-Smith *et al.*, 2018), schools are often overwhelmed with expectations to deliver health and other initiatives, in addition to their core business of delivering a high-quality education to improve children's learning outcomes. Understanding how to support schools and teachers to deliver a high-quality education in an environment that supports children's health and well-being is a fundamental goal of a whole-of-school approach.

In Australia, the Victorian Government released the "Education State targets" in 2018, which, among other targets, aims to increase by 20% the number of Victorian primary and secondary students completing at least 1h of physical activity per day (Victoria State Government, 2018). Whilst there are numerous school-based physical activity interventions available to help schools to achieve this government target (Calvert *et al.*, 2020), a major challenge is that they require school leadership and teacher buy-in to be successfully adopted and implemented.

Leadership is consistently reported as influencing the adoption, implementation and sustainability of physical activity interventions implemented in school settings (Cassar *et al.*, 2019), as school leaders are considered "essential" stakeholders in any whole-of-school approach (Daly-Smith *et al.*, 2020). Supportive leaders have consistently been shown to facilitate implementation of physical activity interventions in the community (Horodyska *et al.*, 2015) and in schools (Hatfield and Chomitz, 2015). Further, school leaders have the opportunity to support the use of interventions by making decisions and setting priorities regarding timetabling, training, resource availability and policies (Hatfield and Chomitz, 2015; McKay *et al.*, 2015). Unfortunately, there are significant gaps in knowledge regarding leadership strategies to overcome barriers and support schools and teachers to adopt and implement these practices (Naylor *et al.*, 2015; Turner *et al.*, 2019).

Application of implementation models and theories in implementation studies may be one step towards addressing the research–practice gap and better understanding the implementation challenges faced by organisations (Nilsen, 2015). Despite this, few studies have used implementation theory to describe the experiences of school leaders in adopting and implementing evidence-based interventions in real-world school systems. For example, there are numerous implementation models used to understand implementation (Tabak *et al.*, 2012), but one such model, the theoretical domains framework (TDF), has previously been used to systematically review and map barriers and facilitators of school-based physical activity policy implementation (Nathan *et al.*, 2018). Research that uses the TDF to better understand how to translate efficacious interventions into everyday practice in schools, particularly from the perspective of school leaders, is very much needed. Thus, this study aimed to: (1) explore barriers and facilitators experienced by school leaders to adopt and implement a whole-of-school physical activity and sedentary behaviour programme, Transform-Us! and (2) identify school leaders' recommendations for the adoption and implementation of Transform-Us!. Transform-Us! is a school-based programme available to

all primary schools in Victoria, Australia, since September 2018. This study offers novel phenomenological insights behind the school leadership processes and decisions that have occurred among schools that have registered to implement this programme.

Methods

Design

The Transform-Us! study is a type II hybrid implementation-effectiveness trial being offered at scale to all government, independent and Catholic education primary schools state-wide ($n = 1{,}794$). For this study, semi-structured telephone interviews were conducted with school leaders responsible for the adoption and implementation of Transform-Us!. We classify adoption as per Rogers' definition in which adoption occurs when an organisation (e.g. school) makes the formal decision to use an intervention or policy (Rogers, 2003). Implementation is deemed the period of time after the decision to adopt the intervention has been made and when target users and schools begin using the intervention (Klein and Sorra, 1996). Implementation refers to the processes involved in incorporating new evidence-based policies and interventions within organisations and settings (Brownson *et al.*, 2017). The Transform-Us! programme began as an efficacious cluster randomised controlled trial for 7–9 year olds (Carson *et al.*, 2013; Yildirim *et al.*, 2014). The programme was then adapted (e.g. from face-to-face to online teacher professional development) for real-world implementation at scale (https://transformus.com.au/) and offered to all primary schools and students in Victoria, Australia, in September 2018. Transform-Us! includes behavioural and pedagogical changes, as well as environmental strategies in the classroom, school and family home, to encourage children to sit less and be more active throughout the day (Salmon *et al.*, 2011).

Participants

School leaders from schools that adopted the Transform-Us! intervention in the year since the programme launch were eligible for recruitment into the study. We define school leaders as individuals in any of the following roles and with the responsibility of managing the intervention delivery within the school: principal or assistant principal, year coordinator, leading teacher (e.g. head of health and physical education). The school leader need not only have strategic leadership for the school, rather they could also have leadership of the school health and PE programme. Participants were contacted between September and December 2019 via email and were required to provide both verbal and signed consent. Considering that the depth of the data, rather than size of the sample, is the most important issue in qualitative research (Clarke and Braun, 2019), we aimed to recruit 6–12 school leaders to provide sufficient "information power" for our study (Hamilton and Finley, 2019).

Theoretical framework and interview guide

The TDF (Lawton *et al.*, 2015) and previous literature (Chalkley *et al.*, 2018; Nathan *et al.*, 2018) were used to develop the semi-structured interview guide in line with the qualitative procedures outlined by Atkins *et al.* (2017). The TDF includes 14 theoretical domains stemming from behaviour change theories and 84 theoretical constructs, allowing for the analysis of individual, social and environmental influences on implementation behaviours (Cane *et al.*, 2012). The TDF has been designed to aid in qualitative research and enabled the linking of implementation barriers and facilitators to the framework. The full interview guide, including demographic and teaching experience and role-related questions, can be found in (Appendix). Interviews ranged from 27 to 43 min with an average length of 33 min.

Interpretation and analysis. Participants were categorised by gender, role within the school. Schools represented were categorised by school sector (government, independent, Catholic), location (major city, inner regional, outer regional, remote, very remote) (Australian Bureau of Statistics, 2018), size (student enrolments) and quartile of the Index of Community Socio-Educational Advantage score (ICSEA) (ACARA, 2015). The ICSEA provides an indication of the socio-educational backgrounds of students, where higher values denote greater educational advantage for students at the school and was collapsed into quartiles for all Victorian primary schools eligible for Transform-Us! for the purpose of this study. Interviews were audio-recorded and transcribed. Qualitative data coding was performed using NVivo software to draw out key themes and quotes. Data familiarisation occurred by reading and/or listening to the interviews at least twice in full before coding commenced. Coding was conducted separately by two authors (SC and SK) using the TDF and following a coding manual (Appendix), with each coder keeping a research journal. A framework analysis approach to coding was undertaken whereby the TDF constructs are used as a starting point as this allows for *a priori* codes (according to the TDF) and emergent codes (e.g. relating to participants' experiences) (Lawton *et al.*, 2015). To ensure trustworthiness, findings were discussed among coders, and any discrepancies were resolved by consensus decision with all authors (SC, JS, AT, SK, HK) (Hansen, 2006).

Results

Interviewees ($n = 7$, 5 females) represented schools located in major cities ($n = 5$), outer regional ($n = 1$) and remote ($n = 1$) regions and included one principal, one assistant principal and five with responsibility for leading the health and physical education (PE) programme in their school. All schools (six government, one Catholic) were in the top two quartiles of ICSEA and school enrolments ranged from 0–50 to 600–650 (categorised to ensure anonymity). Table 1 presents interview themes as per the TDF framework analysis, including TDF domains and illustrative quotes identified. Four key themes emerged from the data and related to ten of the 14 TDF domains and constructs: knowledge, goals, implementation factors and leadership. The four TDF themes that did not emerge in the interview themes described further included *skills, beliefs about capabilities, optimism and emotion*.

Knowledge

The theme "knowledge" included the TDF domains "Knowledge" and "Beliefs about consequences" which were evident in this theme as school leaders were quick to reference the known health benefits of physical activity, with the main view being schools are beginning to understand the importance of physical activity for children's health. Interviewees also consistently mentioned the academic benefits related to physical activity, for example, classroom active breaks, which were deemed necessary to keep primary school children on task and could be used as a pedagogical tool to re-engage students during key moments of the day. There was an acknowledgement from school leaders that their students were potentially less active outside of school hours (i.e. unable to afford team sports participation on the weekends) and that their students were now at risk of negative health outcomes after spending more time with technology than in years past. Knowledge of the benefits of school-based physical activity promotion was described as a motivator to initial programme adoption.

Goals

There was a general feeling from school leaders that having goals and school policies relating to Transform-Us! implementation would be beneficial to increase engagement and continuity

Table 1.
Framework analysis

Theme	TDF domain	Illustrative quotes
Knowledge	(1) Knowledge (2) Beliefs about consequences	Benefits of physical activity on health: "what we've been able to do is basically say to the school community that we're looking after the mental health and the social health and the physical health of our kids" Benefits of physical activity on learning outcomes: "There's essentially five of us out of a very small leadership group that come from a background of PE and everyone is very much on board, because the research proves that kids that are active also concentrate and improve their ability to take up information and learn, which is what the leadership group is all about" "If anything, there's evidence to say that it increases academic performance and being where we are, in a school, that's most people's priority is that academic performance"
Goals	(1) Goals	Policies/targets: "We set the target that everyone had to . . . all the primary staff had to have done the online training" "We probably should have [had a goal], because that's what I found. . . The first couple of weeks after we did the training, I saw lots of classes going outside to do activities or there were kids doing things. But then, other things got in the way" "We do not have a strategic plan yet. Because we're only three years old. So we just have yearly AIPs [Annual implementation plans]. And it's one of the targets that I have attached to me. So it [Transform-Us!] is something that the school is serious about. Because it's a target that we want on our, you know, to be met"
	(1) Intentions	Intentions: "Yeah, a change in practice and it's not going to happen overnight, but it will happen. You've just got to go keep going at it and that's our intention here, to encourage people to do that, so keep working at it"
Implementation factors	(1) Behavioural regulation	Strategies to embed in daily practice/lesson plans: "What we've basically tried to do is we've done an audit of the times of day where the kids seem to have the least level of concentration" "So that it's written into their [teacher] planners, like their weekly planners. So that when they. . .the weekly planner is the one they look at the most so they've got it written in there. So they [teachers] remember to do it"
	(1) Environmental context and resources (2) Social influences	Impact of school culture: "So I think that the physical activity side of things and being active, I think the kids see the teachers. . .we're quite active teaching staff as well, I think they [students] see that it is just part of life. And that's what I want them to get" "Well, we try and focus not just on the kids, but as everybody as a community, so parents, staff, admin staff. So, yeah, we've got a real whole-school approach here with everything that we roll out"
	(1) Organisational commitment	

(*continued*)

Theme	TDF domain	Illustrative quotes
		Focus on literacy/numeracy: "It's all about statistics and the student achievements and all that, which is all about numeracy and literacy and stuff"
Leadership	(1) Memory, attention, and decision processes	Decisions about fidelity: "Definitely leaving it up to them [teachers]. They know their kids a lot better than we do, so definitely letting them decide how they wanted to use it [Transform-Us!]"
	(1) Reinforcement	Encouragement: "Generally through emails and giving them [teachers] links to different websites and different things and then on our school server as well"
		"We've actually rolled out a bit more activity in our own PD days. So, a lot of the staff, when we have our PD, rather than sitting, we have a lot of active breaks or active learning, where we get them up and make them move around during the workshop"
	(1) Social/ professional role and identity	Fit within role: "I think it fits in perfectly because it takes a whole-school approach, which really does help. If you do it in dribs and drabs, it becomes really difficult to coordinate it, but I've been able to do it across the school"
	(1) Organisational commitment	School leadership commitment: "I think they're pretty hesitant to add another thing, another programme. As we had a bit shake up of literacy and numeracy this year. Only because we're a new school and like every year is like another year. . .like another new thing is happening"
		"That's the leadership focus, to always improve behaviour, improve attendance, improve learning outcomes, improve school connectedness, improve links with community"

from their staff. Statements coded to this theme related to the "goals" and "intentions" domains in the TDF. Whilst school leaders wanted to implement more of the programme in the coming school year, they did not specify particular implementation targets or timelines for action, as planning was incomplete. As interviews were held in the final term of the school year, there was a sense of starting again fresh in the new year by putting it back on staff meeting agendas. Interviewees highlighted the time needed to embed programmes in schools and that strong long-term goals for programme planning were key.

Implementation factors

In the absence of formal policies and targets, school leaders spoke of strategies to help change the everyday practice of their teaching staff though several means. These related to four TDF domains "behavioural regulation", "environmental context and resources", "social influences" and "organisational commitment (social/professional role and identity)" and included discussing with teachers the specific times during the day in which children were likely to have lower concentration. This was used as a tool to plan when certain aspects of Transform-Us! (i.e. active breaks and active lessons) would be most beneficial. Others sent out digital communication via email or cloud storage platforms with information and examples for their teachers.

School leaders described the positive impact school culture had on their experience of adopting and implementing Transform-Us!. Participants described how teachers and school staff model an active lifestyle to their children, with others speaking to whole-school mindsets regarding physical activity promotion which helped encourage staff participation. These statements were often linked with discussion surrounding motivations to adopt the programme and were often related to the overarching school leadership support. School leaders argued that school priorities surrounding standardised testing impact teachers' willingness to implement a programme such as Transform-Us! which may take away time from their curriculum. School leaders spoke of the juggling act teachers are required to perform balancing their many curriculum responsibilities with prioritising changes to their practice.

Leadership

The leadership theme covered four TDF domains including "Memory, attention, and decision processes", "reinforcement", "professional role" (social/professional role and identity) and "organisational commitment" (social/professional role and identity). School leaders revealed not feeling comfortable imposing proposals regarding their teachers' workflow. There was discussion indicating teachers often planned lessons and schedules in year-level teams and school leaders trusted their teachers to deliver the programme when, and how, they felt most appropriate. Despite a hands-off leadership approach to implementation fidelity of Transform-Us!, school leaders described several ways in which they encouraged staff to implement the programme. This involved the provision of online teaching resources and reminders via emails and providing teachers the opportunity to discuss their experiences during staff meetings. Some school leaders felt that they themselves had let Transform-Us! slip off their agenda, and their encouragement and reminders had begun to wane as the school year progressed. One school decided to bring aspects of the programme to their own staff meetings as a way for their teachers to experience the benefits of activity on concentration and to encourage them to take these active practices to their classroom. All school leaders who were involved in teaching PE (5/7) mentioned the alignment between their work and the goals of Transform-Us!. The two other school leaders commented on the fit within their role from an overarching school leadership perspective rather than their

individual responsibility and described wanting to participate as a means of fostering innovation and of implementing a whole-school approach.

Broader support for Transform-Us! among the school leadership team was mixed within the adopting schools. In some schools there were strong statements of support from the wider school leadership, where there was a clear importance placed on the programme and how it would help the school. Others felt the wider leadership was less supportive of the programme within the school, with perceptions that it was another initiative in an already busy school environment. Thus indicating that in some schools there was inconsistency between the interviewee's motivation towards the programme and that of their wider school leadership.

School leader recommendations

Recommendations to enhance adoption (at a school and/or teacher level) and implementation for other school leaders considering adopting Transform-Us! related to seven core areas: presence of a school/programme champion(s); collaborative knowledge sharing; online training; school-based workshops; promote programme behavioural and mental health outcomes; teacher autonomy in delivery; and a supportive implementation environment (See Table 2). Of particular note were recommendations relating to school/programme champion(s); collaborative knowledge sharing; online training; school-based workshops with multiple school leaders highlighting their importance. The descriptive examples given in Table 2 outline the specific approaches schools identified to potentially assist with wider adoption and implementation of the programme within the school. School leaders in the study prioritised a strength-based approach to supporting adoption and implementation and encouraged a collaborative approach to implementing the programme within their school. In particular was the recommendation that school leaders needed to trust in their staff to deliver the programme on their own terms and allow time and resources for staff to take ownership of the programme.

Discussion

This study described school leaders' experiences of adopting and implementing Transform-Us! and maps factors which may influence these processes to the TDF implementation framework. Our qualitative analysis uncovered four key themes which covered most (10/14) TDF domains in addition to school leader recommendations for adopting schools. These themes included *knowledge, goals, implementation factors and leadership*. Findings highlighted the important role school leadership can play in the implementation of a real-world, scaled-up physical activity intervention in the educational system. This study also provides important insights into the delivery of such programmes in the Australian educational setting, particularly in Victoria where school leaders are allowed significant self-regulation and a high level of autonomy that enables them to tailor delivery of health promotion programmes according to the needs of their students and staff (Victorian Competition and Efficiency Commission, 2013).

There were four TDF domains not mentioned by school leaders in this study; *skills, beliefs about capabilities, optimism and emotion*. In their review of the implementation of physical activity policies in schools, Nathan *et al.* (2018) included qualitative studies from a broad participant base (i.e. teachers, principals and school level administrators) and reported a wider coverage of the TDF for barriers (9/14 domains) and facilitators (10/14 domains). Of the five domains not identified in that review, our findings overlap for the *optimism* and *emotion* domains. It could be that these domains were not relevant to implementation in the context of physical activity promotion in schools (hence not mentioned). This is important because it shows that although the TDF is theoretically relevant, in practice and in this context, some

Recommendations	Descriptive examples	Adoption (A)/ Implementation (I)
School/programme champion(s)	Have a team of champions (one person from each year level as this helps with authenticity)	I
	Implement as a whole-school approach and create a team to lead/roll it out	A and I
	Select the sport/PE team as programme champions	I
	Have a programme champion	I
Online training	Have school leaders complete the online training for added legitimacy when introducing to staff	A
	Have staff revisit online training each year	I
School-based workshops	Practical workshops where teachers can test the programme and role play	A and I
	Complete training as a group in staff meeting sessions	A and I
	Place Transform-Us! as an agenda item on each staff meeting	I
Promote programme behavioural and mental health outcomes	Sell the programme on "wasted time" due to behavioural issues to increase teacher uptake	A
	Sell the message of improvements in behaviour and mental health	A
Teacher autonomy in delivery	Ensure programme is driven by the teachers in "bottom up" approach	A and I
Collaborative knowledge sharing	Share experiences at staff meetings, have teachers to talk about how others could use the programme if having issues, e.g. around concentration	I
	Set up a cloud storage account to house resources where all staff can access them	I
Supportive implementation environment	Place promotional posters around the school to keep delivery front of mind	I
	Provide time for school leaders to complete leadership responsibilities such as research and programme promotion	I
	Encouraging staff regularly and being patient with changes in practice taking time	I

Table 2. School leader recommendations for adopting and implementing interventions in schools

factors may not be related to adoption/implementation in school settings. Alternatively, the missing TDF domains may in fact be highly relevant and were not mentioned due to a lack of perceived importance or this may be an indication of participants' understanding of what promotes effective implementation.

School leaders in our study consistently commented on the low prevalence of children's physical activity and the positive evidence relating to academic performance. In this study participants recommended promoting this evidence, alongside evidence for behavioural and mental health benefits as a way to increase adoption rates. Understanding of the importance of physically active students and schools appears to be growing among school leaders (Dyrstad *et al.*, 2018; Skage and Dyrstad, 2019; Van den Berg *et al.*, 2017), although we acknowledge that most of the school leaders interviewed in this study were responsible for or trained in health and PE. Despite this, a traditional focus on literacy and numeracy standardised test scores was described as an organisational barrier to implementation by participants and is consistently mentioned as a barrier in other studies (Brown and Elliott 2015; Skage and Dyrstad, 2019). Knowledge of benefits may not be sufficient to overcome

priorities of testing and academic achievement and a perceived lack of time as key barriers to implementation (Naylor *et al.*, 2015),

The creation of school-level policies and goals for physical activity may partially address these issues. Previous studies have shown policies and goals to be effective for whole-school implementation (Dyrstad *et al.*, 2018; Van den Berg *et al.*, 2017) and have also recently been recommended in the creating active schools framework (Daly-Smith *et al.*, 2020). Skage and Drystad (2019) support the argument that physical activity was more likely to be implemented in schools where there were priority areas relating to the intervention. Another possible influence, recommended by school leaders, involves schools leveraging positive school culture by highlighting that prolonged sitting leads to issues of poor behaviour and concentration. A positive school culture was discussed by study participants, and this in combination with their recommendations to consider how the intervention is "sold" to teachers provides an opportunity for school leaders to overcome any misunderstandings regarding what implementation entails. By ensuring teachers are made aware that the classroom component of Transform-Us! requires a change in practice (i.e. active pedagogy), rather than teaching additional content, teachers may be more receptive to programme adoption.

School leaders in this study agreed that promoting interventions such as Transform-Us! within their school was a part of their professional role. However, several school leaders suggested promotion efforts be in collaboration with teachers (bottom-up) rather than top-down approaches. This finding has also been noted elsewhere (Dyrstad *et al.*, 2018). Recommendations in the current study included having a team of 'champions" and for school leaders to encourage peer-to-peer support by providing dedicated time in meetings and for group lesson planning. It has previously been suggested that creating peer support among teachers is more advantageous than a traditional PE teacher "champion" who may not always understand the classroom context (Calvert *et al.* 2019). School leaders may consider that rather than placing one staff member in charge as the champion, support teams (Van den Berg *et al.*, 2017) where individuals are given time in their workload as intervention champions may be effective at promoting changes to teaching practices within the school (Michael *et al.*, 2019).

Further to these suggestions, additional highlights were the importance of repeating online training and active encouragement for school leaders to lead by example and complete training before introducing the programme to other staff. This could contribute to increasing uptake and implementation of the programme more broadly within the school. These recommendations add to the literature, which calls for adequate training to be provided to enhance implementation (Brown and Elliott, 2015; Daly-Smith *et al.*, 2020; Michael *et al.*, 2019). The school leader recommendations to make use of school-based workshops (i.e. in the form of staff meetings) to complete training as a group, to test out aspects of programme delivery and to allow for discussions as part of the regular agenda are known facilitators in other school-based intervention literature (Cassar *et al.*, 2019).

We have found that a supportive environment is important, which is also supported by the existing school-based literature (Cassar *et al.*, 2019; Naylor *et al.*, 2015), and so in practice this might involve school leaders recognising their importance and ability to support staff in the process implementing new programmes in their daily practices. However, as we know the implementation of such programmes is a slow process which can occur over many years (Kibbe *et al.*, 2011; McKay *et al.*, 2014), future programmes of a similar nature may need to implement changes to the physical environment to remind staff of the programme and ensure a supportive environment. Following on from this advice from school leaders to others adopting and implementing similar programmes is to be explicit and realistic around staff implementation progress in the knowledge these changes take significant time to become embedded. One way in which school leaders can change their practice to support

implementation is to provide workload allocations for programme champions and staff when starting new within the school.

Strengths and limitations

Strengths of this study include the use of a well-known implementation framework, which enabled the classification of implementation factors relating to school leadership practices. This is often the gateway to successful adoption of health promotion programmes in schools. Application of the TDF in this context is a strength by allowing for comparison with other implementation literature in the field. We were unable to recruit school leaders from independent schools and only two non-PE teachers were interviewed. Leaders from these schools may have different experiences and views to those in the current study. Despite greater representation from school leaders with PE backgrounds, those participants that did not teach PE shared consistent experiences and so this strengthens the potential generalisability of the results. Further, participants were aware that the interviewer was involved in Transform-Us! as a student and/or staff member, which may have led school leaders to respond more positively than if interviews were conducted by an independent third party.

Conclusion

School leaders play a vital role in creating a positive implementation environment, which includes the distinct, but complementary, actual delivery setting (classroom) and a supportive culture instigated by leadership (knowledge sharing). This study outlines specific barriers and facilitators for the implementation of physical activity programmes in the Australian educational setting and offers recommendations to school leaders for future programme optimisation. The application of the TDF to the study bridges the gap between theory and practice and identifies potential future implementation strategies which may be further tested in professional practice future studies. The recommendations provided by school leaders implementing this programme under real-world conditions within the educational system outline important insights for other schools and may inform the future adoption and implementation of this, and other, school-based physical activity programmes.

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Appendix
Transform-Us! school leader interview questions

Instructions – to be read to participant
You have been invited to participate in this interview as you are a school leader within one of the schools currently implementing Transform-Us!. This discussion should last no more than 30 minu. Questions will relate to your schools' experiences of the programme, including any barriers or enablers you might have faced. Please speak freely and honestly about your experiences both positive and negative.

This interview will be audio-recorded, transcribed and coded anonymously for analysis. Your name will not be used in any of the published material and your responses will remain unidentifiable. You will have the opportunity to read and edit the transcript of this interview. Please ensure you have the read the PLS and asked any questions before we begin.

Signed consent must have been received prior
Tell me a bit about yourself – how did you get to this position

Theoretical domain	Questions
Knowledge	(1) Tell me what you know about T-Us! (Prompts: why is it important or needed?/why did you sign up?)
Social/professional role and identity	(1) How do you think it fits with your role as a school leader? (2) Tell me about the commitment of your school leadership to the programme.
Goals	(1) Can you describe any goals or targets your school has for the Transform-Us! programme?
Skills	(1) To what extent do you think your teachers have the skills to increase children's physical activity across the day? (Prompts: classroom/recess/pedagogy/environment) (2) Do you know how many teachers did the training? (3) Did you do the online training? (Prompts: How did you find it? (content and online delivery mode)/ How did your teachers find the content and delivery mode?/did it provide enough information as a school leader?)
Beliefs about capabilities	(1) How confident are you that Transform-Us! can impact physical activity levels of children in your school? (2) Has your school adapted or altered the delivery on the programme in any way?
Optimism	(1) Do you think T-Us! is making a difference so far? In what ways? (Prompts: PA/School environment/Leadership/Teaching practices)
Beliefs about consequences	(1) Is this what was expected?/What are you expecting?
Emotion	(1) Considering Transform-Us! is a new programme for your school, how do the school leaders feel about it? (Prompts: What about now?) (2) How would you describe how your staff and students felt about doing Transform-Us!?
Intentions	(1) How do you intend to use Transform-Us! as a school going forward? (Prompt: who/what has influenced your decision?)
Reinforcement	(1) As a school leader how do you or other leaders encourage or support teachers to continue with the programme? (2) Is this consistent with other leaders in your school? (Prompt: Were any policies or practices put in place?/Were there any incentives/punishments for using/not using?/Existing or conflicting?)

(*continued*)

Theoretical domain	Questions
Environmental context and resources	(1) How has the school culture impacted teachers' ability and desire to use the programme? (2) Is there anything about the environment or equipment in your school that has affected teachers' ability to deliver the programme?
Social influences	(1) Have you heard from teachers what they think about the programme? (2) How are they going with the programme so far? (Prompt: Do teachers in your school feel adequately supported by management to use the programme?/ Have any teachers requested support from school leadership?/ Is there peer support for delivery?) (3) Are parents aware of the Transform-Us! programme at the school? (Prompts: Can you describe their engagement thus far?/ Have they commented on the active homework?)
Memory, attention and decision processes	(1) Are you or other school leaders involved in the decision when and what elements of the programme your school would aim to deliver? (2) How did you/ your teachers decide? Or do you leave this up to the teachers?
Behavioural regulation	(1) Did you recommend any strategies to help your teachers embed the programme into their lesson plans?
Recommendations* (added)	(1) What advice would you give other school leaders who are considering adopting the programme in their school? (Prompts: Overcoming perceptions about time and relevance/increase uptake of the programme among teachers and or schools/increase likelihood of positive outcomes (children/teachers/school)/improve implementation of the programme/ increase likelihood it becomes embedded in schools' routine)
Conclusion	(1) That's all I have for now, is there anything else that has occurred to you about this programme that I have not asked about? (2) Would you be ok if we contacted you again next year?

Coding manual

Pre-coding steps

(1) Become familiar with all terms and definitions relating to the Theoretical Domains Framework via https://implementationscience.biomedcentral.com/articles/10.1186/s13012-017-0605-9
(2) Use these resources to formulate ideas about how Transform-Us! School leader's organisations' experiences may fit into the constructs during data familiarisation
(3) Data familiarisation via listening to audio recording and/or reading the interview transcript at least twice for each interview before coding begins
(4) Create a research journal (how to keep a research journal) where you can write down your thoughts as you go. This can be used to help track decisions made and reflect on progress. It may also provide a chance to write down any flashes of brilliance before they are lost. It is important to have this to document the rationale behind any new codes generated or for instances where you are unsure of your decision

Coding Steps

(1) Determine which node information applies to
(2) Determine which subcategory it applies to
(3) If information does not fit anywhere or if definitions listed are not a match, file under "other" and assign tentative emergent code to be discussed amongst second independent coder. Be sure to document this in your research journal to enable discussion

(*continued*)

Coding agenda Nodes	Definition
Additional information about participant*	School, job role and experience plus any initial comment on their involvement with the programme
Behavioural regulation	(Anything aimed at managing or changing objectively observed or measured actions) Self-monitoring Breaking habit Action planning
Beliefs about capabilities	(Acceptance of the truth, reality or validity about an ability, talent or facility that a person can put to constructive use) Self-confidence Perceived competence Self-efficacy Perceived behavioural control Beliefs Self-esteem Empowerment Professional confidence
Beliefs about consequences	(Acceptance of the truth, reality or validity about outcomes of a behaviour in a given situation) Beliefs Outcome expectancies Characteristics of outcome expectancies Anticipated regret Consequents
Emotion	(A complex reaction pattern, involving experiential, behavioural and physiological elements, by which the individual attempts to deal with a personally significant matter or event) Fear Anxiety Affect Stress Depression Positive/negative affect Burn-out
Environmental context and resources	(Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence and adaptive behaviour) environmental stressors Resources/material resources Organisational culture/climate Salient events/critical incidents Person × environment interaction Barriers and facilitators
Goals	(Mental representations of outcomes or end states that an individual wants to achieve) Goals (distal/proximal) Goal priority Goal/target setting Goals (autonomous/controlled) Action planning Implementation intention

(*continued*)

Coding agenda Nodes	Definition
Intentions	(A conscious decision to perform a behaviour or a resolve to act in a certain way) Stability of intentions Stages of change model Transtheoretical model and stages of change
Knowledge	(An awareness of the existence of something) Knowledge (including knowledge of condition/scientific rationale) Procedural knowledge Knowledge of task environment
Memory, attention and decision processes	(The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives) Memory Attention Attention control Decision making Cognitive overload/tiredness
Ongoing participation*	How did the participant react to being invited to another interview next year? Are they open to being contacted again?
Optimism	(The confidence that things will happen for the best or that desired goals will be attained) Optimism Pessimism Unrealistic optimism Identity
Others*	Create new code/sub code for important information. Make sure to update this form with a definition of the code and what it includes
Recommendations*	What advice would you give other school leaders who are considering adopting the programme in their school? (Prompts: Overcoming perceptions about time and relevance/ increase uptake of the programme among teachers and or schools/increase likelihood of positive outcomes (children/teachers/school)/improve implementation of the programme/increase likelihood it becomes embedded in schools' routine)
Reinforcement	(Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus) Rewards (proximal/distal, valued/not valued, probable/improbable) Incentives Punishment Consequents Reinforcement Contingencies Sanctions
Skills	(An ability or proficiency acquired through practice) Skills Skills development Competence Ability Interpersonal skills Practice Skill assessment

(*continued*)

Coding agenda Nodes	Definition
Social influences	(Those interpersonal processes that can cause individuals to change their thoughts, feelings or behaviours) Social pressure Social norms Group conformity Social comparisons Group norms Social support Power Intergroup conflict Alienation Group identity Modelling
Social or professional role and identity	(A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting) Professional identity Professional role Social identity Identity Professional boundaries Professional confidence Group identity Leadership Organisational commitment

Note(s): **Denotes an additional node which has been added and is not a part of the Theoretical Domains Framework

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Successful health-promoting leadership – A question of synchronisation

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Abstract

Purpose – The aim of this paper is to identify the role of the principal in establishing a whole school approach for health and wellbeing. Two questions are asked: (1) What do successful Swedish principals do when they take on a whole school approach? (2) How do these results relate to previous research on successful school leadership?

Design/methodology/approach – This paper focuses on the complexity of organisational processes and considers the role of successful leadership in managing a whole school approach to health promotion. It presents findings from two different but interlinked projects, and draws on document studies and interviews with principals, student health team members and teachers in Sweden.

Findings – This paper argues that successful school leaders are crucial in establishing a whole school approach, because of the work they do to synchronise the health-promoting activities in schools. The study identifies four aspects of coordination that need to be enacted simultaneously when leading health-promoting processes. The fifth aspect identified is that a whole school approach is not limited to the school, but the whole local school context, i.e. a synchronisation between different system levels.

Originality/value – Although limited in scale, this paper reports key findings that could have practical implications for school leaders. The study suggests that successful school leadership research needs to use a health-promoting lens in order to make leadership practices health-promoting practices. It also proposes extended comparative research from different fields and contexts.

Keywords Educational practice, Health promoting schools, Management, Organizational effectiveness, Professional concerns

Paper type Research paper

1. Topic and aim

This paper takes as its starting point two global trends related to schools. The first is the predominant focus on school performance, where countries and individuals are measured and ranked. Consequently, school leaders have been identified as important for school development and considered successful if they improve students' learning and performance (Robinson *et al.*, 2009; Leithwood and Seashore, 2011). Research has identified four domains of practice in which successful school leaders engage: setting direction, building relationships and developing people, developing the organisation to support desired practices, and improving instructional practice (Leithwood *et al.*, 2019). These domains have played important roles in the preparation and training of principals (Lumby *et al.*, 2008; Young *et al.*, 2017). The main focus of school leadership research and principal preparation has been leading teachers' learning and improving their teaching through instructional leadership. Other professionals who can work in schools to establish health and wellbeing have been excluded from the research, or not considered as the principal's main focus.

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The second trend concerns the central importance of wellbeing and student health issues (Hughes *et al.*, 2019), which are predominantly studied within another research field focusing on health promotion. For more than 20 years, health promotion research has been carried out in the Nordic countries (Kokko *et al.*, 2018) and schools have been included in this research. School health promotion (SHP), in contrast to leadership research, is built on *a whole school approach* and considers health promotion as a part of everyday school life (Parsons *et al.*, 1997; Green and Tones, 2010; Carlsson, 2016), covering both teaching activities and time between classes (e.g. breaks and meals). One key aspect of this research considers the complexity of organisational processes in which different professionals are supposed to work together. Even though health research identifies the school leader as important, it has not yet had the school leader as the primary focus.

This paper explores what can be learned if these research fields are merged and challenges previous school leadership research and its narrow focus on instructional leadership. From a more holistic perspective on schools, the starting point of this paper is rather that school leaders are responsible for, and possible key actors in, leadership for health-promoting activities as part of their wider responsibility for education. Consequently, research on successful health-promoting leadership becomes essential. The aim of this paper is to identify the role of the principal in establishing a whole school approach for health and wellbeing.

This paper focuses on Sweden, where there is a law regulating health promotion work in schools and the principal's role in making this happen. There have also been attempts by national authorities to help school leaders develop a more holistic perspective. The results in this paper build on research about these efforts.

2. From research on successful school leadership or holistic health promotion work to research on successful leadership from a whole school approach

The following section is divided into three parts. In the first part, the focus is on school leadership research, to identify what successful school leaders do. The second part considers health research and the importance of a "whole school approach". The third part identifies the research gap and the research question of the paper.

2.1 Successful school leadership

As indicated in the introduction, the primary focus of school leadership research has often not been on wellbeing and health, but on instructional practices and what successful school leaders do to improve students' learning in the classroom. Consequently, successful school leadership is predominantly measured through performance on tests and, according to aggregated results from this research field (Leithwood *et al.*, 2008, 2019), successful school leaders focus on four essential practices:

(1) Setting the direction;

(2) Building relationships and developing people;

(3) Developing the organisation to support desired practices; and

(4) Improving instructional practice.

This means that school leaders are identified as important for improving students' results, but they do this by working through teachers. Setting the direction is about building shared visions and identifying specific goals and communicating them. When developing people, this can be done by stimulating growth in the professional capacities of staff, but also providing support for staff. Trusting relationships includes several actors, i.e. staff, students and parents. School leadership can be considered as an individual's work. Today, however,

distributed leadership is one of the main fields within school leadership research and building a collaborative culture using distributed leadership is a main task for school leaders. This last practice has become one of the most important leadership practices for principals, and is achieved by working closely with teachers and monitoring student learning and school improvement progress (Leithwood *et al.*, 2019).

For over a decade, these practices have been central to school leaders' work. In many countries, they have even been established as standards within preparation programmes (Ingvarsson *et al.*, 2006; Ylimäki, 2013; Young *et al.*, 2017) and linked to various leadership models such as distributed leadership, instructional leadership, transformational leadership and teacher leadership (Gumus *et al.*, 2018; Leithwood *et al.*, 2019). It is stressed that teachers' work is the most important factor in students' results, but, when wellbeing is added, it improves the chances of student success (Leithwood *et al.*, 2019).

However, a holistic approach including multi-professional coordination and a multipurpose approach including different aims for schools is excluded from most school leadership research. This might be because of differences between countries regarding the presence of health professionals in schools, which makes it difficult to compare. There is, however, a growing interest in complexity (Day *et al.*, 2016; Hallinger, 2018; Hawkins and James, 2018; Leithwood *et al.*, 2019; Rönnström and Skott, 2019). This paper explores complexity further and uses knowledge about the Swedish school system to explore successful health-promoting school leadership.

2.2 The holistic health approach

The instructional focus of school leadership research on the teaching core excludes what health research has called a "whole school approach" (Carlsson, 2016). This approach includes learning about health through teaching as well as establishing health and wellbeing in schools. St. Leger and Young (2009) assert that a whole school approach for health-promoting work enhances learning, increases emotional wellbeing and reduces risk behaviours. A challenge of this, however, is that efforts for change must be comprehensive, including work on relations between teachers and students, and the development of teacher-, parent- and local context involvement as well as cross-educational levels (Weare and Nind, 2011).

Jourdan *et al.* (2016) examine the difficulty of establishing a health-promoting approach and identify the importance of working in the awareness of teachers' professional identities, i.e. teachers need to feel the relevance of it to their profession. Hence, health-promotion research to some extent identifies the same kind of success factors identified by leadership research (the importance of teachers' work) but overlooks the importance of leadership practices and multi-professional coordination. No single profession can carry the change, so it is not enough just to point to the importance of management and the ability to handle complex organisational challenges (Boot and de Vries, 2010); there needs to be research on what works and why.

2.3 Bridging the gap

When considering the two research fields separately, it seems as if their improvement is being hindered because of their traditional focus. In this study, a first step to merging the fields is combining research on successful school leadership with the holistic approach of the health research. By bridging the gap between them, the fields can improve together. Since the focus of this paper is the school leader, the previous research on school leadership will be the starting point. The whole school approach on health is used to ask new questions and make new aspects of leadership visible.

An important step in this merging of perspectives is to consider the meaning of the term "success". Here, it should be remembered that research on school leadership is closely related to research on school effectiveness (SE) and school improvement (SI), which are combined in what Reynolds *et al.* (2014) call "educational effectiveness research" (EER). EER developed

out of the early belief that schools and school leaders could not compensate for differences in society (Coleman *et al.*, 1966; Reynolds *et al.*, 2014; Pashiardis and Johansson, 2016). Several decades later, the field has helped address questions such as what makes a school a good school and how this is achieved, including leadership (p. 197). From the start, the question of learning outcomes was key to effectiveness and success.

Even though learning outcomes can include academic and social development, student achievement has been the predominant effectiveness criterion (Reynolds *et al.*, 2014, p. 205). The two main dimensions of school effectiveness at the heart of the research are *quality* and *equity*. Quality is about the scoring between schools, while equity is the difference made within a school (Reynolds, 2014; Pashiardis and Johansson, 2016). When student wellbeing is considered within this tradition, the focus is predominantly on wellbeing as a measurable output. As Pashiardis and Johansson (2016) suggest, there are reasons to problematise what we mean by success, and consider not only *products* but also *processes* and *context*. Context considers the fact that, while all schools are similar on one level of understanding, the everyday life of a school includes unique students, parents, teachers and principals. For one thing, students have different socioeconomic backgrounds (Hallinger, 2018) Focusing on processes means paying attention to the everyday activities and relations between school actors, which in turn means focusing on the *doings* of schools. One problem with this is that, even though we define success as something wider than academic results and processes, important processes exist on many levels within multiple contexts (Skott, 2009; Clark and Wildy, 2016). These include reform work, leadership at different levels, and development work at the school level. This means that to establish health promotion work in schools it is necessary to pay attention to the complexity of processes.

This paper focuses on the complexity of organisational processes at the school level and considers the role of successful leadership in managing a whole school approach for health promotion. It considers schools as responsible for both health *and* learning and examines the Swedish school context.

The research questions are:

RQ1. What do successful school leaders do when they take on a whole school approach?

RQ2. How do these results relate to previous research on successful school leadership?

To answer these questions, this paper draws on empirical data from two projects in Sweden. The term "principal" is used when identifying school leaders at the school level.

3. Health-promoting school leadership: the Swedish context

For ten years, the Educational Act of Sweden (SFS, 2010:800) has stipulated that principals are responsible for leading "Student Health Services", which are defined as health-promoting and illness-preventing activities. Each school must have a student health team (*elevhälsoteam*/EHT) comprising different professional competences such as counsellors, psychologists, doctors, school nurses and special educators). Together with the teachers, they are supposed to develop student wellbeing through health-promoting work, which is seen as highly related to students' learning and performance. One can consider this law itself as a whole school approach. One of the reasons the intention behind the law has proved difficult to establish in practice is that it challenges the perception of schools as places consisting mainly of classrooms where teachers work with students, and not as places for collaboration between different professionals, working together (Törnsén, 2018; Hylander, 2016).

Törnsén (2018) finds that professionals in the EHT team generally consider the principal's leadership to be important for the team and the whole school. The principals considered health work as something outside the core business and did not understand how it was interlinked with the rest of the school work or how the organisation could work in a more

holistic way. They did not coordinate competence development for different professional groups and there were weak learning environments. Consequently, the support was given to students only when problems appeared, instead of identifying what they needed to remain healthy and what support they needed to be able to participate in the teaching. The principals thus did not enact a health-promoting leadership from a whole school approach, despite the fact that all principals in Sweden participate in a mandatory training programme built on school leadership research (Brauckmann *et al.*, 2020).

This was also a reason why The National Agency for Special Needs Education and Schools (SPSM) started to collect inspiring examples from their development work and put together an internet-based course called *To develop the school's health care work,* which the principals and their EHT teams could attend. Close to 1,000 schools have so far participated, including 4,600 participants. Over time SPSM identified that most schools developed their work, but only some schools became really successful. Therefore, four researchers were invited to shadow the principals and their teams to identify the difficulties in establishing a whole school approach. This paper emanates from a follow up study of the schools that were identified as most successful in establishing a whole school approach. It identifies what it was the principals in these schools did to make a difference.

One problem of comparing countries is that school systems differ widely. To understand the Swedish context, it is important to understand that the governing system of schools is built on a three-level structure. On the macro level, the state regulates all schools through common laws, regulations and curricula that are enacted at the micro level of schools where principals are responsible for what is called the "inner work". To assist the principals in this work, there are two national authorities that provide materials and assistance – SPSM is one of those.

In between the macro and micro levels, there is also a meso level. This is the local owner level, which consists of the 290 municipalities (public) and thousands of independent school owners (private). All local owners follow the same national school law and curricula, and are publicly funded and inspected. It is their responsibility to make sure the national regulations are followed. In this study, the focus is strictly on municipality contexts. Important to note here is that, within these municipality contexts, all schools are run by a politically appointed school board with the mandatory administrative function of a superintendent. This position is a link between the board and the principals. To describe the importance of interlinked processes, the term "governing chains" has been used (Moos *et al.*, 2015), and this study will pay attention to these interlinked processes.

4. Method

4.1 Background

This paper combines the results from two different projects. The first project started out as an evaluation of a government-funded online course. Over the course of a year, the participating principals and their student health teams worked through digital modules and sent their reflections to a team of researchers from different research fields and perspectives, including leadership and organisational perspectives. The researchers analysed the material individually and collectively to investigate high-quality work with "student health" (Löfberg, 2018). The findings were the starting point for a second project – a follow-up study of schools that had successfully developed their health-promoting work during the course. In this second project, two of the researchers continued to explore what it was that these schools and principals had done to become successful.

4.2 Selection and data

The successful schools were identified through the quality of their formal plans and other documentation, including professionals' writing about the schools' processes and personal

contacts the SPSM had with the principals and their teams over a year. Their documents, texts and stories indicated a qualitative difference in their work. One important aspect of this was how well the schools coordinated the professionals within the student health team and also the team and the teachers. In the first study, two models that identified different stages of development were developed. These models were tested with other principals in the period between the studies to make sure that the different stages made sense to the principals. Some found the models so useful that they used them in their local quality work. The models were then used to identify schools that had moved from having multi-professional teams to having interprofessional teams and combining them with new kinds of cooperation with the teachers, i.e. not only taking care of problems but working interactively with the principals to establish health-promoting practices.

The selection of schools was done in two steps. In the first round, 18 well-developed health-promoting schools were selected from the same cohort, which was studied in the first study. This selection was done to identify practices that could be analysed for more in-depth studies, including professionals' perspectives on the health promoting work. The design included four schools, but added interviews with principals from other successful schools to broaden the dataset. One difficulty was that, to be identified as a case school, it was necessary for the principal and team members to still be working at the school and be able to participate in the follow-up study. Without them, it would be impossible to collect data about the development processes. Only three schools could be selected from the original cohort, and one was added through recognition in a previous course group. Several of the principals did, however, agree to be interviewed even though they had changed schools.

Out of the four case schools, two schools were primary schools and two were upper secondary schools. At each school, the principal, deputy principals, student health team and a representative selection of teachers (chosen by the principal) were interviewed. Since most schools work with teacher team leaders, this was in most cases the participating teachers. Students were not included in the study since the focus was on organisational aspects in which the students were not involved. Some superintendents of the four schools were also included since the meso level seemed to matter for success. This was a result of the study and was added after the first school visit.

Altogether, the study included 57 informants, including 17 principals, 18 participants from student health teams, 21 teachers and 3 superintendents. Two principals were interviewed also as superintendents. For an overview see Table 1.

This paper builds on a larger research report (Hylander and Skott, 2020) and includes all the collected data. However, in what follows, the focus is mainly on the interviews with the principals. Hence, this paper highlights the work principals do to establish a whole school approach and predominantly uses the interviews with them to identify successful health-promoting leadership. The other interviews are used to put the principals' stories into perspective, i.e. to make sure the principals' stories were in line with those of the student health teams and staff; this proved to be the case, no matter if the school was successful or not.

The study also included analyses of 19 health plans, which will not be referred to in this paper. They were, however, important because all the successful schools had plans that were living, not dead, documents. The focus here, however, is not on the texts as texts, but on the lived practices and what the principals did to improve these practices.

4.3 Setting and data collection

First, all schools were contacted by two civil servants at SPSM whom the principals knew from the course. This personal contact with the principals was to make them comfortable with asking questions, help them understand the purpose of the study and respond honestly whether it was possible for the two researchers to come and perform the interviews. The principals could also read the researchers' conclusions from the first project. When the

School	Plan	Principals	Student health team[a]	Teachers	Superintendents
Primary school 1	x	P, P[b]	K, Ssk, Sp, R	3	Student health
Primary school 2	x	P, Dp1, Dp2	K, Ssk, R, D1[c]	6	
Upper secondary 1	x	P[d], P[e]	K, Sp, Syv, R	5	Upper secondary
Upper secondary 2	x	P	K, Ssk, Sp, Syv, R	7	Upper secondary
Primary school 3	x	P			
Primary school 4	x	P			
Primary school 5	x	P, Dp			
Primary school 6	x	P,P[f]			
Upper secondary 3	x	P[g]			Upper secondary
Upper secondary 4	x				
Upper secondary 5	x	P[h]			
Upper secondary 6	x	P[i]			
Primary school 7	x				
Primary school 8	x				
Primary school 9	x				
Upper secondary 7	x				
Upper secondary 8	x				
Upper secondary 9	x				
Upper secondary 10	x				

Note(s): [a]K = counsellor, Ssk = school nurse, Sp = special educator, Syv = guidance counsellors, Sp = school psychologist, R = principal
[b]Previously a principal (now a superintendent with a special responsibility for student health)
[c]Dp1 = deputy principal with responsibility for student health
[d]Programme principal with special responsibility for student health
[e]Previously a superintendent responsible for student health, now a parallel programme principal
[d]Present and previous principal. Separate interviews
[f,g]Group interviews

Table 1.
Plans and informants

principals had agreed to participate, the researchers sent an email with a request to have a first contact to plan for the study.

All the case study interviews were done on-site and the rest were done by phone. All interviews were performed by the two researchers and were semi-structured (see Appendix 1 for the interview guide). The focus of the interviews with principals was on current and previous student health work in order to capture the organisational processes and leadership aspects.

The interviews with the principals were mostly individual or with the deputy principal. There was one focus group, which included principals from schools 2–6 that all had the same superintendent (who was silently present with a development leader). The interview was considered a learning event by the participants and the presence of the superintendent was discussed with them before the interview. All considered it important that she was present. On average, the interviews lasted for around 75 min and were performed with informed consent. All interviewees were informed they could withdraw from the study at any time.

The on-site interviews were complemented by walks through the school environment to help capture the different contexts. These were guided by the principals before the interviews and were important both as an introduction and for building trust, and were often used as a reference point by the principals in the interviews when describing the schools' work.

4.4 Data analysis

The interviews were recorded, transcribed and analysed qualitatively, using thematic analysis to identify themes and patterns.

The transcribed material was analysed by the two researchers. The author of this paper – an academic within the field of educational leadership – performed and analysed the

interviews with the principals. The other researcher – an expert in EHT teams – performed and analysed the interviews with the EHT-teams and teachers. Since the interviews were made by the researchers and relatively small in numbers, the coding was done manually by the researchers. And since the purpose was to identify unknown success factors, inductive coding was used to identify themes.

Before the coding, each researcher read through all the transcribed interviews to get an overview of the material. However, the deeper analysis was done only by the researcher who performed each particular interview. The two researchers then discussed the identified themes together and one notable finding that came from this interaction concerned the importance of the principal's "inner turn around". The leadership researcher considered the principal's turn around to be interesting, but the researcher on student health teams disagreed. The turn around in question had been done by the team members a decade ago, and it did not appear noteworthy until the data was analysed on a deeper level. It was then that it became one of the major findings, i.e. that principals must have a deep understanding of what it is they are supposed to change, otherwise their leadership cannot contribute to achieving it.

One important aspect of the analysis work was that the two researchers spent much time together before and after the interviews working on how to capture the multiple processes at the schools. Before visiting a school, the researchers analysed the health plans and other documents the school had provided. These documents were discussed, so that each of the researchers knew the important questions to ask regarding processes. All the interviews at each of the four schools were completed on the same day, and the researchers went there together. At the end of each day, the researchers met to describe in a systematic way their first impressions of the interviews, and also what can be easy to forget, such as the feeling when entering the school and performing the interviews. Everything was written down and taken into consideration when analysing the material.

5. Results

The study included 17 successful school principals. All of their schools showed remarkable progress in their processes during the course. From their stories about the change work, it was possible to identify what it is that successful principals do when they take on a whole school approach: *They synchronise the health-promoting activities at the schools*. This is a complex task that includes five aspects of everyday work:

(1) They build their actions on a holistic approach regarding curriculum assignments.

(2) They coordinate the student health team's work and establish prerequisites for a health-promoting, distributed leadership.

(3) They work with cross-professional coordination.

(4) They take health promotion as a starting point for local quality work and link the quality work to health-promoting capacity building.

(5) They widen the holistic approach, coordinating leadership between different system levels.

In the first results section, these aspects will be described in more depth. To explain what made the successful leadership possible, the second section highlights what all principals described as the most important factor for a whole school approach to be realised: a turnaround within themselves.

5.1 Synchronisation of the five aspects

Successful health-promoting processes take time to establish. One principal described a journey over five years, starting from zero. Several others described "fragility" and

sustainability challenges due to the change work being built on human actors' understandings and coordinated actions. Since a holistic approach includes many actors, the processes were repeatedly interrupted when there was a staff change in important positions. Positive change is not something that can be established overnight – it takes time and constant effort. Those that managed it focused on the following aspects.

5.1.1 A holistic approach regarding curriculum assignments.

> For us, it was an important signal to show that student health is a part of the whole school, and safety and wellbeing is as important and crucial for the students as gaining knowledge. Therefore, we have worked to make student health an important and obvious part of everything that we do. (Ps 2, P)

To understand the difference the successful principals made, it is necessary to look beyond leadership practices and doings. The holistic approach starts with a genuine understanding of the overall purpose of schools and a deep knowledge about the whole curriculum. This includes norms and values, and each student's right to support in achieving their academic goals. All the principals described how the different parts of the curriculum were bound together to assist learning and development. Values work was considered an important part of the core business. Key to success was transforming the complexity in the guiding documents into lived and synchronised actions. It is, as one principal described it, a focus on "student health all the time".

To be able to work with all aspects of the curriculum, one school had divided the student health team into two parts: one health team and one comfort team (*trygghetsteam*). The latter managed the preventive and promotional elements (linked to values). Among other things, they worked on the basis of incident reports and described the plan against discrimination and defamatory treatment as the backbone of health promotion work. The counsellor was responsible for creating a respectful school environment. The team also included a school nurse, two safety hosts, a special needs teacher and a host for comfort. They all coordinated their activities to achieve equal coverage between classes. Thus, it was not a single teacher working with values, but a team working for the whole school, which the principals talked about and made visible to students and parents. The principals said the aim was equivalence between the classes and a single spirit throughout the school.

Another frequent expression of this holistic work is the *whole school day approach*, where the teaching and all sub-activities during the school day are considered important. In Sweden, schools provide aftercare (*fritidshem*) for children under the age of thirteen, until the parents' work day is over. At the successful schools in this study, this part of the day was integrated with the rest of the school day. Added to this, they identified that a lot was going on during the school day that was likely to permeate classrooms and obstruct good teaching. They found it was calmer and safer if the breaks were structured. One important change was having the same adults always present at the soccer field, where many fights started and needed adults to break them up before the students could enter the classrooms. Investment in rest activities was a common feature in the primary schools that had come a long way in their health promotion work.

An important task for the principal was to monitor the health-promoting aspects of everyday activities and make sure that there was an experienced difference. One principal said the transition work started by changing a teacher team beset by negative storytelling into a group that thrived and laughed together. Another principal stressed that one of the biggest success factors was that the organisational system of the school was made known to everyone, including students and parents. The most crucial part was that these structures were recognised in everyday practice.

Leading health work is thus a much more complicated task than leading the work of student health teams or teaching alone. It's about enacting the whole curriculum and creating a healthy environment. At the successful schools, the difference was clear upon entering them – there was a welcoming atmosphere and a sense of joy and pride.

5.1.2 Coordinating the student health team's work and establishing prerequisites for a healthpromoting, distributed leadership.

> I could never go back to the way I worked before. . .to think that I did not have the special teacher by my side and did not have the counsellor and school nurse close, to interact with. . .it would be difficult. . .. It's a change. . .or perhaps it's a change in me, I do not know. (Ps 1, P)

Health promotion work is not only about learning health for the future. It's also about living health promotion during school days, including in regular teaching activities. One important part of leading health-promoting activities is that the principals are knowledgeable about inclusive teaching so that they can lead the change in school practice. This can be about seeing, questioning and instructing on different health-promoting practices. However, this is not only the work of a single leader, but something that can be done together with the student health team.

The principals described the importance of actively coordinating professionals within the student health team, i.e. building a synchronised team and working together to develop concrete structures and tools. A first and important step was spending time with the team and getting to know their different professional perspectives. As the participants in the team got to know each other's skills, it became easier to work together and spread the whole school approach. The coordination work included leading the team through different development phases. With a more developed teamwork, it also became easier to handle changes of staff.

When the team was established together *with* the principals, the leadership was perceived as more shared. Several spoke of working together to arrange their everyday practice, with plans, meetings, routines and responsibilities. One principal said that *everything* was now based on student health thinking, including overall organisation, scheduling, group assemblies, and more. More knowledgeable and synchronised team members made it easier to get better traction in daily work: "*keeping the inclusive vision alive*". The principal cannot be everywhere at once but, through others, change leadership can cover the entire organisation.

The principal and the health team had in many cases developed interdependency. The principal gained improved student health skills and enacted a health-promoting school leadership and the team became more integrated and assisted in the leadership of student health work. To assist the development work, the successful principals held many meetings, but were not always the ones leading them. Rather, it was a question of setting the direction, being firm about basic values, and distributing responsibility for coordination. This, however, could not be done without working with other professionals at the school.

5.1.3 Working through cross-professional coordination.

> This means that we easily end up with a focus on the individual, "how do we help this individual?" And this is where we all the time need to remind everyone but how do we change the whole learning environment. . .so that as many students as possible, that the base in the teaching is accessible so that we do not have to do individual adjustments. But it is easy to end up with the individual case, since we have many students in need of support. (Us, 2, P)

An important change factor in the successful schools was that the teachers wanted to be involved in the change work. This included a basic change in attitude, from formerly "dumping" problems with individual students on the health team, to considering the health team as co-players in the change work. The change was about preventing problems by using the team, as well as promoting health through reflective actions. One principal said there should be "*easy roads into the student health team for the teachers, that there should be no obstacles*". This can be achieved by a shift in thought that student health is part of a school's basic competence that requires constant cooperation. The tricky thing is establishing these formulations in practice.

Achieving cross-professional cooperation required that the principals showed all professionals respect while staying firm in their health-promoting and inclusive perspective. While some teachers considered "difficult" students the responsibility of the special teachers, the principals described how they constantly followed up with a focus on the inclusion of individuals and groups. This was done while maintaining an understanding of the complexity of the teachers' work, who were not only supposed to handle large heterogeneous groups, but also mentor the students. The teachers needed to feel supported in this work, to be able to change their ways of acting and not be judged by other professionals.

The principals also pointed to the heterogeneity of the teacher group, where some, just as in the student groups, needed more support than others. Several principals highlighted the importance of mutual trust and that employees needed to show trust in the principal. As principal, it's about getting everyone onboard by gradually eliminating what one principal called "*trip wires*" through more knowledge and changed attitudes. A crucial aspect was therefore interprofessional respect. When this was established, the teachers at the successful schools saw that the change work was not extra work, but a possibility to develop their own teaching practice. One principal described how it created a different kind of organisation, with different names, moving away from old thought structures. This gradually changed the teachers' way of thinking and acting. Another described the change work as "*branching out on the pedagogy platform*".

The schools that had come a long way in synchronising professionals' work had principals who had exercised strong management and leadership practices to establish the change. In these schools, all staff had stories about their development work. The teachers at these schools expressed great respect and admiration for their principal and student health team.

5.1.4 Taking health promotion as a starting point for local quality work and linking the quality work to health-promoting capacity building.

> All types of competence development. . .to be able to meet in these conversations, so that in a way. . .all kinds of competence development. . .the common and the more specific for different groups, are part of some kind of web, which we are weaving. . .with threads, to be able to meet in this thinking. (Ps 5, P1)

According to Swedish law, all schools must enact local, systematic quality work, which includes collecting data and identifying necessary changes. Research shows that it is difficult to establish quality work that makes a difference in practice (Kostenius and Lundqvist, 2019). The principals at the successful schools described how they brought the health-promoting perspective into the quality work, which became a tool "*to organise the unique fabric where everything is woven together*". One crucial aspect that several interviewees mentioned was linking data regarding quality aspects to capacity-building activities. The cornerstone of the work was that analysis came before actions and were linked to the health-promoting vision.

One challenge was getting teachers to spend time on knowledge-building related to health promotion, rather than deepening their academic skills. To succeed in this change of perspective, the teachers were divided into smaller groups based on their expertise and areas of interest. The principals gave them a framework for what they wanted them to do and a time to meet each week. The teachers were free to decide the subject of their pedagogical assignment, but the principals identified guiding themes that were relevant to the entire organisation. Small groups of teachers were given the responsibility to plan learning activities for the other teachers, which changed the teachers' perspective on change work from being passive recipients of the principal's orders to driving it forward themselves. This work also made a stronger impact than previous development work – something happened when the principals were no longer the only ones leading it.

The principals did not shy away from the fact that there were always individuals who showed less willingness for change. One way of addressing this was for several principals to

work in shorter development cycles to show how small changes can make big differences. One important aspect of this was bringing quality work into every conversation, including individual staff development meetings. The teachers began to take the health-promoting perspective into their individual meetings with students and mentor meetings with their classes. In this way, the quality aspects were advanced, no matter what the activity.

The principals described how they worked systematically at all levels of the school organisation with promotion and preventive student health work based on the school's quality work. One challenge of this was that, to succeed, each individual's action counted, every day.

5.1.5 Widening the holistic approach and coordinating leadership between system levels. The four aspects above mainly focus on the work at the school level, going into fine detail while keeping the holistic perspective in mind. Important, however, is that while Swedish principals are responsible for schools' inner work, they are also part of a larger local context, which means they need to link their actions to superintendents and other school leaders in a synchronised, multilevel leadership that includes vertical synchronisation.

All the schools in the study were public municipal schools. This means that they were not only following national laws and regulations, but working under a local school board and superintendents. In general, this means that local school work should be synchronised between system levels, with the school board deciding the focus of each school's development work. When it comes to student health issues in particular, each municipality has at least one responsible manager at the meso level. Some professionals in student health teams can also be based centrally and divide their working time between different schools. Consequently, there are inbuilt challenges of coordination regarding student health work.

One major finding of this study is that the vertical aspect of synchronised leadership is crucial. In several of the most developed schools, success was the result of superintendents' active work for holistic change. In these contexts, the quality work of the municipality was constructed from a health-promoting perspective and made development work between schools possible. It was not a coincidence that all the upper secondary schools in one municipality were on the list of successful schools. This was the result of intensive work led by the superintendent, who synchronised the development work over several years. This resulted in quality processes on a higher level, showing trust in the local health work:

> I do not require a student health plan anymore, which I did at the beginning. . .just for them to do it. I do not care. . .now that we are through that phase. Now I see their work through the systematic quality work that we do. How they do it is their business. But this is my way to follow up that it is done. (US 2, superintendent)

Other municipalities showed similar synchronisation. But it was evident that it was a fragile construction where changes of superintendent could destroy the synchronised work at the school. Of course, this is never intentional, but one case clearly showed that if a superintendent does not understand the health-promoting perspective and starts to reorganise from other perspectives, this negatively affects the local school work. In this particular municipality, the superintendent merged two schools and installed a new principal to lead the student health work. The new principal had, however, no experience of this:

> I received the mission as a kind of bonus, before I was to start my job. To begin with, I was to lead the vocational programmes, but then I had the question of whether I could take the responsibility for the student heath team. "Well – yes I can". Unfortunately, this has meant that we lost it, the work they did. . .I simply have not had that possibility. So they have to start leading themselves somehow, and we have not really figured out how. (Us 1, P)

When the holistic perspective is lost, a lot of small integrated actions that have built up structures and cultures over time are also lost. Thus, the holistic perspective must include the whole local context, not only the school.

5.2 A turn around within the principal

It is evident that the principals were important for establishing a whole school approach. In the previous section, the focus was on *what* they did as successful leaders. Here, the focus is on *why* they did it, because one of the main findings was that all the principals shared the same change story – a kind of inner turn around. When they understood the essence of a health-promoting perspective, it changed their actions so that they mastered and enacted a more synchronising leadership.

> I developed another knowledge base to stand on. Now, I think all the time: prevention, promotion. Before the course, I was in an emergency situation all the time, and it's so easy to be in a school and not focus on this kind of work that will show results in a year's time. So I'm so glad I prioritised the journey, precisely because I've got a new knowledge base, which makes me think differently. (Us 5, P)

The change meant taking a more holistic approach to school work, including health promotion. Making a difference required more than an excellent student health team where health issues were handled separately from teaching activities; the difference came when they started to see student health work as part of the core pedagogical business.

The essence of the above quotation was common among all the successful principals (see Appendix 2). They described how they started to widen their leadership practice from focusing strictly on instructional leadership with teachers in focus, to acting from a more holistic perspective, where the main task was coordinating multi-professional actions between parts of the organisation. One principal said that each action now was considered an opportunity to think from a preventive and health-promoting point of view. They started to synchronise all the other work from this starting point. The following figure illustrates this synchronising work (for further development, see Hylander and Skott, 2020) (see Figure 1).

The triangle illustrates that the principal's knowledge base and leadership are the foundation for positive change. The arrows in the middle represent the first four aspects of coordination described earlier. The left side of the triangle symbolises the student health team's development, where the principals change the ethos of the work from individual professionals to a synchronised team. The right side symbolises the teacher teams and other professionals working together at the school, who also need guidance to become more synchronised in health-promoting actions.

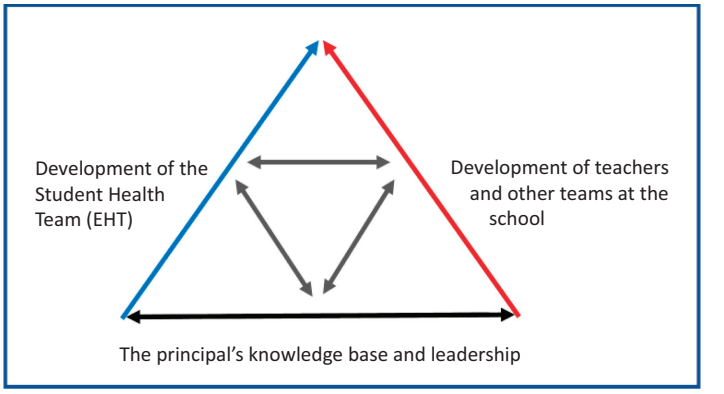

Figure 1.
A synchronised health-promoting leadership, built on a strong knowledge base

When the principals consciously led from a health-promoting perspective, the development work did not stop with the development of a student health team – the teaching teams also developed their health-promoting work (which included inclusive education and working with stress-reduction related to assessments) as an aspect of teaching. Even though the student health team in some cases had been strong before the change, the major difference came when principals kept their focus on health promotion and started to synchronise activities for sustainable and health-promoting school development.

When principals manage to develop and integrate both sides, this is recognised as health-promoting schools where all professionals work merge into a whole organisation – the triangle is closed, without gaps. What were previously separate professions in the school came together over time. The arrows within the triangle illustrate that there is not one single action that makes the difference, but many interlinked activities over time. The square around the triangle symbolises that a whole school approach is not limited to the school, but includes the local context and interlinked system levels (Factor 5, above). This is what in the beginning of the paper was called the complexity of organisational process.

6. Discussion

The aim of this paper was to identify the role of the principal when establishing a whole school approach for health and wellbeing. Two questions were asked. The first considered what successful school leaders do when they take on a whole school approach. The first finding was that principals' leadership is crucial for establishing a whole school approach. Without the synchronising work of principals, it is difficult to establish a health-promoting school. Their leadership is necessary for handling the complexity of organisational process. The paper summarises five coordinated aspects of school leadership. When principals actively engage in leading health promotion and stop considering health issues as separate from teaching practices, this make all the difference. It requires a turnaround within themselves. A holistic approach improves not only the possibility for student health teams to develop as teams, but it helps them to work interprofessional with synchronised teacher teams at the schools. Together, they develop health-promoting environments. While previous research identifies the importance of principals (Hylander, 2016; Törnsén, 2018), this study shows *what* can be accomplished through principals' leadership and *how*.

Since much is known about successful school leadership in general, the second question was whether successful health-promoting leadership differs from these general leadership practices. When compared, these original successful practices can at first appear similar to a health-promoting leadership. To begin with, health-promoting leaders need to set directions, but the important thing is that they cannot set just any direction – they need to build on deep knowledge about the whole curriculum and make health promotion part of the overall aim, known by everyone. Further, health-promoting work cannot be established without intensive work on building relationships and developing people. It is, however, important that the development of important health promotion issues is synchronised between different professionals. Essentially, this means developing the organisation to support desired practices, but accomplishing that is much more complex than what the single practices in the list reveal. Finally, a successful health-promoting school leader needs to work through instructional leadership and consider what the instruction should be about – it must be redefined to include health promotion. A principal who narrows the leadership to *only* be instructional can hardly be working from a whole school approach. Hence, health-promoting leadership is not an added leadership practice, but more like a "pentathlon" of practices with the aim of establishing student wellbeing and academic achievement through multiple synchronised actions. Taken together, successful school leadership practices need to be viewed through a health-promoting lens.

This study has several implications for practice. Compared to previous research, the most important finding here is that a successful leader must be able to develop a synchronising leadership. If the school leaders are not provided with a full understanding of what a health-promoting leadership requires, they run the risk of being too narrow in their leadership by following research-based standards that do not consider the complexity of organisational processes. The case studies suggest that a knowledgeable and multitasking principal is a crucial factor for success. Understanding the complexity is necessary, but not sufficient. Previous research shows that effective teaching is not about doing a small number of "big" things right, but doing a large number of little things well (Reynolds *et al.*, 2014, p. 212). The same can be said about successful health-promoting school leaders, i.e. no change is possible if the school leader does not understand what health promotion is about.

This study also has implications for future research. It was built on a previous study where successful principals had been identified through their participation in a digital course and where the schools sent in their reflections over a year. Four schools were selected as case schools, where interviews were done with the principals, student health team members and teachers. Added interviews with other successful principals were done to broaden the dataset. The interviews were recorded, transcribed and analysed qualitatively using thematic analysis to identify themes and patterns. Even though these schools and principals were selected out of hundreds that participated in the course, the results in this paper are built on analysis of a small number of municipality schools. The data collection and analysis may also be biased since there were only two researchers involved in the qualitative project.

This means that there are reasons to explore these and other successful schools further. This study suggests that strong leadership is important. But how is that leadership enacted when performing the coordinating activities? What exactly is it that principals do when staff accept that the changes are necessary and require strong leadership? And how do the students experience successful student health work processes? Added to this, it is important to question the concept of a "whole school approach", that is: what is a school? The results indicate that superintendents can sometimes be what Stringfield (1998) calls "change killers", where new actors do not see the value in continuing a change work initiated by others. A holistic approach to health-promoting school leadership in countries like Sweden also needs to consider the local owner context. In future comparisons between countries, it is important to explore system differences within schools as well as in different local system contexts.

Even though the study is limited to a small selection of successful schools and principals in Sweden, the paper takes a first step to bridge the gap between leadership research and research on health promotion. International research on successful school leaders rarely addresses professions other than teaching and strongly focuses on instructional leadership for teaching and learning, while research on health promotion rarely considers contextual differences between countries. The main result of this study is that principals' leadership seems to be crucial when establishing a whole school approach. This is also why the paper encourages more research on successful health-promoting leadership.

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Appendix 1

Interview guide for meetings with principals

You have been selected for this interview since you are/were the principal(s) of a school which participated in the SPSM – course *To develop the schools health care work*. During the course you and your team were identified as schools which developed substantially. Now that one year has passed since you finished the course, we are interested in your own reflections about your work and the results.

(1) Describe your own background/leadership experience and the role you have had in the development work at the school.

(2) Describe the background of the schools and why it was decided to engage in this specific development work.

(3) Describe the development processes for the team and for the school as a whole.

(4) What were the main challenges during the development work?

(5) What do you consider the most important results? And what do you consider as important for achieving those?

(6) Have the results remained? If not, explain why.

(7) If you reflect from a leader perspective, did you develop any new knowledge related to your role, and if so has this affected your leadership? What do you consider necessary for a principal to know and do to develop student health work?

Appendix 2
The principals' turnaround and synchronising work – sample quotations

We made a student health plan and started to give a lot of concrete expression regarding the promotion and prevention. . .what value base we stood on. . .the spirit we wanted to work with around our students and talked a lot about different perspectives on health and. . .we turned around the student health work. Earlier, we ran around and extinguished fires, just remediation. Now we focus on, "we'll have a good bottom". Student health begins in the classroom. It is the teachers who meet the students every day. That's where we're going to focus. (PS 3, P)

I see that it is extremely important to embrace the idea that student health work begins in the classroom. That the class teacher can respond to students and adapt. That's the most important thing. . .first it's that you look at your own adaptations and treatment. Then you get the teacher team to help you. If that does not work, then you can go on to special education and discuss it. Wouldn't that work, it's EHT. You need to make that clear. A lot of people skip all those ranks. . .But while we were taking the course, we had to plant this mindset. (PS 6, P)

We strive to be a student health without an office as we say, that we should be where the student is, where the staff is, we'll be out in the school practice. I as an assistant principal with responsibility for student health should be visible, accessible, the counsellor is very out and works in classes, the school nurse is out a lot. And we want to get away from sitting in our offices. (PS2, DP 1)

The student health is here for the education, and from my point of view, student health is not as it says in the law, that it is the team members or the special professions. I keep saying we are all student health. And that student health is a verb, something you do, it's in every choice. (US 2, P)

PS = Primary school

US = Upper secondary school

P = Principal

DP = Deputy principal

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The role of principals in school health promotion in South Africa: a qualitative study

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Abstract

Purpose – School principals are presumed to be pillars of school health promotion implementation. Their understanding of their role could enhance school health promotion. This study aims to investigate how principals understood their role in school health promotion.

Design/methodology/approach – In this study, semi-structured interviews were conducted with six school principals who participated and completed the first cycle of the Continuous Professional Teacher Development programme that was offered by the South African Council of Educators. Snowball sampling was used to sample participants.

Findings – The findings of this study showed that principals did not differentiate between concepts of health-promoting schools and school health promotion, the meaning was the same for them. They focused on any health improvement within the schools, regardless of its conceptual nature. The second finding pertains to the role of the principal as a manager, while the third was on expedition of collaborations and partnerships.

Research limitations/implications – This research was limited to school principals who completed the Continuous Professional Teacher Development programme. It, therefore, does not include perceptions of other principals.

Originality/value – The study findings suggest that despite inability of schools in poor communities to implement effective school health programmes, the principals of the sampled schools were aware of their roles. This is positive, as the efforts to enhance health promotion initiatives would focus on developing and empowering principals to improve their performance.

Keywords School health promotion, Managerial roles, Managerial tasks, Partnerships with parents, Intersectoral collaborations

Paper type Research paper

Introduction

A school is the second-most influential environment in a child's life (American Academy of Pediatrics, 2008). A healthy school environment is crucial for effective teaching and learning. According to Cohen (2010), such an environment contributes to the development of children as skilled and productive members of the community. Although the core business of schools is focused on educational outcomes, it is believed that health and education are intertwined, as poor health inhibits learning. School health promotion is an internationally recognised approach that connects health and education in a planned, integrated and holistic way and has the potential to support improvements in both health and education (Stewart-Brown, 2006). School health promotion is defined as any activity that occurs from within a school that is undertaken to improve and/or protect the health of the whole school community (WHO, 2000). It is about providing a better foundation to build a rich health knowledge base and healthy living skills (St Leger and Young, 2009) through health education, as well as development of learning spaces that are a part of the everyday life of the school (Carlsson, 2016).

Schools, especially principals, are expected to play an important role in providing healthy environments for learners and teachers. To this end, the Department of Basic Education

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policy on the South African Standard for Principalship (South Africa, 2016) indicates the role of principals as, amongst others, creating a safe, secure and healthy learning environment. Principals are responsible for building and sustaining high motivation and supporting their staff in developing the skills required to successfully change and coordinate processes and activities and encouraging them to sustain new practices and activities (Dadaczynski and Paulus, 2015). They have a significant influence on deciding whether to make schools healthy organisations. The key role of the school principal is to promote the interests of all learners and staff members. The school principal is responsible for ensuring that the school and the people, assets and all other resources are organised and managed to provide an effective, efficient, safe and nurturing environment (South Africa, 2016). Dadaczynski and Paulus (2015, p. 254) further claim that there is a "slowly emerging evidence that indicates that principals as 'gatekeepers' to school innovations have significant influence on whether or not a school will become and remain a healthy organization". However, these authors argue that, despite the progress made in terms of school health promotion in recent years, principals and their role have barely been investigated in theory and practice. According to St. Leger (1998), school health promotion will only be successful if the school principals can understand, interpret and shape it to meet the needs of their respective school communities.

There is a lack of documented evidence of principals' understanding of their role in school health promotion in South Africa. An international study by Roberts *et al.* (2016) focused on the principals' role in health promotion; it explored specific aspects such as active living and healthy eating. A national study by Kwatubana (2017) was dedicated to the principals' role in developing social capital. Another study by Kwatubana and Nhlapo (2020) investigated the principals' role in changing the mental models of teachers involved in school health promotion. This study was premised on the notion that principals are regarded as change agents leading the school community to adapt and accept changes that may be initiated from outside the organisation. As much as these studies provide relevant information on principals and school health promotion, the role of principals has not been extensively investigated. No study could be found that examined the roles of principals in school health promotion in general, not only on specific programmes and or component/s. The question that comes to mind is: do principals in South Africa understand their roles in school health promotion? It is important to investigate how principals understand their roles in school health promotion because of the strategic position they hold that can enable them to be change agents. It is believed that developing and sustaining teacher commitment to health promotion in schools requires role conception (Jourdan *et al.*, 2016, p. 117). Understanding of a role may improve practice if what they know is enacted. The researchers feel that the principal as a leader should have a better understanding his or her role to guide the school community towards turning their schools to health-promoting ones. It is conceivable that principals who lack understanding of their role would be unable to initiate and support health promotion initiatives and activities. However, before roles can be enacted, they must be conceived and understood. This notion brings us to the next question of this study: how do principals understand school health promotion?

Background and rationale

Literature reveals that a focus on school health promotion (an umbrella term for all health activities) improves knowledge, competencies and the health status of the school in its entirety (Sinnott, 2005). When health promotion is neglected, learners are at a higher risk of academic failure, which can have ripple effects, affecting the performance and effectiveness of the whole school (Kwatubana, 2014). The school health promotion initiative is new in South Africa, a draft on guidelines for schools was only published in 2000 (Department of Health *et al.*, 2000). Consequently, a school health-promoting strategy was adopted to ensure the

development of healthy school policies, supportive learning environments, strong community links, personal skills development and the provision of appropriate education support services (UWC, 2006). This concept is not only particularly important for promotion of health and well-being but also for the achievement of educational goals (Department of Basic Education, 2010). The understanding of school health promotion is fast gaining impetus in keeping with the global trends in advancing strategies that sustain healthy environments. The aim of school health promotion is to assist the whole school population to achieve healthy lifestyles by developing supportive environments that are conducive to health promotion and effective learning. This is particularly important in South Africa, a country with 19.7 million children of the total population of 57.7 million people under 18 most attending schools (Statistics South Africa, 2018). This is a country with the highest prevalence of HIV in the world, contributing to a total number of 2.7 million orphans in 2018 (Statistics South Africa, 2018). Two-thirds of children live in the poorest 40% of households (Hall, 2019). In such a context, a school becomes an effective entity to improve the health of the population (Shasha *et al.*, 2011).

Principals as heads of schools usually perform three interchangeable functions of being managers, leaders and administrators. As school managers, they focus on managing and controlling human, physical and financial resources. The leadership role is associated with driving the vision of the institution, focusing on organisational development and school improvement (Kowalski, 2010, p. 23) and exercise influence (Christie, 2010). As administrators, principals deal with day-to-day operational matters and continuously shift between leadership and management functions (Kowalski, 2010, p. 23). In addition, the policy on the South African Standards for Principalship (Department of Basic Education, 2016) is clear on the responsibility of the principal. The Integrated School Health Policy (Department of Health and Department of Basic Education, 2012) states that the implementation of this policy is the responsibility of the School-Based Support Team under the guidance of the school principal. The principal's guidance is expected in performance of tasks, including mobilising the community, ensuring that all components of the Integrated School Health Policy package are provided to all learners and building partnerships with external providers and other community organisations (Department of Health and Department of Basic Education, 2012). In that case, principals are at the forefront of promoting healthy school environments. However, this mandate can be interpreted differently by principals. As principals have to act on this policy imperative, their understanding of their role is imperative. However, globally, researchers agree that policy enactment is complex, as it depends on how actors interpret it (Braun *et al.*, 2010). How these leaders interpret and make sense of what "providing guidance" means will influence their understanding of their role in the implementation of the policy.

The creation of a favourable environment for school health promotion has always been determined by: the support of principals and teachers and staff's general attitude towards their role in health promotion (Barnekow *et al.*, 2006). Moreover, according to St. Leger (1998), the successful implementation of health promotion in schools is largely dependent on teachers' understanding of the building blocks of health promoting schools in general and principals in particular. Adamowitch *et al.* (2014) reported that school principals were mostly the "driving force" in initiating school health promotion and in deciding (together with the later implementer) for concrete health-promoting activities. Research that documents the role of principals in school health promotion is scarce. In particular, the literature has been relatively silent on how principals perceive their role in health policy implementation in relation to curriculum-based programmes and promotion of healthy school environments.

Research methodology

A qualitative research design was employed in this study. The qualitative research is appropriate for this study, as it was important to understand the meanings the participants attach to their roles and how they experience everyday life realities (Niewenhuis, 2016) of enacting the roles. Snowball sampling: a process whereby the sample is selected using networks (De Vos *et al.*, 2011), was used to sample participants. This sampling method was suitable for this research because information on principals who completed Continuing Professional Teacher Development (CPTD) that was offered by the South African Council of Educators was not easily available. We targeted principals who were participating in CPTD activities and had completed a cycle. CPTD is a practice-based, part-time programme aimed at providing management and leadership support through a variety of interactive programmes to improve practice (South Africa, 2012). The CPTD emphasises nine key areas of whole school improvement, including basic functionality; leadership, management and communication; governance and relationships; quality of teaching and learning and educator development; curriculum provision and resources; learner achievement; school safety, security and discipline; school infrastructure; and parents and community. These key areas do not focus specially on school health promotion, but workshops sporadically address some thereof. The acquired skills and information gained could also be beneficial to school health activities. For instance, stakeholder involvement, safety, security and discipline and support of a positive teaching and learning environment are part of school health promotion. The criterion that guided our sampling process was not just to get principals who were willing to participate, but those who had attended the CPTD workshops. This was important for this study, as we assumed that principals might have acquired more information about the role they were supposed to play.

We approached a principal whom we knew, first asking for those that attended CPTD workshops. We approached the five who we were referred to, but only two completed CPTD. When these two accepted our request for them to participate in the study, we then asked for referrals, and we were directed to other members of the population (Creswell, 2014). We explained the purpose of the research to the principals who met the criterion and asked them to participate. This process continued until data saturation was reached. The sample consisted of six primary school principals from historically disadvantaged communities: four males and two females.

Data were collected by means of semi-structured individual interviews with school principals at a time convenient for the participants. A detailed interview protocol was used, and each session lasted for 1 h. The interview questions were open-ended and intended to elicit data on how principals understood their role in school health promotion. They were based on two aspects: the principals' understanding of school health promotion and their perception of their roles in school health promotion. In the interview schedule, the questions on the first aspect intended to elicit data on the thoughts of participants on what school health promotion entails, what its pillars are and its significance. The guiding questions included: what does school health promotion entail? What are the most important activities that you embark on as a school to ensure health promotion? How important are the health promotion activities for the school? In the second aspect, based on their understanding of what school health promotion entails, principals had to elaborate on their role on each point they had raised. As these were guiding questions, probing questions were posed for clarity and elaboration. The first aspect was included based of the belief that if they do not understand what health promotion is about, they will not understand their roles in this area.

The data gathered from the participants in this study were carefully analysed using thematic analysis. Data were analysed by means of coding, categorising and thematising, as described by De Vos *et al.* (2011). As these authors suggest, the steps were not followed rigidly but as guidelines to reduce the data into manageable set of themes that allowed us to write the final narrative. McMillan and Schumacher (2001) describe qualitative data analysis as an

inductive process of organising data into categories and identifying patterns. After each interview, we analysed the data before commencing with the next interview. Two authors independently reviewed selected transcripts and employed open coding strategies (Strauss and Corbin, 1998) to inductively identify emerging codes (Creswell, 2007).

Results

Understanding school health promotion

Most of the participants seemed to understand what school health promotion was about. They mentioned its importance and its goal. Others focused on the important aspects such as: policies, involvement of teachers and learners, collaborations and partnerships. Participants said: "[school health promotion] is about promoting the health of everyone in the school–teachers, learners, support staff and anyone who works in the school" (participant 6); "my understanding is that a healthy school is a place where everyone and everything is safe" (participant 2); "health promotion prioritises the health of everybody in the school community, there must be policies and plans that guide the implementation of programmes" (participant 3); "it is about creating a conducive environment for teaching and learning and for learners to grow (participant 1); a school where all stakeholders promote the health of staff, parents and the wider community" (participant 4).

A participant indicated an important aspect that may ensure continuity of the initiatives: "offers opportunities for and requires commitments to the provision of a safe and healthy environment" (participant 5).

It became clear that most participants considered a clean school environment, school nutrition, physical activity and health education as important. These were regarded as valuable building blocks of a healthy school. Participants said the following in this regard: "school nutrition is important, our learners come from poor backgrounds, in order for them to learn they have to get nutrition (participant 3); learners have to be taught about healthy living and healthy eating" (participant 5); "learners have to be taught to keep the environment clean, playgrounds, toilets and their classrooms; a school that takes the learners' health seriously, they make [sic] sure that the environment is clean so that learners do not get diseases from unhealthy places in the school, like the rubbish dump or sewer spillage" (participant 12); "it is good that learners are involved in physical activities through Life Orientation, this keeps them physically fit and alert" (participant 3).

Focus on collaboration with other interest groups

Participants indicated the importance of collaborations with government departments and the crucial role that they should play in this regard. They mentioned three government departments and elaborated on their role in ensuring that these collaborations are strengthened. "...we are happy to work in collaboration with various departments. The nurses from the Health Department visit our school to teach our learners about health aspect and provide vaccination. My role is to ensure that they are supported in order for them to do their work effectively. I assign a teacher that ensures that they have a private space to work on, they are not disturbed and they get all the assistance they need" (participant 2); "we involve social workers when there are learners that are in need of social services, I have to liaise with the social workers and facilitate meetings with the learners. Social workers help with counselling for learners who experience hardships. Teachers make me aware of such learners and my role is to organise the counselling sessions" (participant 4); "we work closely with the South African Police Service, our local police help when we experience burglaries and when we have learners that are using drugs. I invite police to talk to learners about crime, drug and substance abuse, child abuse, they assist us in this regard as they provide learners with relevant information" (participant 6).

Participants also noted the importance of involvement of community members, but furthermore mentioned the challenges they were faced with in strengthening these partnerships. They indicated that: "community members are involved, they help us with food gardens, volunteering as food handlers in the school feeding programme, cleaning of classrooms. We struggle to get parents who are committed, they want to be paid so they prefer to be involved in feeding scheme where they get a stipend. I do not know what to do to ensure that the community helps us in the initiatives" (participant 1); "we have partnerships with local non-governmental organisations including local Church leaders that help us, we welcome their assistance as sometimes as a school we get overwhelmed with social problems" (participant 5).

This table depicts that there is no difference of opinion in the participants' understanding of school health promotion. For instance, regarding the focus on school health promotion, a clean, conducive environment contributes to a person's health and in the same breadth, paying attention to a person's health will include a clean environment. Participants are in agreement pertaining to certain aspects that must be in place to ensure sustainability of programmes, a focus on programmes and the importance of the school health promotion.

Roles in the creation of a healthy school environment and implementation of programmes

Most participants were quick to mention that they had taken the lead in creating a healthy school environment. ". . .in this school, everybody–learners, educators and parents–know that the school surroundings must be kept spotlessly clean despite the dilapidated school facilities. My role is to provide resources, support the initiatives by organising manpower. The Department of Labour helps us with cleaners when we approach their offices. But sometimes I become so busy that attending to that becomes a mission" (participant 4); "I make sure that there is a committee responsible for clean surroundings, this committee make plans at the beginning of each year. They report to me if they encounter problems or they need resources" (participant 2); "we do have processes in places for the cleaning of toilets but I must confess we are not winning. There are two things that need to be done, keep toilets clean and make sure that they are not vandalised. We do not seem to be doing well in both. Relying on learners for this important task is not working even if there are teachers responsible for it. I am aware that we need assistance but at the moment I have not approached anyone because of time" (participant 1); "we have a duty rooster to make sure that teachers monitor that the learners pick up papers after break so that we keep the environment clean" (participant 4*)*.

Interview question 1: What does school health promotion entail?	
The focus of SHP	Everybody's health in the school community; conducive environment
Factors that ensure continuity of SHP	Commitment; availability of policies and plans; collaboration with external stakeholders
SHP programmes	Nutrition; curriculum-based activities; keeping clean environment; physical activity
Interview question 2: What are the important activities that you embark on as a school to ensure health promotion	
Activities	Nutrition scheme; physical activity; keeping clean environment; and providing health education
Interview question 3: How important are SHP activities for the school?	
Significance	Nutrition linked to learning; unclean surroundings are associated diseases; and when there is a lack of physical activity learners become physically unfit and lack alertness

Table 1.
Below summarises the responses of the participants regarding their understanding of school health promotion

Regarding the nutrition programme and health education, participants indicated their role as that of providing leadership and support. "I make sure that there are structures including a teacher that oversees the feeding scheme, food handlers are hired and trained, there is a dedicated area for cooking and dishing up" (participant 6); "the Life Orientation teachers are responsible for teaching learners about health issues, my role is to monitor the curriculum and make sure that learners also do physical activity. I get involved in sporting activities, and the choir. I support with resources" (participant 4).

Participants indicated different reasons for not taking up certain activities themselves so that they can lead by example. "I like sport but I cannot have a team as I would not have time to focus on the training sessions and competitions" (participant 1); "I teach Life Orientation in grade 7, my idea was to be involved with learners so that I can better advise staff members on matters I experienced" (participant 5); "If I would be personally involved and not just manage and provide leadership teachers will never understand that being responsible for tasks is actually their role and not mine" (participant 2).

Workshops and information sharing

Principals confirmed that they sporadically organised workshops and motivated their staff members to attend those that were conducted by the department. They acknowledged the importance of acquiring information and skills, as they indicated that school health promotion is a new initiative. For instance: ". . .there are workshops here and there that are about safety and security and on health issues, the wellness coordinator attends" (participant 5); "we once attended a workshop on bullying, and after that workshop, I also invited parents and trained them on things like cyberbullying and the importance of checking what is happening on their children's cellphone" (participant 2); "there are trainings about life skills, HIV/AIDS and sexually transmitted diseases, teachers attend these meeting, they are important, empowering and informative. It is my responsibility to make sure that our school is represented, we cannot be left behind and also we need competent teachers to assist with health promotion" (participant 3).

Principals said that, after attending workshops, they always created platforms for various committee coordinators to give feedback to the rest of the staff: ". . . my role is to ensure that, when there are workshops on health issues, coordinators or committee members of that committee attend the workshop and then come back to give feedback to staff" (participant 4). "In most cases, I request a written report from teachers who attended workshops, this is for record keeping, in that way we always have documents to refer to" (participant 6); "I also share the information after a workshop, this is a norm in my school, after attending a workshop on bullying, I gave feedback to staff members and parents. After that, we were able to include measures of dealing with bullying in our safety policy" (participant 1).

The participants indicated the importance of roles that principals have to play in strengthening collaborations that are formed at national level and partnerships with local communities. The role in the implementation of programmes was indicated as threefold, involving: setting up structures to sustain the school health activities and providing resources, providing leadership and support and developing as well as empowering of staff members. The responses of participants revealed a multifaceted role that includes interpersonal, information and decisional functions. For the interpersonal role, principals had to stand as figureheads of their institutions in collaborations with external stakeholders as the first liaison officers, in marketing the vision and in providing guidance within schools. For the information role, they had to be monitors, the disseminators of information by creating platforms for information sharing and acquisition as well as being spokespersons. For the decisional role, principals needed to be role model leaders, the source of information allocators and the negotiators.

Discussion

This study intended to investigate the perceptions of principals regarding their understanding of their role in school health promotion. It was important to also determine their understanding of school health promotion. Six principals who had attended and completed the first cycle of CPTD participated. The limitation of this study pertains to the number of participants involved; however, rich data were gathered from these participants. There are more health-promoting activities that were reported by participants than those mentioned in this paper, but the data presented here focused on getting an overall picture of the views of the principals regarding their understanding of what health promotion entails and their role in it. All three authors are in the field of education with extensive experience in teaching and leadership and management of schools, the findings, therefore, should be understood from a school management perspective. The findings revealed that the principals in this research had an idea of what school health promotion entails but also added elements of a health-promoting school in their definition. They focused on different roles that included, mostly, performance of managerial tasks and facilitations of collaborations and partnerships to safeguard effective implementation of school health promotion.

The first finding about the principals understanding of school health promotion revealed that they were aware of its importance in creating conducive environments by providing nutrition and physical activity and teaching and learning about health. This perception of school health promotion is in line with the definitions by WHO (2000), St Leger and Young (2009) and Carlsson (2016). Principals also understood school health promotion as focusing on policies and programmes, collaborations and partnerships and involvement of teachers and learners in the implementation of programmes. This understanding also conforms to the definition of a health-promoting school, which emphasises four distinct but interrelated principles: fostering health and learning, engaging all school partners, providing a healthy environment and implementing healthy policies and practices (International Union of Health Promotion and Education, 2009; World Health Organization, 2016). Perhaps, it can be agreed that the principals did not differentiate between the elements of health-promoting schools from those of school health promotion. Health-promoting schools and school health promotion seem to be the same for them. The principals focus on any health improvement

Role	Activity
Organising	Organising resources; establishing health committees and structures to support health programmes; organising manpower to support the initiatives of school health promotion
Leading/delegating	Role modelling by teaching a subject, assigning teachers who will work with police, nurses, social workers and other community-based organisations
Monitoring	Monitoring of curriculum delivery (health education)
Liaising role	Liaising with police, social workers, nurses and other community-based organisations
Supportive role	Providing resources and support teachers to do their work effectively
Collaborative role	Forming and strengthening partnerships
Facilitating information sharing	Training parents after workshop attendance, sharing information after workshop
Professional development of teachers	Motivating teachers to attend workshops
Enforcing rules and regulations	Making sure that the school is represented in workshops
Controlling role	Requesting written reports from teachers who attended workshops for record keeping and future reference

Table 2.
Summarises roles

within the schools, regardless of its conceptual nature. Indeed, schools in South Africa concentrate on all the aspects that principals have mentioned. This could mean that the principals interpret and adapt the concept of school health promotion, depending on what best meets the needs of their school (Marshall *et al.*, 2000). This notion may not be applicable to South Africa only, but to other countries that would opt to combine the two concepts and implement them as a unit.

The second finding revealed that the principals perceived their role as being aligned more with management. This is not surprising, as the focus of the CPTD training was on improving their managerial skills. Perhaps, what the global community can learn from this finding is that principals execute their role based on what they know. The focus of their management was on four tasks: planning, organising, delegating and monitoring/controlling. With regards to planning, the principals cited setting up plans by developing policies and having cleaning roosters. The planning was reinforced by setting up structures to ensure effective implementation, including setting up committees, having teachers that lead some programmes, providing space for health workers and a conducive environment to work in. Planning has always been regarded as an essential management function in schools (Beach and Lindahl, 2007). It aligns more with proactiveness and speaks towards the principal as an instigator of change. Participants also elaborated on their role of making available finances and organising manpower, thus allocating human resources to support programmes. Certain tasks were delegated to teachers. Principals seemed to understand what responsibilities to delegate to allow themselves time to plan, to collaborate with others and to monitor the performance of their employees. Delegating tasks enable principals to accomplish more than if they attempted to handle every task personally. Moreover, delegation allows principals to focus their energies on the most crucial high priority tasks (Lunenburg, 2010).

Furthermore, in ensuring effectiveness, they focused on teacher training as a means to develop and empower teachers. Perhaps, there was a realisation that without "the know-how" and acquiring of skills, it would be difficult to embark on this important task. This is important for informed decision-making. Principals may have decided to motivate the teachers to attend trainings for them to be able to overcome obstacles in implementing the school health-promotion projects. Education managers, especially principals, play an important role in influencing the effectiveness of the professional development of teachers (Du Plessis, Gillies and Carroll, 2014). A study by Jourdan (2011) revealed that the training of primary school teachers had a significant impact on the implementation of a school health education project. They then facilitated the sharing of information and knowledge gained from the workshops. Knowledge exchange has been deemed important in schools as a means of supporting comprehensive school health (CSH) by creating awareness, informing action and acting as an overall catalyst for change, helping to implement and embed policy and practices within the school culture (Gleddie and Hobin, 2011). This notion can also apply in school health promotion. Thus, principals appeared to understand the role of managing the processes of school health promotion. However, it seems that the principals relied more on management than providing leadership (the latter focusing on coping with change and charting the way forward). Some scholars believe that management is a prerequisite to leadership (Lunenburg and Arby, 2006). It could be that the principals in this research share the same belief that management is the priority and that leadership can follow when the school health-related activities are up and running. Choosing the best practice has always been debatable, but the widely accepted managerial tasks mentioned above seemed to have settled in the minds and actions of principals in this study. The management practices of the principals give an impression of being traditional and administrative as opposed to being innovative. The management of the day-to-day operation of the school health promotion activities is essential, but perhaps the leadership would have made the system to work better. In school health promotion, a principal is not only expected to manage the implementation of

programmes but to also provide leadership, as a facilitator and a visionary to stimulate creativity and innovation.

The third finding is based on the role of principals in networking and nurturing existing intersectoral collaborations, develop partnerships and networks in their communities. The intersectoral collaborations mentioned in this research are a result of the World Health Organisation's (1997) call for the achievement of health outcomes that are more effective, efficient or sustainable. Principals seemed to be aware of their role in these collaborations. Moreover, their utterances gave an impression that they understood their role in strengthening and supporting the intersectoral collaborations that are formed at national level to benefit the school community. Provision of support is the duty of the school administration, it is a very important function; otherwise, the school will get lost (Gugglberger and Dür, 2011). The participants mentioned their role as providing support for the provision of health services by the departments, setting up structures and liaising with the departments to access resources for the schools. In a study by Gugglberger and Dür (2011), the principals played a key role in establishing relationships and fostering interactions between schools and the government sectors. These collaborations are important in facilitating exchanges of health-related knowledge, experiences and resources (Keshavarz *et al.*, 2010). Moreover, the principal's role is that of ensuring that collaborations with the professionals providing services are as strong as those at provincial and national levels, for them to benefit the poorest learner (Kwatubana, 2019). The data also revealed that the principals valued partnerships with community organisations. Collaborations are key in ensuring sustainability of health promotion in school. It is health promoting for schools to work in collaboration with parents and the local community to enhance students' health and well-being (Weare, 2010). Collaborations between schools and their communities in developing countries are crucial for acquisition of resources (Kwatubana, 2019). The principals tried to advocate for the change inside and outside of the school by involving parents, community members and organisations. This is consistent with Taylor *et al.*'s (2012) statement that engaging parents is a key component of school-based health promotion effort.

Additionally, the health-promoting school framework views that links with parents and the community as one important facet of school health promotion. Principals mentioned how important these collaborations were and how the schools benefitted from them. The findings of this study lend support to the view that forging strong partnerships between home and school is an important facet of effective health promotion. Home and school are the two major realms for promoting lifestyles among students (Clelland *et al.*, 2013). Without the support of the parents and community members, schools have little chance of success in terms of behaviour change and long-term lifestyle changes. Principals also noted the challenges they were faced with in strengthening these partnerships including their inability to facilitate (Inchley *et al.*, 2007). Engaging parents in school activities in South Africa has never been easy. For instance, Kwatubana and Makhalemele (2015) lament the involvement of parents in only certain activities and not in the whole process of implementation. These authors also raise concern on the lack of empowerment and information, as these factors would contribute to their full participation.

Conclusion

This paper contributes to the understanding of roles of principals in school health promotion and discussion of how such roles are enacted. It can be understood that perceptions on roles in school health promotion might differ as they are linked to context. Our results have important implications for informing practice in school health promotion. This research highlights the importance that principals in this study attach to their role of management. In particular, they provide evidence on how principals can maintain health-promotion strategies by embedding

management practices into their actions to sustain interventions. It is assumed that as all the participants completed the CPTD training, the programme might have equipped them as they were learning about various themes in leadership and management. However, as the themes for training were general and not focusing specifically on matters pertaining to school health promotion, there is an opportunity for training that focuses on how these managerial roles can be played effectively to reinforce school health programmes. Currently, in a period where rapid changes are occurring, much is needed to empower and enhance the management practice of school principals (Msila, 2011). The same can be said about management of school health-promotion initiatives.

It was established that principals play an important role of facilitating, strengthening and sustaining collaborations and partnerships. Collaborations and partnerships are a cornerstone of school health promotion. It is believed that schools, especially those that are located in poor communities, often find themselves in difficult positions of being held accountable for initiating partnerships with communities without clear guidance and direction in establishing, maintaining and evaluating such partnerships (Sanders and Harvey, 2002). There is a need to learn how to encourage, support, improve and sustain, the implementation, effectiveness and interaction of national and local collaborative partnerships.

The principals' role in enabling teachers by motivating them to attend workshops and exchange information can be regarded as capacity-building intended to sustain the change. Workshops are vital for staff development. There is a need for investing in staff development as a way of improving their performance. Workshops that are referred to in this research are often organised by education districts. Teachers have to actually attend in venues allocated for such. As much as these workshops serve their purpose, other means of staff development can be looked at. We are of the opinion that use of a variety of workshops would benefit the staff members more.

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Open letters about health dialogues reveal school staff and students' expectations of school health promotion leadership

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Abstract

Purpose – This study explores to what extent health promotion policy in practice and leadership engagement is reflected in school actors' experiences of health dialogues (HDs) and their ideas about promoting health and learning in schools.

Design/methodology/approach – The 93 participants consisted of 44 school nurses, 37 students in grades 4, 7 or the first year of high school and 12 teachers, who shared their experiences with HDs by writing open letters.

Findings – The qualitative content analysis resulted in four themes: Putting health on the agenda, Finding a common goal, Walking side by side and Pointing out a healthy direction. The participants' expectations of school health promotion leadership are revealed in suggestions on how the HDs can fulfill both the educational assignment and promote student health.

Practical implications – Based on the findings, we argue that for successful school health promotion leaders need to acknowledge the field of tension where leadership has to take place, anchor health promotion policy and administer "a Sandwich approach" – a top-down and bottom-up leadership simultaneously that facilitates school-based health promotion.

Originality/value – When different school actors (school nurses, teachers and students) are given a voice, a collective picture of HDs can emerge and help develop health promotion practices.

Keywords Health promotion, Health promoting schools, Management, School health promotion, Education policy, Health policy

Paper type Research paper

Introduction

There are strong links between student's health and academic achievements (Correa-Burrows *et al.*, 2017; Dadaczynski *et al.*, 2019). Therefore, school staff should be educated about the relationships between health and school performance (Busch *et al.*, 2017) and how

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"school health promotion initiatives often target several levels (e.g. individual, professional, procedural and policy) simultaneously" (Rosas, 2017, p. 301).

The World Health Organization (WHO, 1946) has defined health as:

> . . . a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity (p. 100). The Ottawa Charter on Health Promotion views health as a resource for everyday life, not the objective of living, and a positive concept emphasizing social and personal resources, as well as physical capacities (WHO, 1986, p. 1).

In 1997, the WHO's expert committee on comprehensive school health education argued that health-promoting school (HPS) initiatives would positively influence the health and education of future generations (WHO, 1997). Since then, practice and research have followed. Although definitions have varied over the years, a HPS "can be characterized as a school constantly strengthening its capacity as a healthy setting for living, learning and working" (WHO, 1998a, p. 1). Interventions proven to be effective have been identified and evaluated with methodological rigor, contributing factors that led to successes and considering country variations (WHO, 2017). Forums for in-depth knowledge sharing about becoming a HPS and how to design school health promotion have been established (SHE, 2020).

Additionally, there is a large body of research on HPSs. The work of Simovska and McNamara (2015) thoroughly develops the issue of sustainability in HPS. For example, Young (2015) argues that highly effective HPSs have common features, like a clear and focused vision, a safe and stimulating school environment, excellent leadership celebrating student and school successes and strong home–school relations. Also, in strengthening sustainable development in schools, students need to become critical about their attitudes and behaviors linked to health and sustainability (Deschesnes *et al.*, 2014).

There are also arguments that school management and educational practices bring together research in areas such as school health, learning and teaching and, schools' effectiveness in achieving educational, health and social outcomes (Turunen *et al.*, 2017). This complexity and need for collaboration across professional and institutional borders can be compared with the whole-school-approach described by multiple researchers (see, for example, Dassanayake *et al.*, 2017; Kearney *et al.*, 2016; Warne, 2013). However, schools tend to remain with a traditional topic-based approach instead of realizing an integrated whole-school-approach, which indicates a need for more support during implementation and cultural adjustments of health promotion activities (Adamowitsch, 2017; McIsaac *et al.*, 2017).

School leaders in health-promoting schools

School leaders play a crucial role in health promotion efforts, and their collaboration with other stakeholders influences the successful realization of HPS (Langford *et al.*, 2017). However, successful health promotion within a national educational system also requires political will and a partnership with mutual understanding between the education and health sectors to build trust and capacity (Kostenius *et al.*, 2019; Young *et al.*, 2013). Research has pointed to the critical importance of school leaders and their role in the successful implementation of HPS programs (Dadaczynski *et al.*, 2020a; Viig *et al.*, 2005). The role of school leaders is recognized as crucial for the school's development work (Hallinger, 2018), and principals have been conceptualized as gatekeepers of change (Fullan, 2001).

There have been lessons learned during the past decades from HPSs worldwide, where aspects, such as the crucial role of school leaders and their collaborative processes, including other stakeholders, are emphasized. For example, a Dutch HPS pilot intervention empowered an HPS coordinator to organize the program with partners from both inside and outside the school (Busch *et al.*, 2015). Their findings show how this HPS intervention successfully changed student health behaviors, for example, by decreasing alcohol use, smoking, sedentary time and bullying behaviors. As a result, the students had significantly fewer

psychosocial problems. These researchers suggest more strongly integrating health literacy, positive attitudes toward HPS and competencies in health promotion into the qualification and training of school leaders. However, school managers can have a good understanding of health promotion, but not act on their interests in health promotion (Persson and Haraldsson, 2013). School managers need not only to be interested in health promotion issues and understand their value, but to organize the school setting and curriculum accordingly, taking a whole-school approach for best results.

Combining health education in the classroom with the development of school policies, the school environment, life competencies and involving the whole school community makes for a complex undertaking (SHE, 2020). Colquhoun (2008) confirms the complexity of HPS and the conflicts and tensions that might arise for schools in handling societal challenges, such as ill-health, inequality and social exclusion. In this respect, school leaders can be described as positioned in a "field of tensions", where multiple and sometimes conflicting assignments must be handled (Berg, 2003).

Influenced by Spillane (2005), we apply a working definition of the term leadership, which involves "...activities tied to the core work of the organization that is designed by organizational members to influence the motivation, knowledge, affect, and practices of other organizational members" (p. 384). This definition excludes relations that are not tied to the core work of the organization. In this article, we discuss two formal leader positions, principals and managers of student health services (SHS). In addition, in a Swedish context, the municipality school organizer refers both to the political leadership and to the head of the school organization.

Student voices and participatory processes in health-promoting schools

The principles of health promotion involve empowerment, participation, holism, intersectionality, equity, sustainability and multi-strategy support, and these have consequences for HPS implementations (WHO, 1997; 1998b). Regarding empowerment, Carlsson (2015) holds that involving students in the formulation of health problems and solutions, and transformative learning principles emphasizing critical reflection, thinking and action, can ensure that education is not reduced to a technical function in school health promotion. Bruun Jensen and Simovska (2005) argue for the involvement of students in learning and health promotion processes and explain that the participatory approach needs to influence all aspects of a democratic HPS. Students can inform school development, and their participation can foster engagement and create opportunities for school improvement (Peacock, 2006).

However, to successfully consider what students tell us regarding how best to improve schools, youth-adult partnerships are needed (Mitra, 2009). Similarly, Bragg (2007) suggests building a listening culture in school as relationships are key to promote health and learning in school; it is not about the school system itself, she argues. However, the school system needs to enable the process of increasing people's control of their health, which can be enhanced when they are heard and when they perceive that their contributions are valued (WHO, 1998b). Participatory practice can empower people by giving them a voice and space in a democratic spirit (Ghaye *et al.*, 2008; Kostenius and Nyström, 2020).

Aim

This study explores to what extent health promotion policy in practice and leadership engagement is reflected in school actors' experiences of health dialogues (HDs) and their ideas about promoting health and learning in schools.

Theoretical starting point

Researchers within the field underline the complexity of HPS, as health education can involve the whole school community (SHE, 2020) and many interventions, policies and professions

intersecting in the school arena, and that schools are often expected to handle societal challenges (Skott, 2018; Colquhoun 2008). Dadaczynski *et al.* (2019) call for an integrated multi-setting approach. Taking this into account, our theoretical starting point is policy enactment theory, which concerns policy actors' creative processes of interpretation, translation and negotiation. Consequently, "policies are understood as processes as it is enacted (rather than implemented) in original and creative ways within institutions and classrooms" (Braun *et al.*, 2011, p. 586). This theoretical perspective is responsive to contextual dimensions – as, argued by Braun *et al.* (2011). We argue that this theoretical starting point helps us grasp the complexity and offer a wide perspective on HPSs.

Following our argumentation for participatory processes enhancing school actors' empowerment (Peacock, 2006; Ghaye *et al.*, 2008), teachers, school nurses and students are all understood as policy actors involved in processes of interpretation and translation of policy into practice (Ball *et al.*, 2012). Enacting policy is an act of positioning, as interpretations and sense-making of the policy depend on "where you stand" (Maguire *et al.*, 2015). Therefore, we highlight how school actors enact the health promotion assignment and understand leadership engagement, as they position themselves with the roles and engagement they ascribe to school leaders.

Policy enactment studies have mainly focused on teachers and school leaders as policy actors. However, following Ball *et al.* (2012) and Tanner and Pérez Prieto (2014), we argue that students are also policy actors. Tanner and Pérez Prieto (2014) thus illustrate that both teachers and students contribute to the translation, use and maintenance of policy discourses, though unequally.

Methods

The chosen design was inspired by participatory research which has the potential to empower people involved, through democratic partaking and appreciating strengths and abilities (Ghaye *et al.*, 2008). When people feel heard and valued they can become empowered to influence their own practice (Melander-Wikman *et al.*, 2006). Participatory research is doing research with people in a given context, not doing research on people (Heron and Reason, 2001). By introducing the beginning of a sentence, we encouraged the participants to take part by thinking of a HD they participated in and asked them to share their ideas about promoting health and learning in school. The participating school actors' shared experiences enabled the exploration of health promotion policy in participatory process enhancing school actors' empowerment (Ghaye *et al.*, 2008; Kostenius and Nyström, 2020).

Context and participants

In Sweden, where this study took place, several policies reflect a political interest in health promotion in schools. According to the Swedish law (SFS, 2010, p. 800), all students in preschool, grades 4, 7 and the first year of high school are entitled HDs with SHS staff. To allow students to develop to their fullest potential and enjoy school, there is a need for a well-functioning SHS with close collaboration among the SHS, teachers and school leaders (SKL, 2018). In Sweden, the school principal has the formal and overall responsibility for ensuring that the school focuses on achieving national goals. The Education Act (2010: 800) extends and clarifies the principal's responsibilities, authority and decision-making powers. It provides principals new instruments to continuously shape and develop their schools' organization and pedagogical activities (Swedish School Inspectorate, 2015). The pedagogical leadership is stated as a key concept and assignment for school principals (Johansson, 2011). Further, the principals are responsible for student health, ensuring good study conditions and student safety (SFS, 2010, p. 800).

This study was carried out in the most northern county in the Arctic region of Sweden (Norrbotten), including 14 municipalities ranging in size from approximately 2,700 to 78,000 inhabitants. Three schools in three municipalities in the region were contacted based on variations (one large, one medium and one small municipality) inviting students and teachers in the three schools (one primary, one middle and one high school) to participate. All 55 school nurses in the region were invited. The 93 participants included 44 school nurses, 37 students in grades 4, 7 or the first year of high school and 12 teachers from the same grades as the students. Due to the risk of identifying the municipality and the individual participants, we have refrained from collecting additional information.

Data collection and ethical considerations

The entire research project was focusing on health promotion school development in a broad sense, while this particular article focused specifically on leadership aspects. The participants were invited to write an open letter by continuing the following sentence; "To use the health dialogue to its fullest potential to promote student's health and learning, I think that. . .". They were encouraged to think about one or many HDs and describe their experiences with holding, participating in or facilitating HDs. The open letters were distributed in both paper and digital forms so that participants from a large geographical area could take part. The first author visited the regional network for school nurses from the 14 most northern municipalities in Sweden on three different occasions and distributed the open letters. The first author and LN (see acknowledgments) visited the three schools in the three different municipalities, inviting students and teachers to participate in the study. The study was approved by the local ethics committee [2017/403–431].

Analysis

The data consisted of 93 open letters (handwritten or digital). The process of analyzing the open letters was inspired by Graneheim and Lundman's (2004) qualitative content analysis. The authors read all of the transcribed data multiple times to obtain an initial sense of the whole and discussed their individual understandings. Further they highlighted meaning units, where the authors aimed to individually identify the experiential structures found in the data and looked for differences, similarities and patterns. The underlying meanings were discussed while creating subthemes. Finally, the authors asked themselves the following questions; What are different school actors' thoughts about how HDs can be used to their fullest potential to promote student health and learning? To what extent do their reflections address leadership engagement? Based on this query four themes were created that describe what the text is talking about, referred to by Graneheim and Lundman (2004) as the latent content.

Findings

The qualitative content analysis resulted in four themes: Putting health on the agenda, Finding a common goal, Walking side by side and Pointing out a healthy direction. The school staff and students' expectations of school health promotion leadership are revealed in suggestions on how the HDs can fulfill both the educational assignment and promote student health.

Putting health on the agenda

The participants' thoughts about using the HD to its fullest potential make visible the expectations of leadership, including health promotion as a valuable aspect of educational

responsibility. This, according to the participants is a prerequisite for putting health on the agenda.

The participants argued that the HD needs to be prioritized and viewed as something valuable, helping the students excel and helping the school staff fulfill their professional assignments. One school nurse wrote that the HDs "...need to be accepted as part of the student's learning; having the HDs *is* part of their learning". The input and results coming from the HDs are, according to the participants, valuable information. One student wrote, "I think that the HDs can help the teachers and everybody to understand how we perceive things". However, in order for the HDs to have full potential for promoting students' health and learning, the participants suggested a change in attitude. One teacher wrote, "My experience is that student HDs do good and are important. We need more staff, resources and opportunities to help students in a more comprehensive way."

According to the participants, when school leaders view health as part of the educational responsibility, HDs are prioritized as a natural part of health promotion and disease prevention efforts. The leaders have the power to put health on the agenda and to get everyone involved, school staff, students and parents alike, which increases the chances for a common agreement that good health supports learning. The HD is an important tool in the health-promoting efforts in school, improving not only students' health and wellbeing but also increasing their school achievements. The participants stressed the role of the heads of schools and principals to put health on the agenda. One teacher who also was a principal wrote:

> As a new principal, I did not get any information about the HDs and when these were to be held. The nurse came to me after she had completed the HDs to talk about (student's) 'individual problems,' some which were known; however, new issues emerged. I was surprised and astonished at the width of the questions in the HD questionnaire and realized that the information the school receives from the HDs is very valuable!

One teacher wrote that the HDs:

> should be held more often, preferably in every grade, in order for students to feel that we care about them and that there will be an annual follow-up. Only then will we notice possible improvements. It may be a good idea for many more adults who work with the students to become involved in HDs. Then several viewpoints could be gathered. After all, health is complex.

A student reflected on voicing students' needs and how the school practice can facilitate a health-promoting environment "We can give some tips ... about how to act during breaks and then you can hire staff to be involved during the breaks, people who are also calm and kind to the students". All in all, to put health on the agenda in school, there's a need for a health-promoting direction. One school nurse wrote, "We need to raise questions and talk about how we can perform HDs so that these can be truly health-promoting and not just measuring height and weight and talking about problems".

Finding a common goal

The participants' thoughts about using the HD to its fullest potential made clear that school leaders need to be engaged in making health promotion a common goal for all actors in the school, i.e. professionals, students and parents. The participants identified aspects such as sufficient time to hold the HD and prioritizing health promotion efforts as key to successfully using the opportunity. Additional time slots would, according to them, enable the school nurses to fully interact with each student. One school nurse wrote, "In order for the HDs to have full potential promoting the student's health and learning, I think we must have fewer students per school nurse. We need more time for each student". She continued, "Documentation and using statistics take a lot of time. We need more time for each student, fewer students." Although lack of time is an aspect in need of improvement,

according to the participants, the way the time is spent (the quality of the encounter) is also important. In order to find a common goal, the students' suggestions on what is needed for a HD to be successful are valuable. Acknowledging the challenges with disease prevention and problem-solving strategies is key. One student wrote, "some are afraid to talk about mental illness because they are afraid of being judged in a bad way".

The participants made suggestions on finding a common goal, and it was evident that understanding each other was permeating their experiences. The lack of information about the purpose of the HD was seen as a deficiency. One school nurse wrote:

> It is important that the teachers and principals have an understanding of what we are doing during the HDs. Why do we do them? They are part of the health promotion efforts in school, and it (the school nurses assignment) is not just about measuring height and weight, checking eyesight and hearing.

The absence of a feeling of team effort made it difficult to be engaged. One teacher wrote, "I have no experience with them//...teachers should receive information about what can affect the student's learning and social situation in school". Understanding each other, according to the participants, is easier within a school organization that promotes an all-inclusive environment, than everyone tending to their tasks without seeing their role in building the common good for everyone in the school. One school nurse stated:

> I believe that a well-functioning student health service team at a school can work magic. However, to succeed, everyone in school must promote health, all staff from the school restaurant, the school janitors, the teachers etc.

Similarly, a teacher expressed: "We should gather teachers and student health professionals to form a summary of general development opportunities and strengths after the HDs." However, health promotion is more complex than gathering all staff. A listening culture was described as a prerequisite for all actors to be seen and heard. One student expressed that "it is good to know that there is always someone to talk to."

The participants also suggested bringing the results from the HD to the guardians. One teacher wrote, "It is also important to meet with parents, the student, and other school staff to discuss the student's situation and the efforts needed to help the student". According to the participants finding a common goal also included the guardians' health promotion and disease prevention efforts to be successful. One school nurse wrote:

> In my world, we have to be MUCH better at building good relationships with the parents beginning in preschool. We need to meet early on if problems arise. Without having parents with us, we are not going to succeed.

The students connect their health and wellbeing as well with the different contexts of both home and school and made suggestions for the HD to be a tool to help students confide in someone about their situation. One student wrote: "When you have had the HD, perhaps you'll find the need to talk to someone, if one feels bad, have a hard time at home or so. More students may start talking to each other about it and then feel better."

Walking side by side

The participants believed that to use HD to its full potential involves leadership engagement that supports collaboration among all school staff, students and parents. The collaboration was described on different levels, including the individual student's level and crossing professional boundaries to work side by side. One teacher wrote, "It is important to bring in all actors to get a comprehensive picture of the student's situation". A school nurse concluded, "Cooperation with teaching staff and school management needs to be improved. Student health is created together, not something that the student health professionals can fix on their

own". They elaborated about finding a common cause that agreed on the content of HPS development. They emphasized the importance of finding a common interest in HDs and clarifying staff responsibilities. One teacher wrote:

> Routines for HDs should be planned in collaboration with the pedagogical staff, the student health staff, and the principal in a joint planning day in June. The important point is to address HDs and their "role" in the health promotion efforts at school.

Participants articulated the importance of seeing the potential of the HD among school staff and students alike in order for the HDs to be best used to promote health. One student wrote, "It gives teachers and other adults in the school world a chance to see how their students feel and be able to do something about it. If students are very tired, the (adults) can fix the school days and lessons based on that!".

HD questionnaires are used as a point of departure for the HDs between the school nurses and the students. They also provide a way to collect and save information about students' self-reported health in a database. The participants described an HD database as an opportunity to enhance health promotion efforts in school. According to the participants, using the results from the HD questionnaires was not only a task for the health professionals but also the teaching staff, municipality officials and the local politicians. A school nurse wrote:

> Give feedback about the health questionnaire to school staff and parents. It is important to bring the teachers into the work. Student health starts in the classroom. The results must be disseminated at all levels from the student and up to the officials in the municipality and the politicians.

The participants pointed out the importance of communicating results from the HD questionnaire with the students. This could bring awareness to the students themselves about the results and how they can relate to these. They indicated several possible ways to involve the students in analyzing the HD questionnaire results on individual, group and school levels. One school nurse wrote, "I think we could benefit from using the questions about food ... and ask what the student thinks about the results and what might improve the result rather than pointing to where they wrote the 'wrong' answer". Further, unleashing the power of positive change was articulated by the participants due to making the HD a part of the school organization. When able to successfully walk side by side, the professional collaboration within the school organization could enable positive change on the individual student's level. One student wrote, "It was a wake-up call for me, I got to see what my diet and sleep look like on paper. I have started to eat breakfast and sleep better now, on my own".

Pointing out a healthy direction

Although we asked the participants to share their ideas about using the HDs to their fullest potential to promote student's health and learning in school, we received several negative narratives presenting an array of challenges. The participants described school leaders who were not considering HDs as an important part of the school's mission, which is reflected in decisions regarding which professionals were hired and which issues were on the school agenda. One school nurse wrote:

> At some schools, the management and the teaching staff show little or no interest in hearing about the results. They do not see the potential of working with the results. It can even become a problem for some teachers when the students are pulled away from the classroom for their HDs.

A teacher wrote:

> The saddest thing is that sometimes the HDs do not help. Either you do not receive the help or resources you would need. There is either no staff or money/materials/possibilities to help. Then I,

> who am a teacher, become frustrated and get the feeling that we only sit in meetings, but nothing happens. That is a waste of time.

The participants also pointed out a power imbalance in the school as an organization. One student wrote, "children should be able to decide". However, parallel with their descriptions of the lack of sufficient leadership engagement, they elaborated on the need for school leaders to indicate a healthy direction.

Discussion

The qualitative content analysis resulted in four themes: *Putting health on the agenda, Finding a common goal, Walking side by side* and *Pointing out a healthy direction*. These themes illuminate a large variation of school actors' experiences of HDs and their ideas about using the HD to its fullest potential to promote student's health and learning. The findings give a broad picture of the school nurses', teachers' and students' experiences, and descriptions of contexts reflecting health promotion policy in practice and leadership engagement (in terms of principals and SHS managers engagement), or lack thereof. Similarly, Carlsson and Simovka (2012) found that the interplay between different approaches when implementing HPS projects and contextual factors substantially influence the scope of the outcomes. Regardless of the extent to which the participants felt that they had promoted health and learning in school in general, and developed the HDs in particular, we identified a consensus on what is desirable, which will be addressed in the following discussion.

Leadership in a field of tensions – a possible way forward

According to the findings, there seems to be a field of tension where leadership has to take place. First of all is this important to acknowledge. Given that school leaders are of critical importance to their entire school, this professional group should be placed more firmly in the focus of school health education and health promotion (Dadaczynski *et al.*, 2020b). The health-promoting organization that the professionals described involved administrative leadership building structures, budgeting and directing resources. However, just as important was the pedagogical leadership described as capable of creating consensus and common goals shared by both teachers and SHS staff. Thus, the findings illustrate a principal's leadership concerns about creating both structures and cultures. Previous studies show that principals enter a field of tensions where the ambiguous structure of the school organization together with the different cultures in school and healthcare challenge their preconditions for successful leadership (Törnsén, 2014; Höög, 2014).

The findings provide a picture of great variations. On the one hand, professionals voice a collective responsibility for health and learning, and on the other hand, professionals do not collaborate to accomplish their assignments. To handle this, different staff situations present leadership challenges for principals. Törnsén (2014) described tensions between different perspectives that the principal must deal with in his/her leadership. This tension is based on different views of the starting point for the work of the SHS staff, a professional perspective or a school assignment perspective.

In order to manage an HPS on an individual, group and organizational level, collaboration with managers and leaders of SHS is crucial. Developing a collaborative culture enables dialogue about role perception and mission perception so that the strengths with the professional perspective can be supplemented with an assignment perspective in line with the school's governing documents (Törnsén, 2014). Based on the findings, school actors appreciate the leadership that enables collaboration and builds bridges of communication and understanding. In other words, they desire school leaders who point out a common

healthy direction involving actors at all school levels: student and professional, group and organization. This calls for simultaneously administering a top-down and bottom-up leadership – a Sandwich approach – facilitating school-based health promotion. This echoes Rowling's (2009) and Warne's (2013) description of a whole-school approach. According to the findings, such an approach requires leaders at different levels within the school organization to collaborate and take responsibility for defining a healthy direction.

Health promotion policy needs to be anchored

Based on the findings, we argue that health promotion policy needs to be anchored with all students and professionals at the school and municipal levels with support in the local and national political agenda in order for actors to successfully practice health promotion policy. Collaboration with the guardians is also highlighted in the findings.

One of the possibilities that surfaced in the findings illustrates how HDs are a natural part of health promotion and disease prevention efforts. School leaders and teachers are familiar with the purpose and results of the HD questionnaires and, consequently, with how this is handled as a shared responsibility among school professionals. The findings show how HDs can be used as tools for reactive interventions identifying students with problems to help them. Additionally, the health-promoting benefits of HDs were described by participants throughout the entire school organization, at the individual, group, and institutional levels. The participants experienced different levels, from individual to organizational, as interwoven and spoke for the need to view the HDs as being beneficial not only for individual students but also for the entire school environment. The findings are in line with Gugglberger and Dür (2011), who argue that schools need support from their environment in terms of building resources and institutionalizing health promotion into their core and management processes.

The findings illuminate challenges and a lack of principals and SHS managers leading the development of HD to contribute to the school's educational assignment. There also seems to be a discrepancy between the high expectations of the School Health Services (SHS) staff and the assignments that SHS has under current government regulations. National reports from Swedish schools further reveal the widespread view that one of the most challenging aspects is how to develop health promotion and disease prevention efforts (Swedish School Inspectorate, 2018). According to the Swedish School Inspectorate, several school organizations are deficient in SHS, with great variations among schools. Also, the agency states that variations are seen not only among schools but also between occupational groups, and the extent to which SHS staff are involved in realizing educational goals. This means that the principal's prerequisites for organizing and conducting efficient SHS are limited.

When problematizing the findings further, one alarming consequence of inadequate school organization and indistinct leadership engagement regarding health promotion is that reactive interventions targeting individual students are easier to achieve. Therefore, reactive interventions on the individual level can be prioritized at the expense of promotional efforts at the group and school levels. Such an individualized perspective can also mean that social problems in school and societal challenges can be conceptualized as a student's problems (Säljö and Hj örne, 2013). In a school context with insufficient structural readiness to correctly address the results from the HD questionnaire and detected problems at the school or organization level, there might be a tendency to individualize students' ill-health (cf. Törnsén 2014). In the worst-case scenario, this can lead to an unjustified preponderance for treatment and medicalization (Mind, 2018). On a societal or municipal level, the organizational inability to address the causes of individual ill-health might result in complex problems relating to life conditions being downplayed on a political agenda (Beck and Beck-Gernsheim, 2002).

Based on the findings, for HDs to effectively inform health education practices and to enable school actors to successfully practice health promotion policies, such policy needs to be anchored, not only at the school level but also at the municipal level with support in the local and national political agenda. Therefore, we argue, in line with the Schools for Health in Europe (SHE, 2020) and Dassanayake *et al.* (2017), that the whole school approach to health promotion is extremely important. Also, the findings indicate that another layer of structural anchoring at the municipal level is needed, since these variations exist at the local settings.

Administering "a Sandwich approach"

Based on the findings, we suggest administering a top-down and bottom-up leadership simultaneously – a Sandwich approach – facilitating school-based health promotion. To anchor health promotion policy with all students and professionals at the school and municipal levels with support in the local and national political agenda calls for an approach involving all concerned. Further, the findings draw attention to the localized nature of policy enactment and how local organizational conditions and leadership engagements produce different policy responses and responsibilities in local practices. Braun *et al.* (2011) argued that schools with distinct sets of professional outlooks and attitudes "make certain policy responses more or less possible" (p. 591). Consequently, as the findings highlight, certain school organizational structures foster distinct professional roles and responsibilities, resulting in specific local and individual strategies. As a result, school actors position themselves by taking on either an active or passive role regarding their responsibilities for HD. In such a process, they also ascribe the school leaders' roles and responsibilities.

The issue of shared or non-shared responsibility and the mission's high or low priority and legitimacy remain ambiguous. For example, a lack of cooperation between the staff of different professions revealed a feeling of separation between the teaching assignment and the assignment of health promotion. This indicates that the health promotion assignment in general and specifically regarding the HDs cannot be conceptualized as a shared responsibility and a collective objective. From the students' perspectives, there are expectations where health promotion is a shared responsibility, and this is a prerequisite for putting health on the agenda.

The findings confirm that the teachers' and school nurses' interpretations and enactments of the policy are mediated by different institutionally determining factors, in line with Braun *et al.* (2011). One evident explanation of why HDs, in many cases, failed to be conceptualized as a shared responsibility is related to the institutional conditions, as the school leaders did not view the HDs as part of the entire school's mission. Important aspects seem to be: the local organization of the SHS, the organizational space to involve teachers in the process, the priority of the HDs among the school leaders and how HDs are included in the systematic quality. Accordingly, to reinforce the schools' capacity to absorb a healthy school approach, supportive organizational conditions are needed, including the principal's leadership and integrative management that enable integrating the HS action plan within the school's operations (cf. Deschesnes *et al.*, 2014). Similarly, Viig *et al.* (2005) argue that several conditions at the organizational level facilitate teachers' participation in school-based health promotion. These conditions are common goals, supportive leadership, sufficient and available resources, competence and cooperation inside the school and within the local community. Broadly anchoring the policy and making the health-promoting assignment a shared practice and a collective objective might also reduce the vulnerability that can arise in schools with a large turnover of principals (Swedish School Inspectorate, 2019).

School actors are given a voice

The findings speak to co-creation beyond age and profession. As suggested by the participants, when different school actors (school nurses, teachers and students) are given a

voice, a collective picture of HDs can emerge and help develop health promotion practices. We concur with previous research on school development, arguing for a participatory process enhancing school actors' empowerment (Ghaye *et al.*, 2008; Kostenius and Nyström, 2020).

Further, based on the findings we argue in line with Peacock (2006), it is evident that positive school development is enabled by a participant approach, including ethics, trust and cooperation, which requires that everyone in the organization is allowed to make their voices heard. In the case of Sweden, the health-promoting assignment is in line with the key paragraphs in the Swedish School Law (SFS, 2010:800) and curricula, which state that the democratic principles of being able to influence, take responsibility for and be involved in their education should cover all students.

According to the findings, there are some useful examples of good practices from which to learn. However, in some cases, the conditions in the school or municipality are not sufficient to do so. Support is needed to pursue equal health, following Haglund and Tillgren's (2009) reminder that the main focus of practicing health promotion is social justice. Therefore, the findings can be used to fuel the argument for building regional or national collaborative support structures for municipalities that need to develop HDs for the school's systematic development work. Following Nutbeam's (2000) and Kickbusch's (2012) line of reasoning, as health education is directed toward improving health literacy, the role of regional support structures should focus on enabling empowerment and lifting best practices for shared learning. This will simultaneously increase health literacy at an individual, organizational and societal level: a synergy for social justice and health equity.

Limitations and future research. Although the open letters were not written by school leaders we argue that school nurses, students and teachers' expectations of school health promotion leadership provides a noteworthy contribution to research in this area. Further, to address *trustworthiness* in qualitative research, the concepts *credibility*, *confirmability*, *dependability* and *transferability* have been used to discuss possible shortcomings (cf. Graneheim and Lundman, 2004; Polit and Beck, 2004). Quotes from the students were fewer than those from professionals, which can be viewed as a *credibility* issue. Although the authors tried to balance the quotes between professionals and students, the two professional groups' perspectives seem to emerge more clearly. However, when choosing participants with various experiences, ages and genders, as was the case in our study, shedding light on the research question from a variety of aspects increases likewise increasing the *credibility* (Graneheim and Lundman, 2004). To avoid bias and one-sided interpretation, the two authors and two colleagues with different personal experiences and professional backgrounds (middle school teacher, school leader, sociologist and health educator) analyzed the qualitative data to enhance *confirmability*. Bringing different actors together, as we have in this study, might present challenges with the *transferability* of findings. The two professional groups have many years of formal school education, including academic studies, while the students have between 4 and 10 years of education from primary and secondary education. We turned to Warne *et al.* (2020), who argue that including students and those who are part of the social setting, thus school staff, widen the understanding of the studied phenomenon. We also noted that the 93 open letters varied in length from five sentences (the shortest) to one full page (the longest). The letters from the students were generally shorter than those written by the participating teachers and school nurses. This might raise doubts as to whether the students' voices were heard.

Nevertheless, echoing Peacock (2006), we hold that positive school development is enabled by a participant approach and requires that everyone in the organization is allowed to make their voices heard. When analyzing and writing the results section, we made an effort to balance the quotes from all actors. Further research, including actors of different ages and backgrounds, is needed. Also, the findings of qualitative studies are not generalizable in the same way as quantitative results are. However, following Graneheim and Lundman (2004),

we tried to strengthen the *transferability* by giving an as detailed as possible description of the context of the research by presenting participants, data collection, data analysis and quotations. Also, as *dependability* is about to what extent the findings are consistent and could be repeated (Guba and Lincoln, 1994), the research process was thoroughly described. Overall, the limitations presented above need to be kept in mind when the findings are interpreted.

Conclusions and practical applications. Summing up, the findings reveal school staff and students' expectations of school health promotion leadership. Regardless of the extent to which the participants felt that they had promoted health and learning in school and developed the HDs, we identified a consensus on what is desirable in connection to health promotion leadership. Based on the findings, we argue that for successful school health promotion leaders need to:

1. *Acknowledge the field of tension where leadership has to take place.* A possible way forward is focusing leadership based on a high degree of collaboration among all professionals in school, students and their caretakers.

2. *Anchor health promotion policy.* Health promotion need to be anchored with all students and professionals at the school and municipal level, an assignment for principals as well as school organizers, with support from the local and national political agenda.

3. *Administer "a Sandwich approach."* A practical application of the findings is to administer a top-down and bottom-up leadership simultaneously that facilitates school-based health promotion.

Although this study did not examine the sustainability of HPS development in connection to political agendas, we noted a clear link between the two, which can be an interesting topic for future research. Also, as the findings show that organizational structures supporting the health promoting assignment vary greatly among schools, we suggest further research on this topic.

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Expectations and tensions in school leadership regarding the 2014 Danish school reform: emerging perspectives linking school leadership, learning and well-being

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Abstract

Purpose – The purpose of this paper is to explore the expectations of and possible tensions in school leadership regarding the implementation of the 2014 Danish school reform and, by extension, to address emerging perspectives linking school leadership, learning and well-being.

Design/methodology/approach – An analysis of central policy documents in the reform as well as research reports examining the role of leadership in the implementation of the reform offers insights into the new expectations of and tensions in school leadership. Drawing on theories of school leadership, the analysis highlights the various forms and aspects of school leadership that are at play in the reform.

Findings – The analysis identifies expectations regarding school leadership, ranging from aspects of strategic leadership that focus on management by objectives and results to aspects that are closer to teaching, such as curriculum and instructional leadership. It furthermore highlights barriers with regard to realizing policy intentions of strengthening instructional leadership, such as encroaching upon pedagogical and curriculum leadership, which have traditionally been the domain of teachers. Meanwhile, the kind of leadership that can be practiced through data-based management by objectives and results seems to have been perceived as a more viable approach in the implementation of the reform.

Research limitations/implications – The papers' theoretical and empirical foundation is rooted in Danish and Scandinavian perspectives on schooling, and thus the generalizability of the findings may be limited to countries with similar perspectives or "packages of expectations" on linking school leadership, learning and well-being.

Originality/value – The paper provides an original contribution through its engagement with the tensions inherent in the specific "package of expectations" and new demands on school leadership in the 2014 school reform.

Keywords Schools, Learning, Implementation, Mental and physical wellbeing, Education policy

Paper type Research paper

Introduction

School leadership has an important role to play in relation to the school's overall purpose of providing teaching, learning and a good upbringing, a role that is actualized in recent school reforms across Europe and in current calls to build a bridge between educational leadership, curriculum and pedagogical practices (Uljens and Ylimakis, 2017). Uljens and Ylimakis argue for an integrative approach that does not separate the aims of educational leadership from those of education itself. This approach seems to resonate with the aims and strategies of the most recent 2014 reform of the Danish "Folkeskole" (public schools providing primary and lower secondary education). In this reform, the aim of strengthening students' learning and well-being at school is placed high on the agenda based on the pragmatic presumption that improved well-being leads to better academic performance. The reform can furthermore be described as a system-wide structural reform, characterized by placing school leaders in an

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even more central role than previously and by the significant investment in developing school leadership competences. School leaders are required to lead the implementation of the reform and the quality assurance strategies following up on measurements of students' academic achievements and well-being as well as to focus more on schools' core task of teaching and learning (Danish Ministry of Education, 2013). They are thus expected to exercise both internally oriented pedagogical leadership and externally oriented strategic leadership, the latter by implementing quality assurance strategies focused on control and on producing outcomes that meet national and municipal targets. However, these two functions of school leadership, and the associated responsibilities and tasks, might be at odds with each other: one of the prerequisites for pedagogical leadership is trust and engagement in collaborative approaches alongside teaching staff. Meanwhile, strategic leadership demands monitoring, exercise of control and decision-making, which might have a negative impact on trust and limit school leaders' time and space for engagement in pedagogical processes. The challenges that arise in efforts to balance local and contextual demands with external requirements can be described as reflecting a general tension inherent in current school leadership (Moos, 2017). This paper offers insights into how this tension develops within the context of the 2014 school reform. It sets out to delineate key findings from studies on the role of school leaders in school development, focusing on learning and well-being. This is followed by a description of theoretical perspectives on school leadership and the paper's approach to document analysis. Then the analysis is presented, focusing on identifying expectations of and tensions in school leadership in the reform.

Studies on the role of school leaders in school development

Research on school leadership strategies generally reflects The Organisation for Economic Co-operation and Development (OECD) policy discourses on the role of school leadership in improving students' academic achievement, i.e. with a focus on the outcomes of education (see, e.g. Soehner and Ryan, 2011; Mulford, 2013). The link between school leadership and students' academic achievement is well researched, with findings indicating that various intermediate and context-dependent factors can strengthen this link but with no conclusive documentation that school leadership in itself has a causal effect on students' academic achievement (Moos, 2017; Knapp and Hopmann, 2017). By comparison, the shift in the role of school leaders within policy toward a greater emphasis on the aim of strengthening student well-being as a part of a broader policy context linking school leadership, learning and well-being has received insufficient attention within educational research. Studies of specific interventions within comprehensive school reforms, such as school- or classroom-based physical activity programs (see, e.g. Knudsen *et al.*, 2019; Lee and Welk, 2021), focus on teachers as curriculum makers in micro- and meso-level school-based curriculum development, while school leaders' part in this process has received little attention. As Terhart (2013) points out, there is a greater focus on the role of school leaders as curriculum leaders at the macro-level in school reforms, i.e. on externally rather than internally oriented curriculum leadership.

The literature on standards and capacity building in health promotion indicates that an external orientation toward control and producing outcomes that meet national or regional/municipal targets is a common prerequisite for leadership in the new accountability-focused environments in public sector institutions. The European project *"Developing Competencies and Professional Standards for Health Promotion Capacity Building in Europe"* (Dempsey *et al.*, 2011), for example, highlights skills such as quality assurance and monitoring of outcomes, which draw on discourses of competition and economic values, while downplaying pedagogical practices and competences (Carlsson, 2015). In studies of the implementation of school health promotion policies, school leaders are largely identified as gatekeepers, highlighting the importance of their values and engagement (Deschesnes *et al.*, 2014; Simovska and Prøsch,

2016; Samdal and Rowling, 2015). Dadaczynski *et al.* (2020), for instance, point to the association between school leaders' self-efficacy and attitudes to health promotion with regard to the implementation of the health promoting schools approach. Hargreaves (2013) suggests that when school principals place little value on health education, it is given lower priority, only limited resources are made available, and there is a lack of awareness among teaching staff of the links between education and health. Studies of the implementation of school health promotion and health and well-being education in Denmark point to the fact that although health and well-being are emphasized in national school policy, they are given low priority in school leadership on municipal and school levels (Simovska and Prøsch, 2016; Simovska *et al.*, 2016). When it comes to the relationship between education policy, learning and well-being, Spratt (2017) highlights two discursive relationships in Scottish school policy: "*well-being for learning*" and *"learning for well-being"*. This illustrates how the relationships between the functional aspects of schooling (learning) and the personal aspects of childhood can be positioned differently to serve different purposes. From this perspective, schools can be seen both as neoliberal "high performance learning organizations", serving functional goals of performativity and as welfare-liberal "person-centered learning communities", seeking to ensure all learning is personally fulfilling and meaningful and thereby contributing to students' well-being.

Theory

In this section, two main approaches in educational leadership are first outlined, followed by a discussion of possible differences and common ground between theories of education leadership and educational theories and a discussion of different assumptions regarding school leadership as involving diverse forms of educational influence.

In their exploration of the empirical turn in educational leadership, Uljens and Ylimaki (2017, pp. 48–58) point out that it includes a functionalist and rationalist approach as well as a critical and transformative approach. The first of these approaches draws on organizational theory, considering curriculum an object of management, inspired by, Tyler among others, emphasizing that *rational* systems utilize hierarchical structures that create clear divisions of labor and clear managerial spans of control. Meanwhile, the critical and transformative approach in the leadership theory draws on critical pedagogy and social justice theory, inspired by the theories of Freire and Apple, among others. Here the focus is on education as a means to improve the lives of all children and to develop teachers' and students' critical consciousness and agency with a goal of social transformation. As such, the school leadership theory can be seen as just as complex, value-based and socially contingent as the educational theory, indicating the possible benefits of focusing more on commonalities than differences between the two.

The field of educational theory includes theories addressing Bildung, focusing on educational aims and content and theories addressing teaching and learning, focusing on educational influence, i.e. the relation between educational inputs and outputs (Uljens and Ylimaki, 2017). Bildung-oriented theories have an interest in educative responses to societal challenges and in how societal aims, values and ideals related to children's upbringing, learning and care are translated into curriculum content and teaching methods. This they have in common with critical and transformative approaches in school leadership, while functionalist and rationalist theories of educational leadership and theories addressing teaching and learning, focusing on educational influence have in common the interest in educational outputs and measurement of learning outcomes (Uljens and Ylimaki, 2017, p. 20). Bildung theories in education thus might seem far removed from the empirically driven functionalist and rationalist theories of education leadership, with their focus on describing approaches to and forms of successful leadership that improve student achievement. With this in mind and considering that the educational leadership literature has evolved from an organizational

theory and management foundation, there seems to be a considerable difference between theories of school leadership and educational theories. However, as Moos (2019) demonstrates, global market discourses of performance and competition and their interpretations and materializations in social technologies, such as guidelines, standards, measurements and indicators, affect school leadership and teaching practices in educational institutions in a similar way. He describes this development as a movement from "a participatory, democratic paradigm toward a management-by-objectives and outcomes paradigm" (Moos 2017, p. 152) notions that largely overlap with Uljens and Ylimakis distinction between a critical and transformative approach and a functionalist and rationalist approach in school leadership.

Teachers' professional judgment and freedom in their choice of teaching methods to shape the content of the curriculum are central elements of Danish school culture, and pedagogical or curriculum leadership has traditionally been the domain of teachers. However, school reforms over the last 20 years have challenged this "order" of things and led to strengthening of pedagogical and curriculum school leadership (Moos, 2011). With an expectation that school leaders focus more on supporting teaching and learning, i.e. on internally oriented pedagogical leadership, the 2014 school reform further reinforces this development. With regard to the implementation of the reform, I find it productive to think of school leadership in a Danish context in terms of three categories, as suggested by Moos (2011, p. 160), which are each based on overall broad assumptions regarding leadership as involving diverse forms of educational influence. Moos points out that the three categories should not be seen as mutually exclusive school leadership practices, as school leaders will "from time to time make use of all three forms of influence" (Moos, 2011). Their potentiality in regard to this paper lies in the perspectives they offer on expectations of and tensions in school leadership emerging in the implementation of the 2014 reform.

(1) Direct leadership, based on the assumption that leaders lead by prescribing or persuading followers to do what they would otherwise not have done.

(2) Strategic leadership, based on the assumption that leadership is about developing and following up on short- and long-term plans and strategies.

(3) Reciprocal leadership, based on the assumption that leadership is enacted in relations, interactions and communications at many levels.

Direct leadership largely overlaps with the internally oriented pedagogical leadership described in the Introduction to this paper, focusing on *instructional and curriculum leadership aspects* involving specific actions taken to improve teaching practices and curriculum development, requiring knowledge of didactics, teaching methods and learning theories (Moos, 2011). It emphasizes the school leader as a source of pedagogical expertise can include supervision of and feedback on classroom teaching as well as adjustments of schools' curriculum, aims and organization of teaching.

With regard to strategic leadership, recent studies stressing the ongoing implications of the introduction of accountability strategies and national standards, tests and measurements in education have highlighted the shift from a focus on the aims of education and its processes and inputs to a focus on outputs (Knapp and Hopmann, 2017; Moos, 2019). Leadership, in this context, is not a matter of didactics but is *output-oriented*, focusing on the proper implementation of regulations and guidelines; its success is measured by student outcome variables, such as an increase in scores in national tests and well-being measurements. As such, strategic leadership is mainly guided by external expectations, but the category also includes *transformational leadership aspects*, where the role of the school leader is to inspire the teachers through the development of local visions and strategies for the school and to provide a strong support structure for pedagogical development. The term reciprocal leadership reflects an understanding of leadership as enacted in relations, interactions and

communications at many levels (Moos, 2011), and thus not as a task for a single person but as a coaction of institutional, system and personal factors (Knapp and Hopmann, 2017). Moos (2011) points out that this more indirect form of leadership is common in Danish schools, where efforts are made to develop relationships that can further positive outcomes such as trust and engagement through processes of face-to-face encounters, deliberations, negotiations and mediations (Moos 2017, pp. 159, 168). Reciprocal leadership is both internally and externally oriented and includes aspects such as *distributed leadership*, i.e. leadership that does not lie in the actions of the leaders *per se* but in the interactions between leaders and followers (Moos, 2017, p. 168). Leadership through the relations and interactions necessary for the collaboration taking place between municipalities, school leaders and pedagogical staff at schools, focusing on externally oriented expectations (such as meeting national and municipal targets) furthermore reflects the kind of educational influence that is related to reciprocal leadership.

Methodology

The space for learning and well-being in schools as well as the role of school leaders in terms of strengthening student learning and school well-being are shaped by both regulative policy and guideline-based policy. As such, policy documents central to the school reform, the 2013 and 2019 parliamentary agreements on the school reform and the ministerial guideline for schools' work with well-being all inform the analysis (Danish Ministry of Education, 2013, 2019a, b). The analysis furthermore draws on two research reports examining the role of school leadership in the implementation of the reform (Winter, 2017; Bjørnholt *et al.*, 2019). This section first describes the approach to document analysis, the different documents included in the analysis and how excerpts from these are extracted and analyzed. This will be followed by a discussion of the inclusion of the research reports in the document analysis, the relation between the documents included in the analysis and an outline of the structure of the analysis.

The document analysis draws on an understanding of documents as data on the ways in which individuals and institutions represent and account for themselves, with a potential to contribute to understandings of social practices (Coffey, 2014, pp. 367–368). The documents in the analysis can be described as existing (thus not produced explicitly for the research at hand) and as created for a particular purpose to serve a function. They can furthermore be described as artefacts of persuasion and as evidence of practice, with a distinctive and specialized use of language, not just describing aspects of social reality but also helping to create this (Coffey, 2014, pp. 369–172). A code and retrieve process was first applied within each electronic document, guided by the search terms school leadership, learning, academic skills (aims/levels/results/development) and well-being, after which a qualitative thematic analysis was conducted, drawing on the retrieved excerpts from the documents. In the governmental agreements, the code and retrieve process is applied in the documents as a whole, while in the ministerial guideline it is conducted in the eight-page section specifically addressing school leaders. In the two research reports, it is applied in the sections drawing on data and findings from the qualitative interviews (individual and focus group) with school leaders and teachers in 26 schools. Principles from categorical thinking (grouping data items into categories) and dialectical thinking (seeking to identify inherent tensions and contradictions) guide the thematic analysis, alternating between reflections related to the empirical material and the conceptual and theoretical sources of inspiration (Freeman, 2017).

Analysis of school reforms often draws on policy documents, while research reports are not commonly included in document analysis. However, reform and research can be seen as closely intertwined (Sivesind and Wahlström, 2017). Research reports intended to monitor and evaluate interventions identify areas that can lead to adjustments of ongoing reforms or provide justifications and momentum for new interventions (Hansen, 2009). With the functional purpose of answering "what works" in reforms, such reports are often rich sources

of data, providing "proof" of events that have taken place (Coffey, 2014). Policy documents such as the parliamentary agreements and ministerial guideline explicitly state their purpose as providing, respectively, the legislative and the guiding framework for the reform's implementation. By comparison, the functional purpose of the research reports is more complex. Analysis of documents, whether policy or research documents, requires considerable reflexivity, both in relation to understanding the possibilities and limitations of documents as artifacts and representations of social life and in considering how they are related to each other (Coffey, 2014). Reflections on how the documents included in the analysis are related are outlined in the following, while methodological reflections on possibilities and limitations in the document analysis are included in the concluding part of the paper.

The documents selected for the analysis relate to one another in different ways. The parliamentary agreements play an important role, informing about what has been decided, giving authority to the representations of school leadership in the guideline on school well-being and scaffolding the implementation of this element of the reform. Moos (2011) describes this twinning of rule-based and guideline-based policy, the latter governing through persuasion rather than regulation, as a general tendency in the Danish school policy. By reading the ministerial guideline, it is clear that it carefully avoids representations that might diverge from the visions, values and governance rationales regarding "what works" in the parliamentary agreements. However, by addressing school professionals, which furthermore involves the need to address the social reality of everyday school life, the guideline also adds to these representations by unfolding and interpreting them. The research reports, examining the implementation of the reform, commissioned by the Danish Ministry of Education, have a more complex relation to the parliamentary agreements as they are not limited to interpreting the perspectives on school leadership that these agreements present. They also have a function of "troubling" these perspectives in different ways, e.g. by drawing on school leadership theories that might question the logics used in the reform. Furthermore, the reports cross-reference previous research reports on the implementation of the reform, as well as previous studies on school leadership, and can thus create what Coffey (2014) terms powerful documentary realities. On the one hand, this makes them rich sources of data; on the other hand, it illustrates some of the challenges of working with these reports as documents, with their complex relation to the commissioning ministry, to other documents and to a range of theoretical foundations.

The distinction between *policy intentions* and *policy enactment* provides the overall structure for the analysis in two parts. Policy intentions refer to visions, values and governance rationales about "what works", while policy enactment refers to the specific materialization processes that make certain knowledge, practices or identities visible in school leadership (Fenwick and Edwards, 2011). Policy enactment furthermore refers to an understanding where policies "are interpreted and "translated" by diverse policy actors in the school environment rather than simply implemented" (Braun, Maguire and Ball, 2010, p. 547). The first part of the analysis, drawing on the policy documents describing policy intentions, focuses on identifying expectations regarding school leadership in the reform. The second part of the analysis, drawing on excerpts from data and findings in the research reports regarding the interpretations of policy and its implementation by school leaders and teachers as policy actors, focuses on identifying tensions in school leadership emerging in the implementation of the reform. Both parts of the analysis draw on the conceptual and theoretical sources of inspiration from the theory section distinguishing between different approaches, categories and aspects of school leadership.

Analysis

Expectations of school leadership in policy

The analysis of expectations of school leadership in the policy first focuses on the 2013 and 2019 governmental agreements, after which it addresses the ministerial guideline. One of the

main intervention areas in the reform is the introduction of a longer and more varied school day, providing more time and space for teaching, both in traditional school subjects and in the new teaching category "supportive teaching" (which is intended to supplement and support the subject-based teaching). The agreements underline the school leader's responsibility for ensuring coherence between the two. *Curriculum leadership*, as an aspect of internally oriented direct leadership (Terhart, 2013), can thus be considered one of the key expectations of school leaders in the reform. School leaders are also responsible for ensuring that students have 45 min of physical activity per day on average. This includes classroom-based physical activity, which is to be used as a way of working with the subject content. Furthermore, they are expected to work alongside teachers and educators in developing the school's teaching and learning environment and improving well-being. These expectations all focus on *instructional and curriculum school leadership aspects* of direct leadership, underlined in the 2013 agreement as a key competence area in the qualification of school leaders, along with strategic leadership competencies regarding how to manage, plan and organize the school day (Danish Ministry of Education, 2013, p. 20).

The title of the 2013 parliamentary agreement reflects the overall vision of strengthening academic achievement, which is further outlined in the agreement's introduction: "it is central that students have the opportunity to fully realize their potential, so that we can cope with the increasing international competition" (Danish Ministry of Education, 2013, p. 1). This expresses a view of education as providing opportunities to compete in the job market, resonating with neoliberal values and understandings of education as driving economic growth. In harmony with this approach, the agreement introduces a focus on performance, standards and outcomes, operationalized in targets for strengthening students' academic achievements and well-being. These targets include the following: "At least 80% of students should be [classified as] "good" at reading and arithmetic in the national tests", and "Student's well-being should be strengthened" (referring to status results from previous well-being measurements) (Danish Ministry of Education, 2013, p. 23). The formulation of the targets explicates what successful school leadership means when it comes to the expected outputs of the reform.

The goal of improving students well-being is primarily described as an adjunct to academic performance in the agreements, exemplified in this excerpt from the 2013 agreement (p. 17): "to work with teaching environment and well-being in order to (. . .) support the pupils" social and academic development". Well-being is, however, also presented as an education challenge that needs to be addressed, "(. . .) to create an even better school and optimal frameworks for both good teaching and a good children's life with high academic achievements and well-being" (the 2019 agreement, p. 1). The two discursive relationships – well-being *for* learning and learning *for* well-being – are thus present in the policy. Mandatory comparative measurements of well-being are included in the quality assurance processes at the school, municipality and ministerial levels and are construed as a new means of incentivizing, controlling and changing school practice. The descriptions of the means and resources for reaching the targets stipulated in the policy suggest that data from national tests and measurements of student well-being are given a central role in the governance of schooling (Carlsson, 2017) and are also functioning as indicators for monitoring the use of staff resources. The foundation in assumptions of a management-oriented rationalist approach in educational leadership is apparent, emphasizing that rational systems utilize hierarchical structures that create clear managerial spans of control. School leaders' function in implementing and working with these new governance tools, including the setting of local targets that reflects the national standards for strengthening students' academic achievement and well-being and taking action based on these measurements, frames *output-oriented aspects* of strategic leadership as central in the implementation of the reform.

The 2019 agreement, subtitled "adopting the "Folkeskole" to be more open and flexible", underlines the need to "show trust in and provide more flexibility for school leaders, school boards

and school professionals, allowing them to shape their school according to local needs and conditions" (Danish Ministry of Education, 2019a, p. 10). The document highlights barriers encountered in the implementation of the 2014 school reform, pointing out that changes need to be meaningful at the local level and opening up for the possibility of adapting the reform's principles regarding the length and organization of the school day to take into account local conditions. The discourses of trust and flexibility and the underlining that "change must be meaningful at the [local] practice level" (Danish Ministry of Education, 2019a) signal that decentralization and local ownership are a central part of the overall vision for school development. This underlines the need for *transformational aspects* of school leadership, supporting the development of local visions and strategies. However, the focus on national standards and outcomes is maintained, as they are discourses reflecting an understanding of school leadership as driven by accountability and performativity, resonating with *output-oriented aspects* of leadership.

The ministerial guideline for schools' work with well-being refers to schools' "day-to-day management team" (Danish Ministry of Education, 2019b, p. 5), i.e. aspects of *distributed leadership*. This includes both the school principal and other members of staff to whom responsibility is delegated for the implementation of the annual survey of student well-being and for taking appropriate action based on the results. The outline of tasks, emphasizing processes of participation that can enable people to be informed and discussions among stakeholders at different levels stand out as representing good school leadership (Danish Ministry of Education, 2019b, pp. 9–11). These tasks include establishing a working group that can take part in planning, assessing and following up on the results of the well-being survey as well as informing the student council, parents and members of the school personnel about when and how they can be contacted if students need to talk. Following up on the survey, school leaders should furthermore asses the results by creating an overview, select focus areas that can improve students' well-being, e.g. by comparing the results from the survey with the formulated political targets, and involve key individuals at the school and from the municipal school authorities in discussions of the results. "Following up on survey results" can be seen as a key part of the reform, ensuring that school development stays focused on objectives and results.

This points to the current development in the education policy affecting school leadership and teaching practices in educational institutions in a similar way, moving toward "a management-by-objectives and outcomes paradigm" (Moos 2017, p. 152). At the same time, the guideline emphasizes *transformational aspects* of school leadership, such as providing a support structure for school development, and establishing a framework for feedback and dialogue about well-being at the school. The emphasis both on management by objectives and results and on more "pedagogical" forms of steering, such as feedback and dialogue, is an example of the twinning of "hard" and "soft" governance expectations in the guideline. Overall, the guideline underlines reciprocal leadership, describing relations and interactions between national, municipal and school levels on the one hand and between school leaders, teachers and educators on the other hand. In comparison with the descriptions of school leadership in the parliamentary agreements, discourses centered on strategic leadership are somewhat downplayed in the guideline. Nevertheless, the bottom line in the governance rationale guiding school leaders in terms of the 2014 reform is their responsibility for properly implementing regulations and guidelines and for strengthening student outcomes.

Tensions in school leadership emerging in the implementation of the reform

The analysis of the two research reports highlights tensions between direct and strategical forms of leadership, tensions in the intertwining of leadership aspects related to these two forms of leadership and tensions following the increase in municipal management by objects and results.

In the interviews with school leaders, most describe "pedagogical school" leadership as a matter of "getting close to" teaching, teachers and educators (Bjørnholt *et al.*, 2019), which

includes observing teaching, giving feedback and discussing teaching methods with teachers, all of which refer to *instructional leadership aspects*. The close engagement with teaching practices can be contrasted with the reform's focus on realizing specific targets in terms of student outcomes. The 2019 report points out that although the school leaders' engagement with teaching practices and methods seems to strengthen the implementation of certain elements of the reform (such as the mandatory 45 min of daily physical activity), it does not seem to have an effect on students' learning and well-being. It concludes that the 2014 reform's assumptions about "what works" cannot be validated when it comes to the expected impact on student learning and well-being when strengthening instructional leadership. The interviews with school leaders and with teachers indicate that instructional leadership, such as observing teaching, giving feedback and taking part in discussions of teaching methods, seems to have a poor fit in terms of Danish school culture and teachers' freedom in their choice of teaching methods (Winter, 2017). The interviews with school leaders furthermore suggest that they are careful to avoid what might be seen by teachers as encroach on their professional autonomy when implementing the reform. This is illustrated in the following excerpt from an interview with school teachers: "I respect the fact that a professionally trained teacher should have the opportunity to choose what is best for their subject. How should I be able to be elitist and say what is best in all teaching" (Bjørnholt *et al.*, 2019, p. 42). Winter points out that Danish teachers seem to have less respect for school leaders and students less respect for teachers than in the Anglo-Saxon countries where instructional leadership has proven effective, a factor that might prevent the successful use of "instructional-oriented pedagogical leadership" (Winter, 2017, p. 96). This might shed light on why, according to the 2019 report, there is an emphasis on management by objectives and results in the implementation of the reform, i.e. on *output-oriented aspects* of strategical leadership. Such approaches, based on data-based appraisals of student achievement, might be experienced as leadership that is more "hands-off" and "further removed from teaching", and thus as more manageable in comparison with instructional leadership, which directly addresses teaching practice.

The interviews with teachers furthermore underline that school leadership that draws on *transformational leadership aspects*, for instance initiating dialogue with individual members of staff about the future, furthers positive implementation effects. Bjørnholt *et al.* (2019) note that the school leaders describe transformational leadership as ideal, using terms such as "captain on the ship", "the driver" and "the catalyst". Transformational leadership is described by school leaders as being "about going ahead and creating enthusiasm" and as something to strive for, but they also point out that it is not always possible due to a lack of time and the many other tasks they have (Bjørnholt *et al.*, 2019, p. 64). The excerpt below indicates that the school leader has adopted the governance rationale for strengthening data-informed teaching and encourages the teachers to analyze and discuss data from the tests and well-being measurements in the planning of the teaching (Bjørnholt *et al.*, 2019, p. 51):

> It is very much about putting it into a system (. . .). We work with academic progression and a well-being dimension that is also essential to learning (. . .). We try to disseminate this [approach] and encourage our teachers to support it. They have all been through reflexive processes from data to analysis to teaching. (. . .) What we are trying to implement is that you work with progression as a professional method. We work with it (objectives and data, ed.) on a strategic level when planning teaching. (. . .). I am always involved in the feedback. In that sense, our work is heavily informed by data.

The quote illustrates how "close to teaching leadership", i.e. *instructional leadership* such as planning of teaching, is twinned with *output-oriented leadership*, described as working with data-informed progression as a professional method. The 2019 report highlights two main challenges in this regard: First, the school leaders underline that gaining the acceptance of teaching staff, "genuine legitimacy when it comes to using objectives and data as another tool in pedagogical practice" (Winter, 2017, p. 53), is a gradual process. Furthermore, school

leaders generally perceive the goals and indicators related to student well-being as a new (and demanding) element in the management by objects and results in schools. Second, they point to a lack of data literacy among school leaders, i.e. a lack of the necessary competencies to select, organize and, not least, interpret data, which is described as a prerequisite for developing a data-informed teaching practice. Winter (2017) points out that there has been development of "distributed pedagogical leadership" through teacher teams in the reform's first two years. When the school leaders assess that they lack the necessary competencies or time, they delegate responsibility for management by objectives and results to middle managers, school counselors and teacher teams. This suggests that when educational governance is focused on management by objectives and results, emphasizing *output-oriented leadership*, school leaders draw on strategies of *reciprocal leadership*, i.e. leadership enacted in relations, interactions and communications at multiple levels. This indicates that not only will school leaders "from time to time" make use of all three forms of educational influence (Moos 2017, p. 160) but also strategical leadership aspects are intertwined with both instructional and reciprocal leadership aspects.

Leadership that is "further removed from teaching", such as collaboration with the municipality regarding objectives and results at the municipal and school levels, which can be described as an aspect of *reciprocal leadership*, seems, according to Winter, to have little or no effect on the implementation of the reform in relation to teaching practice (Winter, 2017). Winter notes that, in practice, municipalities' management of both goals and means has increased, and that school leaders spend far more time than previously meeting with local authorities to discuss requirements and management. According to the school leaders, the municipalities are more active than before the reform in developing indicators for assessing and monitoring schools' performance, as described by this school leader, who points out that "there is significantly more follow-up on that we achieve the goals that have been set, and I think we spend significantly more time on that. These are typically the things that are also in the quality report (. . .)" (Winter, 2017, p. 151). Supported by findings from previous research concluding that the effects of an isolated use of management by objectives and results on macro- and meso-levels (national and regional/municipal levels) on student learning are very mixed and context dependent, Winter questions the reform's rationale when it comes to the benefits of increasing municipal management by objectives and results.

The reports highlight a range of factors related to municipal governance and school leaders' autonomy that might affect the possibility of strengthening aspects of direct leadership such as instructional and curriculum-oriented leadership as well as the school leaders' opportunities to influence the direction their schools take, i.e. transformational aspects of strategic leadership. These factors include the top-down implementation of learning platforms at schools, municipalities' formulation of specific objectives that schools should reach within a given timeframe and indirect steering through competence development activities or through municipality initiated projects at the school.

Discussion

Drawing on theories of school leadership, the analysis highlights the various aspects and forms of school leadership that are at play in the reform. The analysis of the policy documents identifies expectations regarding school leadership, ranging from aspects of strategic leadership that focus on management by objectives and results to aspects that are closer to teaching, such as curriculum and instructional leadership. The 2013 and 2019 parliamentary agreements and the guideline for schools' work with well-being and the implementation of the well-being survey generally exemplify the strategies described in previous research on school leadership with their emphasis on (measurable) outcomes (Biesta and Priestly, 2013; Moos, 2011; Hopmann, 2013). A range of expectations placed on school leadership is highlighted in the analysis of the policy documents: from different aspects of strategic leadership, such as output-

oriented and transformational leadership, to aspects of direct leadership, such as curriculum and instructional leadership. Meanwhile, aspects of reciprocal leadership are central in the guideline, emphasizing processes of participation that can enable people to be informed and discussions among stakeholders at different levels. Many of the features and tensions in current curriculum reforms internationally – the concerns about a more child- and learning-centered curriculum, the active role of the teacher and the focus on standards, outcomes and performance – are flagged in the policy documents. As such, on the one hand, the policy documents focus on students and their learning and well-being as well as on teachers and school leaders and their agency, underlining school leaders' autonomy to choose the means to adapt their school to local needs. On the other hand, there remains a focus on the narrow aims, measurable outcomes and standards set out at the national and municipal levels. The general picture emerging from the analysis is thus one of tensions and contradictions in the expectations regarding school leadership rather than a singular trend toward one particular form of leadership.

The analysis of the two research reports highlights tensions between direct and strategical forms of leadership, tensions in the intertwining of leadership aspects related to these two forms of leadership as well as tensions following the increase in municipal management by objects and results. The increased role played by school leaders in the pedagogical process can, as Knapp and Hopmann (2017) point out, improve the quality of both schooling and instruction. However, coinciding with greater responsibility for quality assurance, it can also lead to new challenges in dealing with these expectations. In the context of the development of a new accountability environment, transforming school leadership to accountability gap management between national standards and school performance, "there is little time and room for school leaders to practice didactics on behalf of the teachers" (Knapp and Hopmann, 2017, p. 239). The authors point out that gap management has another side, focusing on students and teachers, where school leadership also is "about defending the educative surplus of schooling (Bildung) as an outcome of the didactical use of teachers" pedagogical freedom (p. 239). They accentuate that as a result of these two sides of gap management, school leadership has to deal with the gap between controlling and regulating the demands of centralized school authorities and defending the pedagogical freedom of teachers.

The reports examining the implementation of the 2014 reform underline that leadership close to the teachers and teaching as well as leadership through teacher teams in general seem to be effective when it comes to changing teaching practice, while pointing out that what has an effect on teaching does not necessarily have an effect on students' learning and well-being. Meanwhile, the increase in the municipality's management by objectives and results and its effects on school leaders' autonomy are generally seen as more of a hindrance than as facilitating positive changes in teaching. Aspects of transformational leadership are highlighted as having a positive effect on the implementation of certain elements of the reform related to teaching, while barriers to instructional leadership, such as "getting too close to" the pedagogical or curriculum leadership that has traditionally been the domain of teachers, are underlined. This can illustrate why "leadership that is further removed from teaching" has been a more central aspect than "close to teaching leadership" in the first five years of the reform. The development of strategies of reciprocal school leadership, i.e. leadership enacted in relations, interactions and communications at many levels, seems to be closely connected to the demands following the strengthening of management by objectives and results in the reform. This is especially the case when it comes to the expectations of data-informed teaching development in the reform and its assumptions of the positive effect of implementing educational practices in reading and responding to student performance data. However, as pointed out in research on the implications of such strategies, this can have an impact of disruption on identities and work in these practices, including a risk of de-professionalization, unless professionals are given an opportunity to develop the necessary skills in analyzing and turning data into pedagogical action (Wyatt-Smith *et al.*, 2019).

In their discussion of leadership in Danish welfare institutions, Åkerstrøm Andersen and Pors (2014) describe "potentiality leadership" as a central perspective on leadership in the 2014 school reform. This perspective is referring to both strategic and transformational leadership expectations and to the school as a flexible organization expected to constantly exceed its own practices. One the one hand, they point out how the state and municipalities are required to set clear objectives for the school and monitor performance, while on the other hand, highlighting constituent problematization of the dysfunctional nature of accountability targets in relation to institutions' and professionals' possibilities to provide high quality education. A central tension lies in the understanding of school policy as both a tool for politicians to set the agenda for school development and a tool enabling schools to see themselves as self-developing. The efforts of this are especially apparent in the 2019 parliamentary agreement. On the one hand, there is an emphasis on a discourse of deregulation, conceptualized as the need to "adapt the "Folkeskole"" to be more open and flexible and to strengthen professional judgment and freedom of planning teaching and learning. On the other hand, the agreement presents a governance framework for steering, including detailed accounts on how to strengthen teaching, and rules and regulations for the time-consuming work with documentation, self-evaluation and participation in accountability processes that are described as a necessary part of school leadership in ensuring school development.

Limitations in the document analysis

This paper has explored the tensions that arise in school leadership in relation to the specific "package of expectations" and new demands in the 2014 school reform. The paper's theoretical and empirical foundation is rooted in Danish and Scandinavian perspectives on schooling, and thus the generalizability of the findings may be limited to countries with similar perspectives or "packages of expectations" on linking school leadership, learning and well-being. Considering the limitations of and possibilities for working with policy documents and with research reports in document analysis, it is important to point out that although the documents selected for this analysis consist of descriptions of the social world, they are constructed accounts of this. With functional purposes such as providing the legislative, guiding and evaluative framework for the implementation of the 2014 reform, they are not necessarily "true" accounts of the complex expectation of and tensions in school leadership. As pointed out in the method section, the documents can be understood as artefacts in the specific materialization process that make certain practices in school leadership visible. What could have been better developed in the analysis of the documents is the possibility of pursuing their intertextuality relationships, including in relation to how the research reports' use of discourses and rhetoric devices both draws on and troubles the legislative and guiding frameworks in the governmental agreements and ministerial guideline. A complementary analytical approach drawing on critical discourse analysis could thus have been relevant. Not only to better understand how the different levels of translations, interpretations or "troubling" of values and governance rationales in the documents draw together and sometimes stabilize what Fenwick and Edwards (2011, p. 736) call "strange assemblages of educational policy activity" but also to point at spaces where alternate possibilities may emerge.

Conclusion and implications

The effort of matching local and contextual demands with external requirements, pointed out as an inherent tension in current school leadership, is highlighted in the analysis, raising critical questions in relation to some of the central assumptions in the reform about "what works" in school development. The analysis of the research reports points to the fact that direct, strategic and reciprocal forms of leadership interact and affect each other in different ways. One concern in relation to the interaction between direct and strategic forms of leadership is when instructional and curriculum-oriented leadership aspects, formulated as a

key expectation of school leadership in the reform, are perceived as "getting too close" to teaching. The result of this seems to be that the kind of leadership that can be practiced through data-based management by objectives and results has been perceived as a more viable approach in the implementation of the reform.

The analysis furthermore accentuates how direct and strategic forms of leadership seem to be twinned in practices such as "data-informed planning of teaching". This raises a question of how this development in the first five years of the implementation of the school reform influences the space for instructional and curriculum leadership, i.e. leadership practices that go beyond the expectations of management by objectives and results. Another concern is how the development in school leadership policy focusing on expectations of management by objectives and results might affect the possibility of a practice based on a broader sense of purpose of school leadership, drawing on what Uljens and Ylimaki describe as a critical and transformative approach in educational leadership. The management by object and result approach in school leadership seems to leave little room for a school leadership founded on an understanding of educational leadership as a means to develop teachers' and students' critical consciousness and agency with the goal of social transformation. It also leaves little room for the provision of a support structure for pedagogical development concerned with how local visions as well as societal aims, values and ideals related to children's upbringing, learning and care can be translated into the curriculum content and teaching methods.

The analysis furthermore raises the question of whether the reform has led to an expansion of the space for working with learning and well-being in schools. As in Spratt's (2017) study of the Scottish policy on learning and well-being, the policy's overall intention can be seen more as "well-being for learning", where well-being serves as functional goals of performativity than as "learning for well-being", which seeks to ensure that all learning is personally fulfilling and meaningful. Nonetheless, the materialization processes that take place through the implementation of and response to the survey of student well-being and the national tests ensure that there is an ongoing focus on both learning and well-being aims in schools. The main challenge when translating this into a leadership practice that can strengthen well-being is that school leaders seem to regard the tasks related to the implementation of the school well-being surveys as a new and demanding element of school leadership. It may thus be seen as "simply" another aspect of the management of schools by objectives and results, and thus more as a political tool than as a pedagogical one that can contribute for linking school leadership, learning and well-being.

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Health literacy and mental health of school principals. Results from a German cross-sectional survey

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Abstract

Purpose – School principals are generally seen as key facilitators for the delivery and long-term implementation of activities on school health promotion, including health literacy. However, there is little evidence on the health literacy and health status of this occupational group. The purpose of this paper is to investigate the health literacy of school principals and its association with mental health indicators.

Design/methodology/approach – A cross-sectional online survey with German school principals and members of the management board (vice principals) was conducted (n = 680, 68.3% female). Demographic (gender, age) and work characteristics (type of school, professional role) as well as health literacy served as independent variables. Mental health as a dependent variable included well-being, emotional exhaustion and psychosomatic complaints. Next to uni- and bivariate analysis, a series of binary logistic regression models was performed.

Findings – Of the respondents, 29.2% showed a limited health literacy with significant differences to the disadvantage of male principals. With regard to mental health, respondents aged over 60 years and those from schools for children with special educational needs were less often affected by low well-being as well as frequent emotional exhaustion and psychosomatic complaints. Taking into account demographic and work characteristics, regression models revealed significant associations between a low level of health literacy and poor mental health across all indicators.

Research limitations/implications – The cross-sectional nature of this study does not allow to draw conclusions about the causal pathways between health literacy and mental health. Although the sample has been weighted, the results cannot be generalized to the whole population of school principals. There is a need for evidence-based interventions aiming at promoting health literacy and mental health tailored to the needs of school principals.

Originality/value – This is the first study to investigate health literacy and its association with health indicators among school principals.

Keywords School principals, Health literacy, Well-being, Emotional exhaustion, Psychosomatic complaints, Health promoting school

Paper type Research paper

Introduction

Since the global corona pandemic at the latest, it has become clear that health literacy of individuals and organisations is of great importance for public health research and practice (Košir and Sørensen, 2020; Paakkari and Okan, 2020). The increasing amount of health-related information, as well as its varying quality and reliability, has led to an unprecedented information jungle that is difficult to navigate, requiring the ability to obtain, evaluate and

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apply information appropriately in order to restore, maintain or promote one's own health (Abel and McQueen, 2020; Sørensen *et al.*, 2012). Given the high relevance of health literacy, it is not surprising that this topic has received increasing attention on the political agenda of European countries in recent years, resulting in several action plans and frameworks to address health literacy (Van der Heide *et al.*, 2019). In Germany, a national action plan for health literacy was adopted under the auspices of the Minister of Health in 2018, comprising a total of 15 recommendations across four suggested areas of action (Schaeffer *et al.*, 2018). Particular importance is attached to the education system, which, according to the recommendations, should be enabled to promote health literacy early in life. Policy strategies in other countries also attach great importance to the education system to promote health literacy, including Australia (Australian Commission on Safety and Quality in Health Care, 2012), Canada (Mitic and Rootman, 2012), Portugal (Direção-Geral da Saúde, 2019) and the USA (US Department of Health and Human Services, 2010).

Despite political demands for greater integration into the school setting, there is a lack of empirical evidence on health literacy among school staff. In their recent study, De Buhr *et al.* (2020) surveyed 420 teachers from schools attending a pilot study on establishing school nurses in German schools. The results showed a limited health literacy for 50% of the sample with highest difficulties found for evaluating the reliability of health information (51.6%) and finding information on how to manage mental health problems (48.8%). Another cross-sectional study among 520 teachers from Sri Lanka revealed a limited level of health literacy for 32.5% of the sample (Denuwara and Gunawardena, 2017). Higher levels of health literacy were associated with increasing age (45+ years), more professional years as a teacher (10+ years), a higher level of knowledge about health or participation in special courses in health-related subjects within the past six months. Additional studies focused on pre-service teachers (one with special focus on COVID-19-related literacy among biology teacher candidates, Fauzi *et al.*, 2020). Although the comparison of results is difficult due to the use of different instruments, the study of 704 pre-service teachers from Iran showed a slightly higher proportion of respondents with limited health literacy (49.5%, Ahmadi and Montazeri, 2019). Again, the greatest difficulties could be found for the dimensions of critical evaluation and application of health-related information. Moreover, male respondents and those less than or equal to 20 years of age reported a significant lower health literacy.

These study findings indicate a need for action to promote individual health literacy and thus to strengthen professional capacities of teachers, especially in the field of school health promotion. However, as emphasized by Okan *et al.* (2020), school principals are also of critical importance when it comes to health literacy promotion in schools. In their overall responsibility for all school matters, school principals and managers are gatekeepers for facilitating the delivery and long-term implementation of activities on health promotion in the school. However, given the importance of this occupational group, it is surprising that health literacy of school principals has not been the subject of empirical research so far. The same can be observed for the mental health of school principals, which has received much less attention in school health promotion and prevention research compared to pupils and teachers. As a result of the Global Education Reform Movement (GERM, Sahlberg, 2012), schools all over the world have gained more autonomy (e.g. in terms of school budget, staffing), while at the same time a process of decentralisation can be observed (e.g. by national standardised tests and curricula). It is argued that these developments have led to increasing job demands and responsibilities for school principals, which in turn increases the risk of mental stress and strain of school principals (Dadaczynski *et al.*, 2020). In fact, available research findings indicate that school principals are often affected by mental health complaints that exceed those experienced by reference groups. Based on a representative assessment of a sample of the working population in Germany, Hasselhorn and Nübling (2004) could show that school principals belong to an occupational group with highest odds ratios for work-related mental exhaustion (rank 7 out of

67 occupational groups). Moreover, the results from a cross-sectional study with 290 school principals from the UK revealed a prevalence of work-related stress of 43% (Philips *et al.*, 2008). Compared to a general population norm group and a peer group on non-educational managers, school principals reported to be more often stressed by work overload and lack of work–life balance. Moreover, female school principals reported to experience more stress by some aspects of their work (e.g. overload, control). With regard to more distal mental health outcomes, Dadaczynski and Paulus (2016) found symptoms of depression requiring further diagnostic clarification in 12% of German school principals (n = 4,300). Stratified by sociodemographic and school characteristics, school principals from primary schools and younger school leaders more often reported a very low well-being. Finally, burnout among school principals has been investigated in a number of studies, with findings ranging from 27% for moderate levels of burnout (Combs *et al.*, 2009) to 13% for high levels of exhaustion and depersonalisation (Whitaker, 1996). Compared to teachers, non-educational managers and the general population, an Australian study found significantly higher scores for burnout among school principals (Maxwell and Riley, 2017).

Given the high relevance of mental stress and strain not only for individual health but also for the quality of teaching (Klusmann *et al.*, 2006), student performance (Klusmann *et al.*, 2016) and early retirement (Reames *et al.*, 2014), the identification of predictors of mental health is of great importance for the development of school health promotion and prevention activities. Health literacy has been identified to be associated with health outcomes including mental health in a number of studies (Jordan and Hoebel, 2015; Tokuda *et al.*, 2009). Drawing on the limited research findings described above, this study sought to explore the health literacy of principals and its association with mental health indicators. The following research questions guided this study:

RQ1. What is the state of health literacy among school principals?

RQ2. What demographic and work characteristics are associated with health literacy and mental health of school principals?

RQ3. What are the associations between health literacy and mental health indicators, taking into account demographic and work characteristics of school principals?

Methods

Study design

To answer the research questions, a cross-sectional online study was carried out in the German federal state of Hesse from October to December 2018. Study participants were school principals and members of the school management board (e.g. vice principals) from public primary and secondary schools. Following an ethical approval by the Hessian Ministry of Education, all eligible study participants were invited to participate in the study by the Hessian association of school principals via email and newsletter. This also included two reminders three and six weeks after the survey has started. Participation was voluntary, and anonymity was assured. The survey was administered electronically using the Enterprise Feedback Suite (EFS) survey tool by Questback. Upon entering the online survey site, the participants were presented with information regarding the aims and the background of the study, including a consent box at the bottom of the page.

Study population

At the time of the study, there were a total of 1,854 public primary and secondary schools in the federal state of Hesse (Hessisches Statistisches Landesamt, 2019), all of which were contacted via the Hessian association of school principals. After plausibility check and adjustment for

incorrect data, the final sample contained a total of $N = 680$ respondents who completed the questionnaire. Compared to the general population of school principals from Hesse, female respondents from comprehensive schools were overrepresented (58.3 vs 52.6%) in our study sample, while schools for children with special educational needs (54.4 vs 66.8%) were underrepresented. Hence, to control for selection bias caused by the convenience sampling procedure, we used weighting to adjust the sample distribution to the characteristics of the general population of school principals and members of the school management board. Based on data provided by the Hessian Ministry of Education on request, data could be weighted for gender and type of school (Table 1). The majority of the weighted sample were female principals with 68.3%, school leaders from primary schools with 48.5% and 46 to 60-year-old respondents with 61%. Moreover, 81% of the sample had the role of the principal, while 19% stated to be member of the school management board (e.g. vice principal).

Instrument

With regard to the sociodemographic variables, we used gender (male, female) and age (≤45 years; 46–60 years; > 60 years). Work-related characteristics included the type of school, which according to the Hessian school system included primary school and five types of secondary schools (grammar/high schools, comprehensive schools, schools for children with special educational needs, vocational schools and mixed schools [i.e. primary, lower and middle-secondary school]). Moreover, a dichotomous measure of the professional role was included (principal; member of the management board).

Health literacy was measured using the German short version of the European Health Literacy Survey Questionnaire (HLS-EU-Q16) including 16 items (Röthlin *et al.*, 2013). On a four-point Likert scale (1 = very simple, 4 = very difficult), respondents were asked to indicate how difficult it is for them to find information (e.g. ". . .on how to manage mental health problems like stress or depression?"), to understand information (e.g. ". . .why you need health screenings?"), to judge information (e.g. ". . .if the information on health risks in the media is reliable?") and to apply information (e.g. ". . .how you can protect yourself from

	Frequencies	
	n	%
Gender ($n = 680$)		
Male	216	31.7
Female	464	68.3
Age ($n = 680$)		
≤45 years	146	21.4
46–60 years	415	61.0
>60 years	119	17.5
Professional role ($n = 680$)		
School principal	551	81.0
Member of the management board	129	19.0
Type of school ($n = 680$)		
Primary schools	330	48.5
Primary, lower and middle-secondary schools	66	9.7
Grammar/high schools	65	9.6
Comprehensive schools	108	15.9
Schools for children with special educational needs	57	8.4
Vocational schools	54	7.9

Note(s): % = frequency in percent; *n* = number of cases

Table 1. Sample characteristics (absolute und relative frequencies) (weighted)

illness based on information in the media?") related to health care, prevention and health promotion. The scale showed a very good internal consistency ($\alpha = 0.90$). Based on the suggestions of the scale developer, all items were dichotomized (= very simple/fairly simple and 0 = fairly difficult/difficult). Using the sum score, three levels of health literacy were created: inadequate health literacy (0–8 points), problematic health literacy (9–12 points) and sufficient health literacy (13–16 points). For all analyses, the categories inadequate and problematic health literacy were combined to the category limited health literacy.

Psychological well-being of school principals has been assessed using the WHO-5 well-being index (Bech, 2004). WHO-5 is a tool to assess self-perceived well-being for a given period of time (past two weeks) through five positively worded items (e.g.: "Over the last two weeks. . . I have felt active and vigorous"). It is conceptualized as a uni-dimensional measure, with each item rated on a six-point Likert scale ranging from 0 (at no time) to 5 (at all the time). Internal consistency for this scale was good ($\alpha = 0.86$). According to the scale developer, the raw score for each item has been multiplied by 4, resulting in a transformed scale from 0 (lowest well-being) to 100 (highest well-being). Existing cut-off values suggest a lower well-being for scores ≤ 50, while values ≤ 28 indicate a depression, which requires further diagnostic clarification (Topp *et al.*, 2015). For subsequent regression analyses, we merged the two groups indicating lower well-being (≤ 50) and depression (≤ 28) into one group (low well-being).

To measure the frequency of psychosomatic health complaints, a seven-item scale by Harazd *et al.* (2009) was used. Respondents were asked to indicate the occurrence of various symptoms during the past six months, including fatigue and overwork (e.g. sleeping difficulties), physical excitement (e.g. physical restlessness) or gastrointestinal complaints (e.g. stomach pain) on a four-point Likert scale (1 = never, 4 = (almost) always). Cronbach's α of 0.87 indicated a good internal consistency. With regard to regression analyses, we dichotomized this variable using median split (frequent vs less frequent psychosomatic complaints).

A scale for measuring emotional exhaustion was used to assess the subjective feeling of being emotionally overwhelmed and drained by work. Emotional exhaustion is seen as a core dimension of burnout, which is operationalised by the Maslach Burnout Inventory (MBI, Maslach and Jackson, 1981). We used a German version of this subscale including six items (e.g. "I feel used up at the end of the workday") that could be answered on a four-point Likert scale ranging from 1 (never) to 4 ([almost] always) (Barth, 1997). The scale showed a good internal consistency ($\alpha = 0.86$). A dichotomous variable was created for further regression analyses using median split (frequent vs less frequent emotional exhaustion).

Data analyses

In a first step, all data on health literacy and mental health of school principals were analysed descriptively. Cross-tabulation and chi-square tests (χ^2) were performed to test the statistical significance of the association between categorical data (i.e. the two levels of health literacy with demographic and school-related characteristics and the three mental health indicators). This association was further explored through logistic regression modelling, to analyse the contribution of demographic and work characteristics and of health literacy to mental health. Separate models were calculated for each mental health indicator (low psychological well-being, frequent emotional exhaustion and frequent psychosomatic complaints) by odds ratio (OR) and its respective 95% confidence interval (95% CI). The inclusion of explanatory variables in the regression models was based on available empirical findings. Given the study findings reported by Philips *et al.* (2008), male sex served as the reference category. According to Dadaczynski and Paulus (2016), respondents aged 60+ showed a higher well-being than younger principals, which is why this age group was defined as the reference group. With regard to type of school, only very few findings are available so far, which have mainly

differentiated between primary and secondary education. There is a tendency for principals from schools for children with special educational needs to have a better mental health compared to principals from other types of school (Dadaczynski and Paulus, 2016). Hence, we used school type as reference category for the regression analysis. All tests were two-tailed, and p-values < 0.05 were considered statistically significant. The estimated fit of the regression models was provided by Nagelkerke's R-squared. All analyses were performed using IBM SPSS Statistics 23 for all statistical analyses.

Results

Health literacy levels

After creating the three levels of health literacy, 70.8% of the school principals in our sample were found to have a sufficient health literacy. By contrast, 23.5% of the respondents had a problematic and 5.7% an inadequate health literacy (Table 2). On the level of single items, school principals expressed most difficulties to find information on how to manage mental health problems like stress or depression (30.2%), to judge if the information on health risks in the media is reliable (29.5%) or to judge when they may need to get a second opinion from another doctor (27.8%).

Stratified by demographic variables, the results show significant gender differences, with male principals more often reporting a limited health literacy (34.9 vs 26.6%; $\chi^2 = 4.82$ (1), $p < 0.05$). For the different age groups, however, no differences in the level of health literacy could be identified. The same could be observed for work characteristics, with no significant differences between types of school and professional role.

Mental health outcomes

Using the cut-off scores on the WHO-5, 24.5% of the respondents were screened as having a lower well-being, while 15.3% showed indications for a clinical depression (39.8% in sum categorized as low well-being, see Table 3). Moreover, about one-half of the respondents reported being frequently affected by psychosomatic complaints (51.9%) and symptoms

	Limited HL % (n)	Sufficient HL % (n)	χ^2 (df)	p
Gender ($n = 657$)			4.822 (1)	0.028
Male	34.9 (73)	65.1 (136)		
Female	26.6 (119)	73.4 (329)		
Age ($n = 658$)			2.860 (2)	n.s
≤45 years	26.3 (36)	73.7 (101)		
46–60 years	31.7 (128)	68.3 (276)		
>60 years	24.8 (29)	75.2 (88)		
Professional role ($n = 657$)			0.088 (1)	n.s.
School principal	29.0 (155)	71.0 (380)		
Member of the management board	30.3 (37)	69.7 (85)		
Type of school ($n = 656$)			2.134 (5)	n.s.
Primary schools	29.6 (94)	70.4 (224)		
Primary, lower and middle-secondary schools	35.4 (23)	64.6 (42)		
Grammar/high schools	25.8 (16)	74.2 (46)		
Comprehensive schools	27.4 (29)	72.6 (77)		
Schools for children with special educational needs	25.9 (14)	74.1 (40)		
Vocational schools	31.4 (16)	68.6 (35)		
Total ($n = 657$)	29.2 (192)	70.8 (465)		

Note(s): HL health literacy, χ^2 chi-square, n.s. not significant, % percent, n frequency

Table 2.
Health literacy levels of school principals stratified by sociodemographic and work characteristics

Table 3.
Mental health of school principals stratified by sociodemographic, work characteristics and health literacy

	Well-being		Emotional exhaustion		Psychosomatic complaints	
	Low % (*n*)	Sufficient % (*n*)	Frequent % (*n*)	Less frequent % (*n*)	Frequent % (*n*)	Less frequent % (*n*)
Gender (*n* = 680)	$\chi^2 = 2.88$ (df = 1), n.s.		$\chi^2 = 2.30$ (df = 1), n.s.		$\chi^2 = 2.877$ (df = 1), n.s.	
Male	35.2 (76)	64.8 (140)	54.6 (118)	45.4 (98)	47.2 (102)	52.8 (114)
Female	42.0 (195)	58.0 (269)	60.8 (282)	39.2 (182)	54.2 (252)	45.8 (213)
Age (*n* = 680)	$\chi^2 = 9.34$ (df = 2), $p = 0.009$		$\chi^2 = 14.64$ (df = 2), $p = 0.001$		$\chi^2 = 13.38$ (df = 2), $p = 0.001$	
≤45 years	41.1 (60)	58.9 (86)	55.5 (81)	44.5 (65)	50.0 (73)	50.0 (73)
46–60 years	42.9 (178)	57.1 (237)	63.9 (266)	36.1 (150)	56.6 (235)	43.4 (180)
>60 years	27.5 (33)	72.5 (87)	45.0 (54)	55.0 (66)	37.8 (45)	62.2 (74)
Professional role (*n* = 680)	$\chi^2 = 1.25$ (df = 1), n.s.		$\chi^2 = 0.05$ (df = 1), n.s.		$\chi^2 = 0.41$ (df = 1), n.s.	
School principal	38.8 (214)	61.2 (337)	58.6 (323)	41.4 (228)	51.7 (285)	48.3 (266)
Member of the management board	44.2 (57)	55.8 (72)	59.7 (77)	40.3 (52)	52.7 (68)	47.3 (61)
Type of school (*n* = 680)	$\chi^2 = 13.17$ (df = 5), $p = 0.022$		$\chi^2 = 14.46$ (df = 5), $p = 0.013$		$\chi^2 = 8.86$ (df = 5), n.s.	
Primary schools	41.8 (138)	58.2 (192)	62.1 (205)	37.9 (125)	55.5 (183)	44.5 (147)
Primary, lower and middle-secondary schools	40.9 (27)	59.1 (39)	69.7 (46)	30.3 (20)	57.6 (38)	42.4 (28)
Grammar/high schools	49.2 (32)	50.8 (33)	47.7 (31)	52.3 (34)	44.6 (29)	55.4 (36)
Comprehensive schools	40.4 (44)	59.6 (65)	54.6 (59)	45.4 (49)	52.8 (57)	47.2 (51)
Schools for children with special educational needs	19.3 (11)	80.7 (46)	43.9 (25)	56.1 (32)	40.4 (23)	59.6 (34)
Vocational schools	37.0 (20)	63.0 (34)	63.0 (34)	37.0 (20)	42.6 (23)	57.4 (31)
Health literacy (HL) (*n* = 657–658)	$\chi^2 = 16.41$ (df = 1), $p = 0.001$		$\chi^2 = 12.36$ (df = 1), $p = 0.001$		$\chi^2 = 26.62$ (df = 1), $p = 0.001$	
Limited HL	52.1 (100)	47.9 (92)	69.4 (134)	30.6 (59)	68.2 (131)	31.8 (61)
Sufficient HL	35.1 (163)	64.9 (302)	54.6 (254)	45.4 (211)	46.1 (214)	53.9 (250)
Total (*n* = 680)	39.8 (271)	60.2 (410)	58.8 (400)	41.2 (280)	51.9 (353)	48.1 (327)

Note(s): χ^2 chi-square, n.s. not significant, % percent, *n* frequency

of emotional exhaustion (58.8%). While no gender and professional role differences were found in any of the mental health indicators, school principals aged > 60 years reported less often to be affected by low well-being ($\chi^2 = 9.34(2)$, $p < 0.01$), frequent emotional exhaustion ($\chi^2 = 14.64(2)$, $p < 0.001$) and frequent psychosomatic complaints ($\chi^2 = 13.38(2)$, $p < 0.001$). With regard to work characteristics, significant differences in mental health were found for the type of school, but not for the professional role. While principals of schools for children with special needs were less often affected by poor mental health, respondents from grammar schools reported more often low levels of well-being ($\chi^2 = 13.17(5)$, $p < 0.05$). By contrast, principals from primary, lower and middle-secondary schools reported being more often affected by symptoms of emotional exhaustion ($\chi^2 = 14.46(5)$, $p < 0.05$).

Associations between health literacy and mental health

The results of the bivariate analyses for health literacy and mental health are presented in Table 3. Principals with limited health literacy reported a significantly lower well-being ($\chi^2 = 16.41(1)$, $p < 0.001$). Similar differences were observed for the other two mental health indicators, with a higher frequency of emotional exhaustion ($\chi^2 = 12.36(1)$, $p < 0.001$) and psychosomatic complaints ($\chi^2 = 26.62(1)$, $p < 0.001$) among respondents with limited health literacy.

In a final analytical step, binary logistic regression models were performed separately for each mental health indicator (Table 4). As no significant differences could be observed for the professional role in the bivariate analyses and no previous evidence could be found to justify the inclusion, this variable was excluded in the regression models. By contrast, gender was included in the regression analyses, despite the lack of significance in the

	Low well-being OR (95% CI)	Frequent emotional exhaustion OR (95% CI)	Frequent psychosomatic complaints OR (95% CI)
Gender			
Male	1.00 (Ref.)	1.00 (Ref.)	1.00 (Ref.)
Female	*1.52 (1.03–2.24)**	1.28 (0.88–1.86)	1.33 (0.91–1.93)
Age			
>60 years	1,00 (Ref.)	1.00 (Ref.)	1.00 (Ref.)
46–60 years	*1.95 (1.22–3.10)***	*1.88 (1.23–2.89)***	*1.89 (1.22–2.91)***
≤45 years	*1.89 (1.09–3.11)**	1.32 (0.79–2.19)	1.58 (0.94–2.66)
Type of school			
Schools for children with special educational needs	1.00 (Ref.)	1.00 (Ref.)	1.00 (Ref.)
Primary school	*3.08 (1.46–6.52)***	*2.01 (1.10–3.66)**	1.80 (0.98–3.32)
Primary, lower and middle-secondary school	*3.11 (1.30–7.54)**	*2.72 (1.26–5.88)**	1.95 (0.91–4.17)
Grammar/high schools	*5.57 (2.30–13.48)***	1.41 (0.66–2.99)	1.46 (0.68–3.15)
Comprehensive school	*3.32 (1.47–7.52)***	1.54 (0.79–3.03)	1.75 (0.88–3.48)
Vocational school	*2.69 (1.06–6.81)**	2.19 (0.98–4.89)	1.12 (0.50–2.52)
Health literacy			
Sufficient	1,00 (Ref.)	1,00 (Ref.)	1.00 (Ref.)
Limited	*2.07 (1.46–2.95)***	*1.86 (1.29–2,67)***	*2.54 (1.77–3.66)***

Note(s): OR: odds ratios, CI: confidence interval, **$p < 0.01$, *$p < 0.05$

Table 4. Multiple binary logistic regression analyses for mental health of school principals ($n = 656$)

bivariate analyses. The reason for this are the previous study findings that point to significant gender differences, and hence, justify inclusion (Philips *et al.*, 2008). With regard to the first model, gender and age were significantly associated with the level of well-being. We observed a 1.52-fold increase risk of low well-being for female respondents (95% CI: 1.03–2.24). The same could be found for the age groups of ≤ 45 years and 46–60 years who had a higher risk for a lower well-being. Belonging to any other type of school was significantly associated with the dependent variable, with respondents from grammar schools who had a more than 5.5-fold increased likelihood of low well-being (OR: 5.57, 95% CI: 2.30–13.48) compared to the reference group (i.e. schools for children with special educational needs). Moreover, compared to respondents with sufficient health literacy, school leaders with limited health literacy had a 2.07-fold increased OR of low well-being (95% CI: 1.46–2.95).

The other two regression models for frequent emotional exhaustion and psychosomatic complaints showed a somewhat different pattern with regard to the demographic variables. While no significant association could be found for gender, respondents in the age group 46–60 years showed an approximately 1.9-fold increased likelihood of frequent emotional exhaustion (95% CI: 1.23–2.89) and psychosomatic complaints (95% CI: 1.22–2.91). With regard to the type of school, significant associations could be found for emotional exhaustion, but not for psychosomatic complaints. Belonging to a primary school or a mixed school (primary, lower and middle-secondary school) increased the risk for frequent emotional exhaustion and psychosomatic complaints by a factor of 2 and 2.7, respectively. Finally, limited health literacy among school principals was significantly associated with frequent emotional exhaustion (OR: 1.86, 95% CI: 1.29–2.67) and psychosomatic complaints (OR: 2.54, 95% CI: 1.77–3.66). Nagelkerke's R^2 ranged between 0.07 and 0.09, indicating that about one-tenth of the variation between the two groups (i.e. poor and sufficient mental health) was explained by the explanatory variables included in the regression models.

Discussion

The results of our study revealed a limited health literacy for 29.2% of the sample. In comparison, the proportion of teachers with limited health literacy is between 32.5 and 50% (De Buhr *et al.*, 2020; Denuwara and Gunawardena, 2017) and 44.2% of the German general population (Jordan and Hoebel, 2015). When comparing the results with representative findings of the German general population, it should be borne in mind that those differences can be partly explained by the work and sociodemographic variance. School principals and members of the management team belong to a group with high formal education and higher income, both of which are strong (socio-economic) determinants of health literacy (Stomacq *et al.*, 2019). On the other hand, however, it can be argued that a percentage of almost 30% can be considered as very high, especially in view of the high formal educational level of this occupational group. Stratified by demographic and work characteristics, significant gender differences could be found with male respondents reporting more difficulties in searching and dealing with health information. Previous research has produced mixed findings, with only a few studies reporting gender disparities on health literacy (e.g. Ahmadi and Montazeri, 2019; Lee *et al.*, 2015). One possible reason for these differences could be that women use health promotion, prevention and health-care measures more frequently and are therefore more familiar in dealing with health information (Jordan and von der Lippe, 2013; Owens, 2008). In contrast to the findings of Ahmadi and Montazeri (2019), we could not find any differences in health literacy by age. This could be explained by the fact that the average age in our study was much higher (compared to pre-service teachers in the study by Ahmadi and Montazeri),

and differences between middle- and higher-age groups are no longer detectable due to a higher level of knowledge and experience.

With regard to mental health, we could observe a low level of well-being for almost 40% of our sample, including 15% with symptoms of clinical depression. Compared to the results of the European Working Conditions Survey 2010 with 33,443 employees (Schütte *et al.*, 2014), the proportion of respondents with low well-being was substantially higher in our study (40 vs 26%). Contrary to the previous studies, no gender differences were found in the bivariate analyses for any mental health indicator. However, based on the gender differences reported by Philips *et al.* (2008), we included gender in the regression analyses. Female respondents showed an approximately 1.5-fold increased likelihood of low well-being, while no associations could be found for emotional exhaustion and psychosomatic complaints. Recent qualitative research findings have identified three sources of stress: work-related stressors, relationship-related stressors and time-related stressors, with the last including most often perceived conflicts with family–work balance (Mahfouz, 2020). As women are more likely to take on family and caring responsibilities, it can be assumed that they are more likely to be affected by stress, which has a detrimental effect on well-being. In line with previous studies, we found no gender differences, while older respondents (60+ years) had a better mental health across all indicators compared to younger respondents. A possible explanation could be that work experience and routines become more pronounced with age, which could have a positive effect on coping with work-related demands (Dadaczynski and Paulus, 2016). With regard to the type of school, there are significant differences, but contrary to the previous discussion, this points to poorer mental health among principals from grammar schools. It has been discussed that primary school principals have higher teaching duties and less organisational support compared to other school types, which can lead to more work-related stress and poorer mental health (Dadaczynski *et al.*, 2020; Krause *et al.*, 2013). A comparison with other findings is not possible, as most studies have distinguished only between primary and secondary schools, but not between different types of secondary education. To verify the relevance of this finding (i.e. lower mental health from principals from grammar schools), future studies should consider different types of secondary school. Moreover, principals of schools for children with special educational needs are least affected by poor mental health. Compared to other types of school, teacher training for schools for children with special educational needs are much more focussed on health-related subjects, including diagnostic, mental, emotional and social development or consulting and supervision of children with special needs. This could be accompanied by positive effects in dealing with stressful and difficult working situations, which might have a positive impact on mental health of teachers and principals (Lazarus, 2006).

Finally, taking into account demographic and work-related characteristics, the results of the regression analyses confirm the predictive value of health literacy for proximal and distal mental health indicators with OR ranging from 1.86 (emotional exhaustion) to 2.54 (psychosomatic complaints). This finding is supported by Fiedler *et al.* (2018) who explored the association between health literacy and well-being in a sample of 126 commercial industry managers. Even though health literacy was conceptualised and operationalised differently, the findings indicate that higher health literacy is associated with a decreased risk of poor well-being. The promotion of health literacy can, therefore, also help to strengthen mental health. More specifically, school principals should be supported in finding adequate information on how to deal with stress and mental health problems and critically assess their quality. Furthermore, the needs of male school leaders, who are more often affected by low health literacy compared to their female colleagues, should be taken into account. Possible forms of intervention are, among others, further trainings and support measures (further education or counselling to raise awareness)

within the school. In Germany, prospective school principals undergo a mandatory qualification phase, which is structured differently in the 16 federal states. The qualification phase in the federal state of Hesse comprises five modules and a school project with a total duration of 12 months. While the focus is on issues such as effective teaching, school budgets, school legislation and managing change processes, health-related topics are not sufficiently addressed.

Another form of support could be school nurses, who are not common in German schools and currently the subject of pilot studies. Although not significant, first findings from two cross-sectional surveys with 28 intervention schools (baseline and T1) revealed a tendency towards a decrease of limited health literacy among teachers by 4% (De Buhr *et al.*, 2020). The main tasks of the school nurses included the provision of health care and support for students, but also counselling and engagement in and with school health promotion. Whether an extension of the tasks would lead to a strengthening of health literacy among school principals will have to be examined more closely in future studies.

Limitations

First, as this study applied a cross-sectional design, the results cannot be interpreted as causal relations. Although it is quite conceivable that limited health literacy is strongly related to mental health problems, longitudinal studies are needed to confirm the causal pathways. Second, although we weighted our sample to control for selection bias through the convenience sampling, the results cannot be generalised to the whole population of school principals in the federal state of Hesse. The data set could only be weighted for the variables gender and type of school, while no data were available on the distribution of other characteristics (e.g. age, professional role). Thirdly, although frequencies of symptoms of emotional exhaustion and psychosomatic complaints have been reported, these figures must be interpreted with particular caution. The classification into the two categories "frequent versus less frequent" was based solely on the median split and not on any defined cut-off values. Besides its benefits, it has been argued that this method can lead to loss of information and to underestimations of the extent of outcome variation between groups (Altman and Royston, 2006). To verify the results, linear regression analyses with continuous variables could be performed. Finally, the variation that can be explained between the two groups (Nagelkerke's R square) remained low across all regression models. Given the complexity of mental health and its associated factors, future research should include further potential determinants such as work-related stress and resources.

Conclusion

To our knowledge, this is the first study providing empirical findings on health literacy for this important occupational group. In sum, the results of this study add to the existing evidence base in several ways. Most importantly, our findings underline the high importance of health literacy, even for school leaders who are characterised by a high formal education status. Given the association between health literacy and mental health, there is a need for evidence-based interventions aimed at promoting the ability to search for and use health information by particularly male school principals. In addition, our findings highlight the importance of school principals in school health promotion. School leaders are not only key persons when it comes to introducing and sustainably anchoring health promoting measures in schools, but should also be seen as an own target group in need for support concerning their own mental health. This requires an extension of the Health Promoting School (HPS) approach to this professional group and systematic research efforts (e.g. with regard to the development and evaluation of tailored interventions).

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