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Finding the Balance Between Collaboration and Autonomy Among School Nurses in Interactions With Schools

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Abstract

In Norway, new national guidelines for school service emphasize the importance of establishing structured collaboration with schools. Nevertheless, few studies have explored the characteristics of such collaboration. The purpose of the present study is to explore how principals, teachers, and school nurses collaborate and to identify barriers and facilitators of structured collaboration. The study is based on 46 qualitative interviews conducted in five Norwegian municipalities in 2018 and 2019. The results reveal that school nurses are highly valued among the school staff but collaborations between teachers and school nurses varied both within and between schools, often for arbitrary reasons such as personal relations and office locations at schools. Personal relationships built over time as well as regular meetings, seemed to foster stronger collaboration, while discontinuity in personnel, recruitment difficulties, and sick and maternity leaves were frequently reported factors that seemed to have negative impacts on collaboration.

Keywords

collaboration/multidisciplinary teams, qualitative research, administration/management, school nurse characteristics

School health services provide health-related interventions and supervision to students on topics such as vaccination, weight and height measurement, menstrual management, oral health, sexual and reproductive health, asthma, obesity treatment and prevention, mental health, and vision (Levinson et al., 2019). In addition, the service provides support in dealing with behavioral problems, multicultural diversity, mental problems, bullying, and absenteeism among students (Havik et al., 2015; Heyne et al., 2019; Patalay et al., 2016; Ward et al., 2018). School nurses' support of teachers may reduce strain and increase the time they can devote to teaching (Weismuller et al., 2007). The school health service aims to ensure healthy development and provide good health education to all students (Chase et al., 2010; Davis, 2018; Hill & Hollis, 2012; Hjörne & Säljö, 2004; Hoekstra et al., 2016; Maughan & Adams, 2011).

Previous research on school health services reveals differences in organization and activities among countries (Dahm et al., 2010; Levinson et al., 2019). Some argue that school health services in Scandinavian countries differ from those in other countries by focusing more on prevention, health promotion, and universal measures than on medical conditions and treatment (Dahm et al., 2010). The new Norwegian guidelines for the school health service emphasize the importance of establishing systematic partnerships between schools and the school health service. Nevertheless, evidence of the benefits of more structured collaboration is limited.

This study was conducted as part of the research project "Et lag rundt eleven" (a team around the student), which was a randomized controlled trial funded by the Norwegian Directorate for Education and Training (https://www.lagrundteleven.no/) studying the impact of increasing school health service resources on the school learning environment and learning outcomes among students in Grades 5–7 (age 10–12 years) in public schools. The increased resources were to be used in line with new national guidelines for school nurse services, with an emphasis on strengthening and structuring the collaboration between schools and school health services (Federici, Flatø, et al., 2019; Federici,

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Helleve, et al., 2019). In this article, we explore the characteristics of this collaboration.

School Nurses in Norway

In Norway, the school nurse education is a 1-year specialization postbaccalaureate with at least 1 year of work experience as nurse. The school nurse service is a statuary service provided by municipalities. The school nurses are employed by the municipalities and not by the schools. A national regulation defines the purposes of the service as to (i) promote mental and physical health; (ii) promote a positive social environment; (iii) prevent diseases and injuries; (iv) reduce social inequalities in health; and (v) prevent and reveal violence, abuse, and neglect (Lovdata, 2018). The wide range of recommended and suggested tasks for the school health service is described in national guidelines (Helsedirektoratet, 2017a). The broad range of task descriptions combined with municipalities' autonomy leads to variations among municipalities with regard to the content of services that are provided. In addition, each school nurse is often responsible for several schools and—to a large extent—makes their own decisions on how they spend and prioritize their work hours at each of the schools.

The school nurse service normally has its main offices in the center of the municipality, while the schools' nurses throughout the week make regular visits at the schools that they serve. The school nurse is present at each school only a limited number of hours per week, but the schools will provide some sort of office facilities that secure privacy for individual conversations with students.

Strengthening school health services has been a national priority in Norway in recent years. Nevertheless, the national median number of 676 primary school students per school nurse (Waldum Grevbo & Haugland, 2015) reveals a substantial gap, as the recommended national norm is one school nurse per 300 primary school students (Helsedirektoratet, 2017b). Many municipalities struggle to recruit nurses with the 1-year post baccalaureate preparation in school nursing, and in many municipalities, other professions (e.g., regular nurses) act as school nurses. Furthermore, there are huge variations in the extent of implementation of the new guidelines. Suggested explanations of the variation include factors like differences in the time that the school nurses spend at each school, location of the school nurses offices at the schools, and the characteristics of collaboration between schools and school nurse and that the new guidelines are rather new (Waldum Grevbo, 2018).

Emphasis on Collaboration in the National Guidelines

The new guidelines emphasize the importance of structured collaboration between schools and the school health service, focusing on the system level. The partnership should "...facilitate a sound physical and psychosocial environment...," and the school health service "...should be involved in efforts by schools to plan school-wide, group-based and individualised interventions" (Helsedirektoratet, 2017a, p. 105). If no partnership with schools is established, the guidelines emphasize the responsibility of the school nurse to initiate such a partnership. The guidelines underline the overall importance of partnerships by describing them as "...imperative and essential in order for the school health service to fulfil its statutory obligations and follow the recommendations of this guideline" (p. 106). The guidelines describe establishing shared values, shared understanding of concepts, clear-cut division of roles and responsibilities, and familiarity with each other's rules and regulations as the keys to a well-functioning collaboration between school nurses and schools (p. 107). One reason for the strong emphasis on collaboration is that the school nurse service is governed under the health law; hence, the school leadership does not have formal authority nor is the school nurse obliged to report to the school leadership. Another reason for the focus on structured collaboration at the system level is to avoid the practice that school nurses spend too much of their working hours at the schools on counseling sessions with individual students, which often has been the case (Waldum Grevbo, 2018; unreported data from the project). It remains unclear, however, whether the increased resources and new guidelines have led to a more structured and systemic collaboration in the sense that schools and school nurses establish, that is, regular meeting structures, plan for measures based on a mutual assessment of the specific needs at the schools, and work toward common goals.

Collaborative Partnerships

Even if the school health service and the school are governed by separate law regulations and have different tasks, they share the goals of improving learning and psychosocial development for all children. This makes it analytically relevant to use the concept of partnership, with the school nurse and the school staff as executive partners. Research on partnerships also emphasizes the need to establish a common understanding of aims, roles, and responsibility (Blossing at al., 2016; Goodlad, 1988; Midthassel, 2017). Although the aim is agreed upon, the different professions and traditions involved can still give way to misunderstanding and mistrust (Midthassel, 2017). Therefore, establishing trustful relationships with open communication is important (Midthassel, 2017; Rice, 2002). One of the challenges of the national guidelines in this regard is that the description of the collaboration is described in guidelines valid for only one of the parties, the health sector.

Partnership collaboration can take different forms. It can be loosely coupled based on task distribution within each domain, for instance, if teachers and school nurses agree that she teaches mental health issues because the topic is

perceived as belonging to her domain. It can be a collaboration where the school nurse and teachers learn from each other by working alongside each other; for instance, if they teach together but are responsible for specific topics. It can be a joint work if the teacher and the school nurse use their knowledge to produce something new that they would not have accomplished alone. In partnerships where the aim is to create something new based on knowledge of both parties, cultural historic activity has been used as a framework (Akkerman & Bakker, 2011; Penuel et al., 2015). This theory uses the concepts "boundary crossing" and "boundary practice." While *boundary crossing* refers to an individual's transitions and interactions across different sites of practice (Penuel et al., 2015, p. 188), *boundary practice* is the more stabilized routine established to support the sustainability of the joint work. In our setting, *boundary crossing* can, for instance, be the case if the school nurse and a teacher perform joint work on health promotion or as follow-up on a student at risk. *Boundary practice* is the meeting structure established by the principal to support the joint work. Moreover, the way the guidelines describe the systematic partnership is in line with the description of *boundary practice*. Interestingly, schools' staff and school nurses may have different perceptions of collaboration. Principals and teachers state, for instance, that there is a clear understanding of the role of the school nurse, while school nurses themselves state that their role is perceived differently by school staff (Federici, Helleve et al., 2019). This is an indication that there is not necessarily a "shared understanding of concepts" which is described in the guidelines as one of the keys to collaboration (Helsedirektoratet, 2017a, p. 106).

The Significance of the Study and Research Questions

The Norwegian school nurse service has a strong focus on prevention and universal measures, and the new national guidelines emphasize the importance of establishing systematic partnerships between schools and school health services. There is a wide range of recommended tasks described for the services in the guidelines as well as expectations of structured collaboration with schools. However, the understanding of the content and dynamics of such collaboration is limited. There is little evidence of how school nurses, principals, and teachers experience their collaboration and how they perceive the characteristics of their collaboration as impacting the specific tasks that the school nurses get involved in. The aim of the present study is to explore school nurses' role as collaborative partners with teaching staff in schools. We will operationalize this as the following research questions:

Research Question 1: What characterizes the collaborations between school staff and school nurses in Norwegian elementary schools?

Research Question 2: What are the perceptions and experiences of facilitators and barriers to structured collaboration between school staff and school nurses?

Method

This qualitative study was conducted as part of a large randomized controlled trial (RCT) study as mentioned above. The project started in January 2018 and ended in December 2019 and was implemented in 12 municipalities. In each municipality, there were four intervention schools and at least four control schools. Each municipality received funding for increased school nurse resources equivalent to approximately 3.25 hr per intervention school per week over a period of 2 years. The increased resources were to be used in line with the new national guidelines for school nurse services, with an emphasis on strengthening and structuring the collaboration between schools and school health services (Federici, Flatø, et al., 2019; Federici, Helleve, et al., 2019). The study was approved by the Norwegian Centre for Research Data (ref. 55018/3/LB).

The methodological part of the qualitative study is reported below, consistent with the COnsolidated criteria for REporting Qualitative research checklist (Tong et al., 2007). The study is based on 46 interviews with 12 school nurses, 13 principals and 16 group interviews with Grades 5–7 teachers from 12 schools from 5 of the municipalities that participated in the project. The municipalities were purposely selected based on their student/school nurse ratio (lowest and highest) and the extent to which the municipality emphasized working on the school learning environment in their policy documents. From each municipality, teachers, principals, and school nurses from the largest and smallest intervention school (in number of students) and the largest control school were invited to study (see Table 1 for overview). The school nurse ratio ranged from 371 to 808 pupils per school nurse in the five different municipalities (2017 figures). The informants were approached by email through the project coordinators in each municipality and through school principals. All the school nurses and principals agreed to be interviewed, but the invitation to the teachers was communicated from the principals to the teachers, and it is unclear whether any teachers refused to participate.

The interviews were conducted in two waves. In the first wave in May/June 2018, interviews were conducted in two intervention schools (the largest and the smallest) and the largest control school in three municipalities. In the second wave in May/June 2019, new interviews were conducted in the largest intervention schools in the same municipalities in addition to interviews with the largest and smallest intervention schools in two municipalities.

Two of the authors are experienced qualitative researchers. U.M. conducted interviews in municipalities A and D, while A.H. conducted interviews in municipalities B, C, and E. The school nurses and principals from the intervention

Table 1. Overview of Informants.

Municipality		2018 Interview ID	2019 Interview ID
A	Largest intervention school	Principal (P1a), teachers (T1a), school nurse (SN1)	Principal (P1b), teachers (T1b)
	Smallest intervention school	Principal (P2), teachers (T2), school nurse (SN2)	—
	Largest control school	Principal (P3), teachers (T3), school nurse (SN3)	—
B	Largest intervention school	Principal (P4a), teachers (T4a), school nurse (SN4)	Principal (P4b), teachers (T4b), school nurse (SN10)
	Smallest intervention school	Principal (P5), teachers (T5), school nurse (SN5)	—
	Largest control school	Principal (P6), teachers (T6), school nurse (SN6)	—
C	Largest intervention school	Principal (P7a), teachers (T7a), school nurse (SN7a)	Principal (P7b), teachers (T7b), school nurse (SN7b)
	Smallest intervention school	Principal (P8), teachers (T8), school nurse (SN8)	—
	Largest control school	Principal (P9), teachers (T9), school nurse (SN9)	—
D	Largest intervention school	—	Principal (P10), teachers (T10), school nurse (SN11)
	Smallest intervention school	—	Principal (P11), teachers (T12), school nurse (SN12)
E	Largest intervention school	—	Principal (P12), teachers (T13),
	Smallest intervention school	—	Principal (P13), teachers (T14), school nurse (SN13)

schools were familiar with the researchers from two workshops carried out during the project period, while none of the teachers had met the researchers before the interviews. However, the teachers were familiar with the ongoing project. The interviews took place in separate rooms, either at the schools or at the school health clinic. The school nurses were all women, while the principals and teachers were gender balanced. Most of the school nurses had several years of work experience. Following the interviews, both researchers wrote short field notes summarizing their impressions and experiences.

The interviews lasted from 30 to 60 min and were conducted during working hours with thematic, semistructured interview guides adjusted to the informant's profession and whether the informant represented a project intervention or control school. The guide for school principals included the themes school learning environment, collaboration at the system level, collaboration with the school health service, and anti-bullying work. The intervention schools had an additional theme concerning project follow-up. The guide for the focus group interviews with teachers included themes on class learning environment, general and specific experiences from collaboration with school nurses, anti-bullying work, and a project implementation theme for teachers from the intervention schools. The guide for the school nurses included a description of their background, their experiences of collaboration with schools and other services, and their involvement in anti-bullying work, while the school nurses employed by the project also had themes concerning the project in general as well as the project activities in particular. Examples of questions are provided in Table 2. The interview guides for the second wave of interviews focused on experiences with collaboration.

The digitally recorded interviews were transcribed and coded in the NVivo Software (Version 12) using an issues-based approach (Weiss, 1994). Both authors coded all the interviews separately and then wrote short summaries of each interview. The codes were sorted into additional overall themes. The coding process was guided by the issues raised in the interview guide but also included issues that emerged in the interviews. The informants did not provide feedback on the interview transcripts. The quotations presented in the findings section illustrate the themes identified, and the quotations are identified by participant ID and profession. The interviews from the second wave were transcribed and summarized into condensed texts.

Table 2. Examples of Questions in the Interview Guides.

To school nurses	How would you describe your collaboration with the school? To what extent do you think that the school has an overview of the health challenges of the student population? How would you describe the importance of participating and being invited to meetings with the principals and teachers at the school?
To principals	What is the most important contribution from the school nurse to the student at your school? Which challenges, if any, have you experienced in the collaboration with school nurses? To what extent do you experience that you have an influence on how the school nurse predispose her work hours at your school?
To teachers	On what kind of topics do you collaborate with school nurses? What experiences do you have on collaboration with school nurses on improvement of the learning environment? Have you ever initiated concrete collaboration with the school nurse?

Although interviews were conducted at both the intervention and control schools of an RCT study, we did not consider their group assignments when analyzing the material, as both groups had school nurses who were guided by the same guidelines.

Results

In general, the study found that teachers and principals appreciated the school nurse as a collaborative partner at school and also appreciated the nurse's contributions to the school. In addition to the school nurses' professional competence, principals and teachers valued them for being another adult with a different perspective who could be involved in resolving challenges among the students. Additionally, the informants emphasized that the school nurse provided complementary competence. School nurses themselves emphasized their autonomy as an important aspect of their role as well their presence as an adult who was easily available for students to talk to. In their perceptions of their own role, it appeared as particular important that their efforts were based on the students' needs as defined and expressed by themselves. Among the participants, there was a common perception that school nurses were busy, and time constraints often limited their capacity. The degrees of collaboration between principals and school nurses ranged from ad hoc meetings and talks to regular meetings between the two. Collaboration between teachers and school nurses varied both within and between schools, often for arbitrary reasons such as personal relations and office locations at schools. Personal relationships built over time and regular meetings seemed to foster stronger collaboration, while discontinuity in personnel, recruitment difficulties, sick and maternity leaves were frequently reported factors that seemed to have negative impacts on collaborations. The findings will be further elaborated in the following sections.

Different Degrees of Collaboration Between Principals and School Nurses

The participants in the study described different degrees of collaboration between school leaders and school nurses. Informal talks in the corridors and school nurses dropping by the principals' offices when they were at school seemed to be a common way to interact. For the school nurses, this routine was described as a way to let the principal know when they were at school. The school nurse is employed within the health sector and does not have to report to the principal in a formal way; therefore, informal contact becomes more important. In some cases, principals and school nurses described their collaboration as mainly limited to these informal meetings. Others had more structured collaboration through formal and regular meetings. At many schools, the school nurses were invited to interdisciplinary team meetings along with other professionals such as school psychologists, representatives from the social service, child welfare service, and sometimes parents. These meetings focused on individual students with specific challenges, with the aim of deciding on necessary efforts and follow-up plans. In these meetings, the school nurses often received invitations from the principal in the same way as representatives from other professions. Finally, there were examples of structured collaboration with a broader systemic perspective, where school leaders and school nurses had regular meetings, either bilateral or involving other relevant school personnel. One example is a large school where the principal (P13) had weekly resource meetings with teacher representatives, the school counselor and the school nurse to discuss and plan for the use of personnel resources the coming week.

At schools where collaboration was more formalized, it seemed more likely that the different professionals discussed—from a broader perspective—what specific tasks the school nurse could be involved in, such as teaching health-related subjects, group counseling, classroom observation, participating in class meetings for parents, and so on. One of the principals said,

> All schools in this project have made an annual cycle plan together, which describes when the school nurses shall teach health themes in each grade. In this way, we have systemized that the school nurse actually comes into every class. Beforehand, it depended on the teacher's initiative. (P2)

Although schools normally have planning days before the school semesters starts, it seemed that the school nurses were rarely invited. More regular and formal meetings seemed to make it easier for the principal and school nurse to plan for more strategic initiatives throughout the school year.

The Relevance of Personal Relationships

Although there were several explanations for the variation in degrees of collaboration, it seemed that the personal relationship between the principal and school nurse was perceived as particularly important. The relationships were often described as being built over a period of time, during which the principals and school nurses learned about each other by showing trust and mutual respect. Thus, being available and offering competent help and support became important. One of the school nurses described how she experienced her efforts as school nurse complemented the competencies at schools:

> They [the school staff] need an extra pair of eyes, a relief of their workload [. . .]. They have tasks in their job they don't know where to fit in, this is where we can collaborate. I will not take over their job, but I can offer to be part of a collaborative team. (SN4a)

The findings from the interviews with principals and school nurses suggested that both parties recognized the

need for availability and a positive attitude if a collaborative team was to emerge. One of the school nurses stated,

> It's kind of personal how one achieves a good collaborative relationship, one needs to be available and clear as well as proactive. One cannot sit in one's office but needs to be visible to go out and offer measures or help to the school. One needs to be offering. That is quite important. (SN11)

The same school nurse underlined the new guidelines that instruct the school to collaborate with the school nurse "that is really positive. One doesn't need to feel one has to beg the school to collaborate" (SN11). A general observation was that the school nurse in most cases was the one who initiated meetings or dialog with principals and teachers. Some school nurses prioritized, for instance, joining the school staff's lunch break with a clear aim to get to know the school staff better. As one of them said, "I often bring my lunch to eat with them [teachers] when I know they have some time off-duty and I want to make contact with some teachers" (SN1a). A similar goal seemed to motivate the school nurses when they visited school classes, parents' meetings, and similar meetings. While some principals were proactive and had included the school nurse in the school's plans, others seemed to be more distant and relied on the school nurse herself to define her job.

Collaboration With Teachers

Independent of the extent of collaboration between principals and school nurses, it appeared that teachers collaborated with school nurses in various ways and to different extents even at the same school. While some teachers hardly had any collaboration with the school nurse at all, other teachers described extensive collaborations even at the same school. Such differences might have different explanations; for instance, some classes had more challenges or differences in personal relationships between teachers and school nurses. However, in many cases, it appeared that differences in collaboration were related to simple factors such as the location of the school nurse's office facilities at the schools. Some teachers (T4b) reported that the teachers who had their classrooms in the same corridor as the school nurse had much more collaboration with the school nurse compared to teachers who had their classrooms in other buildings.

The school nurse often emphasized the need to be proactive toward the teachers if collaboration was to increase. This was not only crucial in schools where the principals had less collaboration with school nurses but also relevant in schools with plans for collaboration. These initiatives occurred at different levels. The lowest level was to be present and visible to the principal and the teachers. Some school nurses were only present 2 days a week at the school. Thus, the lunchroom became a relevant arena.

Being visible also depended on where the school nurse was located at school. In some schools, the school nurse had an office in the same corridor as the principal and the school administrative office, while at other schools, the school nurse had an office in a different building. The location of the office impacted not only the informal contact between the school nurse and the school staff but also how easy it was for students to visit her office. However, through their collaboration, their relationship developed over time, both by building a personal relationship and by learning about the concrete tools and services she could provide. Teachers expressed that the school nurse brought a new and different perspective, and some teachers assumed that school nurses had access to and applied relevant information on students (information obtained from the health system) that they could not access as teachers. One general concern that several teachers mentioned was lack of feedback on progress and development from the school nurses on concrete cases. The lack of feedback was perceived as frustrating, as one of the teachers stated: "We provide a lot of information [to the school nurse] but get nothing back" (T4b). For other teachers (T11), the lack of feedback from the school nurses could also cause them to worry, as they would not know if their students received the necessary follow-up. Even if the teachers accepted the confidentiality of the relationship between students and school nurses, they sometimes felt that there was some kind of imbalance.

At the same time, there were teachers who appreciated the school nurse not necessarily because of her health background but rather because she was an adult who could step in and help the teachers in specific situations by, for example, serving as an extra pair of hands. Some teachers made parallels to other professions/adults in school such as counselors or even the caretaker. The easy access to school nurses and low threshold for making inquiries appeared important to the teachers. Even if teachers were positive toward the school nurse, many teachers also reported that they had very limited collaboration with her. One teacher said, "Before she came to teach puberty in fifth grade, there were many of us who didn't know who she was. And she had her office on the other side of the corridor" (SN11).

However, with this informal entrance to collaboration, her services were not equally distributed. Some teachers had not collaborated with her, either because they did not need it or because they were uncertain of what she could offer. Similarly, several school nurses experienced that collaboration within schools varied from teacher to teacher. One school nurse said, "There are some teachers with whom I have a good collaboration. And then there are other teachers who I have barely spoken to" (SN8). Interestingly, the school nurse felt that her relationships with the teachers had an impact on whether she had students from their classes or not. Other teachers had a more active role. Sometimes, teachers were uncertain whether their students would be more open and honest without the teacher in the classroom.

When the teaching was organized into groups, the teacher had to take the rest of the class. Most of the teachers were happy with the school nurse teaching themes where they felt that she had more competence. While some of the interviewed school nurses liked the task of teaching, others felt this was outside their comfort zone and therefore preferred smaller groups.

Collaboration Concerning the Learning Environment

Some of the school nurses and some of the teachers talked about using collaboration to improve the psychosocial environment in class. The collaboration could often be initiated by conflicts in class, bullying or an environment dominated by unwanted behavior. It was usually the teacher or the teacher and principal together who asked the school nurse for help. The task could, for instance, include observations, meetings with students, the class, and parents, or talking with groups of students. To work alongside the teacher in a class was time consuming, and while some of the teachers we interviewed had experienced this, it was unfamiliar to others. The teachers who had experienced this collaboration said that they valued it highly.

The teachers' involvement varied when the school nurse was teaching groups or classes about topics such as puberty, building relationships, stress, and psychological first aid. While some teachers were actively involved, others left these topics to the school nurse. The teachers' reasons for these decisions differed. While the active teachers argued that taking part would give them important information they could use as class teachers, other teachers feared that their presence could prevent students from expressing themselves freely. There were few examples of school staff and school nurses who had experienced tensions and profound disagreements.

Critical Structural Factors

One of the greatest challenges to collaboration between schools and school nurses as described by the informants in the study related to staffing and recruitment problems; these problems were related to turnover or to absence due to sick or maternity leaves. In some cases, schools found that school nurses who went on leaves or left their jobs were not immediately replaced. Even when a school nurse was replaced, teachers found that it could take some time to establish a relationship built on mutual trust and respect between the school staff, parents, pupils, and school nurses. On the other hand, there were also opposite experiences, where the new school nurse had a much more proactive and present approach compared to her predecessor. Nevertheless, all the experiences of the informants seemed to indicate that a longer period of absence through sick leaves, maternity leaves, or job change led to a situation where the school had to restart collaboration with a new school nurse. Another structural challenge is the shortage of educated school nurses in Norway. Consequently, many municipalities have vacant positions over long periods and without applicants, while other municipalities employ ordinary nurses in positions as school nurses as a temporary solution.

Discussion

The aim of this study was to explore the characteristics of the collaboration between school staff and school nurses and their perceptions of facilitators and barriers to collaboration. The examples of strengthening systemic and structural collaboration given in the national guidelines described as aiming for shared values, shared understanding of concepts, clear-cut division of roles, and familiarity with each other's rules and regulations. In practice, this entails participation of school nurses in existing meeting structures and teams (Helsedirektoratet, 2017a).

The appreciation that principals and school staff feel for the school nurse is promising and a prerequisite for a well-functioning collaboration. The presence of the school nurse at schools was never questioned by school staff. Hence, they seemed to have a common understanding that the school nurse could contribute to aspects of the learning environment, mental health, and the general well-being of pupils and not merely to physical health-related issues. This is in line with the understanding of the term *boundary crossing*, where legitimating coexistence is understood as one of the characteristics of the interactions across different sites of practice (Akkerman & Bakker, 2011, p. 151), and this is similar to the school staff's perception of school nurses. Previous studies on partnerships in education have also emphasized the importance of developing a shared understanding of roles and tasks in the relationship (Blossing et al., 2016; Goodlad, 1988; Midthassel, 2017). At the same time, there is not necessarily a very consistent perception of the school nurse's role, tasks, or tools. School nurses themselves express that they do not necessarily share understandings of concepts and their roles with schools, while teachers and principals are much more positive with regard to describing their collaboration (Federici, Helleve, et al., 2019). It appears that the school nurses' flexibility in time management and the perceived accessibility for both students and teachers can partly explain why school nurses were valued. Even the personal characteristics of the school nurse seemed to have an impact on teachers' perceptions. Another dimension of the term *boundary crossing* that is relevant to describe the interactions across different practices is perspective-making and perspective-taking (Akkerman & Bakker, 2011, p. 151). When school teachers describe the school nurse as having a different perspective on students, a more holistic view, this might be read as an example of perspective-taking. The question remains, however, whether principals' and teachers' appreciation of school nurses can be understood as similar to the "clear-cut division of roles and responsibilities" that the national

guidelines aim to achieve through systematic partnerships (Helsedirektoratet, 2017a, p. 106).

At the same time, the teachers and principals did not have strong opinions about how the school nurses spent her working hours and prioritized tasks. This adjusts with how the school nurses also see their role. However, the present study shows that time constrains commonly were a challenge and the personal relationships between school nurses and school staff seemed to determine the level of collaboration. School nurses do not spend many hours each week at each school, and time constraints are an issue for the school nurse, teachers, and probably also for the students. Moreover, many school nurses make appointments with students on a regular basis, which further limits flexibility with regard to involvement in new tasks. The experience of time pressure among school nurses described by the participants in this study seems to be a universal problem demonstrated in other studies that have reported how insufficient time puts pressure on the school nurse (Lineberry et al., 2018). Additionally, collaboration rests on trustful relationships that take time and effort to develop. The collaboration seems very much to depend on the school nurses' availability and on the initiative they take to learn about the other parties and to develop trust-based relationships over time. It seems to be particularly important for school nurses to build relationships directly with students. One downside of letting the collaboration depend on personal relationships is that the collaboration becomes particularly vulnerable when school nurses change jobs or are on sick leave or maternity leave. According to the findings in this study, discontinuity among school nurses caused setbacks in collaboration in several schools. Even if there is some kind of understanding that a structural collaboration between school health services and school sectors is important, it is critical if the collaboration only depends on the personal relationship between the school nurse and the school staff. Again, these reflections support the perspective that the collaboration between a school and school nurse is not instrumental in the sense that collaboration automatically follows from instructions in guidelines; it depends on the efforts and commitments from individuals.

Balancing Structured Collaboration and Professional Autonomy

School nurses are a limited resource at Norwegian schools with regard to their working hours at schools, their general availability, and the number of appropriately educated personnel. The general impression from this study is that the demand for school nurse services is larger than the supply. In the typical model of Norwegian municipalities, there is only one school nurse responsible for follow-up per school. With the autonomy built into the school nurse's role, the school nurse is largely responsible for prioritizing which tasks to become involved in among the recommended tasks in the national guidelines. In some cases, the municipalities have strategies for the school nurse service, but the general impression remains that the school nurses have a fairly autonomous role. The level of collaboration depends on personal relationships alone and is seldom anchored at the municipality level. For instance, in our study, there were no examples of the involvement of teachers or principals in the assessment and decision of whether regular counseling with a student should continue or be terminated; this was a judgment made by the school nurse alone. A more structured collaboration between schools and school nurses could possibly be helpful with regard to prioritization. On the other hand, the autonomy of school nurses is highly valued because their perceived independent and holistic views on students allow them to identify students who are in need of support.

For many school nurses, it appears as if they are in a situation where they need to find the right balance between doing tasks anchored in structured collaboration with school staff and professional autonomy. The more resources and working hours school nurses spend at school, the more they may impact which tasks to be involved in. A similar challenge for the school nurse is to balance spending time on regular individual counseling/individualized interventions on one side and school-wide and group-based interventions on the other side. Although follow-up of individual students was assessed as an important part of school nurses' work and the school nurse's duty to maintain confidentiality is a significant aspect of the role, the question remains whether there is a need to reevaluate the procedures or assessments that are used to terminate a series of counseling sessions with individual students.

School Nursing Implications

The implications of our findings school are particularly relevant for other countries with regard to organizing and planning of collaborations between school nurses and schools. The shortage of nurses prepared as school nurses is probably related to the lack of capacity of the education system. In a situation where the demand for educated school nurses is bigger than the supply, it is probably more difficult to recruit to positions in smaller municipalities. The starting salary for school nurses is better than for ordinary nurses (with bachelor degree) and less likely to be a relevant factor. Despite more structural challenges like staffing and shortage of educated school nurses, our findings suggest that structured collaboration could be a potential strategy to release school nurses' experiences of time pressures and constraints.

Limitations

There are some limitations to our study. First, we are not able to generalize the findings for school nurses, teachers, and principals in general, since we used a convenience sample. Furthermore, there is also a risk that the informants to

some extent expressed themselves in a manner conforming with social desirability, particularly since they were interviewed indirectly about how they perform their professional role. Despite these limitations, our findings show variations in how structured the collaborations between school staff and school nurses are. The collaboration seems to depend on personal relationships, which makes the collaboration vulnerable. Future efforts should explore measures to strengthen the systemic and structural collaboration between schools and school health services.

Author Contributions

Arnfinn Helleve and Unni Vere Midthassel contributed to the conception of the manuscript as well as to the initial drafts. All authors contributed to acquisition, analysis, and interpretation of the data; critical revisions; gave final approval; and agreed to be accountable for all aspects of work ensuring integrity and accuracy.

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