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Healthy Learners in Schools: New Brunswick's Comprehensive School Health Approach

Apprenants en santé à l'école : Approche globale de la santé en milieu scolaire du Nouveau-Brunswick

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Abstract

The purpose of this study was to identify facilitating and inhibiting factors of the implementation of the Healthy Learners in Schools Program (HLSP) - a Comprehensive School Health approach - in two Elementary schools in New Brunswick, Canada. Four teachers and two principals participated in semi-structured interviews to discuss the HSLP. Factors identified included: lack of knowledge pertaining to the HLSP; environmental factors; support from the administration, school community and student' families; teachers' and principals' individual attributes; and organizational factors. Health promotion in schools needs to become a priority for programs such as the HLSP to become apparent and consciously implemented in schools and for school staff and members of the school community to be aware of its existence. Support from parents, colleagues, and the administration along with health promotion policies are strongly recommended to assist the implementation of a Comprehensive School Health approach in these two New Brunswick schools.

Résumé

Cette étude cherchait à cerner les facteurs qui favorisent ou défavorisent la mise en œuvre du programme Apprenants en santé à l'école (ASE) : Approche globale de la santé en milieu scolaire, dans deux écoles élémentaires du Nouveau-Brunswick, au Canada. Quatre membres du personnel enseignant et deux directions d'école ont participé à des entrevues semi-dirigées dans le but de discuter des ASE. Plusieurs facteurs sont ressortis de ces discussions, y compris le manque de connaissances au sujet du programme ASE; les facteurs environnementaux; l'appui de l'administration, de la communauté scolaire et des familles des élèves; les qualités particulières du directeur ou de la directrice de l'école; ainsi que divers facteurs organisationnels. La promotion de la santé dans les écoles doit figurer parmi les priorités de programmes comme ASE pour être prise en compte et intégralement mise en œuvre dans les écoles, et pour que le personnel et les membres de l'école s'engagent pleinement en ce sens. Il est fortement recommandé d'obtenir l'appui des parents, des collègues et des gestionnaires, et

de se doter de politiques de promotion de la santé pour faciliter l'adoption d'une approche globale de la santé en milieu scolaire dans ces deux écoles du Nouveau-Brunswick.

Introduction

In 2004, Statistics Canada reported that more than one in four children between 2 and 17 were either overweight or obese (Shields, 2006). Two proposed reasons for the increase (up 70% since 1978/1979) are physical inactivity and poor nutrition, problems that extend into adulthood (Shields) and consequently may strengthen the obesity statistics for adults. Developed with statistics such as these in mind, Comprehensive School Health (CSH) approaches emerged worldwide to help encourage schools' personnel to promote healthy choices throughout the school day. CSH is a ecological approach that incorporates four pillars aiming to facilitate health promoting opportunities in schools through: (a) teaching and learning; (b) social and physical environments; (c) healthy school policy; and (d) partnerships and services (Joint Consortium for School Health, 2009) and "is an internationally recognized framework for supporting improvements in students' educational outcomes while addressing school health in a planned, integrated and holistic way"(Directoriate of Agencies for School Health, 2011).

In Canada, education falls under provincial/territorial government's jurisdiction. As a result, provinces and territories each have their own concepts of the health promoting school. There are also a number of national associations advocating the CSH approach, guiding the provinces' and territories' frameworks. Notably, the Canadian Association for School Health (CASH), the Joint Consortium for School Health, the School Health Research Network, the Canadian School Physical Activity and Nutrition Network, the Canadian School Health Centre, and Physical and Health Education Canada are all involved in the health promotion efforts in schools. In Canada, research concerning CSH initiatives is emerging (Beaudoin, 2011); yet research pertaining to the province-wide CSH-type initiative in New Brunswick, the Health Learners in Schools Program (HLSP), remains very limited.

In this paper we investigate factors associated to the implementation of HLSP in two elementary schools in New Brunswick, Canada. In 2000, the Government of New Brunswick launched the HLSP to "support the long term outcome of student health, wellness and learning achievement" (Government of New Brunswick (GNB), 2005, p. 3). To meet these objectives, the HLSP has three distinct goals: for the school community to acquire the knowledge, attitudes, and skills necessary to achieve wellness; for the school community to provide healthy and safe learning environments; and for the school community to have access to services and support (GNB, 2005). In order to implement the HLSP, the GNB identified several key groups and individuals and mandated their roles in the initiative's implementation. Primarily, a Public Health Nurse (PHN) appointed through a partnership between the Ministry of Education and the Ministry of Health and Wellness to work with a cluster of schools - one PHN per school district.

According to Government documents (GNB 2005, 2009), the first step in implementing the HLSP is the creation of Health Committees - groups that identify priorities and plan and monitor actions to implement in each individual school district (GNB, 2005). The PHN is therefore responsible for the implementation of the Health Committees responsible for the first step in the advancement of the HLSP in schools. As the HLSP is meant to be implemented in all elementary schools in New Brunswick and very little is known about the Program, we were interested in learning about the factors that may have inhibited and facilitated its implementation. Following Hitchcock and Hughes' (1995) assertion that a case study methodology is the ideal approach to

examine CSH, we utilized a multiple case study approach for this study, specifically with two elementary schools.

Methods

Sampling

A PHN who had been working in the same school district for at least two years was required as a participant in our research in order to ensure the selection of an information-rich case for our study (Patton, 2002). This also narrowed down the list of potential school districts eligible for participation. In order to identify experienced PHNs, we used purposeful sampling through Internet searches and telephone inquiries. Once ethics approval was obtained by our university's Research Ethics Board, experienced PHNs were contacted through email and the first PHN who met the study's criteria and indicated a willingness to participate was selected for the study. Consequently, the school district in which the PHN worked was also contacted about the study and ethics approval was obtained from the school district. Emails and telephone calls were then used to solicit permission for involvement from schools through principals in the selected district. Two principals agreed to have their schools participate in the research. The two principals were then assigned the task of finding three teachers who would be willing to participate in individual semi-structured interviews.

As they were within the same school district, the two schools that served as cases in this study were located in approximately the same vicinity within New Brunswick. The first, School A, was located in a village roughly 50km outside of a city. The student population of School A was 350 students from kindergarten to grade 8 and had access to a multitude of facilities, including an ice rink, tennis courts, a golf course, a running track, and more. The school's facilities were an integral part of the community and were shared through school-community partnerships. The second school, School B, was located within 10kms of the same city and with a student population of 150 students from kindergarten to grade 5. The school's facilities were a bit more dated than School A's, as the school was built fifty years ago. School B had a small gymnasium, an outdoor playground, and a large field in its surroundings.

Once the nine participants (PHN n=1, School Administrators n=2, Teachers n=6) were selected and gave informed consent, they participated in semi-structured interviews. All interviews were digitally recorded. Table 1 identifies the participants' sex and years of teaching experience.

Table 1
Participants' Sex, Years of Teaching Experience, & Time at Current School

Participants	**Sex**	**Experience (years)**	**Time at Current School (years)**
Public Health Nurse	F	26	4 as PHN in schools
School A			
Principal	F	14	8
Teacher A	M	11	9
Teacher B	M	18	12
Teacher C	F	13	13
School B			

Principal	M	2.33 administration	1
Teacher A	F	2	2
Teacher B	F	16	5
Teacher C	F	1	1

In addition, to semi-structured interviews, documents describing the background of the HLSP, such as program guidelines and published government reports, were obtained to gain a better understanding of the initiative.

Analysis

The interviews were transcribed verbatim entered into NVivo - a computer program for qualitative data management. There were then two phases to the coding of the data. In the first phase, open coding was used to identify all factors that may have affected the implementation of the CSH approach. This phase included the identification of any statements pertaining to the implementation factors of the HLSP - whether it be facilitating of inhibiting. Within this phase, statements that identified situations or factors that the participants have faced that are contingent with the implementation of the HLSP were identified. Second, the factors identified were clustered into sub-groups or themes through inductive analysis. Once the factors were identified and clustered, a general profile was created for each school and the profile was compared with the other school for potential commonalities and contrasts. Government publications were studied to gain a thorough understanding of the HLSP but were not analyzed as a part of the research data.

Results and Discussion

Despite the existence of government-mandated CSH programming, neither school in our study was found to be intentionally implementing the HLSP. Our analysis revealed five major factors that influenced the implementation of the HLSP: a lack of familiarity with the HLSP; environmental factors such as the physical surroundings and school policies; support from the administration, school community, and student' families; teachers' and principals' individual attributes; and organizational factors such as the schools' daily operations and government/school policies pertaining to school health. Below, we discuss these factors and the ways in which they facilitated or inhibited the implementation of the HLSP in the schools studied. Additionally, we discuss the implications of these findings and then offer suggestions to strengthen the incorporation of CSH in similar schools in New Brunswick.

Lack of familiarity with the HLSP

The most important factor that affected the HLSP was the participants' lack of understanding of what the HLSP did or did not comprise in terms of content and roles, which resulted in both schools' staff's failure to intentionally implement the program. The principal from School A and the PHN had heard of the HLSP, but only knew its name and not its specific components, while the principal from School B had not heard of the HLSP. Furthermore, the PHN – whose task it is to help school personnel implement the HLSP through the creation of Health Committees admitted to not understanding her role in implementing the Program: "I know it [HLSP], but what are my duties? It's unclear." Consequently, a comprehensive approach to health promotion in these two schools was not implemented in accordance with the HLSP guidelines. In general, it seemed as

though the overall vagueness associated with a CSH approach (it is meant to be generalizable/adaptable to all schools) may have caused the participants some confusion as to how one should implement the program.

Environmental Factors

Another major component of the HLSP's implementation is the adaptation of "physical surroundings in ways that preserve and enhance the health and wellness of students and staff" (GNB, 2005, p. 7). Despite being located in the same district, Schools A and B had very different physical school environments. At School A, the sporting facilities (both indoor and outdoor) were "probably some of the best in Canada" (Teacher B). By having the use of a multitude of well-kept sporting facilities at no cost, the teachers, in particular Teacher B, a physical education teacher, admitted that it is relatively easy to incorporate a wide-range of activities for students during physical education and before and after school, which facilitated the incorporation of health promotion through physical activity. Indeed, Harrison and Jones (2012) found that physical environments, particularly schools grounds, are important components in students' physical activity levels. Consequently, School A's Physical Education curriculum and extra-curricular activities were enhanced due to the availability of a multitude of facilities on or near the school's grounds. In addition, in partnership with the community, School A enhanced its physical environment with the addition of an innovative organic garden. The garden was used to teach students about composting and the importance of organic farming and healthy eating. According to St. Leger (2000) and Ozer (2007), school gardens contribute to the implementation of CSH and health promotion in a school setting. At the time of this research, School A was involved in a Community School approach, which, due to its strong ties to the community, met various criteria that highly resembled CSH (Bertrand and Giles, 2010). Many of the health promoting components that were implemented in School A were linked to the Community School approach.

The facilities in School B were not as elaborate as those in School A - they were outdated and in need of maintenance, a fact illustrated by the dual purpose of the school's gymnasium: a gymnasium and a hallway to another wing of the school. Although the participants in School B did not deem the facilities to be an inhibiting factor to the promotion of health in the school, it was also clear that they did not consider the school's environment as facilitating health promotion initiatives. Though the schools' facilities are examples of physical environments affecting the implementation of health promoting programs, there are other factors such as school policies that can also have an effect on the schools' environments.

The cafeterias in both Schools A and B followed Policy 711: Healthier Eating and Nutrition in Public Schools (GNB, 2009), which ensures that the foods served in New Brunswick elementary schools promote healthy eating practices for both students and school personnel. By having these policies in place, the food options available to students and staff were restricted to those recommended by the GNB and were considered to be health promoting options, which in turn created an environment where healthy eating options were available and encouraged. As outlined in the HLSP's guidelines, nutrition policies are a prime example of a way to help create an environment that supports a health promoting approach. Overall, we found that a physical environment enhanced by healthy eating policies seemed to be an effective way to promote health in schools.

Support

Although physical characteristics and policies can play a role in creating an environment that

is conducive to the implementation of CSH, there is also a strong body of evidence to suggest that support for health promoting approaches may come from the administration (Butler, 1993; St Leger, Kolbe, Lee, McCall, & Young, 2007; Symons, Cincelli, James, & Groff, 1998; Telljohann, Everett, Durgin, & Price, 1996) and the community (Butler, 1993). The present study confirms these findings, as administrative support was found to have a large impact on the implementation of health promotion in both schools. In accordance with CSH and the HLSP guidelines, "working together in a coordinated and collaborative manner" (GNB, 2005, p. 7) is part of creating a socially supportive environment for the promotion of health within the school. In School A, the principal was very supportive of the idea of health promotion in the school: "[school health promotion is] not wasted time, but it has to be well invested." Again, this support was also closely linked to the implementation of the Community School initiative in which School A was involved. In contrast, the principal of School B admitted health is "not a priority right now. We can't add on another thing, there are too many things going on already." This last statement also supports our findings that there is a lack of understanding of the HLSP and CSH in general, as the approach is not an addition to the school's curriculum, but an overlying framework that is to be integrated in a cross-curricular manner.

Teachers deemed support - be it social or financial or in the form of additional training -from the administration to be an important predictor of health promotion in their schools. Teacher B in School B stated, "the principal has a lot to do with whether or not we do things." Indeed, the principals' differing levels of engagement with health promotion had material consequences that were clearly demonstrated by the different health promoting activities in their respective schools. In School A there were several initiatives that took place on a regular, daily, basis (e.g., the organic garden, daily physical activity), as well as monthly school-wide events, which helped create a social climate where health promotion was prioritized. In School B, the main school-wide initiatives that were supported by the administration included short-term activities in which students could voluntarily participate. This appeared to relegate health promotion to a position of low importance and prominence.

As a result of the health promotion efforts of the School A staff, teachers reported that they believed that community members saw them in a more favourable light, which served to facilitate further efforts. By obtaining positive support from the community (e.g., upkeep of School A's garden over the summer months, thank you notes from parents for the vegetables grown in the garden that were sent to their homes, students' feedback of enjoyment of activities (Teacher, C)), the teachers and principal reported renewed energy for the continuation of health promotion within the school community. This was also strengthened by the Community School initiative that was being piloted at the school. On the other hand, the staff of School B struggled to consistently incorporate health promoting activities in the classroom or in the school as a whole. The staff attributed the difficulty of integrating health into the school as due in part to a lack of supportive resources. As a result, there was little drive for the continuation or expansion of health promotion activities.

While support from school administrators and the school community were deemed as important factors for health promotion, many of the teachers who were interviewed stated that they felt that it was necessary for them to receive additional support through training to learn how CSH can be implemented in schools. Numerous studies have linked a lack of health education and CSH implementation to insufficient teacher training (Hausman & Ruzek, 1995; St Leger, 1998, 2000; Symons, Cincelli, James, & Groff, 1997; Telljohann, Everett, Durgin, & Price, 1996), which has been correlated to reduced confidence (Hausman & Rusek, 1995) and self-efficacy (Telljohann,

Everett, Durgin, & Price, 1996) when faced with the task of instructing health topics. Indeed, Jourdan et al. (2002) found that teacher-training pertaining to health education is a predictor of whether or not teachers incorporate health education in their teachings. The principal of School B identified a need for further training in health education and the overall CSH approach, which could in part explain why the HLSP and health promotion was neglected in that school. In fact, almost all of the participants - including the PHN at the time - involved in the study identified a need for either supplementary training or information on how to implement CSH programs. As a result, a dearth of support for training opportunities was identified as a factor that inhibited the HLSP's implementation.

Teacher's and Principals' Individual Attributes

When asked to identify the most important predictor of health promotion in schools, the majority of the teachers who were interviewed indicated that it was of the utmost importance to "practice what you preach." For example, Teacher C in School B said, "if I'm going to tell the students that they can't bring candy and desserts for a snack, I can't have one as a snack either." By leading by example, the teachers demonstrated that good health is important, and "if [students] see that the teacher is doing it [making healthy food choices], maybe it'll incite them to do it too" (Teacher A, School A). Although modeling healthy behaviours may be a relatively simple task for some, it is assumed that not all health education is this straightforward. Many of the teachers interviewed made reference to the necessity of additional training from individuals that have experienced a CSH approach in order to further implement CSH in schools.

Other individual factors identified by the teachers included collaboration between teachers and school staff and openness to new ideas. The collaborative atmosphere demonstrated in School A was an individual factor because it required teachers to have a sense of collegiality and be open to working with others in order to produce change within the school. The principal in School A noted, "it's hard when you have certain teachers who resist change." Certainly, having teachers and principals who modeled healthy lifestyles and were willing to work in a collegial manner on new initiatives to produce change were strong enabling factors for the implementation of HLSP.

Organizational Factors

That the HLSP was not being implemented in Schools A and B in New Brunswick was indicative of the organization and promotion of the Program. As stressed by School B's principal, "the idea is there, but there is no pressure by the government on schools and those who make important decisions to…make 30 minutes of daily physical activity mandatory in all schools." Unlike some other Canadian provinces such as Alberta, British Columbia, and Ontario, the Ministry of Education of New Brunswick does not mandate 30 minutes of Daily Physical Activity (DPA) as part of the elementary school curriculum. Principal B contended that high-level policy makers, such as those working for the Ministry of Education or the Ministry of Health, understand the concept of CSH in schools, but have yet to instil policies within schools to make it mandatory. This means that there are no repercussions for PHNs, teachers, or administrators who do not implement the program in this province; as a result, HLSP as a means to CSH is not prioritized and thus schools and curricula are not organized with it in mind.

The PHN for both schools noted the need for managers to help the PHN's develop a plan for the implementation of the HLSP. Without a clear implementation plan, the PHN indicated that she found it difficult to understand what and how PHNs are supposed to do implement the HLSP. In addition, the degree to which the PHN receives support from the GNB in implementing HLSP is

unclear. These issues should be the focus of future research.

As even the PHN was unsure of her duties, another seemingly viable option instead of supplementary training for teachers that was suggested was "to have someone, like a nurse, that would be at school all the time to organize activities for the students… because we [teachers] already have too many things, so it might help" (Teacher A, School B). Several teachers, especially in School B, mentioned this idea. One that is consistent with the Apple Schools model currently being implemented in Alberta (Apple Schools, 2011). Although there was a PHN appointed for the implementation of the HLSP in the schools, there are at least a dozen schools per school district. As the PHN explained, "[HLSP] has to be done one school at a time, and it has to be done well. But they give us so much extra work, we don't have time to do our job!" The duties to which the PHN referred as interfering with her ability to implement HLSP included immunizations and workshops pertaining to diverse health subjects such as epi-pen delivery and nutrition. This statement is particularly interesting given that the activities that the PHN mentioned are in fact part of the HLSP's instruction and awareness component and therefore, once again, illustrates a lack of understanding and clarity pertaining to the Program. Indeed, supplementary help for the PHN may not be necessary if additional education and training for HLSP were offered to the PHN at the Program's commencement so that she more clearly understood her role.

Implications for School Health

Firstly, the successful implementation of HLSP requires a certain level of common understanding and consensus around the concept of CSH and consequently the HLSP between the government, school districts, administrators, teachers, and PHNs. If the HLSP remains unknown and unclear, its failure is inevitable. In addition to increasing the awareness around the HLSP, schools should create action plans around the various components of the Program in order to ensure that it does not get neglected. Before this occurs, there need to be policies, or perhaps repercussions and incentives, that will help motivate staff, including PHNs, to take action to promote health. As noted by School B's principal, without anything pushing the school staff to change, there will be no change. Further, in order to increase the likelihood of the HLSP being implemented, those in charge of implementation also need to be identified and then given suitable freedom and resources to enable successful implementation.

Principals and teachers also need in-depth training - perhaps from experienced PHNs who are very familiar with the program, or individuals who have researched and seen examples of schools incorporating CSH in the field, in order to better understand the concept of CSH and the ways in which the HLSP can become a part of their classes each and every day. For example, Action Schools! BC - a CSH-like initiative developed in British Columbia, offered workshops to teachers on how to implement various healthy living activities (such as physical activity and healthy eating in the classroom) and found that teachers' attendance at a workshop was positively correlated to the amount of physical activity taught by generalist teachers in their respective classrooms (Naylor, MacDonald, Zebedee, Reed, & McKay, 2006) and that students involved in the initiative increased their vegetable and fruit consumption (Day, Strange, McKay, & Naylor, 2008). We believe that following a similar model could be a viable approach to increasing knowledge of the HLSP and consequently the concept of CSH. It must be noted, however, that if this were to occur, government accountability and significant financial contributions would be necessary.

We further suggest that it would be helpful if the PHN, administrators, teachers, students,

and the community were presented with examples of successful HLSP approaches, including concrete ideas from other schools that can be directly applied to their schools, in order to learn about its potential benefits and methods of implementation. This could easily be exemplified by using the Community School model that is already being implemented in School A as a means to CSH.

Conclusion

Although this study has some limitations such as time and number of participating schools, the message that emerged from the participants was clear: when health is not made a priority in a school, whether it be by the administration, teachers, PHNs, or others, the implementation of a health promotion program is made very difficult. Nevertheless, our research did find that a school environment that is conducive to health promoting programs and a staff that works collaboratively and that has a supportive administrator are two examples of facilitative factors that contribute to the implementation of an initiative such as the HSLP. On the other hand, a better understanding of the Program as well as additional training and policies such as a mandated 30 minutes of DPA as a way to encourage the implementation of the HLSP may be ideas to help surpass the inhibiting factors. Further research is needed to examine the context of school health promotion in New Brunswick in order to understand ways to integrate health into the school curriculum in a manner that will be both meaningful to and successful for all stakeholders.

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