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Dissemination of a Daily Physical Activity Policy on School Websites in Alberta and British Columbia

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Abstract

Most children in Canada are not physically active enough to achieve health benefits. The Daily Physical Activity (DPA) policy was mandated in Alberta and British Columbia (BC) to help children accumulate more physical activity during the school day. Dissemination of DPA policy requirements is necessary to ensure that policy adoption at a provincial level is implemented at the school- and classroom-level. The purpose of this study was to examine if school boards and individual schools in Alberta and BC recognize the DPA initiative and to explore how DPA information is presented on their websites. After reviewing the policy statements for each province, provincial school websites were scanned for DPA content and it was found that the majority of school boards and individual schools are not using websites as a means to disseminate DPA initiative information. Future research should examine whether or not school boards use other systems to disseminate and monitor the implementation of such policies. This is critical to ensure implementation fidelity and effective evaluation in the future.

Keywords: physical activity policy, school, children

Résumé

La plupart des enfants canadiens ne sont pas suffisamment actifs pour en retirer des bénéfices pour leur santé. La politique d'activité physique quotidienne a été adoptée par les provinces de l'Alberta et de la Colombie Britannique pour amener les enfants à pratiquer plus d'activité physique pendant la journée scolaire. La diffusion de cette politique est nécessaire pour s'assurer que son adoption au niveau provincial est réellement mise en place dans les écoles et les classes. Le but de cette étude était de voir si les conseils scolaires et les écoles de ces deux provinces reconnaissent d'une quelconque façon la politique d'activité physique quotidienne et comment cette information est présentée dans leur propre site web. Après une revue des politiques de chacune des provinces, les sites webs des conseils scolaires et des écoles ont été analysés à la recherche de mentions de la politique. Ces analyses révèlent que les sites web ne sont pas utilisés pour diffuser l'information sur la politique d'activité physique quotidienne. De futures recherches devraient tenter de voir si d'autres moyens de diffusion sont utilisés pour cette diffusion et s'il y a une évaluation fidèle et efficace de l'implantation de cette politique.

Mots-clés: politique d'activité physique, école, enfants.

Introduction

Physical activity positively impacts the physiological and psychological health of children and youth (Janssen & LeBlanc, 2010; Larun et al., 2006) and it is recommended that children participate in a minimum of 60 minutes of moderate-to-vigorous physical activity (MVPA) daily to achieve these benefits (Tremblay et al., 2011). Unfortunately in Canada, only 9% of children and youth between the ages of 5 and 17 achieve these guidelines (ParticipACTION, 2015), resulting in almost a third of children and youth being overweight or obese (Statistics Canada, 2014). To combat alarming statistics such as this, recent public health strategies and interventions have focused on addressing the concerns related to Canada's physical inactivity and obesity in children (Gray et al., 2014; Naylor & McKay, 2009; Taylor, McKenna, & Butler, 2010; Waters et al., 2011). Schools are often the target of such interventions as they represent an environment that can reach a diverse population of children on a daily basis (Legarde & LeBlanc, 2010; Naylor & McKay, 2009). Three Canadian provinces, namely Alberta, British Columbia (BC) and Ontario, have mandated Daily Physical Activity policies aimed at increasing children's physical activity levels specifically within schools (Alberta Education, 2015; British Columbia Ministry of Education [BCED], 2011a; Public Health Ontario, 2015). Although it is understood that an examination of other provinces could be included within this study, the intention of this funded research was to specifically examine the Daily Physical Activity (DPA) policies in Alberta and BC, which require schools in these provinces to provide at least 30 minutes of DPA as part of the educational program for children and youth, on days with no physical education (Alberta Education, 2015; BCED, 2011a), and are the home provinces of the research team.

Policy evaluation is beneficial on many levels, as it can inform future policy development (or refine existing policies), warrant ongoing implementation, measure unintended consequences, enhance policy support and provide accountability to stakeholders (Taylor, McKenna & Butler, 2010; Tjomsland, Wold, Krumsvik & Samdal, 2015). Evaluation can investigate a policy's adoption (i.e., process of development and uptake of a policy), implementation (i.e., integration of policy into practice) and/or effectiveness (i.e., the outcomes resulting from policy implementation). In their recently published review examining the adoption, diffusion, implementation and impact of DPA policies across Canada, Olstad and colleagues (2015) thoroughly examined the process of diffusion and adoption of DPA policies at a provincial level, and highlighted the lack of research examining the implementation and impact of these policies (noted earlier by other researchers: Faulkner, Zeglen, Leatherdale, Manske, & Stone, 2014; Naylor & McKay, 2009; Schmid, Pratt, & Witmer, 2006). While policy diffusion and adoption are important processes to understand in the policy cycle, they are not components "sufficient to promote greater physical activity: policies are not self-implementing (Salvesen, Evenson, Rodriguez, & Brown, 2008, p.280). Moreover, implementation evaluation cannot occur until it is determined that the policy was in fact disseminated (in its entirety) to those who are meant to deliver the policy. While implementation is the conversion of policy plans into action (DeGroff & Cargo, 2009) and includes the progress and process of how this occurs and the products resulting from the process (Taylor, McKenna, & Butler, 2010), dissemination refers to the targeted distribution of information to a specific audience (Glasgow et al., 2012) and is therefore a precursor to implementation. To enhance the uptake and implementation of DPA policies from a provincial level to a local level, policy requirements must be made aware to and understood by those who are required to deliver the policy through dissemination. According to Hogwood and Gunn (1984), communication and co-ordination is one of ten necessary preconditions for successful implementation. Without such communication, it would be difficult for education authorities to demand and obtain perfect compliance (precondition #10) to implementation and the DPA policy would risk failing to meet the objective of increasing children's physical activity at school. Thus, policy dissemination is arguably an important

link between provincial adoption and school or classroom implementation of DPA and as such, communicating to stakeholders (i.e., principals and teachers) what is expected of the DPA policy is necessary before they are able to implement the policy. Therefore, it is important to understand *if* and *how* such policies are disseminated to school boards and schools before researchers can measure the implementation process, fidelity and the factors associated with implementation and ultimately the policy outcomes (i.e., effectiveness).

Presently, it is not clear in both provinces if or how school boards have developed procedures to disseminate DPA requirements. The purpose of this study was to systematically examine if and how the DPA policy is recognized amongst varying school boards and schools across Alberta and BC. This study explores whether DPA policy information is present (and to what degree) on school board and a sub-sample of individual school websites in Alberta and BC.

The specific research questions guiding this study were:

- 1) What, if any, are the content components of each DPA policy in Alberta and BC with respect to grade, time, physical activity type, intensity and scheduling?
- 2) What, if any, are the similarities and differences of DPA initiatives between Alberta and BC?
- 3) How do school boards and, more specifically, schools in Alberta and BC recognize DPA initiatives on their websites?

After reviewing the various components of DPA initiatives in Alberta and BC, a content analysis of school board and a sub-sample of individual school websites was conducted to explore if and how DPA information is presented. The findings from this study will contribute to our understanding of whether or not and how school authorities disseminate information about DPA policy initiatives to their respective schools and other educational stakeholders, to aid in the implementation and evaluation of these policies in the future.

Methods

Study Design

This study consisted of an examination of the requirements of Alberta and BC's DPA policies. Secondly, a scan of all school board websites in Alberta and BC ($n = 58$; $n = 60$, respectively) and of a stratified random sample of individual school websites from each province ($n = 65$ [Alberta]; $n = 50$ [BC]) was conducted. A quantitative content analysis (Konracki, Wellman & Amundson, 2002) was then conducted to explore how DPA information is presented on school board and individual school websites. Content analysis has been used previously to systematically code the quality of information on Canadian nutritional websites (Ostry, Young, & Hughes, 2008).

Data Collection

Policy content. To understand the components of each policy by province, DPA policy statements on provincial government/education websites were reviewed and compared in April 2015 by one researcher (Alberta Education, 2015; BCED, 2011a). To compare each policy by province, data were extracted for guidelines relating to grade level, time, physical activity type, intensity, and scheduling/delivery method.

School board website scan. All public and separate school board websites in Alberta ($n = 58$) and public school board websites in BC ($n = 60$) were scanned for DPA content by two researchers. Scanning involved the process of reading each school board's policy manual, administrative procedures, as well as parent, teacher and/or student resource pages. If there was a search bar on the website, the search terms *Daily Physical Activity*, *DPA* and *physical activity* were entered. Presence of DPA information (i.e., yes/no) on school board websites was recorded into an Excel spreadsheet. For any website that did include DPA information (i.e., yes), the information was transferred verbatim to the same Excel spreadsheet and the location of where it was retrieved on the website was recorded.

Individual school website scan in Alberta. All elementary and junior/middle public and separate schools from 12 Alberta school boards representing the North, South, West, East and Central Districts were coded a number (based on alphabetical order) and 10% were randomly selected from each school board using a random number generator ($n = 65$). Senior high schools were not included unless they included grades up to grade 9 (as there are no specific DPA guidelines for this age group in this province). Schools were not included if they were classified as any of the following type of school: Online Learning, Homeschooling, or Arts-Centered. The websites that satisfied these criteria were scanned for DPA content by a member of the research team as explained previously.

Individual school website scan in British Columbia. Ten percent ($n = 50$) of all elementary, middle and high school public schools from the 11 largest school boards in BC representing the North, South, West, East and Central Districts were randomly selected using a random number generator. Schools were not included if they were classified as an independent school or any of the following type of school: short- or long-term Provincial Resource Programs, Alternate Programs, Continuing Education, Distributed Learning or Early Learning Program (i.e., StrongStartBC). The eligible school websites were scanned for DPA content by a member of the research team as explained previously.

DPA citation completeness. DPA citations located on websites were coded for completeness by two independent research team members in terms of the extent to which the citation included all of the DPA policy requirements (i.e., time, type, intensity and scheduling), as outlined by policy statements on provincial government/education websites (Alberta Education, 2015; BCED, 2011a) and summarized in Table 1. Coding reliability was assessed using percentage agreement and Cohen's kappa statistic (Cohen, 1968) and calculations were performed using Excel. Inter-coder agreement values between 0.60-0.79 indicate "substantial" reliability and those above 0.80 are "outstanding" (Landis & Koch, 1977). Two additional questions relating to completeness were coded for their presence (i.e., yes/no), including:

- 1) Were additional references (i.e., resources) provided?
- 2) Was a link to the respective provincial Ministry of Education website provided?

Results

Policy Content

Table 1 highlights the similarities and differences among provincial DPA policy requirements with respect to grade, time, physical activity type, intensity and scheduling in Alberta and BC (for further policy details, see Olstad et al., 2015). DPA policy requirements in Alberta and BC differ with respect to grade level; however, the two provinces hold very similar policies with respect to time, physical activity type and intensity and scheduling/delivery method. While Alberta's DPA policy is mandatory for children in grades 1-9, BC's policy also includes DPA guidelines for children in kindergarten and for youth in secondary grades 10-12, with the guidelines varying slightly based on grade. Elementary schools in Alberta and BC are required to provide students with 30 minutes of DPA at school, which may occur during instructional and/or non-instructional time (i.e., during recess or lunch; Alberta Education, 2015; BCED, 2011a). Both Ministries of Education state that there are no specifications as to what level of intensity elementary school children must put forth while physically active (i.e., MVPA), however activities should vary in form (e.g., flexibility, strength, endurance). Alberta Education (2015) stated that "DPA should be offered in as large a block of time as possible but can be offered in time segments adding up to the minimum 30 minutes per day; e.g., two 15-minute blocks of time for a total of 30 minutes" (para. 6). BC students in grades 10 to 12 are required to engage in 150 minutes of MVPA per week (in- or out-of school), while schools can decide if students in grades 8 and 9 must meet elementary or secondary DPA requirements (BCED, 2011a). In each province, schools are afforded the flexibility to decide how to implement and fulfill DPA.

Table 1
Comparison of DPA Requirements by Province

Province	Grade(s)	Time (minutes)	Type and Intensity	Scheduling
AB	1-9	≥ 30 mins/day; can be offered in time segments adding up to the minimum 30 minutes per day	Activities that vary in form and intensity and that are organized by the school	Instructional or non-instructional hours at school
BC	K	15 minutes for half-day, and 30 minutes for full-day	Endurance, strength and/or flexibility	Instructional or non-instructional hours at school
	1-7	30 mins/day	Endurance, strength and/or flexibility	Instructional or non-instructional hours at school
	8-9	30 mins/day OR 150 mins/week	Endurance, strength and/or flexibility OR MVPA	Instructional or non-instructional hours OR in- or out- of school
	10-12	150 mins/week	MVPA	In- or out-of school

AB, Alberta; BC, British Columbia; K, kindergarten; MVPA, moderate-to-vigorous physical activity; Instructional means DPA occurs during class time; Non-instructional means DPA occurs outside of class (i.e., before or after school, recess or lunch)

DPA Citation and Completeness on School Board Websites

There are 42 public and 17 separate school boards (59 total) in Alberta and 60 school boards in BC. Overall, 20% (12 of 60) of BC's school board websites directly cited DPA on their websites (see Table 2), under categories relating to graduation/curriculum requirements, programs, student/parent resources, or healthy schools (i.e., as a component of Comprehensive School Health [CSH] or Health Promoting Schools [HPS]; see Table 3). One school board included DPA in a formal written policy for promoting student health. The majority of school boards that cited DPA on their websites provided a link to the Ministry of Education site on DPA (BCED, 2011a; see Table 4). In Alberta, 22% (9 of 41; one public school board was excluded because it follows the Saskatchewan curriculum) of public and 12% (2 of 17) of separate school boards included DPA on their websites (19% total in Alberta). One separate and four public school boards in Alberta integrated DPA into their written policies and/or administrative procedures. DPA was also cited under programs, healthy schools and/or resources. No school boards that cited DPA content on their website explained the policy; however, 36% (4 of 11) of these school board websites provided a link to the Alberta Education site (Alberta Education, 2015). Search bar entries resulted in either no additional information or links to documents uploaded by individual schools from their respective school board in each province.

Table 2
Percentage of DPA Citation on Websites by Province

Province	Level (total <i>n</i>)	DPA Citation (<i>n</i>)
BC	Board (60)	20% (12)
Alberta	Schools (50)	30% (15)
	Board – Public (41)	22% (9)
	Board – Separate (17)	11.8% (2)
	Board – Total (58)	19% (11)
	Schools – Public (47)	2.1% (1)
	Schools – Separate (18)	5.6%* (1)
	Schools - Total (65)	3.1% (2)

DPA, Daily Physical Activity policy

*Daily Physical Education, not DPA

Table 3
Percentage and Counts of DPA Citations on School Websites by Context

Province	Level (total <i>n</i>)	Context				
		Policy/ Administrative Procedures (<i>n</i>)	Graduation/ Curriculum Requirements (<i>n</i>)	Component of Healthy Schools (<i>n</i>)	Programs/ Subjects (<i>n</i>)	Parent/ Student Resources (<i>n</i>)
BC	Board (12)	8.3% (1)	25% (3)	41.7% (5)	0%	25% (3)
BC	Schools (15)	0%	13.3% (2)	0%	73.3% (11)	13.3% (2)
AB	Board (11)	45.5% (5)	0%	27.3% (3)	18.2% (2)	9.1% (1)
AB	Schools (1)	0%	0%	0%	100% (1)	0%

BC, British Columbia; AB, Alberta; DPA, Daily Physical Activity policy

DPA Citation and Completeness on School Websites

A total of 115 individual school websites ($n = 65$ [Alberta], $n = 50$ [BC]) were randomly selected and examined for DPA policy information. In Alberta, only one public school mentioned DPA on its website and one separate school included Daily Physical Education (DPE). However, search term results from 6 individual schools in one public school board provided a standalone link to the school board's website page on DPA, but lacking any further explanation about DPA. Of the 50 school websites randomly selected in BC, 15 cited DPA (30%; see Table 2). Eleven of these schools cited DPA within the context of programs and subjects, two schools cited DPA within the context of graduation requirements, and two schools cited DPA within the context of parent/student resources (see Table 3). No schools in either province explained DPA requirements as outlined by the Ministry of Education (see Table 4). Nine schools provided links to the DPA policy outline (BCED, 2011a) and two schools provided additional resources (i.e., provincial DPA program guides [Alberta Education, 2006; BCED, 2011b], curriculum guides, DPA tracking sheets and/or tools, activity ideas, reference guides, other physical activity websites).

Table 4

Percentage and Counts of DPA Citations on School Websites by Completeness

Province	Level (total n)	Completeness		
		Policy Explained (n)	Additional Resources ¹ (n)	Link Provided ² (n)
BC	Board (12)	8.3% (1)	8.3% (1)	75% (9)
BC	Schools (15)	0%	13.3% (2)	60% (9)
AB	Board (11)	0%	18.2% (2)	36.4% (4)
AB	Schools (1)	0%	0%	0%

BC, British Columbia; AB, Alberta; DPA, Daily Physical Activity policy

¹ Resources included: Provincial DPA program guides (Alberta Education, 2006; BCED, 2011b), curriculum guides, DPA tracking sheets and/or tools, activity ideas, reference guides, other websites (i.e., ParticipACTION, HealthyU, CSEP, EverActive Schools, Safety Guidelines for Physical Activities in Alberta Schools)

² Ministry of Education links to DPA policies in Alberta (<http://education.alberta.ca/teachers/resources/dpa.aspx>) and BC (https://www.bced.gov.bc.ca/dpa/dpa_requirement.htm; <http://www2.gov.bc.ca/gov/content/education-training/administration/legislation-policy/public-schools/daily-physical-activity>)

Reliability

Inter-coder agreement across the 39 websites with DPA citations (i.e., school board and school) was substantial (percentage agreement = 97.4% and Kappa = 0.65).

Discussion

The purpose of this study was to systematically examine if school boards and individual schools in Alberta and BC recognize the DPA initiative and to briefly explore how DPA information is presented on their websites with respect to policy completeness and with or without the addition of resources and links to respective Ministry of Education websites. After reviewing the policy statements for each province, provincial school websites were scanned for DPA content and it was found that the majority of school boards and individual schools are not using websites as a means to disseminate DPA initiative information. The majority of school boards in BC that are using their websites to deliver DPA guidelines acknowledge DPA as a component of CSH. Few school boards or individual schools in Alberta and BC have included DPA in their own formal written policies or administrative procedures. In BC, individual schools reference DPA mostly as a program or subject required by provincial curriculum requirements. Unfortunately, DPA citations on websites provide insufficient information regarding the policy's requirements for time, type, intensity and scheduling.

To date, research evaluating the implementation of the DPA policies in Canadian schools and the impact these policies have on the physical activity levels of Canadian children is limited (Faulkner, et al., 2014; Naylor & McKay, 2009; Schmid, Pratt, & Witmer, 2006). In Alberta, one study has examined the adoption of DPA (Gladwin et al., 2008), and two studies have examined the implementation of DPA, including a report conducted by Alberta Education (Alberta Education, 2008; Kennedy, Cantell, & Dewey, 2010). In BC, only two studies have examined the implementation of DPA (Mâsse et al., 2013; Watts et al., 2014). While studies have shown that PE delivery has increased since DPA was mandated (Alberta Education, 2008; Watts et al., 2014), no studies in either province have examined the impact, or effectiveness of these policies at increasing children's physical activity at

school. In one BC study, the percentage of school informants who perceived their schools as fully implementing DPA varied, such that principals perceived greater DPA implementation (59%) compared to teachers (36%; Mâsse et al., 2013). Watts and colleagues (2014) found that the percentage of teachers in BC who reported full implementation of DPA was 65%, 56% and 51% in grade 6, 8 and 10, respectively. Although the province-wide survey by Alberta Education (2008) did not assess percent implementation by teachers and principals, school informants from 55 schools in Calgary reported that DPA has been successfully implemented in their schools (Kennedy, Cantell, & Dewey, 2010).

These studies, although limited, highlight that DPA implementation status across provinces and schools vary considerably, and there are a number of possible reasons to explain this, including: 1) poor policy dissemination, 2) vague policy language, and/or 3) lack of monitoring. This study revealed that most school boards and individual schools do not disseminate DPA policy information on their websites. Although it is unclear if they use other methods to disseminate this information, dissemination is a precondition for implementation; if teachers are not aware of a policy they are expected to deliver, they cannot implement it. Secondly, teachers must understand the requirements of such a policy if they are to fulfill it. This data showed that almost all of the school websites that do cite DPA do not provide complete information about the policy's requirements. In their review, Olstad and colleagues (2015) rated the strength of each province's policy based on the language used, specific time and intensity requirements, and the inclusion of mechanisms for implementation and monitoring. With the exception of BC's DPA policy for grades 10-12, which was given a moderate strength rating, the DPA policies in Alberta and BC were rated as weak. Policies received weak ratings if they were "vague and used non-specific language to provide suggestions or recommendations rather than requirements" (Olstad et al., 2015, p. 390). According to the researchers, one reason the DPA policies in these provinces were rated as weak was due to the lack of monitoring mechanisms in place to track implementation. Both Alberta and BC failed to develop a monitoring system at the outset of policy development by which to evaluate the implementation of DPA in Canadian schools and the impact of DPA on the physical activity levels of children at school, and research, thus far, has been scarce (Faulkner, Zeglen, Leatherdale, Manske, & Stone, 2014; Naylor & McKay, 2009; Schmid, Pratt, & Witmer, 2006). Instead, both provinces decided that individual school boards would become responsible for tracking the implementation and impact of DPA in their respective schools (Alberta Education, 2006; BCED, 2011a). Policy monitoring has been identified as an important component of evaluation to enhance implementation continuity (Brownson, Baker, Leet, Gillespie, & True, 2011). Without formal monitoring, these policies do not meet the necessary pre-conditions for successful implementation (Hogwood & Gunn, 1984; Robertson-Wilson & Lévesque, 2009), and risk failing to meet their objective of increasing children's physical activity at school. Thus far, the absence of a monitoring mechanism was predicted to be an implementation barrier in an earlier study examining the DPA adoption process in Alberta schools (Gladwin, Church, & Plotnikoff, 2008), and many Alberta school teachers and principals have already reported a lack of monitoring as a barrier to policy implementation (Alberta Education, 2008). Overall, a lack of monitoring combined with a poorly defined policy that is not disseminated widely will hinder policy implementation.

Schools with written policies and practices for physical activity have students that are more physically active than those without such policies (Faulkner et al., 2014). Therefore, it is unfortunate that most schools examined here did not incorporate DPA into their formal written policies or administrative procedures. Doing so would demonstrate a level of communication about, monitoring of and autonomy for the DPA policy, and potentially lead to greater implementation of the policy by teachers. Compared to BC, more school boards in Alberta have incorporated DPA in a formal policy or administrative procedures. However, these percentages are still low. While creating more policy does not ensure that the policy will be put into practice, it demonstrates a transfer and level of communication that has occurred in the translational process. If provincial policies are translated into

policies at the school level, they may have a higher school adoption rate and be more likely to be implemented in schools, as it would reflect stakeholder coordination, school-wide support for and ownership of the initiative (Pan Canadian Joint Consortium for School Health, 2010). Future research should examine if there is a difference in implementation status and impact of DPA in schools that incorporate the provincial policy into their own school policies compared to schools that do not attend to this practice. It is critical for schools to develop strategies on how to turn policy into practice most effectively.

Of the school boards in BC that were using their websites to deliver DPA guidelines, the majority of them acknowledged DPA as a component of the CSH model. CSH is a framework based on the World Health Organization's Ottawa Charter for Health Promotion that supports improvements in students' educational outcomes and addresses school health by targeting four main areas: 1) teaching and learning; 2) social and physical environments; 3) healthy school policy; and 4) partnerships and services (Veugelers & Schwartz, 2010), and is supported by the Pan Canadian Joint Consortium for School Health (2010). The emphasis on health promotion and CSH in Canadian schools began three decades ago (Veugelers & Schwartz, 2010). It is possible that the focus of CSH on school websites in Alberta and BC may be the result of provincial governments and education policies shifting priorities from DPA to focus on other issues pertaining to student health. For example, the BC Ministry of Education has recently made a commitment to create safer schools for children by implementing a bullying prevention strategy called ERASE Bullying (BCED, 2013). This campaign was highlighted on many school websites in BC and Alberta. Clearly, DPA is a suitable component of CSH, so long as its implementation is sustained over time as was intended with DPA. Likewise, school emphasis of CSH for health promotion may exist because the elements of CSH can be adapted (more easily) in such a way to meet the various needs of different schools (Veugelers & Schwartz, 2010). In contrast, adapting DPA to the various schools in each province has proven to be a challenge.

A flexible delivery model was considered an important feature for the development of DPA in Alberta (Gladwin et al., 2008). Unfortunately, implementation flexibility may have created more ambiguity about if and how educators can adapt DPA policy guidelines in their schools. Very few websites in Alberta and BC provided explanations of the DPA policy or how their board/school would help their students meet DPA requirements. Likewise, very few websites provided links for teachers, parents and students to retrieve additional references on how to implement and/or support DPA. This is of concern as a lack of direction in DPA policy guidelines has been a reported barrier to implementation by educators in Ontario (Strampel et al., 2014) and, more specifically, in BC (Mâsse et al., 2013). Likewise, teachers in both Alberta and BC have reported a lack of skills and training to deliver DPA as a barrier to implementation (Alberta Education, 2008; Mâsse et al., 2013). However, it was more common for websites to provide a link to provincial educational websites that explain DPA in more detail. These websites also provide some resources and support materials for teachers/administration in both provinces (Alberta Education, 2015; BCED, 2011a) and for parents/families in BC (BCED, 2011a). Clearly, it should be a priority in the development of school-based policies to ensure that those responsible for implementing the policy are trained and equipped with the necessary resources to successfully deliver the initiative. It is more difficult to provide educators with this material and support retrospectively.

Limitations and Future Recommendations

DPA content was extracted from websites by two members of the research team, yet not of the same websites; therefore it was not possible to assess reliability of data extraction. It was beyond the scope of this study to examine the methods by which provincial school boards communicate strategies for the adoption and implementation of DPA within each school. It would, therefore, be valuable for future research to interview superintendents of school boards to conclusively determine the extent of how DPA policies are disseminated and monitored. Although it was beyond the scope of this study,

including Ontario in the scan would have resulted in a more comprehensive view of DPA policy dissemination across the country and should be included in future examinations. Further evaluation into the implementation and impact of these policies in Canadian schools remains worthy of research attention.

Conclusion

The DPA policies in Alberta and BC were mandated to help children accumulate more physical activity during the school day in order to prevent issues such as physical inactivity and obesity. Because these issues do not seem to be disappearing, this study examined whether or not school boards and individual schools in Alberta and BC present DPA policy information on their websites. A scanning of provincial school websites revealed that the majority of school boards and individual schools in Alberta and BC are not employing websites as a means to disseminate DPA initiative information. It is unclear whether or not school boards use other systems (e.g., meetings, newsletters) by which to communicate and plan for implementation of these policies. Future examination of whether or not school boards utilize other systems to disseminate and monitor the implementation of such policies is vital to ensuring implementation fidelity and effective evaluation in the future.

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