1. Introduction

In some parts of the world, especially in North America, the overall consumption of healthy foods that are dense in nutrients and rich in vitamins and minerals has declined amidst the changing demand and accessibility of food, increasing convenience of ‘junk’ or ‘competitive’ food, poor eating habits, and prevalence of sedentary lifestyles. Therefore, interventions targeted at healthy nutrition need to occur early in childhood and adolescence to prevent or reverse the adverse health effects of overweight and poor eating habits (St-Onge, Keller & Heymsfield, 2003). With research illustrating the various cognitive, academic, and health benefits for students who eat a healthful diet (Bellisle, 2004; Taras, 2005), healthy food and improved nutrition should be a high priority on every school agenda (World Health Organization, 2006). Schools are a fundamental setting for promoting and establishing healthy eating and lifestyle patterns (Scriven & Stiddard, 2003). Most often, prevention of deteriorating health in children and adolescents is achieved by developing a healthy environment and school food policies (Story, Nanny, & Schwartz, 2009). Despite the significant potential of food policies to affect students’ overall health and well-being, little is known about schools’ readiness for their implementation.
Policy is an important part of creating a framework for planning, organizing, and clarifying roles and responsibilities to ensure efficiency and commitment to change; yet policy planning and preparation rarely consider the individuals who put the policy into practice (Elmore, 1979). As such, school administration is often confronted with continuous policy directives from the government on ways to improve teaching practice, student learning, and the school environment. To accommodate the new and ongoing demands of various initiatives, schools must be prepared to be dynamic and flexible. In this sense, it is critical to identify and understand the factors surrounding the preparation for policy implementation to effectively transition and adopt certain changes.

This paper reports on the recent study that investigated schools’ readiness for implementing the School Food and Beverage Policy (SFBP) in publicly funded elementary and secondary schools in the Canadian province of Ontario. This paper examines how SFBP informs, influences, and supports schools’ readiness to implement the policy; explores the nature of school stakeholders’ engagement and actions in facilitating readiness for implementing the policy; and describes the differences and similarities among elementary and secondary schools’ readiness for implementing the policy. Upon reviewing the Ontario context and theoretical and empirical frameworks and presenting the methodological underpinnings in the following sections, we turn to the findings, discussion, and implications of this study.

2. Ontario's School Food and Beverage Policy

In December 2006, the Ontario Ministry of Education released the Foundations for a Healthy School framework. This framework was developed based on current research with input from the Ministry of Health Promotion to support healthy school environments (Ontario Ministry of Education, 2010). Within this framework, the SFBP was developed to support healthier eating habits. To achieve this goal, nutrition standards were established for food and beverages sold in publicly funded elementary and secondary schools beginning in the 2011/2012 academic year, outlining strict guidelines for each food group (e.g., grains, fruits, and vegetables as well as ‘mixed dishes’) and miscellaneous items (e.g., condiments, dressings, gravies) to indicate the optimal amount of fat, sodium, and fiber that should be sold in schools. Food labels on each item were to be compared with the nutritional requirements outlined by the policy document to determine whether to “sell most (≥ 80%),” “sell less (≤ 20%),” or were “not permitted for sale” (Ontario Ministry of Education, 2010, p. 3). This policy restricted the sale of all food and beverages that did not align with the standards of nutritional content (e.g., fat, salt, and sugar content). In an attempt to help minimize the consumption of unhealthy foods and promote foods that nourish cognitive and physical development in children (Ontario Ministry of Education, 2010), the policy came in effect in October, 2010, with all publicly funded school boards required to be in full compliance with the policy on September 1, 2011.

3. Implementation of School Food Policies

Research on school food policies has indicated potential barriers and facilitating factors for implementation. On one hand, social support is a common factor in research on positive influences on healthy eating (e.g., Agron, Berends, Ellis, & Gonzalez, 2010; MacLellan, Taylor, & Freeze, 2009; McKenna, 2003; Vecchiarelli, Takayanagi, & Neumann, 2006). On the other hand, challenges to effective implementation include lack of communication, limited school resources, the role and responsibility of feeding children, and accommodating students’ food preferences (MacLellan, Holland, Taylor, McKenna, & Hernandez, 2010). Contextual factors, such as food options, pricing, and advertising, also have a detrimental effect on children’s eating habits (Kubik, Lytle, Hannan, Perry, & Story, 2003; Nollen et al., 2007). The number of food retailers surrounding schools tended to be inversely proportional to schools’ food revenue (Rushowy, 2012; Seliske, Pickett, Boyce, & Janssen, 2008). The negative effects on schools’ revenue are major challenges to effectively develop, implement, and monitor school food policies (Agron et al., 2010; Nollen et al., 2007).

The simple policy approach of eliminating many of the popular foods such as candy, chips, and soda has raised a number of problems in schools in the United States (Vecchiarelli, Takayanagi, & Neumann, 2006). Enforcing nutrition standards alone merely limited the types of food and beverages sold within schools. This, in turn, had adversely affected students’ eating habits because students would “binge on junk food when home” (Vecchiarelli et al., 2006, p. 530). Rather than banning all the so-called ‘junk food’, studies suggest providing more appealing food options that appeal to both adults and children.
alternatives for students to choose from (MacLellan, et al., 2010; McKenna, 2003; Vecchiarelli et al., 2006).

4. Organizational Readiness Framework and Policy Implementation

Amenakis et al. (1993) specifically identified readiness as one's capacity for change and where individuals' willingness, motives, and goals matched the organization's expectations. The literature illustrates various aspects of readiness such as one's beliefs about the appropriateness of, support for, and the value in the proposed change (Holt, Armenakis, Harris, & Feild, 2007). The different factors that influence readiness are broad and multi-faceted. Readiness has been summarized as a comprehensive attitude that is influenced by environmental, structural, and organizational members' receptivity to the intended goals (Holt et al., 2007). Weiner (2009) described organizational readiness as the commitment to implement the change; the collective capability to enforce the change; and the value, resource availability, and task demands of the change.

Increasing readiness for policy implementation might decrease resistance to change and increase the effectiveness and success of the policy being implemented (Amenakis, Harris, & Mossholder, 1993; Cheng, Mok, & Tsui, 2002; Weiner, 2009; Weiner, Amick, & Lee, 2008). Cheng et al. (2002) suggested that identifying and understanding the key factors that bridge the gap between policy planning and implementation are found in the preparation stages. According to Weiner (2009), failure to establish readiness may account for one-half of all unsuccessful organizational change efforts, whereas high organizational readiness contributes to members being more likely to initiate change, exert greater effort, exhibit greater persistence, and display more cooperative behavior. Therefore, understanding perceptions of readiness can establish a foundation for engagement in the change process (Newhouse, 2010). Cheng et al. (2002) asserted that readiness must also be established at the various levels of the organization (e.g., individual, classroom, school, community) to reduce resistance to the policy and facilitate effective practices.

There are various constituencies (e.g., board members, administrators, teachers, support staff, students, as well as families, and the surrounding community) who collectively contribute to change. Consequently, without preparing or collaborating with the members of the organization, unintended consequences may ensue. Since readiness is considered an essential precursor to the successful implementation of change (Amenakis et al., 1993; Weiner, Amick, & Lee, 2008), it becomes beneficial to examine schools' readiness to implement their food policies. Flaspohler and colleagues (2008) asserted that failing to acknowledge the factors that affect the adoption of new policies may jeopardize the results of different health programs or initiatives. Therefore, by anticipating some of the challenges to healthy eating, schools may be better equipped to promote implementation designs and support strategies that reduce resistance to change.

5. Methodological Underpinnings

5.1. Data Sources

Case study research enables one to explore contextual variables, interactions, as well as process mechanisms in order to develop a more general theoretical proposition (Levy, 2008). Furthermore, using a variety of data sources from multiple facets allows for better understanding in order to develop theory, evaluate the process and implementation of policies, and make suggestions on interventions based upon each case (Baxter and Jack, 2008). This inductive case study involved a two-pronged approach to data collection: (i) policy analysis and (ii) interviews. First, a heuristic approach (Pal, 1987), consisting of descriptive (historical and content), process, and evaluative (logical, empirical, and ethical) analyses of the SFBP, was used to better understand the policy development processes. Secondly, assessing the key stakeholders responsible for implementing the policy was crucial in gaining further insight into the preparation process and procedures for implementing the policy. Hence, this study specifically examined administrators’ and teachers’ perceptions of readiness for policy implementation. Using an organizational readiness lens to guide the interview questions, this study explores some of the key factors influencing school's readiness for implementation of the SFBP.

5.2 Setting and Participants

Research shows that students eating behaviour is associated with the surrounding food
environment (Neumark-Sztainer et al., 2005) and might vary from rural and urban communities (Dean and Sharkey, 2011) and thus, two urban and one rural school boards in southern Ontario were selected in order to gain insight on the potential influencing factors surrounding policy implementation (see Table 1).

Table 1. School board characteristics and setting

<table>
<thead>
<tr>
<th>School Board A</th>
<th>School Board B</th>
<th>School Board C</th>
</tr>
</thead>
<tbody>
<tr>
<td>serves over 60,000 students</td>
<td>serves over 20,000 students</td>
<td>serves over 15,000 students</td>
</tr>
<tr>
<td>urban setting</td>
<td>urban setting</td>
<td>rural setting</td>
</tr>
</tbody>
</table>

Ethical clearance was received by the General Research Ethics Board at Queen’s University, Kingston, Ontario on September 7, 2011. School board approval was received first before contacting individual schools with a Letter of Information and Consent for interviews. Eighty school administrators and four teachers within the selected school boards were interviewed (as shown in Table 2). Participants were selected based upon their involvement with the preparations for implementation of the policy.

Table 2. Participant Sample

<table>
<thead>
<tr>
<th>School Type</th>
<th>School Board A</th>
<th>School Board B</th>
<th>School Board C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School 1</td>
<td>1 principal (Aaron)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary School 2</td>
<td>1 principal (Candice)</td>
<td>1 principal (Gloria)</td>
<td>1 principal (Isabelle)</td>
</tr>
<tr>
<td></td>
<td>1 school staff (Denise)</td>
<td>1 school staff (Hailey)</td>
<td>1 school staff (Jessica)</td>
</tr>
<tr>
<td>Elementary School 3</td>
<td>1 principal (Gloria)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 school staff (Hailey)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary School 1</td>
<td>1 principal (Brian) and 2 vice-principals (Ken and Lucas)</td>
<td>1 principal (Elenor)</td>
<td>1 principal (Isabelle)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 school staff (Fiona)</td>
<td>1 school staff (Jessica)</td>
</tr>
<tr>
<td>Secondary School 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary School 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total: 12</td>
<td>2 (+2)</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

In School Board A, secondary school 1, the principal consented to being interviewed alone and on the day of the interview, he had invited the two vice-principals to attend the interview. Thus one unanticipated focus group interview was conducted among the 3 administrators. Participants were selected using a convenience sample based upon voluntary consent and interest in the study. Interview questions were used to formalize and gather similar information from each school; however, the nature of the interviews was informal, as each participant could freely address any additional areas that they perceived were relevant to the SFBP. The duration of each interview or focus group session was approximately 30 to 60 minutes in length.

5.3 Data Analysis

First, the SFBP was analyzed using descriptive, process, and evaluation analysis framework (Pal, 1987) to better understand the policy development processes. Second, stakeholders’ responses to open-ended questions were transcribed from the interviews and coded into key words, then categorized according to recurring ideas, and then grouped into dominant themes.
17

(MacMillan & Schumacher, 2006). Codes were then combined into categories, and categories into patterns or concepts (Lichtman, 2010). A combination of policy analysis and open-ended responses provided rich descriptive data for the study.

6. Research Findings: Policy Analysis

Below, we briefly report our policy analysis findings within two sections: a) the history, content, and process of policy development, and b) the evaluation analysis that includes logical, empirical, and ethical evaluations of the policy.

6.1. History, Content, and Process of Policy Development

The Healthy Foods and Beverages in Elementary School Vending Machines Policy was developed in October of 2004 to support healthy eating habits in early life. Following this health initiative, the Ministry of Education released the Foundations for a Healthy School framework in December of 2006 that outlined four areas to engage in facilitating a healthier school: (1) quality instruction and programs, (2) a healthy physical environment, (3) a supportive social environment, and (4) building community partnerships. In that same year, the Healthy Schools Recognition Program emerged as a means to encourage, celebrate, and reinforce healthy behaviours and practices in Ontario schools. On October 4th, 2010, the Ontario Ministry of Education released the School Food and Beverage Policy broadening the scope of the 2004 Healthy Foods and Beverages in Elementary School Vending Machines Policy to encompass both elementary and secondary schools food and beverage sales, which was established under the Healthy Food for Healthy Schools Act. The Trans Fat Regulation also came into effect in order to reinforce healthy messages to students. Schools were required to abide by the nutritional guidelines for food and beverages sold on school property; restrictions however, did not cover food purchased outside of schools, various events, or food brought from home.

Nutritionally inadequate food and beverages offered at school often make it difficult to have a healthy diet. Thus, the purpose of the School Food and Beverage Policy was “to set out nutrition standards for food and beverages sold in publicly funded elementary and secondary schools in Ontario” (p. 1) as a way to (a) improve eating patterns and (b) improve skills, knowledge, and attitudes regarding healthy eating. The means for improving eating patterns was determined specifically through the nutritional content of each food which was then categorized as the healthiest (“sell most”), moderately healthy (“sell less”) and the least healthy (“not permitted for sale”) categories.

The Ontario government, the Ministry of Health Promotion, and the Dieticians of Canada collaborated on the development of the SFBP in response to government legislation and regulations surrounding healthy eating initiatives. EatRight Ontario provided resource links, information about nutrition and healthy food choices, and even recipe ideas that reflected nutritional guidelines found in the policy, while The Ontario Public School Boards’ Association’s (OPSBA) working teams (Healthy Schools Working Table) contributed to two major resources: the development of the five online modules which contained (1) an overview of the policy document, (2) understanding the nutrition standards, (3) healthy venues, programs and events, (4) implementation, and (5) practices to support implementation; and the creation and development of the elementary teacher resource guide.

These resources were used to aid schools in improving skills, knowledge, and attitudes towards healthy eating. A resource guide in conjunction with the online modules were created to complement and provide additional tools to effectively implement the policy. They provided detailed information on the nutrition standards (e.g., reading food labels and determining which category the food fell under) and additional tools or resources to assist in the implementation process (e.g., nutrition facts sheets, healthy menu tools, and checklists). In 2011, a supplementary resource guide was created for elementary teachers to identify their roles and responsibilities in the school and help them make connections between the policy and the specific curriculum expectations, and integrate life skills to support and promote health literacy.

6.2 Evaluation Analysis

6.2.1 Logical Evaluation of the Policy

The main goals of this policy were to (i) improve eating patterns and (ii) to improve skills, knowledge, and attitudes towards healthy eating through the three food categories and through
nutrition education respectively. The guiding assumption for this type of analysis is that “inconsistency is detrimental to intended policy outcomes” (Pal, 1987, p. 32) and that the policy improvements will occur with more consistency (Pal, 1987). Targeting students’ eating habits in the school alone may not be able to affect their overall eating habits unless the message is consistent throughout the children’s life. While research has shown that higher availability of fruits and vegetables in schools tended to increase the consumption of healthier foods (Kubik et al., 2003), various external factors may also affect these outcomes.

The results of studies have shown that nutrition education can play a critical role in influencing attitudes, skills, and knowledge surrounding healthy eating (e.g., Crawford-Watson et al., 2009; Perez-Rodrigo & Aranceta, 2001; 2003; Powers et al., 2005). Through formal health education and curriculum lessons, students may be better able to understand the benefits and gain the necessary skills and attitudes to choose healthier food options. The creation of the Ontario School Food and Beverage Policy Elementary Teacher Resource Guide 2011 was undertaken to identify the role of the teacher and the curriculum connections that teachers must address to support the policy’s direction. The challenge with learning expectations of the curriculum are that they are already so vast that new topics such as nutrition and healthy eating may be incorporated at the expense of another topic. Competing political forces may be at work in deciding which curriculum topics take precedence over others. If the decision remains to the discretion of the individual teachers, there may be inconsistencies in the curriculum being taught. In the years prior to implementation, this resource guide was developed after the implementation of the policy, in 2011, and thus was not available in preparing schools for September.

Second, we examined the internal consistencies of the policy. The exemptions built into the policy could potentially convey mixed messages that interfere with the ultimate goals of the policy. To have effective policy implementation, consistency is key. In addition, when school policies and public policies are not aligned, mixed messages are received from students resulting in resistance to following school food policies or nutrition standards. Although society has become more aware of the effects of diet on one’s health and is in support of offering healthier menu choices, public policies have not reflected such changes to reinforce the messages both inside and outside of school.

The criteria for all food groups provide a specified amount for fat, saturated fat, sodium, fibre, and protein content to fit one of the three categories (sell most, sell less, or not permitted for sale). For example, in the sell less category for Vegetables and Fruit, nutrition criteria indicate that food will fit this category if there is \( \leq 5 \text{g} \) of fat, \( \leq 2 \text{g} \) of saturated fat, and \( \leq 480 \text{mg} \) of sodium; however, it is unclear whether amount of fat is the total fat content and whether the amount of saturated fat is considered additional to this amount or considered separately. This policy does not state other types of ‘good fats’ that are found naturally in foods such as monounsaturated fats found in olive oil, canola oil, sunflower oil, avocados, olives, almonds, pecans, cashews, etc., or polyunsaturated fats, found in soy, flaxseed, fish, and tofu, which may minimize food choice options if these healthy fat foods were avoided based on this criterion of fat content.

Finally, we examined the differences between intended and contingent consequences. In one of the five online modules, module 2 addresses, ‘Understanding the Nutrition Standards’, to explain how all food and beverages fit into one of the three categories to follow the 80/20 (‘sell most’/‘sell less’) rule. The example provided in the module explained it as such: one food choice would be represented by a bran muffin and another food choice might be a carrot muffin; however, five of the same variety (e.g., 5 bran muffins) are still considered one food choice. The unintended consequence of calculating food and beverage choices to fit the 80/20 rule enables schools to potentially sell more units of the ‘sell less’ food or beverage option over the ‘sell most’ (healthiest) food and beverage option.

The cost-benefit of assessing all the nutritional information for food and beverages that are sold in schools is a contingent consequence. For schools that contract outside food service providers to cater within their school board, this assessment would be at the vendor’s expense, which may pose challenges with the viability of doing business with schools if profits are reduced with the added expenditure of paying staff more for added responsibilities. The amount of time and energy it would take staff to discern every major and minor ingredient and determine the total nutritional content of prepared food may not outweigh the potential cost incurred.

### 6.2.2. Empirical evaluation of school food policies

Due to the recent implementation of this policy in Ontario, program and policy evaluations have
not yet been done in the Ontario context. However, evidence from other provinces and states that have implemented school food policies can help to explore the real impacts, efficiencies, and efficacies of similar school food policies in various school contexts in relation to the goals of this policy.

Studies that investigated the impact of school food policies within Canada and the United States have generally resulted in some positive outcomes, such as improved eating habits (e.g., Bevans, Sanchez, Teneralli, & Forrest, 2011; Cullen, Watson, & Zakeri, 2008; Mullally et al., 2010) and increased knowledge, attitudes, and willingness to try new foods (Day, Naylor, & McKay, 2009); however, research showed that insufficient communication, lack of facilities and staff, lack of appealing food choices, cost (e.g., ‘good for value’), and portion sizes of these healthier choices were barriers to implementing these policies (Callaghan, Mandich, & He, 2010; MacLellan et al., 2010; Rushowy, 2012). In addition, exceptions to the policies such as allowing staff, public, and other programs to continue purchasing food with minimal nutritional value or bring in food from home, were likely to reduce the overall effect of the policy in achieving its goals (Whatley-Blum et al., 2011).

There are no current, publicly available data within Canada that identify the actual food that is served in schools since the implementation of such food policies, nor is there evidence of how much children are actually eating (Leo, 2007). Limited studies examine the pre- and post-effects of implementing school food policies alone, but rather, evaluate more comprehensive programs. These programs often use a holistic approach to improving eating habits that include changes in school food policies, nutrition-based curriculum, self-monitoring, non-food based rewards, and information for parents to encourage and support healthier eating habits at home (e.g., Day, Naylor, & McKay, 2009; Naylor & Bridgewater, 2007; Spitters, Schwartz, & Veugelers, 2009; Storey, Spitters, Cunningham, Schwartz, & Veugelers, 2011).

6.2.3. Ethical Evaluation

The idea of generating revenue at the expense of students’ health and wellbeing is a predominant ethical issue. Healthier choice vending snacks tend to decrease revenue for schools (Callaghan, Mandich, & Meizi, 2010) and, due to funding constraints, schools that rely on this revenue tend to suffer. Although some research indicates that school food policies do not cause a loss in total revenue (Wharton, Long, & Schwartz, 2008), it is well known that ‘competitive food’ sales are more profitable than the nutrient-rich alternatives (Drewnowski & Darmon, 2005). This also poses some challenges for students of lower sociodemographic backgrounds that may not be able to afford to eat healthy, and school food policies may potentiate these insecurities and add to the coexisting problem of obesity and hunger in low-income families (Drewnowski & Darmon, 2005). Thus, financial profitability plays a competing role against supporting healthier eating habits and long-term health outcomes.

In summary, policy analysis reveals some inconsistencies within the policy document itself and exposes some of the gaps to misinterpret its goals and intentions. This brings to light future challenges and obstacles for implementing the SFBP, but may also shed light on ways to improve future implementation efforts that will be examined further in the discussion section.

7. Research Findings: Stakeholders’ Perceptions

Data analysis of stakeholders’ responses revealed three broad themes: (1) pre-implementation planning (222 code occurrences), (2) policy’s technicalities (137 code occurrences), and (3) challenges of confronting implementation (223 code occurrences) (see Appendix). Within each of these themes, sub-themes are discussed in further detail to provide insight into this study’s purpose and findings.

7.1. Pre-implementation planning

A predominant theme was related to the preparation and planning prior to implementing the SFBP. Stakeholders’ perceived sense of readiness for implementing the policy varied from two extremes within the same school, but also varied across a spectrum of readiness between schools from the same board. This theme included the dissemination of the policy to the various school stakeholders, physical changes, and support availability.
7.1.1. Dissemination of policy

The mode of communication through which school stakeholders were informed of the policy varied in the extent of information provided as well as the timing and method of communication. Four key stakeholders were identified: administrators, teachers, students, and parents. Administrators admitted to being advised and formally introduced to the SFBP approximately one year prior to the enforcement of the policy. Administrators also claimed to have informed all school staff at least once at the end of the previous school year in an in-service training or staff meeting. Two teachers confirmed that they heard about the policy in a “brief” staff meeting while the two other teachers were provided with resource guides and training. Only those who were affected by the policy or were interested in learning more about the policy were provided with these additional resources. Teacher interviewees’ awareness of the policy ranged from very basic knowledge to knowing the specific aspects of the policy. Most teachers sought additional support and direction from higher authorities to implement the policy while only one teacher was able to work collaboratively with the principal to determine food selection for their school. Hailey was a teacher who was recommended by her principal (Gloria) to be interviewed as she was in charge of planning and implementing the SFBP; however, Hailey insisted that she was not formally or thoroughly informed about the policy and had a vague understanding of the 80/20 rule. Parents were informed of the policy either via parent council meetings, a newsletter home, or through their respective school websites. Students were informed through a PA announcement or on a need to know basis.

7.1.2. Physical changes

For all secondary schools, vending machine content needed to be re-evaluated and the deep fryers in the kitchen facilities were removed in order to comply with the policy. The interpretation and implementation of the policy was dependant upon the food service providers of their respective school board. The biggest challenge of offering food that might not appeal to students was that, “[students] truck across the street and get the big…greasy thing with gravy” (Principal, Elenor). On the other hand, for all elementary schools, canteens, tuck shops, and hot lunch program offerings were decided upon by the principal and sometimes with the feedback from teachers. The biggest challenge here was parents complaining that their “kid didn’t eat lunch because they didn’t like it” (Teacher, Denise).

7.1.3. Support availability

The amount of support received varied from school to school. Each respective school board initiated the dissemination and training of the policy, but the majority of the planning occurred at the individual school level to establish their own support system. In most instances, teachers claimed that the administrators were helpful; however, the health unit was indicated as a major supporter for schools but was only utilized by one school. One local health unit provided documentation on foods that met the nutritional guidelines of the policy and “we did not have to spend hours and hours figuring out every food item out” (Principal, Candice). Other schools were challenged “to figure out if food was good, bad, or indifferent” (Principal, Isabelle) and would have been helpful to have “a database of recipes already vetted and collected [to] save a lot of time and energy” (Teacher, Fiona). A few principals were curious as to how the government was contributing and supporting this policy.

7.2. Policy technicalities

This theme emerged when the interpretation of the policy was challenged and when competing priorities challenged its compliance as well as the issue of stakeholder engagement in abiding by the nutritional guidelines. Stakeholders included parents, students, and teachers.

7.2.1. Interpretation of the policy

In this study, data revealed that the interpretation of the policy could highly affect how it was implemented, how it was received by the stakeholders that it impacts, and the outcomes of implementing the policy itself. All interviewees acknowledged that the nutrition standards of the policy only applied to food and beverages sold within schools; however, their understanding and interpretation of the 80/20 rule varied from school to school. One secondary principal believed
that one fifth of the vending machines could be filled with pop and would be re-filled as often as needed while another secondary principal believed that pop could not be sold unless they were “compliant,” which meant that they were sodium-free, caffeine-free, and sugar-free, such as diet coke. Since food service providers were outsourced to a third party vendor in all secondary schools, some principals questioned the food choices but did not contest the food selection as one principal stated, “some choices are odd...like poutine chicken fingers...hey, they must be [compliant]...so, I’m sure they fit” (Isabelle). At the elementary school level, one principal had difficulty in understanding the aspects of the 80/20 rule while the other 2 principals did not express any perceived difficulty since one received a list of pre-approved foods while the other felt their interpretation of the policy was accurate.

7.2.2. Competing priorities and responsibility
With all the obligations and responsibilities within the school, there are often issues that take greater precedence for school administrators. One principal mentioned, “it was one agenda item out of several...it might rank 4 or 5, [but] didn’t worry about my pizza and how it tasted until September 7th” (Aaron). When participants were asked about the policy’s priority, all participants agreed that it had a relatively high priority; however, with issues surrounding student learning, assessment practices, bullying, safety, school improvement, mental health among many others, it is often difficult to manage and them all. Elenor explained that:

Every Ministry believes that they are the only people talking to me...but it all converges right on us. With school improvement and all the rest of it, this is an important thing, but I'm not losing sleep over it. I am complying with it [...] it’s not the highest priority of things that I do in my day. I’m going to tell you, I am not going down to police the cafeteria. I am trusting that corporately, that they are doing their job.

The enforcement of the policy and the roles and responsibilities at the secondary school level were a challenge, especially for secondary school principals since they felt that it was unreasonable to monitor every food or beverage that was sold in their respective schools.

7.2.3. Stakeholder engagement
Administrators and teachers agreed that the policy had complemented what was being taught in schools; however, creating student interest and buy-in for complying with the nutrition standards involved much more effort and resources. The mode in which the policy was communicated in engaging those affected individuals (e.g., parents and students) was limited.

Teachers did their best to model expected behaviors; however, respondents admitted that this was often more of a challenge for high school students and more manageable for elementary children since “kids follow your lead” (Teacher, Fiona). While Jessica, a secondary school teacher stated the difficulty in encouraging any type of behaviour change in a high school student is that, “they don’t want to be told that they can’t have this...” and having parents call the school to say, “how dare you tell my 17 year old what to eat – it’s none of your business!” A majority of respondents acknowledged that consistency was key to influencing eating behaviour if the message was reinforced both inside and outside of school. Since parent engagement and parent education is a critical aspect of reinforcing optimal behaviours, principals agreed that they could have done a better job and disseminating the information earlier; however, . Since schools had no control over what parents would send in their child’s lunch, it was crucial to help “influence those that are influencing them” in order to affect change. Thus respondents believed that encouraging parents to abide by the nutritional guidelines would minimize students’ resistance to the SFBP. Suggestions were made to produce some marketing tools such as “a resource guide for parents [ ... ] nice and colourful, healthy hints for school lunches” One principal, Gloria, suggested that food grocers increase the prices of unhealthy food and lower the price of healthy ones to encourage its consumption and making healthy food purchases more convenient for the consumers.

While a majority of participants claimed they were ‘ready’ for the policy, both teachers and principal’s alike asserted that a more gradual implementation process may have helped increase the schools’ overall readiness. One principal reflected on his lack of parent engagement and felt he could have “informed [them] a little bit more” (Aaron) on the policy. Only one teacher, who was in charge of the schools’ breakfast club was able to speak to her class and get parents on board prior to September 2011, while another teacher admitted to only making changes to comply with the policy when it was in full force. Most administrators, however, did mention
making incremental changes within the year leading up to the policy’s enforcement, but this assertion was neither confirmed nor denied by their respective teaching staff.

7.3. Confronting implementation

There were various logistical issues that were identified by the respondents after reflecting upon the planning and implementation process. Many schools faced the challenge of the taste and the food options available in school cafeterias, the surrounding food environment, and the profitability of school food.

The first challenge was “making [food] more appetizing and lowering the prices” (Principal, Isabelle). Principals agreed that although healthy eating is promoted in all programs and is consistent within the school, “we no longer have the foods that kids like to eat” (Principal, Brian). Providing cost-effective nutritious foods that are of high quality, tasty and appealing, and offered in an appropriate serving size are all fundamental in influencing students’ eating habits. Respondents believed that addressing some of these core challenges would enable students to easily adapt to complying with the nutritional guidelines of the policy.

The second challenge was the location in which the school resided. This had a significant effect on the efforts of planning to implement this policy. Having a range of neighbouring food establishments that do not cater to the guidelines of the SFBP was a strong impediment and competing force to the schools’ efforts. Respondents commented that the policy would have had more success in improving students’ eating habits if the school was more isolated since schools have no control over students purchasing behaviour or food preferences, area-level factors were an added challenge to the compliance of the SFBP. Therefore, the question that remained was whether this policy would indeed change students’ eating behaviors if students were able to just buy their food off of school property.

The third major challenge, immediately following the implementation of the policy was the issues surrounding profitability of food sales and the sustainability of running a business. As mentioned earlier, some of the rural schools were located in close proximity to food establishments and therefore, students had the option to leave school property and purchase their meals elsewhere. However, since a portion of the revenue generated by food and beverage sales would be given back to schools to help offset operational costs or student activities and equipment, restricting the sale of the most lucrative food items such as carbonated beverages and chocolate bars posed a challenge between healthy eating and profit generation. In one secondary school, the unintended consequence of implementing the SFBP subsequently resulted in a loss of a staff member due to the decrease in food sales. Respondents at the secondary school, the unintended consequence of implementing the SFBP subsequently resulted in a loss of a staff member due to the decrease in food sales. Respondents at the secondary level were worried that “the cafeteria isn't just going to be put out of business” (Principal, Elenor), while one school admitted to seeing a loss of almost 70% of their sales after the SFBP was implemented. She was concerned that her schools’ food service provider would not be able to sustain a business long-term. Thus, the unanticipated effects of implementing the policy were discussed as future concerns for the viability of businesses within the school and the negative consequences that might ensue.

8. Discussion

8.1. Policy Implementation Disconnect

The results of this research illustrated a strong disconnect between stakeholders’ perceptions, roles, and actions in implementing the policy, resulting in less than optimal preparation outcomes. Some of the major barriers included a lack of meaningful and effective dissemination of the policy to the key stakeholders as well as educating students, parents, and society as a whole to create ‘buy-in’ and foster supportive networks to reinforce the policy. For school administrators, training ranged from a short talk by fellow administrator colleagues to a more extensive full day in-service training on the inner workings of the policy and how to plan and prepare their school for implementation. The greater the type and extent of the training, as well as the prior knowledge and experience, the administrator or teacher had on the SFBP, the more it influenced their own personal readiness for the policy. Although the Ministry provided several resources and guides to help inform, support, and influence schools' readiness for this policy, participants rarely referenced them prior to implementation. Neglected items included the policy document itself, the School Food and Beverage Resource Guide, and Quick Reference Guide. Moreover, despite the availability of online modules with school surveys, checklists,
and various tools to help assess the needs of the school and to ensure compliance with the policy, none of the participants used or was even aware of these online resources. As a result, limited financial and human resources to aid in educating stakeholders led to varying degrees of resistance to change in schools.

The strict nutrition guidelines affected how elementary schools were operating through their hot lunch programs, canteens, and fundraisers. Selecting acceptable food choices required much more time and planning on the part of the administrator to facilitate these changes. At the secondary level, the responsibility was placed upon external food vendors to regulate and abide by the policy and was the board’s responsibility to monitor it. Therefore, administrators felt their primary responsibility was merely to organize the special event days.

Although there was a mutual understanding and agreement of the intentions of the policy, many of the stakeholders were unsure that it could achieve its ultimate goal of changing students’ attitudes towards healthy eating and improving their eating behaviors. Since many of the healthy in-school choices did not cater to student population taste preferences, students (mainly within urban secondary schools) often purchased their lunches elsewhere. Contributing to this challenge was the presence and competition of food outlets within walking distance from the schools. The closer the proximity of schools to food retailers, the more difficulties administrators had with students’ compliance of the policy and, more importantly, with promoting healthier eating habits. School stakeholders indicated that other schools in more rural areas, or those with limited food retailers within their neighbourhoods tended not to have these issues and compliance was more easily achieved. Canadian Television News (CTV) (2011) reported that “students at an Ottawa-area high school are being forced to get their food elsewhere” after the high school closed down its cafeteria because caterers declined to make meals due to the unprofitable nature of healthy foods and the nutrition standards (CTV News, 2011). The Toronto public school board projected over a $700,000 loss of revenue due to the policy (Rushowy, 2012). The president of the Ontario Public School Boards’ Association, Catherine Fife, stated that “students are voting with their feet” (Rushowy, 2012) and walking to nearby food establishments. A significant unintended policy consequence was that reduced menu choices and increased food prices led to a decrease in schools’ revenue. Due to the unprofitable nature of healthy food choices, schools reported that food service providers have declined to cater to the nutrition standards of the policy. The increased presence of food retailers around schools also resulted in decreased schools’ food revenues.

The concept of food marketing was addressed by two principals as a means of creating awareness for parents and influencing food purchasing behaviors. Previous research has shown that food marketing has the potential to affect children’s food choices and subsequent consumption (Ofcom, 2007). Ontario’s Bill 53, An Act to Amend the Consumer Protection Act, 2002 restricted commercial advertising for food or drink directed at minors (Legislative Assembly of Ontario, n.d.); however, this bill does not restrict opportunities to advertise healthier food alternatives which may provide a powerful medium through which social marketing and commercial marketing can relay messages that may positively influence food choices and their subsequent consumption. For example, the “Let’s Move” campaign, supported by First Lady, Michelle Obama in 2010 was a spokesperson and advocate for this initiative and has shown to be beneficial in many ways. “Let’s Move” has achieved many milestones for regulating and boosting the nutritional quality of school food, increasing access to healthy food, and has established partnerships to support healthier eating and lifestyles (Letsmove, 2014).

8.2. Increasing Readiness for Policy Implementation

Although resources were provided, work is needed to provide clearer direction to improve the content of these templates for assisting in the potential utilization of these tools. It is also recommended that policies provide guidelines for distributing responsibilities. Since principals did not believe that it was their primary responsibility to communicate and control this policy beyond the school grounds, the government was called into question for their contributions to this policy. The alignment of government actions and support should be taken into consideration when developing and implementing policies to reinforce consistent messages within all arenas. For example, mandating tax laws for the sale of unhealthy foods may help stimulate the purchase and subsequent consumption of healthier foods and support the goals of the SFBP. Currently, “prepared food and beverages sold for $4 or less” (Ontario Ministry of Finance, n.d.) remains exempt from HST and thus coffee, hamburgers, French fries, and many high fat, high
sugar baked goods may still be purchased or even favoured over the more healthy food and beverage options.

From the results of this research, we recommend that schools and school boards effectively disseminate the policy to each level of the organization including students, teachers, administrators, and parents. We also recommend that ongoing in-service training be provided to all teachers and administrators, not merely the ones who are just “interested” in the policy through various modes of communication and at various phases prior to implementation in order to help reinforce the message and support readiness for the policy. More importantly, providing opportunities for stakeholders to interact and engage in the change process, rather than taking a top-down approach, would stimulate greater interest and would make stakeholders accountable for their actions.

Encouraging collaboration between the school boards to share some of these resources may create a broader community network for opening discussions and providing feedback and support to one another. With all the responsibilities that administrators have, it is recommended that other stakeholders, like students, take part in leading the change process and initiating dialogue with outside vendors and organizations to help support the change.

Hill (as cited in Honig, 2006, p. 67) noted that there is always the potential to distort or interpret policy messages differently and construct meaning based on the implementers’ motives or interests. In secondary schools, food service providers were primarily responsible for complying with the nutrition standards, and since they were also business corporations interested in the profitability of food sales, interpretation of certain beverages (e.g., soda pop) have still been available for sale in schools. More research is needed to understand the process of stakeholders’ interpretations and understanding of the policy and is recommended that food service providers collaborate with school stakeholders to devise innovative ways to stimulate interest in healthy eating. For example, initiating healthy eating games, lowering the prices of healthy food, offering fun daily food specials, having taste tests, and offering loyalty points or rewards are just some of the ways that may persuade students to change.

Since parents were discussed as being the prime models for influencing what young children eat, peers can also play an influential role in eating behaviour (Suarez-Balcazar et al., 2007). Creating initiatives that enable peer mentors to lead and promote healthy eating would have a powerful impact on fellow peers. It is recommended that developing skills to empower and engage students in the decision-making process would help influence and encourage healthy eating behaviors (Boyd, 2009). Thus creating student health teams that have student-led activities to bring awareness, identify needs of the school, and allow students to prioritize and initiate the projects should help create a healthy school culture that enables students to support and encourage each other rather than having solely top-down approaches to leading change.

9. Research Implications
The current study sheds light on administrators’ and teachers’ perspectives of readiness for the SFBP and corroborated some of the issues that schools had already faced when implementing similar food policies. Examining stakeholders’ opinions about the process and actions of how their school had planned and prepared for policy illuminated the disparity and disconnection between stakeholders’ perspectives and their thoughts on the readiness process. Since research on organizational readiness in the field of education is limited, studies from business sectors have shown promising results in utilizing organizational readiness to bridge the gap between policy planning and effective implementation. Further research should include students, families, community members, as well as ministry level personnel to illustrate their perspectives of the SFBP. This would allow for a more holistic approach to implementation that would be supported from all stakeholders.

One of the predominant themes that emerged from this study that these models do not consider was the idea of identifying and minimizing obstacles or assessing the needs of the organization. Testing out food options and completing a cost-benefit analysis or price comparison as to whether or not a school cafeteria could be profitable in the long term would be beneficial. Many of the schools had implemented the SFBP using various strategies and approaches depending upon their specific context and situation. The Ministry also recognized that schools would implement the SFBP differently; however, establishing a high level of readiness to implement the policy would be common among each school and would benefit all stakeholders involved in the change.
Alternatively, future research that examines a proactive approach to implement policies and programs through an organizational readiness lens may prove to be beneficial. Kotter (2008) described eight stages to successful organizational change: (i) creating a sense of urgency, (ii) forming a coalition of change agents, (iii) establishing a vision and a strategy, (iv) communicating the vision, (v) empowering the action, (vi) creating short-term goals, (vii) consolidating achievements, and (viii) integrating the change into the existing culture. Fullan (2008), noted similar conditions, also adding the notions of investing in the individuals who initiate the change, providing continuous and meaningful interactions to support individuals, and enhancing the ability of individuals within the organization to achieve, maintain, and sustain the desired change. According to these theorists, organizational change occurs when stakeholders are prepared for the change through the aforementioned elements. Both Kotter (1996) and Fullan (2008) took a top-down approach to leading change with policy implementation following suit. The difference in implementing a school food policy is that principals are often facilitators for the change and are not necessarily working top-down, but are acting as the ‘middle-man,’ without choice and sometimes without sufficient direction to mediate the change. As a consequence, readiness must be mediated at the Ministry level in which the policy was created, although collaboration can still occur. Thus creating a sense of empowerment and providing continuous and meaningful interactions to support individuals in the change process is necessary for organizational change (Fullan, 2008); however, decisions for the direction of achieving the policy goals must be established at a higher level of control in order to optimize change efforts.

The combination of these two models encompassing the concept of readiness for change highlights some of the deficiencies of readiness for implementing the SFBP. Organizational readiness for policy implementation was purposefully adapted from the collective ideas of organizational readiness theory and the existing challenges surrounding the implementation of school food policies. The current study suggests that policy implementation follow a refined framework that uses these specific guidelines in order to achieve more successful implementation. These include: (i) being cognitively aware of the current needs and characteristics of the individuals within the school; (ii) creating a sense of urgency and need for the change; (iii) identifying challenges or barriers for the school and developing a plan accordingly to execute the changes within a reasonable timeframe; (iv) informing, engaging, and involving all stakeholders in the change process to establish visions and strategies; and (v) facilitating meaningful interactions and providing on-going support to sustain and maintain the change. Therefore, further research is needed to test and evaluate programs and policies through the refined organizational readiness framework in order to determine its effectiveness and reliability.

10. Conclusions
In this study, the focus was to examine administrators’ and teachers’ perspectives of schools’ readiness to implement the SFBP through an organizational readiness lens. The unintended consequence of losing a profit on the sale of school food could have been anticipated and prevented by merely taking out the cafeteria and focusing time, resources, and efforts on alternative ways to fundraise. Therefore, by identifying the key challenges of implementing school food policies and acknowledging the enabling factors that create organizational readiness for change; this study offers an exploration of the concept of readiness in the educational context for implementing school policies. It also provides a suggested framework in which organizational readiness could be achieved.

In previous research, organizational readiness has often been measured through a quantitative (e.g., readiness assessment scale) or through qualitative approaches (e.g., interviews). Although research has shown both the benefits and challenges to implementing school food policies, neither quantitative nor qualitative approaches alone provide a complete understanding of the effects of the policy. Future research is needed to examine all school stakeholders’ perspectives to determine the organization’s collective readiness through both quantitative and qualitative approaches.

Recent studies of examining the effects of implementing school food policies have often gone beyond nutrition standards and have incorporated a more comprehensive approach that encompasses an educational, social, environmental, and parental support component, similar to the Foundations for a Healthy School framework. For example, the Actions Schools!
BC - Healthy Eating Research initiative utilized family and community partnerships in order to achieve long-term, measurable health benefits. Students were surveyed about physical activity levels, food frequency, knowledge, attitudes, and perceptions, and food choices (Day, Naylor, & McKay, 2009); self-esteem and practical food handling skills (Tobin, 2008); and offered gradual changes to support healthy behaviors (Storey, Spitters, Cunningham, Schwartz, & Veugelers, 2011). These studies demonstrate the need for schools to identify and support other determinants of healthy eating that go beyond the food restrictions in order to improve overall health. While recommendations are made by some of the key stakeholders responsible for implementing the change, it is important to recognize different perspectives and experiences in order to learn from one another and to help foster positive working groups that are capable and eager to change the health and wellbeing of our students.

By informing, engaging, and involving all stakeholders, administration can develop strategies to improve school food sales and decrease the competition of surrounding food establishments. Improved communication, prior knowledge, lead time, and depth of training might ensure that challenges and barriers are identified, a timely and organized plan is executed, and necessary changes are made to implement policy guidelines. Administrators need to promote a culture that addresses both immediate concerns within their school and considers the broader implications of the changes for society. As it is rather difficult to influence change solely through school food policies, it may be necessary to go beyond nutrition standards and incorporate a more comprehensive approach that encompasses educational, social, environmental, and parental support components.

References


Appendix
Code Occurrences

Of 63 codes, the number of occurrences of the codes were tallied and analyzed for commonalities (codes mentioned more than 10 times were selected) and grouped into patterns, and later emerged into 3 major themes (1) pre-implementation planning, (2) policy technicalities, and (3) confronting implementation:

<table>
<thead>
<tr>
<th>Patterns (codes listed if different from idea)</th>
<th># of occurrences</th>
<th>Theme #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of policy (e.g., knowledge of policy, readiness, support)</td>
<td>56</td>
<td>1</td>
</tr>
<tr>
<td>Resource availability (e.g., preparation, man-power, physical changes)</td>
<td>69</td>
<td>1</td>
</tr>
<tr>
<td>Challenges for vendors (e.g., profitability, taste and choice of food)</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>Challenges with compliance (e.g., school context, surrounding environment, unintended consequences)</td>
<td>123</td>
<td>3</td>
</tr>
<tr>
<td>Competing priorities (e.g., fundraising, policy priorities, roles and responsibilities)</td>
<td>57</td>
<td>2</td>
</tr>
<tr>
<td>Reliability/consistencies within the policy (e.g., interpretation of policy, scope of the policy)</td>
<td>80</td>
<td>2</td>
</tr>
<tr>
<td>Dissemination of policy (e.g., mode of communication, key stakeholders, preparation, training effectiveness, education of policy)</td>
<td>97</td>
<td>1</td>
</tr>
<tr>
<td>Suggestions for improvement (e.g., motivating change, future considerations)</td>
<td>46</td>
<td>3</td>
</tr>
</tbody>
</table>