

The shift from “muffins” to mangoes: child, family, and organizational impacts of an
after-school snack program

by

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A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

Master of Health Sciences

in

The Faculty of Health Sciences
Graduate Studies Program

University of Ontario Institute of Technology

July, 2011

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IMPACTS OF AN AFTER-SCHOOL SNACK PROGRAM

Abstract

In 2009 alarming rates of childhood obesity resulted in the Government of Ontario launching a province-wide initiative through the Ministry of Health Promotion & Sport. This study focused on Eastview Boys & Girls Club (Eastview unit) in Oshawa, Ontario and examined immediate impacts of an after-school snack program involving close to 100-children daily. Data collection included key informant interviews (n=7); one focus group interview with parents (n=8); three interactive children's sessions, and document review. Findings identified changes in children's eating behaviours (e.g., willingness to try new foods) and shifts in staff attitudes (e.g., role-modelling). Facilitators included staff commitment, strong partnerships, and previous program accreditation. Organizational barriers included gaps in nutrition-related knowledge/skills of staff and insufficient program-specific training and resources. Recommendations call for building capacities at individual-, organizational- and community-levels to strengthen the nutritional component of the after-school initiative. Future research should evaluate long-term outcomes of the snack program.

Key Words: nutrition, child obesity, prevention, after-school program, community, qualitative

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Acknowledgements

First and foremost, I thank my faculty advisor Dr. Ellen Vogel for her guidance, support, and encouragement. You have become a mentor to me, and your faith in me pushed me to do nothing less than my best. I am grateful to my supervisory committee members, Dr. Wendy Stanyon and Lauranne Matheson for their invaluable input, direction, and insight through the process of developing and carrying out my study.

I thank the management, program staff, and volunteers at Eastview Boys and Girls Club for their help in planning and recruiting for my study. Special thanks to Lisa McNee Baker, Elizabeth Ann Williams, and Mike Marsella. Thank you to all study participants for providing me invaluable data that shaped my study.

Thanks as well to my fellow Master of Health Sciences Candidates (Olga, Andrea, Christina, and Nakia) for the time spent in the library, office, or in class, reassuring one another that we would get through this together. To my friends, Sharanya, Reema, Shaumy, Crystal, Nicole, Aisha, Sara, Saamah, Rosemeen and Lacsmi – thank you for giving me the courage to pursue this degree and listening to never-ending “spiels” on my research. I also thank my extended family for providing constant encouragement, namely, my grandmother, brother-in-law Yunus, Aunt Bilquis, and Uncle Yusoof.

To my sister Asma, thank you for being my unwavering “rock.” Thank you for offering to read parts of my thesis, irrespective of the time of day, for believing in me, and for always assuring me that I could and would be successful. And last, but certainly not least, I thank my parents, without whom none of this would have been possible. Thank you for your unconditional love and support, for teaching me the importance of education, and for pushing me to reach for the stars. I love you more than you know.

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1.0 Introduction

Emergent trends in dietary and lifestyle habits have contributed to a global rise in the prevalence of obesity. Results from the Canadian Health Measures Survey (CHMS) conducted in 2007 and 2009 showed 37% of Canadian adults were overweight and 24% were obese (Statistics Canada, 2010). A 2005 estimate put the prevalence of overweight and obesity among Canadian children at 30% (Veuglers & Fitzgerald, 2005).

Researchers state that there has been a nearly five-fold increase in childhood obesity in Canada between 1992 and 2007 (Lau et al., 2007). Additionally, a child identified as obese at age four has a 20% chance of becoming obese in adulthood – this percentage increases to 80% for obese adolescents (Demattia & Denney, 2008). Once obesity manifests itself, the associated health disorders such as cardiovascular diseases and type II diabetes make it difficult to reverse. The individual and societal health burdens of obesity, as well as the resulting strain on healthcare resources, make preventative action of paramount importance.

Children from low-income families are more inclined to develop obesity in comparison to the general population (Mozaffarian et al., 2010). In Ontario, the provincial child poverty rate has remained at 9.2% since 1989 (Maxwell, 2008). According to Ontario Member of Parliament Ken Dryden (2004-2011) (Parliament of Canada, n.d.), poverty is:

a pregnant mother just a little less healthy, her newborn baby just a little underweight, a little less developed. A young child growing up just a little more sick a little more often, away from school just a few more days than other kids – just a little behind. Poverty is every day running a 100-metre race as if all the other kids are at the starting line – and they're 10 metres

behind. Poverty is that ‘just a little’ that isn’t ‘just a little’ at all. (Government of Ontario, 2009, p. 11).

An unfortunate cycle persists whereby children raised in poverty are susceptible to remaining in a situation of poverty into adulthood (Government of Ontario, 2009). The persistence of child poverty, coupled with increasing rates of child obesity, underscores the need for health promotion programs geared towards low-income families.

1.1 Rationale

The documented need for programs focused on reducing child obesity has prompted governments to take action. As part of the 2008-2009 Ontario provincial budget, \$10 million was allocated to after-school programming in priority neighbourhoods through the Ministry of Health Promotion & Sport (MHPS) (Ontario Ministry of Health Promotion & Sport, 2010). At the time the funding was announced, the ministry was called the Ministry of Health Promotion; the title was revised to include “and Sport” over the course of this study. The goal of this after-school initiative was to reduce childhood obesity, among other risk factors, and provide children with a place to go after school through activities focused on three major areas: nutrition education, physical activity, and personal health and wellness education to improve self esteem (Government of Ontario, 2009). Further, organizations funded under the after-school initiative could also support communities by providing a range of services including “academic assistance, arts and cultural activities, and teen programs” (Government of Ontario, 2009). The initiative was informed by two documents: *A Review of the Roots of Youth Violence Report* commissioned by Premier Dalton McGuinty in 2007 and *Breaking the Cycle: Ontario’s Poverty Reduction Strategy*, also funded by the McGuinty

government (Ontario Ministry of Health Promotion & Sport, 2010 and McMurty & Curling, 2008).

A Review of the Roots of Youth Violence Report showcased the need for after-school programming in Ontario in order to “help keep youth off the street” (Ontario Ministry of Health Promotion & Sport, 2010). The authors called on government decision-makers to focus attention on disadvantaged communities across the province, where factors such as racism, poverty, and inadequate housing contribute to youth violence (McMurty & Curling, 2008).

The authors of the second report (*Breaking the Cycle: Ontario's Poverty Reduction Strategy*) identified a poverty reduction strategy to reduce the number of children living in poverty in Ontario by 90,000 (a 25% decrease over a five-year period) (Government of Ontario, 2009). The strategy aims to reach its goals partly through educational and learning initiatives. For example, authors recommended increasing the number of Parenting and Family Literacy Centres and directing funding towards after-school programming (Government of Ontario, 2009), including the after-school snack program that was the focus of this study.

In order to facilitate the after-school initiative, partnerships were developed between the MHPS and numerous organizations at the provincial- and community-levels (Government of Ontario, 2009). In 2009, it was estimated that 15,500 children at 270 sites would participate in the after-school initiative (Government of Ontario, 2009). According to the government news-release, the funding that was provided to organizations under the after-school initiative was to go towards improving the delivery of programming (Government of Ontario, 2009). Costs associated with staff training,

program equipment, and healthy food would be covered through this initiative (Government of Ontario, 2009). In addition, transportation costs and equipment to enhance teen programs were also eligible (Government of Ontario, 2009). In order to receive funding, organizations had to demonstrate that financial barriers for childrens participation in the after-school programming were nonexistent (Government of Ontario, 2009).

Further, the MHPS would evaluate the provincial after-school initiative through online health passports (Government of Ontario, 2009). These passports would provide participants access to online quizzes over the duration of the program using a pre- and post- test format. Children would sign-on to the website during the after-school session using codes assigned by program staff. The children would be instructed to keep the codes confidential. Questions in the quiz were to focus on three areas namely, nutrition education, physical activity, and personal health and wellness education and would be designed to measure knowledge change.

In order to receive funding for the after-school programming, organizations were asked to submit “An After-School Strategy Funding Proposal” to the MHPS. Proposals addressed a variety of topics including current funding levels, programming, partners, training available to staff, and budgets. In addition, organizations had to provide detailed work-plans and specific financial details regarding how the funding would be used (i.e., supplies and services, program equipment, and personnel). The comprehensive proposals were reviewed by the MHPS and successful organizations received funding at the beginning of the 2009/2010 school year.

1.2 Background

Organizations that received funding for the after-school initiative were located across the province. This study focused on one site belonging to a community organization that received provincial funding in September 2009. Prior to introducing the site – Eastview Boys and Girls Club (Eastview Unit) (EBGC-EU) located in Oshawa, Ontario – in more detail, contextual information relevant to the study will be presented.

1.2.1 Food security data from Durham Region and Oshawa

Durham Region includes the towns of Whitby, Ajax, and Courtice, as well as the cities of Oshawa and Pickering. In order to provide a socioeconomic snapshot of the area of Durham Region, food security data from the Food Insecurity Needs Assessment and pertinent information from the Nutritious Food Basket Survey (both conducted by the Durham Region Health Department) will now be presented.

Food security is defined as “the availability of food, equitable access to food, and adequacy of the food supply in terms of culture, nutrition, and sustainability” (Rideout, Riches, Ostray, Buckingham, & MacRae, 2007). Food insecurity (i.e., the lack of food security) is a measure that is often used to predict food challenges that may be present in compromised populations (Dachner, Ricciuto, Kirkpatrick, & Tarasuk, 2010). In 2000, a Food Insecurity Needs Assessment was published by the Durham Region Health Department, utilizing survey methodology. However, the 12% response rate reported by authors (Durham Region Public Health, 2000) is highly problematic and findings from

this assessment need to be considered accordingly. Key results from this assessment include:

- Of 335 adult respondents, 174 (or 51% of the total sample) were individuals who lived in Oshawa (Durham Region Public Health, 2000);
- 35% of homes were classified as food insecure while 40% of homes with children were classified as “child hungry homes;” there was a greater propensity for hungry children in homes that were identified as LICO (residing at or below the Low-Income Cut-off), as well as among single parent households compared to households with couples (Durham Region Public Health, 2000, p. 21);
- Among food insecure households, 38% would often “buy/serve less nutritious food;” 36% reported difficulties in getting to a store to buy food, with 14% saying the biggest challenge was the lack of money for transportation to the grocery store (Durham Region Public Health, 2000, p. 25);
- Lowering food costs was seen as the biggest factor in helping those that were food insecure (Durham Region Public Health, 2000);
- Approximately 30% of homes reported that they had “enough food, but not the kind we always want to eat” and a similar percentage indicated that they had “sometimes not enough food to eat” (Durham Region Public Health, 2000 p. 23);
- When asked what services could help those that were food insecure, 26% of food-insecure households said “learning to buy cheaper/better food”

and 25% replied “learning what food family needs to be healthy”

(Durham Region Public Health, 2000 p.33)

Rates of food insecurity in Durham Region increased between the periods of 2005 and 2008. Although the region reported a provincial average (e.g., 8% of all households identified as food insecure) in 2005, this figure increased to 12% in 2008 (Durham Region Health Department, 2010).

The Nutritious Food Basket Survey is conducted to gauge the cost of a healthy diet in a region, utilizing local and popular grocery stores in an area (Durham Region Public Health, 2010). For the May 2010 Durham survey, the cost of a food basket for a week for a family consisting of two adults, one child, and one teenager was estimated at \$162.07 (Durham Region Public Health, 2010). Those individuals of low-income status use a higher percentage of their income on fixed costs, such as transportation and heat (Durham Region Public Health, 2010). The scenarios drafted by Durham Region Public Health showed that those individuals “covered by” Ontario Works (a provincial social assistance program), or receiving minimum wage were required to spend 37% and 30% of their incomes respectively for food (Durham Region Public Health, 2010). In contrast, those described at the median income level required a much smaller proportion of their overall earnings (12%) for food (Durham Region Public Health, 2010). While this report did not include current statistics on low income individuals, authors stated that 9% of Durham residents utilized food banks in 2006 (Durham Region Public Health, 2010). This finding can be used as an indicator for the

status of food insecurity in Durham Region, since it is one of the prevailing reasons for food bank use (Tarasuk & Beaton, 1999).

1.2.2 An introduction to Eastview Boys and Girls Club

The Eastview Boys and Girls Club (EBGC) in Oshawa, Ontario offers programs for children which enable them to “achieve their positive potential in life” (Eastview Boys and Girls Club [Oshawa], n.d.). The programs offered by EBGC at the Eastview Unit (EBGC-EU) include an after-school program; aquatics program with a swimming pool on-site; homework club; and a computer lab on the premises. The Safe Walk Program allows children to be picked up at their school by program staff/volunteers for the walk to the club for after-school programming. Summer and March Break day camps are also offered, as well as family event nights, first aid training, and various teen activities. The teen programs offer facilitation sessions which aid in building job skills, considering post-secondary career options, and planning activities through the Youth Council (Eastview Boys and Girls Club [Oshawa], n.d.).

Management at EBGC-EU provided the researcher with the 2009 Factbook Questionnaire, comprised of information on the population that the club served. This information is compiled on a yearly basis and submitted to the Boys and Girls Club of Canada. The Factbook provided anonymous information including the ages of children served, the number of children and youth who classified as “at-risk” or low-income, information on staff and volunteer numbers, and ethnic backgrounds of the children using the services at EBGC. The Factbook also included a summary of the finances at EBGC, including funding,

expenses, and donations. Aggregated data from all EBGC sites is presented in Table 1 with the exception of two bolded variables that specifically describe EBGC-Eastview Unit (EU) – the focus of this study.

Table 1

Relevant Demographic Information on Individuals Involved With Eastview Boys and Girls Club Oshawa

Factbook Variable	Site	Number
Total number of families that utilized services offered by EBGC	All sites	1,200
Total number of children	All sites	2,119
Total number of children and youth classified as “high risk (i.e. youth in gangs, substance abuse, prostitution, behavioural issues)”	All sites	800
Single-parent families	All sites	410
Children coming from low-income families	All sites	312
Children/youth given financial support or waived fees	All sites	60
Unique individuals registered in after-school drop in program	Eastview unit	97
Unique individuals who participated in nutritious snack	Eastview unit	97
Total full-time staff employed at EBGC	All sites	23
Total part-time staff employed at EBGC	All sites	50
Total seasonal/contract staff employed at EBGC	All sites	30

Note: Adapted from Eastview Boys and Girls Club 2009 Factbook Questionnaire by Eastview Boys and Girls Club. (2009). Boys and Girls Club of Canada 2009 Factbook Questionnaire. Provided by Eastview Boys and Girls Club. Bold font indicates variables specific to Eastview Boys and Girls Club – Eastview Unit (EBGC-EU).

This information provides a snap-shot of the population that is served by

EBGC-EU. Document review conducted by the researcher did not produce additional site specific data.

In May 2010, EBGC-EU received “High Five” accreditation. High Five is the only quality standard that exists in Canada for children’s recreation and sport programs. Accreditation is based on the “5 principles of healthy child development” including a caring adult, play, mastery, friends, and participation (Parks & Recreation Ontario, 2007). High Five also provides three guidelines to facilitate the development of programs that provide children with quality experiences: safe, diversity (unique), and developmentally appropriate (Parks & Recreation Ontario, 2007). For the purpose of this research, it is important to note that nutrition is not currently included as part of High Five accreditation.

The EBGC-EU is also identified as a CATCH (Coordinated Approach for Child Health) facility. The CATCH approach focuses on physical activity and health programs to help develop children’s dietary behaviours (CATCH, n.d.). This approach was developed in 1991 and implemented in schools and after-school programs in the United States (US) based on research demonstrating that the program resulted in positive health outcomes (CATCH, n.d.). The US-based intervention involved four states and more than 5,100 children over a period of three years (CATCH, n.d.). Individuals and organizations can purchase curriculum based on CATCH which includes activity cards and guide books to help in program implementation (CATCH, n.d.). There is also CATCH training available to facilitate successful program delivery. Some of the staff members at

EBGC-EU participated in this training and often referred to themselves as “CATCH trained.”

The after-school program at EBGC-EU is offered five days a week during the school year. When children arrive at the centre, they are given a snack, after which they participate in a short “warm-up” activity that typically involves singing and/or dancing. Children are then divided into three groups according to age, and rotate in 45-minute intervals, through three different activities usually located in the activity centre, the gym, and computer lab. Children can also choose to participate in the homework club, and those over twelve years can participate in age-appropriate activities (e.g., cooking classes and sports programs). Thus, the multi-faceted programming at EBGC-EU initially offered an environment that appeared conducive to implementing the provincially funded after-school initiative.

1.3 Goals and Objectives

The rationale for this study was partly due to the paucity of program data in Canada on community-based programs addressing the prevention of child obesity, especially programs focused on behaviour change. Chapter 2 provides a detailed review of the literature on topics relevant to this study.

The goal of this study was to examine immediate impacts of an after-school snack program at EBGC-EU in Oshawa, ON involving approximately 100-children daily. The study was informed by a logic model (presented in Chapter 2) and explored perceptions of the staff and parents/guardians on the role of the program in children’s lives, with a focus on the impact of the after-school snack. Further, staff involved in the program were

asked to comment on program facilitators and barriers, as well as their own lived experiences. Finally, this study invited children participating in the program to talk briefly about the after-school program and the associated after-school snack. It is hoped that findings from this study will potentially strengthen the program at EBGC-EU and inform other after-school snack initiatives across the province.

1.4 Research Questions

The four research questions for this study pertain to the EBGC-EU site in particular and were informed by the logic model:

- i.** In what ways was the experience transformative for children participating in the after-school snack program, their families, and program staff?
- ii.** What were the major facilitators, barriers, and socioeconomic influences of the after-school snack program in creating conditions that promote child health and prevent childhood obesity?
- iii.** In what ways did the after-school snack program affect the food experience of children, their families, and program staff?
- iv.** How significant was the after-school snack funding provided by the MHPS to the types of nutrition programming and services offered by EBGC-EU?

These over-arching research questions guided the study and informed the development of the qualitative research design described in Chapter 3.

2.0 Comprehensive Literature Review

This literature review helped to contextualize the exploratory study involving Eastview Boys and Girls Club – Eastview Unit (EBGC-EU). First, a summary of obesity trends and factors affecting food choice and consumption in children will be discussed. Second, the link between child obesity and poverty, food insecurity, and low-income status in Canada will be addressed, followed by a summary of after-school programs focused on the prevention of child obesity. After a brief discussion on capacity-building, the literature review will provide an overview of staff training in the context of various health promotion initiatives. The chapter conclusion will present the theoretical framework that informed the study, and the logic model will be presented.

2.1 Obesity Trends

The rates of obesity have ballooned globally in recent years, prompting preventative action geared increasingly towards younger age groups. According to Lau et al. (2007), obesity is the most rampant nutritional disorder in the world, with individuals afflicted with obesity overshadowing those who are undernourished or those who present with infectious disease. The 2004 Canadian Health Measures Survey found that one in four Canadian adults is classified as obese ($BMI \geq 30 \text{ kg/m}^2$) (Lau et al., 2007). However, rates of obesity in children are climbing the fastest; while only 2% of both Canadian boys and girls were overweight in 1991, this increased to 10% of boys and 9% of girls by 2006 (Lau et al., 2007). Associated with the early incidence of obesity are many related health afflictions, including type II diabetes, hypertension, and various cancers (Lau et al., 2007 & Anis et al., 2010).

A recent report on the economic burden of obesity and its related health outcomes in Canada determined that the total cost of overweight, obesity, and co-morbidities was \$6.0 billion in 2006 (Anis et al., 2010). When compared to the cost of these same health issues in 1998, there was a 25% increase attributed to the discovery of new co-morbidities (Anis et al., 2010). As obesity rates continue to increase, it is certain that the associated costs and the burden on the healthcare system will grow. It is necessary to identify the factors that have played a role in the development of obesity and to combat these risk factors in order to improve the health status of Canadians, and to reduce the long-term healthcare burden.

2.2 Factors Affecting Food Choice and Consumption in Children

In order to understand how children make food choices and the resulting food consumption patterns, it is important to consider factors that play a role in food choice and availability, including the determinants of healthy eating. While there are genetic factors that can put an individual at higher risk of being overweight or obese, research suggests that the most significant variables are the environment and associated cultural factors (Lau et al., 2007). According to Cordain, et al. (2005), changes in the environment have occurred so quickly that the human genome has been unable to adapt. These changes started roughly 10,000 years ago with the advents of agriculture and animal husbandry, which transformed the nutritional characteristics of food staples (Cordain et al., 2005). The shift towards a food supply heavily reliant on processed foods (resulting in changes to food consumption patterns) have changed dietary factors such as macronutrient composition, fiber content, fatty-acid composition, and glycemic index (Cordain, et al., 2005). Cordain et al. (2005) stated that this “evolutionary discordance”

has led to the development of many “diseases of civilization,” which include obesity and its co-morbidities. The determinants of healthy eating are now discussed, followed by a review of the literature on children’s food consumption patterns.

The determinants of healthy eating in Canada were synthesized by Dr. Kim Raine in 2005. While this work was published some time ago, the findings remain relevant to the study of factors determining eating behaviour. According to Raine (2005), the determinants can be classified into two groups: individual determinants, and collective determinants, the latter of which include broader environmental determinants as well as public policies. Two of the individual determinants to note, particularly in relation to children, are food preferences and nutrition knowledge. These two determinants are further discussed by Taylor, Evers, & McKenna (2005) in a publication on the determinants of healthy eating in children and youth. The authors emphasized the strong link between food consumption and food preference, which is often predominantly based on either taste and/or liking (Taylor et al., 2005). Authors discussed the children’s poor understandings between food, health, and physical activity and concluded that knowledge does not necessarily lead to children making healthy food choices (Taylor et al., 2005).

One important nutrition education tool is Canada’s Food Guide to Healthy Eating, which helps individuals to make healthy choices, and also serves as a guide in planning programs and activities that serve snacks and meals. The guide outlines servings for the four major food groups: Meat and Alternatives; Milk and Alternatives; Vegetables and Fruit; and Grain Products (Health Canada, 2007). Since dietary requirements differ depending on age and gender, there are a different set of requirements for children according to age group. Although Canada’s Food Guide to Healthy Eating informs

individual determinants of healthy eating, it can also act as a collective determinant when used in the implementation of nutrition programming.

Raine (2005) states that collective determinants of healthy eating can be classified as economic, social, or environmental. Economic determinants include food price, which is of most significance among low-income individuals. Since parents are the ones who typically provide for their children, their income and educational status have implications on what their children eat (Raine, 2005). In her synthesis of determinants of healthy eating in Canada among low-income individuals, Power (2004) referenced numerous studies that demonstrated the link between food insecurity and limited food access. In food insecure households, distribution of food often means that children are fed first, and when supplies “run out,” parents typically do without (Power, 2004). This could mean that in times of food bank use and the availability of low dietary quality foods, parents may over-compensate by feeding their children more than they normally would, leading to weight gain in children.

The social determinants of healthy eating include cultural, peer, and familial factors, among others. Although Taylor et al. (2005) notes that the “globalization” of food has led to fewer intercultural differences in food consumption, the food choices of new immigrants may mean cultural factors play a bigger role than in the past. While there is a paucity of research on peer influences on food consumption, there is some evidence that peer influence can not only play a role in food choice, but also have a long lasting impact in food behaviours (Taylor et al., 2005). The familial factors most relevant to this present study include exposure and accessibility of food, food socialization, and parenting style (Taylor et al., 2005).

The physical environment includes foods that are available to children, particularly in a school environment. The easy access to convenience foods often laden with high amounts of fat, sugar, and sodium and having little nutritional value play a role in the foods children eat (Taylor, et al. 2005). Schools are an environment where until recently, unhealthy foods had been readily available. The Government of Ontario has implemented school food policies aimed at banning “junk food” in elementary schools by 2011. However, children continue to be exposed to unhealthy food through snacks and lunches brought to school (Brown, 2010). The interplay between these individual and collective determinants of healthy eating for children is important. Effective measures towards improving healthy eating practices need to take into account all of the determinants along with their inter-relationships.

2.3 Dietary Trends in North American Children

A number of elements have been attributed to the rise in overweight and obesity in children, including changes to dietary and food consumption habits in conjunction with a lack of physical activity (Gutin, Yin, Johnson, & Barbeau, 2008 & Yin et al., 2005). In particular, the changes in food consumption among children include a high intake of high-fat and high-sugar foods alongside low fruit and vegetable intakes. A selection of studies that have analyzed recent dietary trends in North American children are now briefly summarized, with emphasis on the link between income and diet.

A study on diet quality of children in Nova Scotia which surveyed 5,200 children and their parents found an alarming percentage of children did not consume adequate food from the four food groups as recommended by Canada’s Food Guide to Healthy Eating (Veugelers, Fitzgerald, & Johnston, 2005). Percentages of children falling short

of recommendations ranged from 42.3% for Milk and Alternatives to 73.7% for Meat and Alternatives, with Vegetables and Fruit, and Grain Products falling in the middle at 49.9% and 54.4% respectively (Veugelers et al., 2005). Diets inferior in quality were significantly associated with a higher incidence of buying school meals or fast-food (Veugelers et al., 2005). Findings also showed that parental dietary behaviour influenced the eating habits of their children, and that families from a higher socio-economic status tended to have healthier diets (Veugelers et al., 2005).

Nutrient intakes among children from Ontario were studied by Hanning et al. (2007) in a study carried out in 2006 on 772 children in grades six to eight. Findings collected from web-based questionnaires showed that children were consuming 25% of their daily energy requirements in the form of “other” foods (Hanning et al., 2007). While fruit and fruit juice consumption was most often ranked as being consumed at least once a day, vegetables (raw or cooked) were, alarmingly, most often consumed only “at least once a week” (Hanning et al., 2007). The only food group where requirements were met by most participants was the Meat and Alternatives group. Participants’ intakes fell short for Milk and Alternatives, Vegetables and Fruit, and Grain Products (Hanning et al., 2007). Hanning et al (2007) concluded that helping children eat healthier through program and policy change is necessary in order to combat the factors that lead to unhealthy eating.

A smaller study carried out at three urban Hamilton, Ontario schools showed that most of the 92 participants did not eat five servings of Vegetables and Fruit (76.4%), with intakes of 58.4% participants falling short of the Milk and Alternatives requirements and intakes of 57.3% participants falling-short for Grain Products (Moffat & Galloway,

2008). Participants ate an average of 5.6 servings per day of “other foods” (Moffat & Galloway, 2008). Recommendations included that healthy snack programs should emphasize fruit and vegetable consumption to steer children away from energy-dense, low-nutrient choices (Moffat & Galloway, 2008).

These studies individually demonstrate the need for interventions to focus on improving food consumption in at-risk children. This is of particular importance to ensure that children meet dietary requirements as outlined in Canada’s Food Guide to Healthy Eating. Behaviour change relating to dietary habits needs to be addressed early on in order to prevent obesity in adulthood (Dovey, Staples, Gibson, & Halford, 2008). Including a nutrition-related educational component in programming geared towards children may help in reducing childhood obesity over the long term.

2.4 Poverty, Food Insecurity, and Low-income Status in Canada

Low income and socioeconomic status play an amendable role in the health status of communities and individuals (Fang, Kmetec, Millar, & Drasic, 2009). According to the “Health Disparities Perspective,” poor health provides further social disadvantage to an already socially disadvantaged group (Braveman, 2009). While Statistics Canada does not present an official definition of poverty, many of their findings on low-income groups are defined based on the Low Income Cut-Off (LICO) (Campaign 2000, 2009). This cut-off was established in 1968, and takes into consideration the percentage of income that is spent on basic necessities, which include shelter, clothing, and food (Statistics Canada, 2008). While the average Canadian family spends approximately 50% of their income on these necessities, those with lower incomes and in compromised positions often spend an additional 20%, making up 70% of total income (Statistics Canada, 2008). According to

the 2006 Ontario census, after-tax family incomes of roughly 1.3 million people (11% of the provincial population) were below the LICO; over 308,000 of these individuals were children under the age of 15 (Maxwell, 2008). In addition, according to the Canadian Community Health Survey (CCHS) (2007-2008), 1.92 million Canadians over the age of 12 were food insecure, with the highest prevalence among those living in the lowest income decile. Further, households with children were more likely to be food insecure (Health Canada, 2010). Overall, 8.2% of Ontarian households classify as food insecure, slightly higher than the national average of 7.7% (Health Canada, 2010). These numbers could be higher as this data does not include the on-reserve Aboriginal population, etc.

An extensive document on food insecurity and chronic disease was prepared in 2009 as a background paper for the Food Security Knowledge Initiative (DesJardins, 2009). It included 62 articles published over the last ten years and encompassed a variety of chronic diseases, chronic disease risk factors, and age groups. In the section on obesity, the author found that the combined results of some of the studies examining the relationship between food insecurity and obesity among adults showed a higher incidence of obesity among those who were slightly food insecure, while there were mixed results for this same link in children (DesJardins, 2009). However, DesJardins (2009) discussed the potential of food insecurity to lead to negative child health outcomes that included asthma and iron-deficiency anaemia (Desjardins, 2009). The author concluded that overall, food insecurity plays a role in adverse health for those affected (Desjardins, 2009).

Another recent review focused on recessions and their implications on child health, again linking food insecurity to low-income status (Sell, Zlotnik, Noonan, &

Rubin, 2010). Authors noted that this link was especially important due to the increases in childhood obesity. (Sell, et al., 2010). Specifically, authors found that even short periods of poverty had adverse outcomes on the health of children (Sell, et al., 2010). According to Sell et al. (2010), the negative impacts on child health can be mitigated through adequate provision of public programs.

To contextualize the role that income and food insecurity plays in childhood obesity, a search of the literature was carried out by the researcher. The goal was to determine the prevalence of obesity among children who were food insecure and/or of low-income status. Twelve observational studies were identified that had been conducted in North America between 2005 and 2009. Seven of the twelve studies (58%) used the term “food security” and only three of the seven reported findings to support the link between food insecurity and obesity, overweight, or at-risk of overweight status (ARO). Widome, Neumark-Sztainer, Hannan, Haines, & Story (2009) concluded that food insecure youth were significantly more likely to have a BMI above the 95th percentile. Similarly, Casey et al. (2006) showed a higher ARO for children in food insecure households. In Smith & Richards’ study (2008), 45% of participants presented as food insecure; of those classified as food insecure, 45% of males from this group and 55% of females were either ARO or overweight (Casey et al., 2006).

Two of the observational studies on food insecurity had mixed results and two were unresponsive. While Rose & Bodor (2006) found that children in food insecure households were 20% less likely to be overweight than food secure children, the authors indicated that low income status positively correlated with overweight status. Gundersen, Garasky, & Lohman (2009) found a significant difference between overweight and food

insecurity, however only in the presence of maternal stressors (such as financial stress and family structure stress) and only in the youngest cohort of three-to ten-year olds. Each of the unsupportive studies failed to find a significant difference for ARO between food secure and food insecure children. The authors of two studies concluded that it may be other factors associated with food insecurity status, such as low-income status, that play a role in development of obesity (Gundersen, Lohman, Eisemann, Garasky, & Stewart, 2008 & Gundersen et al. 2009)

The remaining five of the 12 observational studies identified for this review examined low income status in relation to obesity prevalence. In Langevin et al.'s (2007) cross-sectional study in a geographic area described as low income, 36% of children were overweight and 22% ARO. A study conducted by Moffat, Galloway, & Latham (2005) comparing three neighbourhoods in Hamilton, Ontario showed that twice as many children were classified as either obese or overweight in the two low socioeconomic status (SES) schools in comparison to the high SES school. This was similar to the findings of Veuglers & Fitzgerald (2005), who also found obesity twice as prevalent in low income neighbourhoods in comparison to children living in high-income neighbourhoods. Gibson's (2004) published study analyzed the link between food stamp program participation in the US and overweight status, with mixed results. A positive relationship was elucidated for girls and a negative relationship for boys (Gibson, 2004). While Merchant, Dehghan, Behnke-Cook, & Anand's (2007) study on two schools of differing SES showed nil difference in overweight status, authors did conclude that factors leading to overweight status in the two populations varied in terms of access to food and recreational facilities.

The demonstrated link between income and child obesity as opposed to food insecurity and obesity may be a result of measures of food insecurity that were used, as well as the allocation of food in a household. In food insecure households, food provision is usually most compromised for adults, since parents tend to ensure their children are fed before they eat. However, the food that children do consume may be of compromised nutritional value. An extensive review by DesJardins (2009) found that food insecurity was not necessarily directly linked to obesity, and that it often depended on the severity of food insecurity. In cases where there was severe food insecurity, the prevalence of obesity was low since this meant children were often malnourished (DesJardins, 2009). The link between low income status and obesity, however, holds true to the general pattern of higher rates of obesity among socially disadvantaged populations.

2.5 After-school Programming – An Ideal Setting for Obesity Prevention Programs

After-school programming offers a potentially ideal environment in which to deliver obesity prevention programs targeting at-risk children. According to Halpern (2003), after-school programs provided children, especially those from working-class families, with a place where organized play was possible, and where children would “stay out of trouble.” Historically, the reasons for starting after-school programs varied: religious groups starting after-school programs located in churches; boys clubs established to “stop the decline of masculinity” through physical activity in the gym and other facilities; and efforts to assimilate new immigrants (Halpern, 2003). However, all served the same overarching purpose: providing children with a place to go after school

(Halpern, 2003). After-school programs often administer a wide range of activities through programming to suit the diverse needs of participating children (Halpern, 2003).

Relationships that children develop with staff members, in a setting where they interact with “educators” in a “fun” and “hidden” way contribute to the effectiveness of after-school programming (Halpern, 2003). Some of these relationships often last beyond the after-school program (Halpern, 2003). Often, the same children return as volunteers or staff. Lack of staff training has been a key issue for those working in after-school programs, where most opportunities for training are geared towards management (Halpern, 2003).

One organization that began as a boys club and has grown to a multi-national organization and leader in after-school care is the Boys and Girls Club. The Boys and Girls Club of Canada has existed for over 100 years, with locations that serve over 700 communities across the country (Boys and Girls Club of Canada, 2010). While the clubs focus on the after-school period, programming ranges from informal assistance for parents and families, to emergency shelter services (Boys and Girls Club of Canada, 2010). A recent qualitative study on youth who participate in after-school programming offered by Boys and Girls Club of America identified success factors including a safe environment and a place where participants could get help with homework (Fredricks, Hackett, & Bregman, 2010). Responses from youth participants highlighted the role the staff members played in either “making or breaking” the experience. For example, in most cases, the staff acted as a facilitator that motivated the youth to continue to attend programming (Fredricks et al., 2010). While this study did not explore the role of the club in health education or health promotion, findings suggest that the “attractive”

environment of after-school programming can provide an ideal setting to implement health promotion initiatives, especially in the prevention of child obesity.

2.5.1 Nutrition education and obesity prevention programs

Recommendations from many studies on child obesity cite the need for and importance of publically funded programs to prevent obesity and reduce its prevalence. This has led to the development of programs targeting childhood obesity, either during the school day or in the after-school setting, with some incorporating community involvement into their programs. Most of the interventions summarized here include both physical activity (PA) and nutrition education. A review of studies using a community-based approach follows a review of the studies that were implemented by a single organization. All studies took an after-school approach, or included an after-school component. It is important to note that most of these studies were situated in the United States, showing the paucity of research for similar studies in Canada.

An observational study was conducted by Coleman, Geller, Rosenkranz, & Dzewaltowski (2008) looking at after-school programming at seven sites, made up of alliances between “boys and girls clubs and elementary schools.” A total of 63 different food and drink items were observed over a period of a year (six days for each site) and findings showed a high prevalence of high carbohydrate snacks, and low inclusion of fruits and vegetables (Coleman et al., 2008).

Recommendations from this study concluded that training for leaders was necessary to ensure appropriate implementation (Coleman et al., 2008). Authors also acknowledged the importance of boosting the nutritional quality of foods

provided to children (i.e., through the provision of fruits and vegetables) (Coleman et al., 2008).

The Georgia FitKid initiative was based on the concept of a “fitogenic” environment to battle the “obesogenic” environment (Yin et al., 2005). This after-school program was 120 minutes long, with 40 minutes dedicated to academic enrichment and a snack, and 80 minutes focusing on moderate-to-vigorous physical activity (MVPA) (Yin et al., 2005). There was no mention of an educational component to the snack. The study involved 206 children (by the end of the three years) from low socioeconomic backgrounds who were in the third, fourth, and fifth grades at the beginning of the three-year multi-component intervention (Gutin et al., 2005).

Findings after the first eight months of this intervention, which included 278 children with a mean age of 8.7 years, showed a positive significant trend between program attendance and cardiovascular fitness, as well as a significant linear trend between attendance and percent body fat and fat mass for those in the intervention arm (Yin et al., 2005). Preliminary findings from the three-year intervention showed that while there was low attendance (44%), there was an improvement to their primary measure of percent body fat during the school months (Gutin et al., 2008). However, there was nil statistical difference in percent body fat between the intervention and control arms during the summer and beginning of the school year (Gutin et al., 2008). The authors concluded that creating a “fitogenic” environment may be a way to combat childhood obesity,

although more research is required to explain why positive changes were not sustained over the summer months (Gutin et al., 2008).

A similarly named intervention, “Be a Fit Kid”, was used in a pilot study published in 2008 by Slawta, Bentley, Smith, Kelly, & Syman-Degler. The study involved 75 children between six and twelve years old from four schools in rural American communities over a 12-week period (Slawta, et al., 2008).

Measurements included fitness, a simple nutrition test, food logs and questionnaires completed by parents, body composition measures, and measurements of other anthropometrics (Slawta, et al., 2008). The focus of the snack component was on exposure rather than quantity, included an educational component, and involved donations from community partners; some left-over food was also sent home with children (Slawta, et al., 2008). Positive changes in diet were reported, with evidence of behaviour maintenance after 6-months (Slawta, et al., 2008). A grocery trip made by children was deemed successful, especially in educating children on healthy food choices (Slawta, et al., 2008). Authors considered exposure to healthy foods and role modeling important facilitators in the nutrition component of the program (Slawta, et al., 2008). Further, they emphasized the importance of community-level environmental change which includes the school and home environments in order for facilitate individual behaviour change (Slawta, et al., 2008).

The Girls Health Enrichment Multi-site Studies (GEMS) initiative targeted a population identified as high risk for childhood obesity: African-American girls (Story et al., 2003). The study conducted in 2003 by Story et al using the GEMS

approach involved 54 girls between the ages of eight and ten who participated in a 12-week program (Story et al., 2003). These participants came from mostly low-income backgrounds, and 92% of parents were classified as either overweight or obese (Story et al., 2003). The program included both healthy eating and physical activity (Story et al., 2003). There was a family component included in the study which involved sending home weekly packets (including ingredients for a healthy snack for the girls to make at home) and hosting family nights (Story, et al., 2003). This component was focused on expanding the healthy eating environment to the home (Story et al., 2003). Significant positive changes were reported for dietary knowledge as well as “healthy choice behavioural intent” (measured by asking participants questions including presenting children with one health food item and one unhealthy item and asking which they would choose) when compared to the control group (Story et al., 2003). Some of the challenges identified by the authors in program delivery included struggles with how to keep activities fun and how best to cope with low parental attendance (Story et al., 2003).

The most recent US-published study was based on an existing YMCA after-school program (Mozaffarian et al., 2010). Seven after-school programs spread across five states were included in this study; all used the YMCA Learning Collaborative (YLC) initiative to integrate improvements in quality of the snack into their pre-existing program (Mozaffarian et al., 2010). Program delivery was facilitated by staff who attended three learning sessions (Mozaffarian et al., 2010). Two of the programs were already taking Coordinated Approach to Child Health

(CATCH) guidelines into consideration in their programs. Snack menu reports over an 18-month span demonstrated increases in fibre, fruits and vegetables, and reductions in trans fat (Mozaffarian et al., 2010). The authors concluded that easy and straightforward changes to snack programs may offer nutritional improvements to the food provided to children attending programming (Mozaffarian et al., 2010).

Two US studies based on the Coordinated Approach to Children's Health (CATCH) led to positive health behavioural outcomes in children. Kelder et al. (2005) conducted an intervention study on 16 after-school programs in Texas which involved a physical activity component, a snack, and a five-module education component based on CATCH guidelines. The 157 children who participated both at baseline and at follow-up had a mean age of nine-years (Kelder, et al., 2005). There was a significant increase in food-related knowledge among children who participated based on an After-school Student Questionnaire (ASSQ), which asked children questions on topics including nutrition knowledge and previous-day dietary intake (Kelder et al., 2005). Children also benefitted from the hands-on activities that were part of the snack program (Kelder, et al., 2005). These activities helped to initiate discussions at home with their parents on the topic of healthy food choices (Kelder et al., 2005). However, the education component failed to achieve statistical significance (Kelder et al., 2005). Twelve focus groups carried out with program staff indicated the need for additional training (Kelder et al., 2005). Further, hands-on training was identified as crucial in accurately implementing the program (Kelder et al., 2005). The authors

concluded that these types of programs could supplement the health education children receive in schools (Kelder et al., 2005). Overall, studies reviewed in this section have shown the positive effects of implementing an obesity prevention program in an after-school setting, although many have acknowledged the importance of providing healthy food, hands-on interactive activities, and suitable staff training to ensure successful program delivery.

The studies summarized in this section differ from those described previously because of their more comprehensive, community-wide approach where health-related initiatives permeated into the community. A recent study on the CATCH approach by Hoelscher et al. (2010) involved comparing the effects of the CATCH program alone (CATCHBP) to a CATCH-based program in collaboration with community organizations (CATCHBPC). While CATCH was implemented in 30 low-income schools in Texas during the school day, 15 of these schools took a “community collaboration” approach, which involved an after-school program (Hoelscher et al. 2010). Primary measures were BMI, diet (based on the School Physical Activity and Nutrition (SPAN) study questionnaire), and physical activity. After the one year intervention, the number of children classified as either overweight or obese in comparison to baseline measures significantly decreased by 8.3% in the CATCHBPC group, compared to only 1.3% for the CATCHBP group (Hoelscher et al. 2010). In addition, those in the CATCHBPC group showed an increased number of positive trends in health behaviours. Authors concluded that focusing on the community, especially in

regions of disparity, is necessary in reducing childhood obesity (Hoelscher et al. 2010).

The APPLE (A Pilot Programme for Lifestyle and Exercise) intervention, another community-based program set in semi-rural New Zealand, included healthy eating and physical activity over a two-year period, with a significant focus on “healthy eating education” during the second year (Taylor et al., 2007). While this program took place during the school day, it involved a “snackactivity.” Community consultations led to the development of the intervention initiatives (Taylor et al., 2007). The sample size included children between the ages of five and twelve. The intervention arm saw a significant decrease in BMI, with these children consuming more fruit and less carbonated beverages than the control group (Taylor et al., 2007). Researchers also took into account informal feedback from food outlets in the community, who communicated higher sales of healthy fast food options (Taylor et al., 2007). While the researchers concluded that the program may not be able to reduce weight in children already classified as overweight, they suggested that programs like this one could have positive implications on child health (Taylor et al., 2007).

Thus, the success of after-school programs in implementing obesity prevention programs is demonstrated in the literature. It may be easier for already existing programs to move in this direction due to their already established programming. A community-wide approach can help in providing after-school programs with access to partner resources and facilities, as well as providing a more comprehensive and sustainable program. However, in order for this to be

successful, the pre-existing programs need to have to access appropriate training and resources to successfully plan and implement the program.

2.6 Capacity-building and Training for Health Promotion Programs

Capacity-building is necessary to ensure staff in after-school programs are delivering health promotion initiatives effectively. Capacity building in the context of health promotion is defined as “enhancing the ability of an individual, organization, or community to address their health issues and concerns” (Ontario Prevention Clearing House, 2002). Thus, public health practitioners require goods and services to tackle the health issues at hand (Ontario Prevention Clearing House, 2002). This is often in the form of a “chain reaction,” where health promotion workers help build capacity for community organization, which in turn go on to develop other health promotion programs, passing on what they have learned (Ontario Prevention Clearing House, 2002 & Vic Health, n.d.). This ultimately assists in building program sustainability (Ontario Prevention Clearing House, 2002 & Vic Health, n.d.). Building capacity in organizations includes increasing partnerships with those external to the organization and building and enabling a workforce that “fits” the health promotion agenda (Vic Health, n.d.). Rather than being considered an outcome, capacity-building is a bottom-up process which builds on existing capacity, and often begins with recognizing the assets that the individual, community, or organization possess before moving on to a formal needs assessment (Ontario Prevention Clearing House, 2002 & Vic Health, n.d.). This has been described as “building on the positive” (Ontario Prevention Clearing House, 2002).

One of the most important aspects of capacity-building from a community organization standpoint is to equip staff members involved in program delivery with the

appropriate tools and resources to be successful in their positions. For out-of-school programs, this involves providing appropriate training and resources. Many of the articles summarized in this literature review illuminate the importance of training initiatives for staff and building this into the design of the intervention. This literature review will now take a closer look at studies that examined training and capacity-building in health promotion.

The concept of building capacity as a way to increase community engagement has been reported in multiple areas of health promotion. Since health promotion focused on chronic disease prevention and management is relatively new in comparison to other areas in health, the best strategies and approaches have yet to be identified extensively in the literature. Research focused on training as it relates to nutrition education and obesity prevention is especially sparse. This section will summarize a selection of studies from a variety of areas within health promotion in order to showcase the training that is necessary for a successful health promotion program.

The strategies used for tobacco reduction and cessation in Ontario have often been touted as best practice for the design and implementation of health promotion and prevention initiatives. One Canadian study specifically discussed how tobacco control and cessation was implemented in one province (Ontario) (Els et al., 2007). A project was developed that was used to train over 200 staff members involved in various positions in the community as a way to build capacity to decrease tobacco use (Els et al., 2007). While this tobacco study is unrelated to obesity, it depicts a common theme among emerging health promotion practice where in the implementation of health promotion initiatives, knowledge and training is not usually standardized.

Studies that have focused on either nutrition counselling or chronic disease in general have tended to involve physicians and other front line health care professionals (Pelto et al., 2004 & Pavlekovic & Brborovic, 2005). A recent study involved non-health care professionals, such as social workers and clerical staff, in a nutrition-training initiative alongside health care professionals (Levy, et. al 2010). This study was based in New York in a variety of high-needs neighbourhoods and involved primary care teams (Levy, et. al 2010). Training sessions were implemented based on a needs-assessment and consisted of a variety of visual and hands-on approaches to teaching nutrition and how to pass this knowledge on to their patients (Levy, et. al 2010). The training was described as simple and practical, fitting for low-resource areas, with emphasis on individuals using what they were learning (i.e., visuals and hands-on activities) to teach their patients (Levy, et. al 2010). There were significant improvements in perceived nutrition knowledge and confidence, among other measures, from the pre- to post-test survey (Levy, et. al 2010). Authors identified benefits the program provided to both clinical and clerical staff and concluded that one training approach could be useful for individuals in various roles (Levy, et. al 2010). This study also showed the potential for non-health care staff to serve as nutrition educators (Levy, et. al 2010).

Another approach that may be well suited for at-risk neighbourhoods is peer-led programming whereby teenagers are provided the opportunity to assume a leadership role in after-school programs. This experience can help keep teenagers “out of trouble”, while allowing them to develop skills and confidence in their peer positions. A recent initiative trained 20 teenagers to deliver programs for children using the “Get Moving-Get Healthy” curriculum, with a focus on food and fitness (Ripberger, Devitt, & Gore,

2009). Study participants came from Boys and Girls Clubs in New Jersey, and were part of a 13-hour training session which involved educational components and hands-on activities (Ripberger, et al. 2009). Events for children were then planned and executed, with the teenagers taking pre-training, post-training and participating in events surveys (Ripberger, et al. 2009). Authors concluded that there was an improvement in life skills for teens who participated in the training (Ripberger, et al. 2009).

A similar study carried out in 2007 also introduced a peer-led health promotion program in elementary schools located in Ontario. The Healthy Buddies intervention involved children from grades four to seven who agreed to participate in a health promotion training program (Stock et al., 2007). These children were then expected to share their knowledge and skills with children they were paired up with from grades kindergarten to grade three (Stock et al., 2007). This initiative was very similar to programming offered at EBGC-EU – the focus of this study – due to its emphasis on nutrition, physical activity, and promoting a positive body image (Stock et al., 2007). The outcome measures of Healthy Buddies following one year of the program were mainly focused on various anthropometric measures and nutrition knowledge, with an improvement noted in most areas for all age groups (Stock et al., 2007). Authors concluded that a peer-led program may be beneficial in health promotion activities (Stock et al., 2007). While this intervention was carried out in a school setting, there may also be positive outcomes associated with implementing the initiative in an after-school setting.

These last three studies in particular are relevant to the present study by illuminating how training in the context of nutrition education led to positive outcomes.

The conclusions also highlight the importance of child-friendly and age-appropriate manner in order for the nutrition education to be successful.

2.7 Filling the Gaps

This literature review has summarized areas of research most relevant to the study. Findings illuminated the paucity of research that is currently available based on Canadian studies examining after-school obesity interventions. Further, it has shown the lack of published studies on training and staff responsibilities necessary for implementing health promotion initiatives. The present study will attempt to fill some of these gaps and will hopefully serve as a seed for future research in these areas.

2.8 Theoretical Framework

This exploratory study examined immediate nutrition-related outcomes (knowledge, attitudes, and behaviours) of children and their families participating in the after-school snack program offered by Eastview Boys and Girls Club – Eastview Unit (EBGC-EU). The study also explored immediate outcomes at the organizational level (e.g., roles of the staff members in the program, facilitators and barriers they may have faced in the implementation of the after-school initiative). The research was informed by the Multilevel Approach to Community Health (MATCH) framework (Simons-Morton, Greene, & Gottlieb, 1995). The logic model presented in section 2.8 assisted in developing the research design and refining the research questions.

Program evaluation has many benefits, including providing insight into how well the program is currently operating and what can be changed. This information can potentially influence those involved in policy change and in funding, and also facilitate community empowerment and change (Baker, Davis, Gallerani, Sanchez, & Viadro,

2000). By involving those who are participating in and/or implementing the program, capacity-building is developed within the community (Baker et al., 2000). Another important aspect of program evaluation is its use in uncovering information that may be beneficial in other communities, or alternatively, what is unique to a certain area participating in a program (Baker et al., 2000).

The ecological framework that informed this study (MATCH) identifies many different areas which need to be addressed through the intervention in order for change to occur (see Appendix A). The MATCH framework is used most effectively where risks for health factors such as disease and injury are already known and the program priorities are set (Cottrell, Girvan, McKenzie, 2009). According to Simons-Mortons et al (1995), MATCH “provides a convenient way to turn the corner from needs assessment and priority setting to the development of effective programs.” This is relevant to the present study given that the problem of childhood obesity, as outlined by Flynn et al (2006), is a community issue that needs to be targeted from numerous angles. The needs assessment conducted by Durham Region Public Health and presented in Chapter 1 provided a basis for identifying a population potentially at-risk due to high rates of food insecurity. However, many factors need to be in place in order for the community-based intervention to be successful, including funding support, training, and resources.

2.9 Logic Model

The use of a logic model allows for a visual representation of the different steps from program development to its impacts (W.K. Kellogg Foundation, 1998). A logic model is essentially divided into two sections: 1) the planned work, which includes the resources and inputs invested in a program and the activities of the program; and 2) the

intended results, comprised of outputs, outcomes, and impacts of the program (W.K. Kellogg Foundation, 1998). This visual helps with systematically planning and evaluating a program, though effectiveness rests on the clarity of assumptions and expectations that are laid out (W.K. Kellogg Foundation, 1998). Logic models also help in highlighting the strengths and weaknesses of a program (W.K. Kellogg Foundation, 1998). The results of an evaluative study, developed using a logic model, can then provide information valuable to the organization and its target audience (EBGC-EU). It can determine the role of the program in their lives, in the case of individuals participating, and in determining its target audience, strengths, weaknesses, etc. for those involved in its implementation (W.K. Kellogg Foundation, 1998).

The logic model developed for this study (presented as Figure 1) assisted in developing the research design and refining the research questions. While the MHPS after-school initiative focused on the areas of nutrition education, physical activity, and personal health and wellness education, the focus of this study was the after-school snack. The logic model incorporated a knowledge-attitude-behaviour model whereby nutrition education and increased knowledge helps change attitudes which in turn results in positive behaviour change (Farrior, 2005). The primary focus of this study was to analyze changes in dietary behaviours in children; however parents/caregivers were involved to examine some of the wide ranging socioeconomic determinants to healthy eating. In addition, key informants involved with the after-school snack were invited to participate to provide a snapshot of how implementation of the after-school initiative was carried out. Nutrition activities included in the after-school program were discussed, and through the data collection and analyses, the outputs (i.e., resources used as part of the

programming; partnerships; promising practices) were ascertained. The immediate outcomes presented in the logic model were the focus of this study.

Figure 1 Logic Model Prepared to Guide and Inform the Study

Eastview Boys and Girls Club is able to create conditions that promote child health and prevent childhood obesity

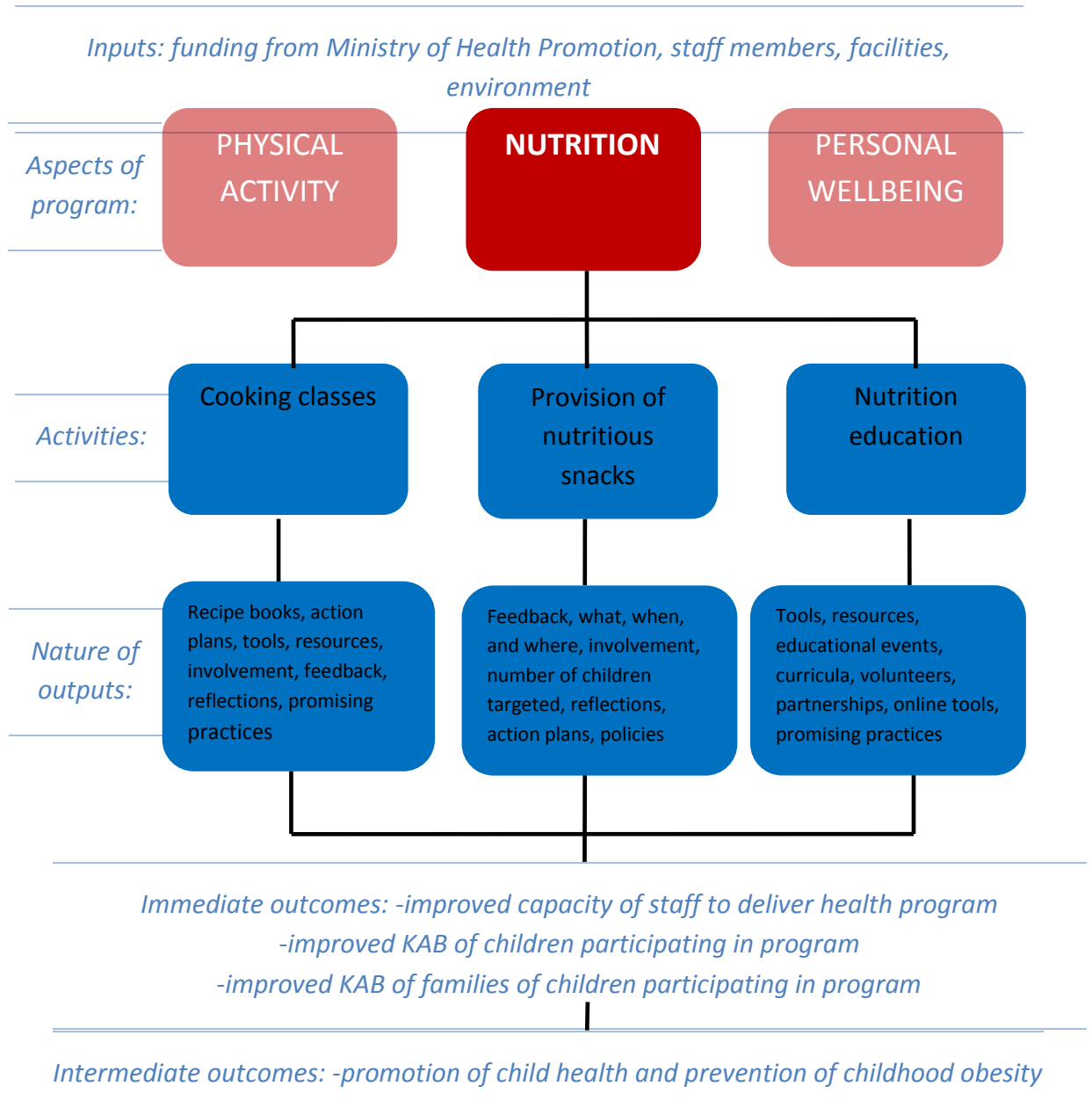


Figure 1: This logic model was developed to guide the research design and ensure study outcomes were met. Abbreviation KAB stands for Knowledge, Attitude, Behaviour. This logic mode was created in collaboration with Dr. Ellen Vogel (PhD, RD, FDC, Associate Professor, UOIT Faculty of Health Sciences), and Lauranne Matheson (Manager, Corporate Planning & Evaluation, Division of Childhood and Adolescence, PHAC / ASPC, Ottawa, Ontario).

3.0 Methodology

In order to gain insight into the nutrition-related immediate outcomes of the after-school snack program, three distinct groups involved with the Eastview Boys and Girls Club – Eastview Unit (EBGC-EU) in Oshawa were included in the study. In-depth individual key informant interviews were conducted with management, board members, and program staff (n=7). One focus group interview took place with parents of children aged six-to nine-years currently participating in the after-school program (n=8). Three interactive childrens' sessions with current participants (children aged six-to nine-years) were also carried out (n=8). Data collection strategies are explicated in this chapter together with an overview of data analysis and study strengths and limitations. A timeline of the data collection and analysis is included as Figure 2.

Figure 2 Timeline of Data Collection and Data Analysis Process

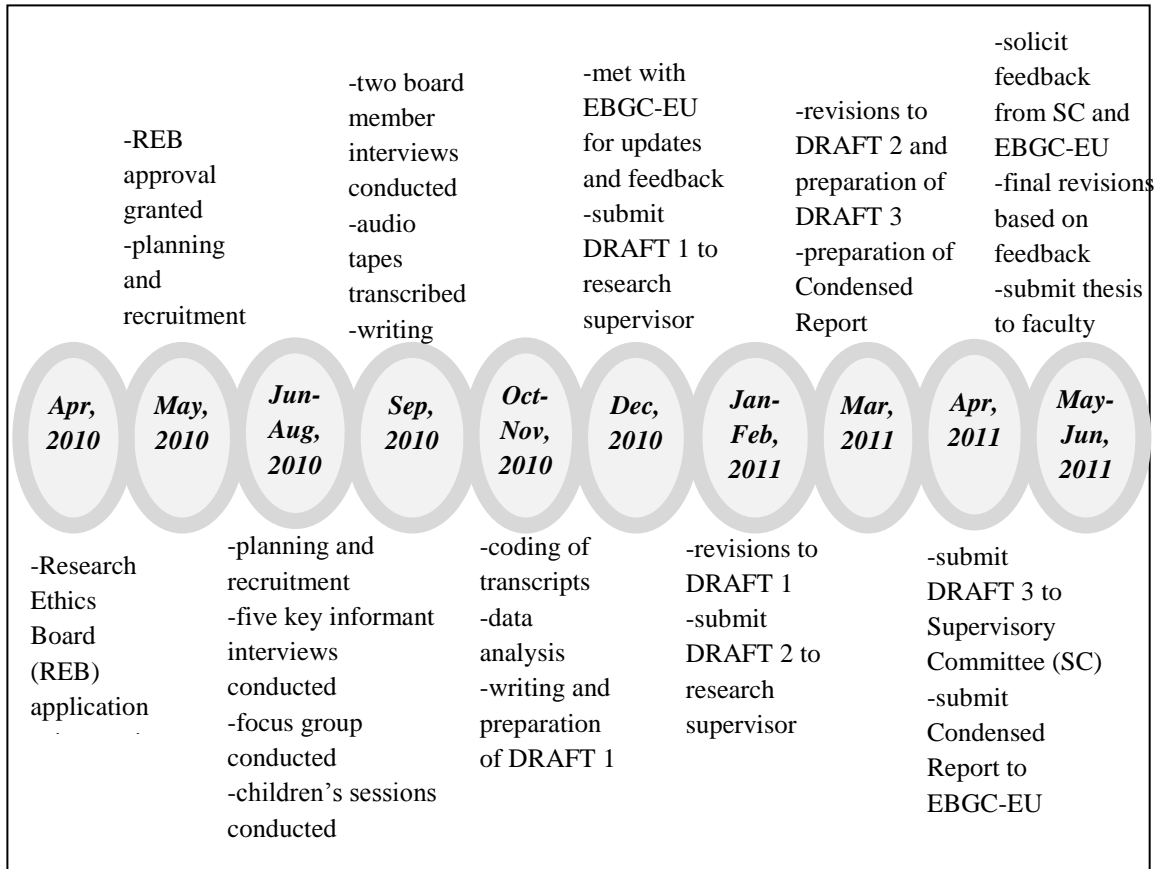


Figure 2: Timeline displaying processes of ethics approval, data collection, data analysis, and preparation of drafts.

3.1 Ethical Considerations

This study was developed and approved according to the guidelines set forth by the Research Ethics Board (REB) at UOIT (file #09-106, Ethics Approval Letter included as Appendix B). The input provided by REB was especially instrumental in ensuring the children's sessions were conducted in an age-appropriate manner. Permission to conduct research was granted by the Executive Direction of EBGC-EU in the form of a letter of permission (Appendix C).

3.2 Qualitative Research

A qualitative approach was used to conduct this study to gain first-hand insights into the lived experiences of key individuals and groups involved with the after-school snack program at EBGC-EU. In deciding on the research design, it is important to determine what sorts of questions the researcher is trying to answer, and the type of data that will be most effective in answering these questions; in effect, placing “data before methodology” (Silverman, 2005 and Richards, 2005, p. 2).

Using a qualitative approach allows the researcher to explore the experiences of individuals through “thick” descriptions provided by participants (Gibson & Brown, 2009). Thick descriptions in qualitative research provide researchers with rich descriptions of particular aspects of their lives, while setting these details in the framework of their actions (Gibson & Brown, 2009). Keeping the context of these experiences at the forefront is fundamental in qualitative research, since the situation of experiences and the way meanings are produced can only be appreciated by understanding their context (Gibson & Brown, 2009 and Richards, 2005).

The construction of meanings and experiences is also dependent on the way the data is analyzed, which in turn depends on the role of the researcher in the research setting; this key concept is known as “reflexivity” (Gibson & Brown, 2009). In addition, qualitative inquiry allows for flexibility on the part of the researcher by allowing him or her to use the knowledge gained to redirect the research as necessary (Richards, 2005). This is especially helpful in areas of interest that may be relatively untouched, or where further understanding is needed.

While an exploratory qualitative study often utilizes a small sample size, rendering findings less generalizable than larger studies, the investigative nature of the

research may bring new issues and questions to light (Silverman 2005). These can then be further examined in future studies, and can lead to novel findings. It is important, however, to keep context in mind when conducting an exploratory study in order to avoid overgeneralizations (Silverman 2005). What may apply to one group or population may not work in a different group of people or situation. By providing insight into the individual human experiences, qualitative studies can be useful in developing and improving programs to be effective at individual and community levels (Marshall & Rossman, 2006).

3.3 Site Selection

The site for this study was based on its availability to the researcher as well as the time constraints associated with a Masters thesis. Choosing one site, out of the five that comprise EBGC allowed the researcher to analyze the after-school snack at one site in depth, and in turn helped to bound the study. The Eastview Unit is also considered the “Main Clubhouse” since it was the founding site.

3.4 Data Collection

3.4.1 Primary methods: key informant interviews, focus group interview, and interactive children’s sessions.

The three primary methods of data collection for this study were key informant interviews, a focus group interview with parents/guardians, and three interactive children’s sessions. A purposive sampling method was used to gain access to a specific group of individuals in a particular context (Silverman, 2005). The groups of participants were available to the researcher, and selected

deliberately in order to study specific characteristics of interest (Bowling & Shah, 2005).

The first type of interview conducted for this study was semi-structured key informant interviews (n=7). The semi-structured interview allows researchers to investigate an area of interest in-depth without adhering to a rigid and structured interview guide (Esterberg, 2002). The premise of a semi-structured interview is for the interviewer to guide the interviewee while keeping it open enough to allow the researcher to probe areas of interest, and allow the interviewee to come to their own conclusions (Esterberg, 2002).

In order to gauge insight into the experiences, events, and lives of individuals, interviews provide an ideal method of data collection (Rubin & Rubin, 2005). This method allows the study participants to reconstruct events and experiences for the researcher (Rubin & Rubin, 2005). The individuals participating in the interview try to bring meaning and understanding on a particular topic, or topics (Esterberg, 2002).

Key informants are individuals who are particularly knowledgeable on a certain subject or topic area, often as a result of their knowledge, skills, and position in society (Marshall, 1996). While they often hold positions of influence or authority, they can also be individuals who work closely with a particular group, in the case of social research (Marshall, 1996). Interviewing key informants can allow the researcher to collect high quality data from its origins in an efficient manner (Marshall, 1996).

A list of key informants was compiled by the researcher for potential recruitment. The list included individuals from each of the groups of interest (EBGC-EU management, board members, and program staff). The researcher worked in collaboration with management at EBGC-EU to identify the individuals that were most involved with the after-school snack program. This collaboration was essential in ensuring individuals who were invited to participate would be able to discuss the after-school snack at length and in detail. A semi-structured interview guide was created, and pilot-tested on a volunteer involved in snack preparation at EBGC-EU (see Appendix D). In follow-up to the pilot, the researcher realized that the interview would provide meaningful data to the study. The volunteer was provided with more information on the study, and consented to use of the data from the pilot interview as per REB guidelines.

Invitations to participate in the study were distributed by hand by the researcher to all those on the list except for the two board members, whose invitations were mailed to them. One board member interview was scheduled over e-mail exchange, while the other was scheduled in a phone call made by the researcher to the invited participant. The invitation package included information on the study, contact information for the researcher, and the consent form (see Appendix E). While some consent forms were handed in to the front desk receptionist at EBGC-EU, others were brought to the scheduled interview. The researcher ensured that the consent form was reviewed and signed prior to the start of all interviews.

The interview was audio-recorded by the researcher using a digital audio recorder (Panasonic IC Recorder RR-US500). Participants were asked to choose a location and time for the interview that suited them well. Most key informant interviews took place in various offices at EBGC-EU; some took place in an office at a location off-site. Interviews began with a brief introduction of the researcher and the study. The study participant was reminded that he/she could end the interview at any time for any reason. The semi-structured nature of the interview allowed the researcher to probe as necessary depending on responses given by the participants. Interviews averaged 40 minutes in length. At the end of the interview, participants were thanked for their participation and given a card containing a thank-you letter printed on UOIT letterhead (see Appendix F).

The second primary method of data collection was a focus group interview involving parents/guardians of children aged six-to nine-years participating in the after-school program at EBGC-EU (n=8). The focus group interview is one of the most commonly used tools in collecting data for qualitative research (Stewart, Shamdasani, & Rook, 2007). Focus group interviews typically involve seven to ten individuals who share a set of characteristics regarding a particular topic or experience, and are brought together to discuss this topic (Kreuger, 1991). While some may consider focus group interviews a form of group interviews, their reliance on the interaction between participants distinguishes them from the usual question-and-response format of an interview (Morgan, 1990). In the focus group setting, the researcher acts as a moderator, who directs the focus group according to an interview guide with guiding questions on the topic of interest (Morgan,

1990). Participants are generally individuals who have some sort of experience or knowledge regarding a particular situation; that is, there is a focused reason and topic for the discussion (Stewart et al., 2007). By allowing the interaction between individuals to generate possibly novel information from what group or individual interviews may provide, focus groups are especially useful in exploratory studies, where sample sizes may be small (Stewart et al., 2007).

The researcher worked in collaboration with EBGC-EU management to conduct a focus group interview in their boardroom. The age restriction (six-to-nine-years) was implemented because the majority of children attending the after-school program are between the ages of six and nine years. A focus group interview guide was created in advance which contained open-ended questions and allowed room for discussion between participants (see Appendix G). In order to accommodate parents/guardians at the focus group interview, a movie night for the children was scheduled to coincide with the focus group at EBGC-EU. This ensured that parents could attend the focus group and safely leave their children to watch a movie, thereby providing child care for the children.

The Program Director (PD) at EBGC-EU provided the researcher with a list of children between the ages of six and nine years. The researcher approached parents as they came to pick up their children from the after-school program. After providing a brief overview of the purpose of the study, the invitation packages were handed out to parents (see Appendix H). Initially, thirteen invitation packages were handed out. The researcher waited a few days to see if any consent forms were returned to EBGC-EU, then proceeded to make

one phone call to each of the parents who had received an invitation package.

This phone call followed a prepared telephone script (see Appendix I). While the researcher was able to contact two parents, the rest of the phone calls were unanswered or the phone numbers were out of service.

The day before the scheduled focus group, five parents had agreed to participate and one parent had stated that she would come to the focus group the following day with her consent form. On the day of the focus group, the researcher prepared a meal as was promised to focus group participants. This meal consisted of a vegetarian pasta bake, green salad, water, fruit juice, and fruit salad. This incentive was used to support the premise of healthy eating and to encourage participation.

A total of eight parents/guardians consented to participate in the focus group interview. The researcher's colleague was present to take notes during the focus group interview, and was asked to sign a confidentiality agreement prior to starting the interview (see Appendix J). Following the meal, the focus group interview was initiated and lasted close to 80 minutes. The focus group discussion was recorded and participants were reminded that they could leave at any time without penalty, or request to have the recorder turned off. As an incentive, participants were given blank thank-you cards with a thank-you letter printed on UOIT letterhead, and a \$25 gift card to the Real Canadian Superstore (see Appendix K for thank-you letter).

The third primary method of data collection consisted of three interactive children's sessions with children between the ages of six-to nine-years. While

adult participants can understand the purpose and rationale behind research and their involvement in it, children require more explanation, and in age-appropriate language, before they can ethically assent to participating in a research study (Ungar, Joffe, & Kodish, 2006).

In order to have children talk about their experiences in a program, it is important that the questions asked by the researchers are embedded in some sort of familiar activity that the children can participate in (Garbarino & Stott, 1992). This can include drawing, acting, and other activities which allow children to express themselves in a unique manner, and that can often provide impetus for the discussion at hand (Garbarino, Stott, & faculty, 1992). According to Tammivaara and Enright (1986), “young children generally find doing something with something and talking about something to be easier, more comfortable, and more interesting than only talking about something that isn’t physically present” (p. 232). Allowing children to draw during a conversation gives them the opportunity to communicate their thoughts and feelings about a topic in a way that is familiar to them (Einarsdottir, Dockett, & Perry, 2009). While the meanings and symbolisms that may be present in a drawing require in-depth analysis by a trained psychologist, the narrative that may take place while a child draws can provide valuable insight into their perspective on the topic (Einarsdottir et al., 2009).

For this study, the assistance of UOIT Research Ethics Board (REB) experts in the development of the invitation package and interview script to ensure age-appropriate language was invaluable. Invitations for small group

sessions with children (see Appendix L) were distributed in the same manner as the invitations for the focus group interview. The packages handed out to parents included the information, consent, and assent forms for the children. Since the children were minors, parents were required to give permission to participate. A separate assent form was provided in age-appropriate language for children to sign. The interactive children's sessions were scheduled during the same week as the focus group, and took place during the after-school snack program. Children participating were taken to the boardroom at Eastview for the session, and safely returned to their after-school program once the session was over

Prior to the three scheduled interactive children's sessions, six children brought in their consent and assent forms to participate. During these sessions, some other children also showed interest. Following the initial two sessions, the researcher provided invitations to four other children as well, three of whom consented to participate. On the day of the third session, only two of the three children attended the scheduled session. This made for a total sample size of eight.

These sessions utilized a child-friendly interview guide and asked children to draw their experiences at EBGC-EU while talking to the researcher (see Appendix M). A drawing sheet and crayons (crayons borrowed from EBGC-EU) were provided to the children, which consisted of two blank boxes with blank speech bubbles. The first box was for children to draw themselves at Eastview, and the second box asked them to draw themselves, food, and Eastview. Children took the drawings home with them. The discussion around the drawing based on

the interview guide was audio recorded. Before beginning the session, the researcher made it clear that the participants could leave at any time without penalty, and they could ask for the recorder to be turned off. While the sessions were scheduled for 20 minutes, they lasted between eleven and 20 minutes. At the end of the session, the researcher read a verbal thank you to the participants, and handed out “healthy eating” insulated lunch bags as a thank-you for the children (see Appendix N).

3.4.2 Secondary methods: document review and research meetings.

Together with the three primary qualitative methods of data collection, two secondary strategies of data collection were used. Document review can be useful in studies where data that would be beneficial to the study has already been collected (WBI Evaluation Group, 2007). This often saves researchers time and money, while still having access to a data set that may be more extensive than what they would have independently been able to collect (WBI Evaluation Group, 2007). Documents provided by EBGC-EU included the 2009 Factbook Questionnaire, After-school Strategy Funding Proposal, newsletters that were sent home to parents, lesson and activity plans, and a recipe book (work-in-progress).

In order to gain insight on the overall population that EBGC-EU serves, management offered to provide the researcher with a copy of their 2009 Factbook Questionnaire. Pertinent data from the Factbook was presented earlier (Table 1). Alongside the Factbook, EBGC-EU also provided the After-school Strategy Funding Proposal that was submitted by EBGC-EU to the Ministry of Health Promotion and Sport. This proposal was completed by management at EBGC-EU

and primarily outlined the areas in which the proposed funding would be used (i.e., training, food, and sports equipment). Newsletters that were sent home to parents, as well as materials used during some of the after-school programming (i.e., lesson plans and activity sheets) were also provided by EBGC-EU program staff. This material was included in the data analysis to support the findings from the other modes of data collection that were utilized.

During the course of this research study, the researcher and her supervisor often met with management at EBGC-EU to discuss the research project. The meetings were to allow for collaboration between the researcher and the community organization to encourage meaningful participation in the research project. This notion was adapted from the principles of community-based research (CBR) and offers a form of research that differs from the traditional approach, which is usually “top down,” to offer a “bottom up” approach where the community is engaged (Minkler, 2005). While CBR was not implemented in its entirety in this study, the research meetings served to update EBGC-EU management personnel on the progress of research and encouraged them to provide insights and feedback. The meetings often brought out ideas and thoughts that helped to develop the findings. In particular, feedback was sought on draft recommendations for the program. Notes were taken during these meetings, and discussed at length by the researcher and her research supervisor. A condensed report of the thesis summarizing the findings was initially provided to the Executive Director at EBGC-EU in order to provide the researcher with feedback and clarifications.

The consent form to participate in this study asked key informants if they were interested in receiving a draft of the final study. Those who answered in the affirmative were provided with the condensed report (revised based on feedback from the Executive Director) as well as a “Draft Use of Verbatim Quotes” which outlined quotes attributed to each key informant and the context in which it was used in the thesis. The key informants were encouraged to provide feedback via e-mail or phone; this feedback was taken into consideration in drafting the final version of the thesis.

3.4.3 Lived experience of the researcher.

The researcher was born and raised in the area where Eastview Boys and Girls Club – Eastview Unit (EBGC-EU) is situated in Oshawa. While she did not attend EBGC-EU as a child, she was a volunteer for a brief time in 2008 during her undergraduate studies. In order to re-familiarize herself with the organization and the individuals for the purpose of the this study, the researcher volunteered on a weekly basis during the after-school program between February and April 2010, assisting with other events as necessary after April. During this time, she helped to run activities and games for children, under the leadership of the program staff. Informal notes were taken, though the main purpose of this was to document the snacks that were being served.

3.5 Data Analysis

The audio tapes were transcribed verbatim by the researcher, using the Olympus AS-2400 Transcription Kit, thereby ensuring everything that was said by participants was captured.

3.5.1 Thematic analysis and coding.

The transcripts were read and re-read multiple times by the researcher to identify overarching themes and to capture important ideas. A list of “catch words” was compiled by the researcher, who also took notes during this initial read-through. Aggregated themes were compiled, whose aims, according to Gibson & Brown (2009, p. 128-129), “are to examine commonality, differences, and relationships.” These were then discussed with the research advisor, and a rough draft of the coding scheme was produced. This included overarching themes, as well as some sub-themes. This coding approach is a “top down” approach, where the researcher begins with a set of ideas that are based on prepositions from reading the transcripts (Ryan, 2003). It differs from the approach where the researcher starts with a blank slate, and looks for themes and subthemes. The second “bottom up” approach often is more complicated and it can become easy to lose focus, while the “top down” approach gives the researcher a sense of direction, which is based on the data itself, and leaves the door open to add themes and ideas as necessary.

This coding scheme was used in NVivo Version 8 to code the transcripts. The researcher participated in and successfully completed two NVivo Version 8 training sessions which took place in Toronto, ON. The first training session “NVivo 8 Fundamentals” was presented on December 9, 2009 and introduced the researcher to the software, including how to import files, software navigation, and coding of text. The second session “Moving On In NVivo 8” took place on November 28, 2010 and focused on using the software for data analysis through

running queries, matrices, models, etc. These two training sessions were a tremendous help to the researcher during the data analysis process.

3.5.2 Validity and reliability.

In order to increase validity, a condensed version of the final study was available for all key informants who indicated “yes” when asked on the consent forms whether they were interested in being provided with a draft of the final study. For those that were interested, condensed reports were mailed out alongside individualized “Draft Use of Verbatim Quotes.” Feedback on these two documents was considered in drafting the final version of this thesis. Meetings that took place during the research process with EBGC-EU management also served to provide useful insight as the research study progressed.

In order to ensure that a reliable method of coding was used by the researcher, a colleague not involved with this study coded one transcript, starting with the same initial schema that the researcher used. This was to guarantee inter-rater reliability. Results from an NVivo 8 coding comparison query indicated 95% agreement between the researcher and her colleague for the chosen transcript. This approach ensured that methods used were consistent and reliable (Richards, 2005).

3.6 Study Strengths and Limitations

This exploratory study provided an in-depth look at one site that took part in the provincial after-school initiative. It provided insight into the experiences of individuals involved in the snack program, and was a basis for analyses of some of the resulting broader behavioural changes. While the after-school initiative focused on the areas of

nutrition education, physical activity, and personal health and wellness to improve self esteem, this study focused on one area of programming: the after-school snack. Due to the focused nature of this study, findings are not generalizable. However, the focus on the after-school snack helped to bound the study by placing emphasis on an area of expertise for both the researcher and the research supervisor.

There were also strengths in collaborating with those at the organizational level in the research process. Key informants were approached based on their knowledge on the program, and this helped to strengthen the analysis. Taking a more randomized recruitment approach may not have been as effective due to the lack of knowledge about the initiative, the after-school snack, and the program in general. The role of the researcher included her personal connections with various individuals at EBGC-EU which was the result of her previous involvement with the organization. The researcher's role as a volunteer in particular during the study increased the researcher's visibility which assisted during the recruitment process. This personal connection was important in recruiting study participants due to the busy and stress-filled lives of the families utilizing EBGC-EU's services.

There was a limitation in the potential bias opinions from participants. For example, parents who agreed to participate may have had a reason to talk about their children's involvement in the program, and their opinions may not be reflective of all parents of children at EBGC-EU. They may have held some sort of bias towards healthy eating, and those with more pertinent issues may not have participated, or may not have been able to participate. The incentives provided for participation did not seem to be the reason parents/guardians decided to give their consent.

The qualitative approach was strengthened with document review and published literature, allowing for a triangulation of data sources. The use of multi-method data collection as well as the expertise of subject area experts on the researcher's Supervisory Committee helped to mitigate some of the limitations. These biases were the result of close relationship with individuals at EBGC-EU, as well as some of the pre-conceived attachments the researcher may have had due to living in the vicinity of EBGC-EU. The findings were verified and strengthened through triangulation of data sources which helped the researcher "see the whole picture" through the lens of a researcher.

4.0 Findings and Discussion

Salient findings that emerged from analyses are reported and discussed in this chapter under four major themes: Eastview Boys and Girls Club-Eastview Unit (EBGC-EU) as a trusted niche; shifts in programming; key facilitators to program success; and barriers and gaps at the levels of the organization and the family.

Figure 3 presents an overview of the findings to be explicated in this chapter. Pseudonyms used throughout this section are described in Table 2. All quotes are verbatim, with unnecessary repetitions omitted to increase readability. In order to retain the meanings of the quotes and uphold their integrity, edits to verbatim quotes were very minor.

Figure 3 Schematic of Findings

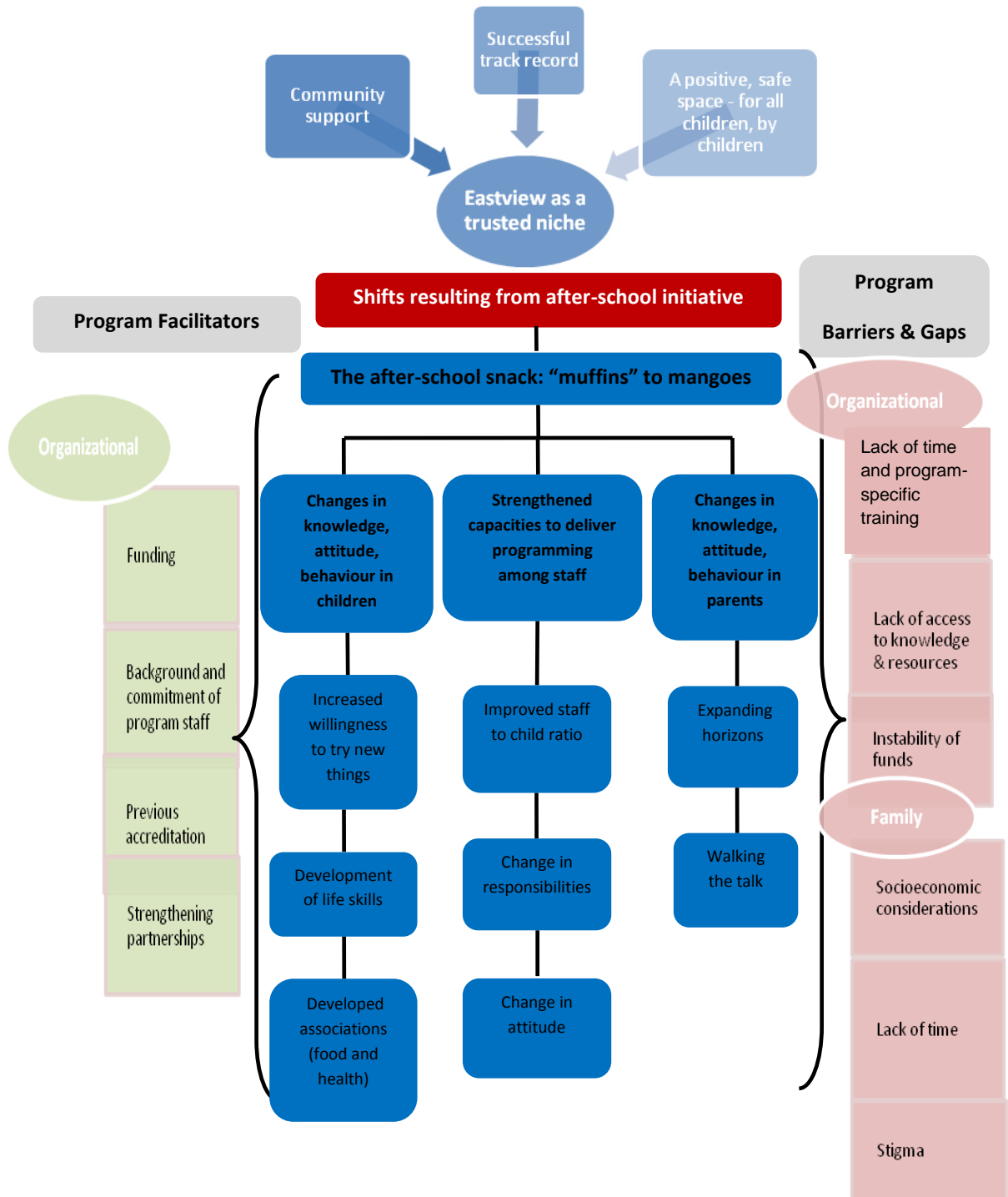


Table 2

Participant Pseudonyms

Pseudonym	Position at EBGC	Background
Jill	Management	Social work
Joanne	Management	Social work
Jane	Program staff	Social work and health care
Joe	Program staff	Education
Jillian*	Program staff	N/A
Jackie	Board Member	Education
Jessica	Board Member	Education
Joel	Volunteer	Education
Rachel	Parent	N/A
Riley	Parent	N/A
Rose	Parent	N/A
Rosanna	Parent	N/A
Roxanne	Parent	N/A
Rebecca	Parent	N/A
Rita	Parent	N/A
Nadia	Child (participant)	N/A
Nadine	Child (participant)	N/A
Naomi	Child (participant)	N/A
Nicole	Child (participant)	N/A
Nicolette	Child (participant)	N/A
Neil	Child (participant)	N/A

Noah	Child (participant)	N/A
Noelle	Child (participant)	N/A

Note: Management, program staff, board members participated in key informant interviews; parents participated in a focus group; and children participated in interactive children’s sessions. Asterisk indicates individual was mentioned during data collection but did not participate in the study. N/A indicates Not Applicable.

4.1 Eastview Boys and Girls Club-Eastview Unit (EBGC-EU) as a Trusted Niche

The key informants (KI) and focus group participants described EBGC-EU as a valued niche in the community, emphasizing its community support system, impressive track record, and most importantly, its reputation as a positive and safe place for all children, by children. A niche is a “comfortable or suitable role” (Oxford Advanced Learners Dictionary, 2010) that a person or organization can hold - an area of specialty. According to findings, the EBGC-EU niche was an ideal platform to introduce nutrition-related initiatives such as the after-school snack program.

4.1.1 Community support.

The KIs in this study discussed the role of EBGC-EU as a community support system. This role involves providing families in need with formal and informal support (e.g., financial aid, food baskets, and other types of social assistance) that are not outlined in the organizations official mandate. According to one KI, the informal supports are helpful in combating food insecurity and in addressing lodging issues faced by families. The literature suggest that community organizations often play a role in filling identified gaps in a community that may not be part of their official mandates or strategic plans (Halpern, 2003). When talking about this informal community support, Jill, a KI

with management responsibilities at EBGC-EU, recalled a recent encounter with a parent:

...I had a parent come up to me in Whitby and thank me for the food that was sent to . . . her family. She's a single mom of 4 children, really struggling. And that was not anything that was done formally or any fan fare.

It is interesting to note that these types of community supports were not mentioned in the 2009 Factbook Questionnaire provided to the researcher. When asked if EBGC-EU provides programming that is for families, management indicated that they did not, thereby suggesting that these informal supports were not part of the official mandate. The website for the Boys and Girls Club of Canada mentions the provision of assistance to families in need, describing it as an informal service (Boys and Girls Club of Canada, 2010). In this study, findings suggest that EBGC-EU utilized existing informal support systems to broaden the “reach” of the after-school snack program. This was helpful in ensuring that appropriate resources were available to those most in need.

Parents and key informants also discussed the impact of EBGC-EU on the lives of children who attend after-school programs, partly as a result of the significant amount of time children spend in the centre. Studies conducted in many developed nations have shown that when children spend a large portion of the day in the care of others (e.g., school, with babysitters, in after-school programs) they garner the positive effects of child care on child development (Blau & Currie, 2003). In this study, parents appreciated the flexibility of having children stay late at EBGC-EU if necessary, providing them an opportunity to take care of errands and other obligations. One key informant, Joe, observed:

. . . Her kid was here, from 3:00 until I think 8:00 or 8:30 that night, 'cause we were doing the special event [pause] And she said, "oh gosh, you guys see my kid way more than I do" [pause] You know? And . . . when you think about that, we probably did.

Thus time spent outside-the-home provides an opportunity for after-school programs to foster child development, especially in low-income and disadvantaged areas (Blau & Currie, 2003). Some parents acknowledged that they had attended EBGC-EU as children, and they chose to send their children to the centre based on positive past experiences. One parent, Rachel, stated:

I too was a person who came here [Eastview] when I was a kid, and I just, it's amazing how it's a, such a part of the community. Like, really. . . my kid walks here from school. . . and I love that aspect.

The literature suggests that child development is affected by the type and quality of child care they may receive (Blau & Currie, 2003). The positive sentiments associated with EBGC-EU were not only due to individual experiences of the parents, but also the perceived role of EBGC-EU in the community as a place where children can learn to work and live successfully. Reflecting on the significant amount of time that children spent at EBGC-EU, and its established role in the community, KIs and parents interviewed concurred that programming should focus on healthy child development which can include healthy eating behaviour.

4.1.2 A successful track-record.

As community organizations expand and offer additional programming and services, successful track records help the organization thrive by attracting new individuals and families. Some KIs, like Jackie, discussed how EBGC-EU

had developed a solid reputation in the community by efficiently providing programming that is dedicated to addressing the needs of children:

. . . [School boards] got their own core competencies that they want to deal with. And, you know, whereas the Y and the Boys and Girls club is used to doing after-school care . . . when you have a market that's already set up, that's figured out how to do this efficiently, it, it seems weird to want to re-invent the wheel...

This quote underscores the niche that EBGC-EU has developed and the potential for programs to grow in the area of after-school programming. Another KI, Joanne, talked about how parents of children participating in the after-school program are aware of this area of specialty and use this as rationale to enrol their children:

And they [parents] know that they're gonna get fed. And they know that they're gonna have a good time. And their parents also know that . . . they're in, well, the Eastview Boys and Girls Club motto is "it's a good place to be."

When discussing the versatility of programming, some KIs provided examples which included woodworking, karate, and the Youth Justice program. Further, KIs were impressed with the facilities - including a swimming pool and using the open space around the building (the park, basketball nets, etc.) By coming to EBGC-EU, one KI, Jackie, mentioned that it gave children a "fresh start after the school day" and that "they see the advantages of having the kids there, and so the program will continue to grow, right?"

One parent talked about her experience with the summer camp program, which motivated her to send her children to EBGC-EU for the after-school program. Some children who participated in the children's interactive sessions

talked about their participation in summer camps. One child, Noelle, stated that she “came here last year, and also after-school, and for summer camp. And I came here the year before after-school and for summer camp.” By participating in the after-school initiative, EBGC-EU incorporated new programming focused on healthy living into its repertoire of services.

The KIs discussed how children participate in play-based learning where they are taught in a fun and unstructured way, something EBGC-EU has always strived to offer. After-school programs have become ubiquitous as a place where children can learn in a creative and hands-on manner (Halpern, 2003). When discussing past nutrition education initiatives at EBGC-EU, one KI, Jill, provided insight into a March Break camp that was offered in March of 2009 for children:

. . . it was a whole week of them being immersed in this nutrition camp...We didn't tell them it was a nutrition camp, they called it, I think Camp Whodunnit, or whatever. But it's to say there was like Captain Broccoli....And Inspector Asparagus, or whatever. So it was fun for them...So making it real and fun and hands-on. They don't want to sit and have you lecturing at a board about you know, the fat content...of McDonalds fries. But if you can make it real and visual for them...And in a way they understand, they totally had fun with it.

The importance of providing education in a less structured manner, particularly when talking about health, resonated with the KIs, who emphasized the importance of hands-on and creative approaches to teaching children. At EBGC-EU, childcare programs have already been well developed, thus findings suggested that the time might be “right” for staff to focus on other areas of child development. This includes focusing efforts on designing and implementing educational nutrition-related activities.

4.1.3 A positive, safe space – for all children, by children

The niche that EBGC-EU has developed includes its established role in the community as a safe haven for children of all backgrounds, and as a place where children can feel a sense of ownership. Parents and KIs talked about psychological safety and perceived safety at EBGC-EU, and emphasized the importance of fostering inclusivity. According to KIs, the positive, safe, and inclusive environment at EBGC-EU makes children more receptive and accepting of nutrition-related education and initiatives.

After-school programs have been identified as settings that offer children a protected environment allowing them to play and explore (Halpern, 1999).

Riley, one of the parents in attendance at the focus group, discussed this safe environment:

...they're around parents, and peers that all want the same thing, they want their kids in a safe environment where . . . you can do the homework, and you can do the crafts, you can do the sports, so they're not out bullying other kids...

Another parent reinforced this point by saying that EBGC-EU is "...a place for positivity. . . I see nothing but positive. . . from . . . adults or older peers, even" (Rachel, Parent). Several parents discussed how beyond being just a positive place, it is a good learning environment where their children develop skills such as conflict resolution that better prepare them to handle issues outside of EBGC-EU in a positive manner. Some parents mentioned that this was something that they still struggled with – they were pleased that their children were being taught essential life skills through after-school programming.

Parents also talked about the idea of “perceived safety” and the reluctance to allow their children to play outside at home, as opposed to their own childhood where these concerns were not as widespread. This reluctance is supported by the literature, which suggests that due to perceived risk on the part of children and parents, children are less likely to play outside and engage in physical exercise when compared to previous generations (Carver, Timperio, & Crawford, 2008). Some KIs talked about how EBGC-EU was a safe place especially for those who are living in less-than-ideal home environments, and/or those who “haven’t got a lot of things going on after school” (Jessica, KI).

The Safe Walk program and school buses provided by EBGC-EU help to mitigate some of these concerns documented in other studies. One study noted that there are often programs available for children, but they are poorly utilized due to the perceived risks in getting to the site (Holt et al., 2009). The ability of EBGC-EUs after-school program to enable children to engage in physical activity in a safe environment is especially important given the increasing prominence of sedentary behaviour. Increasing energy expenditure can contribute towards improving child health and reducing childhood obesity.

During the KI interviews, the sentiment of ownership was brought up on several occasions. Staff KIs described EBGC-EU as a place where children can feel a sense of ownership. According to Halpern (2003) in his book on after-school programming, an open form of communication could be associated with feeling “psychologically safe,” where children feel they are able to be themselves. This psychologically safe environment keeps children coming back to EBGC-EU

because they feel it belongs to them and because it is a place where they have a voice. Joe mentioned that “...we still have structure but we let the kids sort of uh have a say in what goes on here. It’s their club, we want them to feel like it’s their club.” This same KI also discussed how this feeling of ownership allowed children to “talk about anything” with the staff members, volunteers, and other children at EBGC-EU. The researcher observed this openness during her time as a volunteer at EBGC-EU where children approached her to talk about personal issues including conflicts and/or challenges at home, school, and with other children. Feeling psychologically safe may play a role in children being more receptive and trusting of health and nutrition-related messages from EBGC-EU staff.

When asked about the families served by EBGC-EU, almost all KIs discussed the changing demographics of the population served by EBGC-EU. While EBGC-EU (and the Boys and Girls Club of Canada) were originally established as a service for those at a socioeconomic disadvantage, the mandate of the Boys and Girls Club of Canada was recently changed to be more inclusive to all children. The KIs described diverse pockets of people in the surrounding community, with a mix of low-, middle-, and higher-income families. One KI (Jill) stated that:

It’s so different here. We have some kids that come from families who really do have financial challenges...And food security issues. And then we have kids who come that, there’s an abundance of funds.

Increasingly, children attending EBGC-EU have diverse cultural backgrounds.

According to the 2009 Factbook Questionnaire, languages spoken by children at

EBGC-EU included French, Portuguese, Italian, German, Vietnamese, Ukrainian, East Indian, and Polish (Eastview Boys and Girls Club, 2009). This was consistent with how KIs described the diversity of the population:

...we have all different types of children coming to us, and we like to respond and give kids what they need. And, I'd like to think that our programs are flexible too.-Jill

Parents pointed out the advantages of having their children interact with others from diverse backgrounds. One parent (Rose) said she enrolled her daughter at EBGC-EU because "...I wanted her to expand, and to start interacting. . . with more kids." Parents mentioned that their children's friends at EBGC-EU come from different parts of Oshawa. Children also acknowledged this point in the interactive sessions. When asked if the friends they had at EBGC-EU differed from those at school, some children responded in the affirmative. While information on the geographic areas served by EBGC-EU was not compiled for this study, the numerous SafeWalk programs and bus services allow EBGC-EU to serve a number of schools throughout Oshawa. The diversity of children in the after-school program underscores the importance of staff continually working to develop and improve programming that is culturally appropriate and serves a diverse population (e.g., provision of a variety of ethnic foods as part of the after-school snack).

According to the Ministry of Health Promotion and Sport, the provincial initiative is geared towards an "at-risk" group of children in Ontario. When the term "at-risk" was used during meetings with management at EBGC-EU, program staff stated that they would not label their target group (children) as at-risk. This

highlights the sensitivities around placing labels on target groups which may carry stigma. An evaluation of numerous after-school programs in the United States stated that children who utilize after-school programs are not homogenous, and that if these programs did not exist, many would still have access to some form of adult-supervised care (Kane, 2004). A blanket term such as at-risk may not accurately describe a population, and can lead to unintended negative ramifications.

According to one published study, there are various approaches to interventions that target populations which include at-risk youth (Scott et al., 2002). The primary intervention strategies tend to be focused on an entire population, irrespective of risk, and often mean there is less stigmatization involved (Scott et al., 2002). This approach is a proactive one. On the other hand, secondary approaches tend to target specific groups that may be at higher risk for certain behaviours or actions (Scott et al., 2002). While each of these approaches have strengths and weaknesses, the appropriate type of intervention needs to be chosen when developing programs to serve a diverse group of children.

Expanding on this finding, Jessica (a KI) discussed how those who may not be perceived to be at-risk, could have difficulties with handling leisure time in a healthy manner:

...I mean at-risk doesn't mean just poverty, or. . . family makeup. . . there's lots of kids who come from wealthy homes who. . . may not know how to use their leisure time too...I mean they could be at-risk for potential trouble too.

Two KIs recognized the potential for children to increase knowledge as a result of nutrition activities and snack preparation at EBGC-EU while developing skills to utilize their leisure time as they grow older. These findings illuminate how the definition of at-risk may not be easily understood and show that it is necessary to make the term and its connotations clear when developing and implementing programs. It also means that if all children are at-risk in some way, it is important that children associate leisure time with healthy foods and activities. Based on the after-school initiative, this includes teaching children that time with friends can be associated with healthy activities that can improve health behaviour and, in turn, overall child health.

4.2 Shifts in Programming

The funding provided by the Ministry of Health Promotion through the after-school initiative was to focus on after-school health programming, specifically nutrition education, physical activity, and personal health and wellness to improve self esteem (Government of Ontario, 2009). In the following section, findings that underscore the shifts in programming that took place at EBGC-EU are discussed, with an emphasis on how the after-school snack provided to the children led to immediate outcomes at three levels – knowledge, attitude, and nutrition-related behaviour (refer to Figure 3).

4.2.1 The after-school snack – “muffins” to mangoes.

Study participants (KIs, parents, and children) all described improvements in quality, quantity, and variety of the after-school snack at EBGC-EU. During the KI interviews, focus group, and interactive children’s sessions, participants were asked to describe the snack before and after the after-school initiative was

put in place. Respondents unanimously agreed that the after-school snack was much improved in nutritional quality, quantity, and variety as a result of the after-school initiative.

According to many KIs, prior to the after-school initiative, EBGC-EU was dependent on the food sent to them by their community partners including local community kitchens, etc. A key source of funding for many non-profit organizations is donations (Weerawardena, McDonald, & Mort, 2010) and, at EBGC-EU, this included donations in the form of food. The before-program snack mentioned most by parents, children, and KIs was large triple chocolate “muffins” donated by a local wholesale retailer. The quotations denote a cupcake-like nature (high in sugar and fat), rather than what muffins are often synonymous with: a healthy breakfast food. Parents and KIs discussed a typical snack consisting of a single food item (i.e., triple chocolate muffins or apple strudels). This choice in snack is consistent with literature that suggests that after-school programs are often inclined to serve high fat and energy dense foods as part of their snacks (Coleman, et al. 2008). While the study by Coleman, et al. (2008) did not focus on the details around why it was energy-dense foods that were being served, this could have been due to their lower cost, and/or a similar relationship with organizations that provided donations in the form of food.

Beginning in 2009, the provincial funding allowed staff members to shop for groceries used in preparing snacks instead of relying on donations. Some staff members were given the responsibility of planning the snacks and putting together shopping lists on a weekly basis. Parents, children, and KIs emphasized

the improvements in quality of the snacks as a result of the provincial funding. In this quote, a board member (Jackie) elaborated:

...this funding has really helped to . . . really improve a lot what the kids are being able to eat. So, before, we'd have to rely on donations. . . muffins that didn't sell, or they had donuts that didn't sell, so the kids were eating a lot of donuts and strudels and...you know, processed food to the hilt...right? Whereas now. . . they're having granola bars, and they're having carrots, and. . . fruit, and vegetables, so it's. . . a lot healthier for them...

Thus the snacks that were offered prior to the after-school initiative were primarily processed food items provided as donations. Similarly, Jane described the changes to the snack:

So, this year and then last year. Watermelon, grapes, bagels with cream cheese, milk this year. Last year, cookie, carrots, milk-no juice, or water.

The researcher was exposed to these before-program snacks as a volunteer in the after-school program and was able to confirm these improvements in the quality of the after-school snack; the muffins provided before were replaced by healthier foods including strawberries, carrot sticks, whole grain muffins, and milk.

The researcher also noted the increase in quantity of food that was provided for the after-school snacks. While parents and KIs talked about how the before-program snack generally consisted of one food item (again, with the muffins being the usual item), the snack as part of the after-school initiative included three to five foods, with generous platters of each. Jill, a KI, talked about how "they're going up for seconds, and we're leaving it out for them too." Most of this food would be finished by the end of the after-school programming each day. This is consistent with some KIs stating that children often said they

were hungry when they arrived at EBGC-EU and implied that they were full when they left. Parents also discussed this, with one parent (Rose) referring to her daughter: "...I usually try to pick her up at 5 o'clock. . . the difference last year and this year, I noticed she doesn't come home and say she's hungry as often."

These findings suggest that the after-school snack may have contributed to overall healthier eating habits with a better nutritional balance between snacks and meals.

One KI, Jackie, talked about the role of these snacks from the context of Canada's Food Guide:

...This allows that supplement where at home. . . they may have to eat some of the cheaper pastas and, and that type of thing, but if they can get a really good fruits, vegetables, and healthy snack. . . then at least it helps. . . maybe they only have to have 2 or 3 servings of vegetables at home, 'cause they get a couple there [at Eastview].

Guidelines on using Canada's Food Guide to Healthy Eating for children

identifies that an afternoon snack for children should ideally have one serving of Vegetables and Fruit, and one serving from one of the other three food groups (Saskatchewan Ministry of Education, 2008). Typically, there was always at least one Vegetables and Fruit option available to children during the times the researcher spent at EBGC-EU in addition to foods from other food groups.

Regardless, there was a marked increase in abundance of food available to the children for the after-school snack.

Along with improvements to the quality and quantity of snacks at EBGC-EU, the variety of food offered also improved. Parents and KIs discussed the different types of foods that were offered, including exposing children to foods that they had not tried before. Joanne, a KI, discussed the variety of the food:

...kids are trying things that. . . Everybody's nearly eaten an apple, but not everybody's eaten a pineapple, or, a kiwi, or . . . we've brought in lots of different things....instead of just one cheese . . . we try to have cheese a couple of times a week, but we don't just have say cheddar cheese, we might have like mozzarella cheese, or Swiss cheese, or marble cheese, or, like we try to make it that they're trying different things all the time.

The researcher was also impressed with the variety of snack choices, including oversized grapes that she had not been exposed to before. The importance of exposing children to a variety of foods has been documented in studies, where rather than the amount of food that children are being served, those involved in menu planning focus on exposing children to a more diverse palate (Slawta et al., 2008). The documented improvements in the after-school snack, specifically quality, quantity, and variety, contributed to the shifts in knowledge, attitude, and behaviour in children as described in the following section.

4.2.2 Changes in knowledge, attitude, behaviour in children.

The change in the after-school snack provided to children as a result of the provincial funding contributed positively to the overall food experience of child participants. In this study, the food experience is described as the overall experience the child has during a meal or a snack. This includes the food itself and the way it is presented, the environment in which the food is eaten, and the interaction that takes place while selecting and eating the food, whether it be with staff members or fellow children. The average number of children who participated in the after-school snack program at the Eastview unit was 97 (Eastview Boys and Girls Club Factbook, 2009). The shifts helped to improve children's dietary behaviour so that they were more willing to try new foods.

Table 3
Summary of Child Participants.

Number	Participant (pseudonym)	Age	Gender	Years at Eastview	Answers to question on change in snack	Recognized shift in snack
1	Nadia	8	Female	4 years	“wait...it’s healthier”	Yes
2	Nadine	8	Female	2 years	Not direct	N/A
3	Naomi	8	Female	3 years	“good for you”	Yes
4	Nicole	9	Female	2 years	“bit health”	Yes
5	Nicolette	8	Female	4 years	Not direct	N/A
6	Neil	7	Male	2 years	“healthy stuff”	Yes
7	Noah	7	Male	2 years	“teeth strong”	Yes
8	Noelle	9	Female	3 years	“we do a lot more healthy things”	Yes

Note: Child participants were asked if there had been any changes to the snack, and if so, what were they/why. The answers shown are direct quotations.

4.2.2.1 Increased willingness to try new foods.

In this present study, parents talked about how the snacks provided to children led to changes in behaviour, particularly an increased willingness to try new foods. Parents discussed the idea of “positive peer pressure,” and how children are more willing to try new foods in the presence of other children. Recommendations from a study done in 2007 regarding fruit and vegetable consumption in children suggested that to increase children’s intake, interventions should strive to make the practice of healthy eating habitual (Reinaerts, de Nooier, Candel, & de Vries, 2007). While only a small number of studies

focusing on peer influence have been carried out, (Taylor et al., 2005 & Stewart, Gill, Treasure, & Chadwick, 2006) findings have showed the positive effects of peer influences in dietary behaviour change and maintenance in children. Further, parents found that their children were more resistant to try new things if told to do so by their parents. One mother (Rosanna) noted positive changes in food-related behaviours with her daughter based on her participation in the after-school snack program:

...before, my daughter wouldn't eat vegetables at all . . . not at all . . . "no, I'm not touching them. Don't give them to me." But then. . . I've been finding out. . .she'd be at her friends and she ate celery and Cheez Whiz...

Parents attributed these changes in behaviour to the after-school initiative. A KI who is a parent (Jackie) also talked about this:

...from a peer pressure kind of perspective, it really helps if you want to have your kids have that healthy diet, because they're not, they're not like, "well. . . yesterday, we had apple strudel so I'd like apple strudel." You know? . . . I don't have [eat] apple strudel. . . Whereas now, because there's new things there that he might not try, and everyone tries them.

This behaviour is consistent with the literature, particularly one study that examined exposure and behaviour maintenance. Authors found that a program that focused on improving exposure to foods in children led to an improvement in dietary habits, and maintenance of behaviour even after six months (Slawta et al., 2008). Parents in the present study suggested that this behaviour change towards trying new foods was a result of the after-school snack the children ate at EBGC-EU, particularly the improved variety. This change is crucial in developing dietary behaviour which is accepting of novel foods.

In addition, some KIs talked about how surprised they were that the children were eating some foods that were offered. There was attitude change on part of children towards being more accepting of trying new foods. The KIs mentioned the importance of trial and error and persistence in providing different foods. Joel stated that:

You do something, and if it works, it works, and you implement it. . . not just once but you try it again and again and then if you see a change in the children's attitude towards that type of food, then you can say "hey, we're making progress here."

Parents discussed how children would ask for foods at home that were offered as part of a snack at EBGC-EU, such as mangoes and Nutrigrain bars.

During this study, one key informant, Jackie, talked about how children can lead by example; her child often follows the lead of the "braver children". She mentioned that "...he'll let them try it, they don't die, they seem happy, they tell him it's good, then maybe he'll try it." According to Dovey et al. (2008), food neophobia varies according to personality. Children who are more "attention seeking" are less apt to be "food neophobic," defined as the unwillingness to try new and unfamiliar foods (Dovey, 2008). In their review of food neophobia and picky eating in children, Dovey et al. (2008) discuss how resistance to trying new foods peaks between the ages of two and six, decreasing as children become familiar with more foods. Thus this positive peer pressure mentioned by parents helped children who may otherwise have shied away from trying some of the unfamiliar foods offered as part of the after-school snack. The after-school initiative (i.e., the increased exposure to a variety of food through the after-school

snack) had the biggest impact on the behaviour of children participating in the program. This shows the potential for exposure to lead to behavioural change towards healthy eating, although further research would be necessary to analyze outcomes over the long-term.

4.2.2.2 Development of life skills.

Although teenagers were not the focus of this study, some KIs shared positive “stories” about teens at EBGC-EU developing life skills which included grocery shopping, cooking and preparation skills, conflict resolution, and responsibility/team work. However, the majority of these skills acquired through teen programming were not a focus of the children’s program.

The KIs in this study discussed how some of the older children were involved in grocery shopping with program staff. One KI, Jane, talked about her experiences during a shopping trip with some after-school program participants:

...The grocery shopping, that was interesting. They have no idea how to grocery shop. So, instead of bags, lets get boxes . . . Whatever you pack in the box, you have to carry. “Okay Jane, no problem.” Thirty cans of frozen juice in one box, plus bags of milk. “Okay, you guys have to pick that up, cause I’m -” . . . so they learned how to grow some muscles.

According to KIs, this not only helped show the teenagers the differences between “good” and “bad” options, but also taught them about budgeting, costs, and other skills associated with grocery shopping. However, there was limited evidence of these types of hands-on activities for children participating at EBGC-EU.

The provincial funding was also used by EBGC-EU to purchase kitchen equipment and improve the cooking program, which transitioned from relying on

donated ingredients to developing menus and trying new and different foods.

Many facilities used by after-school programs do not have the space or facilities that they require (Halpern, 1999). According to a few KIs, teen program participants were involved in the preparation of dinners for events at EBGC-EU, such as board meetings.

While there was some mention of a cooking program targeting teens, there was a general consensus among parents and KIs that they wanted to see the younger children get more involved in the kitchen. Documents provided by one of the KIs included some of the budget and menu plans that were used during the teen cooking program. Findings suggest that this is an area where EBGC-EU can potentially transition the existing cooking program to involve children in an age-appropriate manner. While the funding provided through the after-school initiative was used in part to update the kitchen at EBGC-EU (including buying new microwaves and other equipment) (After-School Funding Strategy Proposal, 2009), re-structuring of the kitchen would be necessary to enable it to function as a “cooking-friendly kitchen” for the number of children that participate in the after-school program. During research meetings, management at EBGC-EU often mentioned the industrial-style kitchen at the Northview Unit of Eastview Boys and Girls Club and credited the size and capacity of this kitchen for some of the cooking program-related success seen at that site. The cooking program that could be implemented with the appropriate kitchen facilities would allow children to better understand and learn about food from a young age and develop life skills for healthy cooking and eating.

4.2.2.3 Development of associations between food and health.

The exposure to healthier food as a result of the shifts in the after-school snack led to the development of some limited associations between food and health. In this study, findings suggest that there was also some confusion around whether the program was a food experience program, a nutrition education program, or perhaps both. According to a recent qualitative study on the food practices of 6-11 year old children, authors documented that children developed associations about “good” and “bad” food, as well as “healthy” and “unhealthy” food, depending on often contradictory messages (Stewart, et al., 2006). For example, if children were told that they would be given an unhealthy food as a reward for eating something healthy, they associated the unhealthy foods as inclusive of a healthy diet (Stewart, et al., 2006). Authors concluded that children were able to develop associations that went beyond the simple “good” and “bad” (or “right” and “wrong”) associations between food and health (Stewart, et al., 2006). Parents in the present study talked about how children began to associate snacks with healthy foods. Jackie, a KI and a mother, mentioned her son when talking about snacks and developing associations:

...[my son] associates snack with the things he's having for snack there, right?...So, if I say, “. . .what do you want for snack?” He'll go “well, yesterday I had. . . whatever I had for snack”, and. . . it's a comparison, right? . . .this way, their natural comparison is to healthy objectives.

There was also some mention of the development of associating healthy snacks with leisure activities, with the following quote from a KI (Jackie) talking about associating healthy snack with time with friends:

. . .you want them. . .to associate. . . the healthy food with having fun, and their friends...So that when they get with a group of friends at another time, they go “oh yeah, I eat healthy food when I’m with my friends,” I don’t want to go in and find chocolate bars, or whatever else.

Some KIs talked about the shift in viewing healthy foods as treats versus the previous association of treats with high sugar and high fat foods. Joel talked about how the children are “gradually getting used to it now and they realize that they’re being given that because it’s better for them.”

Although there was the beginnings of an association between food and health documented as a result of the after-school initiative, this area could have used the most improvement through the provision of a consistent and well-informed nutrition-education component. As part of the document review process, the researcher was provided with some lesson plans that were used for the after-school programming. Although well-developed, especially the lesson plans that were created by EBGC-EU staff, the majority of content was for the teen program and was appropriate for that age group. While the staff at EBGC-EU made the best of what they had given the limited resources and time constraints to implement the program, a more comprehensive nutrition education program would have helped increase knowledge and awareness in children. Furthermore, it may have assisted in developing an appropriate knowledge-base necessary to make informed healthy food choices. Overall, findings indicated that the after-school initiative led to the most improvements in children’s nutrition-related behaviour (i.e., willingness to try new foods).

4.2.3 Strengthened capacities to deliver programming among staff.

The implementation of the after-school initiative resulted in shifts in the capacity of staff at EBGC-EU. Changes pertaining to program delivery are now discussed. Achieving capacity in organizations includes increasing partnerships with those outside of the organization and building and enabling a workforce that fits the health promotion agenda (Vic Health, n.d.). Findings suggest that at EBGC-EU, this included an improved staff-to-child ratio, some changes in staff responsibilities, and a change in attitude among the staff towards an understanding of the importance of role-modelling and provision of healthy and substantial snacks to program participants. While attitude change was well documented, the change in staff responsibilities did not progress to the extent necessary to implement a nutrition education program.

4.2.3.1 Improved staff-to-child ratio.

According to a KI involved in the hiring process, the funding provided as part of the after-school initiative allowed EBGC-EU to hire individuals who were not only highly trained to work with children (e.g., teachers and prospective teachers) but to also hire and involve more staff in the programming. Having a well trained staff and a low adult-to-child ratio are cornerstones of effective and successful childcare (Goelman et al., 2006). This is because this ratio, coupled with staff qualifications and an individualized, age-specific approach, can lead to positive outcomes in child development (Blau et al., 2004). Jane elaborated during her interview: “Cause right now . . . we’re doing way better with our ratios than we have in the past but as long as the funding continues, we’ll stay at that

level.” This increase in staff-to-child ratio was strongly echoed by other KIs. The 2009 Factbook Questionnaire stated that EBGC-EU had 50 part-time staff for 2009 (Eastview Boys and Girls Club, 2009); most staff involved with the after-school program were part-time, though comparison data from previous years was not included. The improved ratio and increase in human resources meant that there was greater potential for the program to build on its success and facilitate efforts to incorporate the message of healthy eating into after-school activities.

4.2.3.2 Changes in staff responsibilities.

The after-school initiative at EBGC-EU led to changes in staff responsibilities, including integrating the goals of the provincial initiative into the after-school program. The KIs interviewed for this study held roles in various positions from management, program staff, to volunteers. The changes they described varied, but the overall sentiment was that the shift towards health resulted in changes to their roles at EBGC-EU. The ability of programs to integrate health promotion practices into already existing programs and activities has been documented as an efficient way of evolving programming to suit a health-based agenda (Inchley, Muldoon, & Currie, 2006). This is because the process becomes easier for those involved in program implementation, since the new direction is no longer seen as an “add-on” activity that must be planned and executed separately (Inchley, et al., 2006). At EBGC-EU, this included menu planning and grocery shopping – a change in practice from reliance on donations that preceded the provincial funding. Jill talked about this in her interview:

. . . we also make up a grocery list and go shopping So Joe, the assistant, and Joanne, the program director, would

plan out the menu and . . . they would go shopping.

The donations that were accepted went through a “screening” process by some staff members before deciding whether or not they would be included in the snack. Joe mentioned:

. . . we get a lot of donations from say like Saint Vincent’s Kitchen and stuff like that. . .for food. . . Food donations. . . I have to screen that now. . .Because. . . we’ll get like . . .donuts and. . . we get those . . cupcakes that are huge.

Another KI also noted recent changes, discussing how by going grocery shopping rather than ordering from the supplier, EBGC-EU was involving teenagers in that aspect of the snack program. This hands-on approach can develop skills and experiences in program participants. Staff and management also talked about the reporting and other paperwork required by the Ministry of Health Promotion and Sport which were part of their new responsibilities as a result of the provincial funding.

While this study focused on the snack and the nutritional aspects of the after-school initiative, the provided funding was to go towards physical activity and personal wellness activities as well as nutrition education. One KI in particular talked about how physical activity was incorporated into the cooking program – participants danced while cooking to get “moving” in the kitchen.

Other KIs also talked about the integration of the ideas around healthy eating into celebrations. For example:

So our kids got really into it and so what we did was we had uh, instead of say having a pizza party as a celebration, we actually had a smoothie party. . . (Joanne)

There was the potential to incorporate the theme of healthy eating into the summer camps as well. Allowing the message of healthy eating and living to permeate throughout the programming provided by the organization can help to ensure behaviour maintenance over the long-term, though this would require further research.

There was high motivation on part of the staff to do the best they could in delivering the program. However, the lack of nutrition-related skills, knowledge, and resources limited the impact of the program. Findings suggested that staff needed to enhance their role in the area of nutrition education to ensure that children were provided accurate and relevant information that would then enable them to make their own healthy choices. This higher level shift in responsibilities would have required building staff capacities, including training, in order to equip the staff to successfully deliver an evidence-based nutrition education program.

4.2.3.3 Changes in staff attitudes.

During the interviews, the researcher asked KIs about any impacts this program had on their own perceptions of health and healthy eating in order to identify changes in attitude among staff. While most talked about how they already had relatively healthy diets, KIs did identify attitude change pertaining to the food they ate while at EBGCEU. Ideas around role modelling, and making sure that the children saw staff eating healthy food was deemed important to the KIs. One KI (Joanne) mentioned that:

Umm, I mean we're carrying around bottles of water now instead of like cans of pop...and you know, like, I mean I think, like to a certain extent, yeah...Like you gotta practice what you preach, right.

Overall, the attitudes of the staff towards nutrition and food in relationship to their work at EBGC-EU changed, especially the value placed on role modelling healthy behaviours. This is important when considered in conjunction with the close relationships between children and staff.

4.2.4 Changes in knowledge, attitude, and behaviour in parents.

In order to examine the impacts of the after-school snack beyond the walls of EBGC-EU, parents were asked how the after-school initiative played a role in the home. An interesting finding was that as a result of what their children were experiencing in the after-school initiative, parents also learned a few new things, though findings were limited. While this area lacked sufficient evidence to say that it was a success, there was some evidence to suggest that some of the after-school initiative's ideals were moving into the home.

4.2.4.1 Expanding horizons.

Parents in the present study talked about how the variety of food served at EBGC-EU increased children's exposure to foods not normally eaten at home. This led to parents changing their behaviours and expanding their horizons when grocery shopping. Changes in food buying habits is consistent with a study on a diabetes prevention program geared towards Aboriginal Canadian children, where parents of children participating in the program showed a significant increase in the amount of low fat and healthier food options they purchased post-intervention (Saksvig et al., 2005). Kelder et al. (2005) reported that there was increase in dialogue between children and their parents on the topic of healthy eating following a CATCH club intervention, which may be something that leads to

parents expanding their horizons and modifying their food buying habits. In the present study, one parent (Rachel) talked about her son's newfound love for mangoes:

I think the variety too, different from home per say. . .for fruit, for instance. I don't buy mangoes. I don't like mangoes. . .I never thought my kids would like mangoes. Well, lo and behold, one night there was mangoes here. . .and my son just wouldn't step aside from the tray! He just kept eating all the mangoes! And I'm like "oh my gosh!" I felt so bad after that. I mean I. . .deprived. . . him. . . that was from here, and I-I realized that I have to expand my horizons.

Thus, parents talked about how the food the children were eating led to some changes in their own buying habits. Joe (KI) talked about this:

. . . every now and then, you hear a kid saying like "Oh, I'm gonna tell my parents that. . .we should buy more gro-, umm, more vegetables when we grocery shop" and. . ."I don't like those uh" one kid said "I don't like those frozen dinners that we always have," you know?

Although not grown locally in Canada, the theme of mangoes throughout this study characterizes the diverse variety of foods that were offered to children as part of the after-school snack program. In many multicultural communities, access to food akin to what was available in the "home countries" can provide a sense of security and insurance to individuals, particularly in cultures where food is important to livelihood. Access to culturally appropriate food is also an important aspect of food security.

Parents in this study also showed interest in what their children ate, and this was reinforced by a KI (Joanne) who mentioned that parents would often approach her: ". . . some parents have come (sic) and asked like, 'well, what did

you give them today?’ and then we’ll tell them” Parents noted that their buying habits were usually based on their individual tastes and what they liked to eat. The change in exposure children experienced at EBGC-EU, and the resulting willingness to try new foods, led parents to expand their horizons in the grocery store. This could mean fundamental changes in how parents approach grocery shopping and, as a result, could transfer to changes in dietary behaviour in the home to include more healthy options. Overall, this would expand the “reach” of the initiative and create a more comprehensive environment to promote children’s health.

4.2.4.2 “Walking the talk.”

In the present study, there was no formal program component which involved sending home food or information with the children – i.e., “walking the talk.” However, donations provided by community partners and the food-related activities children participated in at EBGC-EU often meant that food went home with the children. An after-school obesity prevention intervention carried out in Minnesota incorporated parents into the programming by sending home packets with participants (Story et al., 2003). These weekly packets contained information in the form of magnets and other user friendly resources that were to relay tips and messages about healthy eating and physical activity (Story et al., 2003). On a bi-weekly basis, these packets also included the ingredients for a healthy snack as prepared by the program participants in the after-school program (Story et al., 2003). Prior to the funding, the surplus donations provided by community partners to EBGC-EU would be sent home with the children.

According to a KI, these food items were usually in the form of a sugary, high fat treat. Nevertheless, the new screening process developed for donations meant that there was a better chance the extra food that would go home to parents was healthier and of improved nutritional quality. However, there is an opportunity for EBGC-EU to move beyond just sending food home with children; taking a similar approach to that of Story et al. (2003) in the provision of packets which include the ingredients for healthy meals and snacks could help to spread the message of healthy eating. This could be especially effective if implemented in tandem with a child-friendly cooking program where children could learn how to make a snack or meal and be given packets to take home ingredients to make the same food item in the home for their families. Not only would this allow children to further develop their cooking and food preparation skills, but it would also give them an opportunity to build self esteem in sharing cooking experiences with their families.

Along with this food, a newsletter was also sent home with children. A few of these newsletters were provided to the researcher and included healthy snack recipes, as well as information for parents on the CATCH Kids Club in order to better inform parents of the focus of the after-school program. Recipes used in the teen cooking program are also currently being compiled into a cookbook, and will be made available to parents on completion. Some of these recipes were also provided to the researcher, and varied from simple (lemon butter) to meal options (chilli and tuna casserole). In order to ensure that the material and food sent home to parents has an impact, it may work to the EBGC-

EUs advantage to include the younger children in the development of recipes and the cooking process. By actively participating in the process of recipe testing and cooking, children may be more encouraged to voice their excitement at home and as a result, the information sent home with them could be most effective.

4.3 Facilitators to Program Success

During the discussions around the changes that have taken place to the snack program at EBGC-EU, some key facilitators to program success became apparent. These included the “new” funding, background and commitment of the staff, EBGC-EU’s previous accreditation, and strengthening of community partnerships. The facilitators assisted in making the shifts in the program possible and they may provide insight for similar programs.

4.3.1 Funding.

The new funding provided by the provincial government for the after-school initiative facilitated the changes to the after-school snack that are documented in this study. The recent emergence of the importance of after school care, relating to more working parents and the perceived positive role that these programs can play in child development, led to increases in funding in the United States (Kane, 2004). This is also the case in Canada, as shown by this provincial initiative which distributed \$10 million across 300 sites (Government of Ontario, 2010). Funding has been identified as crucial in developing and maintaining a successful and healthy after-school program (Holleman, Sundius, & Bruns, 2010). All KIs talked about how the funding was a “saving grace” for EBGC-EU. Jackie mentioned:

This has been a saviour to the after-school program. .
.without this, I mean, they wouldn't be able to eat as much.
. .we would have to reduce the number of staff.

Importantly, one KI mentioned that without the funding, they may have had to close one of their sites. When speaking about program delivery, Jessica, a KI, mentioned that “. . . it was much needed funding and I think it's really improved the quality of program delivery.” Thus the funding helped to improve the standard of service offered to children. Joanne, also a KI, spoke specifically about funding and its effects on the food provided to children:

So now, with this funding, we're able to, like, make sure the kids are full, like they get to eat until their stuffed, right? . . 'cause we did spend a lot of money on food so, I don't know, it's a worry that we, like, 'cause we're up to such a high level of standard now. . .

Consequently, the funding helped to increase the quantity of food in particular.

Another KI, Jill, also talked about the role of funding with regards to food and equipment:

We've been able to equip our kitchen properly, the umm, just the quality of food that they're getting is so much better than it was before.

Overall, the funding allowed the staff to plan and shop for the after-school snack, improve their cooking program, purchase some new kitchen equipment, and have an increased staff-to-child ratio. While the cooking program was not as developed for children, the food provided as part of the after-school snack was especially crucial in leading to changes in behaviour among children and parents. However, it was also clear that the funding fundamentally changed programming and raised the standard, particularly nutritional quality of the after-school snack offered to the children. This funding must be ongoing over the longer term to

ensure these new standards are upheld and the strategic plans at EBGC-EU incorporate the message of healthy living into future programming.

4.3.2 Background and commitment of program staff.

Staff, especially those in management and board member positions, and parents talked extensively about the role of the staff in facilitating the success of the after-school initiative. In particular, findings highlighted the background and training of the staff, their commitment to their roles at EBGC-EU, and their initiative (especially in making activities fun for children) as facilitators to program success. These findings are discussed in further detail.

At the beginning of each KI interview, the researcher asked the KI about their career background and how he/she came to hold their position at EBGC-EU. Surprisingly, the staff had very different backgrounds. This included staff with backgrounds in education and teaching, recreation, catering, and social work. For example, Joe talked about his career background:

. . . My career background is in teaching. I have. . . a teaching degree obviously and. . . how I came to hold this position. . . was during my. . . teacher education program at Trent [University]. I came here for my alternative placement.

A qualitative study on high-functioning after-school programs reported that staff who have qualifications in their positions, i.e., in the realms of teaching and child care, tend to result in a more engaged staff set, motivated by their own goals and were likely to develop positive relationships with the participants of the program and their families (Huang et al., 2010).

The KIs reflected on how their background and previous training allowed them to be successful in their positions at EBGC-EU by incorporating past experience into their current role. Jane stated: “I have health care training, I have social work training. So I took all the training that I already have and past job experience and brought it in.” Previous experience and training has been shown to lead to a higher quality of after-school programming, and the potential for greater child development outcomes in children (Huang et al., 2010). This was especially necessary for the after-school initiative given the lack of training specific to the after-school initiative.

The majority of KIs spoke about their roles at EBGC-EU in a way that showed their commitment to the club and to the children who utilize its services. Commitment to the job in an after-school setting has been described as one of the ideal traits that program directors often look for, along with responsibility, dedication, energy, and an interest in learning (Huang et al., 2010). One KI (Joe) talked about the staff as the biggest asset at EBGC-EU: “Like that’s our biggest asset. You know, the kids really like the staff here. And then they have, you know, good role models that they can look up to.” Some KIs reflected on their love of EBGC-EU, built over many years of service (paid and voluntary) and expressed guilt with the way the program used to be (i.e., reliance on high fat and high sugar food choices). Jill described this guilt:

I hated the snack program before. I felt such guilt about what we were giving the kids before. Because, we had no money. And. . . we were making use of what was brought in.

The KIs also expressed a strong desire to maintain the improvements to the after-

school snack, regardless of EBGC-EUs funding status.: "...Umm but I think that there's probably enough commitment and understanding now amongst people who are running the program that we wouldn't go back..." (Jill, KI). This commitment to their role is substantiated by the background and training that the staff held, and its relationship with the role of qualifications in providing committed and dedicated care (Huang et al., 2010).

Parents talked about how staff would encourage and get excited for children to participate, and that they all seemed to know the children and where they were in the building. Rachel, a parent, mentioned

I walk in the building and one of the, someone's at the counter and they say "Neil's upstairs, Nancy's in the computer room"...[Yeah, yeah]...You know? . . . it's great. They know exactly who I am.

During the time the researcher spent as a volunteer at EBGC-EU, she noted that staff members had caring and genuine relationships with the children who attended the after-school program. Positive relationships between staff and children have been documented elsewhere in relation to children seeing staff members as mentors and role models in their lives (Huang et al., 2010 & Raley, Grossman, & Walker 2005). These relationships and the motivation of the staff facilitated the improvements that were documented as a result of the after-school initiative.

4.3.3 Previous program accreditation.

Throughout their interviews, many KIs referred to the accreditation EBGC-EU has worked to attain. This includes being certified as a Coordinated Approach to Child Health (CATCH) facility, as well as being High Five

accredited (these two programs are discussed in more detail in Chapter 1).

Accrediting organizations that provide after school care helps to set minimum standards of service, and can by and large help to strengthen a program (Halpern, 2003). The High Five program was developed following extensive research by Parks & Recreation Ontario on optimizing child development in programs (Parks & Recreation Ontario, 2007). The CATCH program has been involved in numerous school- and after-school based programs, and has shown positive health outcomes in the realm of child obesity (Kelder et al., 2005 & Hoelscher et al., 2010)

The tools and resources EBGC-EU had been given as part of that accreditation were helpful when they were asked to focus on health as part of the after-school initiative. The CATCH program was especially useful as an approach to children's health that EBGC-EU was already familiar with. In the After-School Strategy Funding Proposal (2009), management had dedicated funds geared towards buying additional CATCH related manuals and CATCH training. One KI, Joanne, talked about the CATCH activity box in preparing activities for children:

. . .there's actually an activity box that. . .it's like an index card that you pull out and you're like "okay, we're gonna play this game" but on the top of it, it says exactly what equipment's needed...

Staff at EBGC-EU had some previous exposure to healthy eating and nutrition as a result of the CATCH program. Jill talked about a March Break camp that took place at EBGC-EU which focused on nutrition: "I think it was before we got into

this Ministry of Health Promotion stuff, it was more related to the CATCH.” The training and resources from previous accreditation was utilized to implement the after-school initiative, and assisted in leading to immediate outcomes towards improving child health and preventing child obesity.

4.3.4 Strengthening community partnerships.

The partnerships between EBGC-EU and other community organizations in the community helped facilitate and provide the healthy snack as part of the after-school initiative. Historically, after-school programs have relied on their community partners and donors for funding and other support (Halpern, 2003). Some of the partnerships mentioned included Saint Vincent’s Kitchen, United Way, and the City of Oshawa. The 2009 Factbook Questionnaire also listed Durham Regional Police, The Durham District School board, and the Town of Ajax (Eastview Boys and Girls Club, 2009). In addition, the After-School Strategy Funding Proposal (2009) listed Jumpstart Canadian Tire Foundation, Durham College, and English Teachers Federation of Ontario. Though KIs mainly discussed their partnerships in passing, the researcher noted that the partners involved in food provision adjusted their donations to the snack program as requested by EBGC-EU. This finding emphasized the strengthening of partnerships with community organizations and some of the policy changes that occurred in these relationships. One KI, Jill, talked about receiving calls from partners asking them what foods were “okay” for them to send.

. . . I’ll hear Saint Vincents say “. . . I’ve got. . . tubs of cottage cheese. Do you think your kids will eat cottage cheese?” And Jillian will say “yeah, uh huh, you can bring

cottage cheese in and you can bring such and such in” but . .
. declining the big trays of muffins.

Thus the strong partnerships between EBGC-EU and their community partners helped to facilitate program success by shifting their contributions to the after-school initiative. While the community partners could have kept providing the same food they had always donated, the changes they made demonstrated their dedication to not only the partnership, but also to the overall objectives underpinning the after-school initiative.

4.4 Barriers and Gaps

During thematic analysis, the researcher noted that barriers and gaps to providing healthy snacks fell into two overarching categories: barriers and gaps at the organization level, and at the family and individual level. These gaps are summarized in Figure 3 and are areas where EBGC-EU and provincial decision-makers can focus efforts to improve programming.

4.4.1 Organizational barriers and gaps.

Barriers and gaps to successfully delivering the after-school initiative were identified by KIs at the organizational level. These included lack of time, lack of program-specific training, lack of access to knowledge and resources, and financial instability.

4.2.2.1 Lack of time and program-specific training.

The KIs in the present study were asked during their interviews to comment on training received before implementing the after-school initiative. All KIs said that there was no specific training to assist them, and that they relied on previous experience and their own research to develop and implement the after-

school initiative. Moreover, there was a lack of time to appropriately implement the initiative. Individuals working in after-school programs are not always equipped with the skills necessary for successful program implementation (Halpern, 2003). Halpern has carried out considerable research in the area of after-school care, and found that some program staff struggled with literacy, planning activities, and in order to compensate, often imitated the worst practices in these fields rather than the best (Halpern, 2003). Furthermore, there is often not enough time for organizations to fulfill their mandates. Some KIs in the present study mentioned that it would be advantageous to have training to help with program delivery, especially since the nutritional aspects of the after-school initiative were new to EBGC-EU.

The lack of training and skill can be translated to other areas of program delivery and new initiatives, such as those in the area of health promotion.

During her interview, Jill talked about this lack of training:

. . . I think. . . providing our staff with training around the nutrition...would be really helpful, so that they feel like they're coming from a place where they have some knowledge and expertise.

Jill clearly identified a specific area of the program (nutrition education) where training would have helped with confidence in program delivery on part of the staff. When looking at the area of nutrition education in particular, a recent study noted that most primary care workers, including those who were informally trained, lacked confidence and general nutrition knowledge prior to a nutrition based training program (Levy et al., 2010). Joanne talked about this during her interview as well, with specific reference to the after-school snack:

...I think there has to be more training involved. Not only just as a program director there has to be more training, but I think for the people that are working on the floor...Like. . . you don't get a workshop that says come here and see what's a good after-school snack.

Thus, nutrition education was identified as an area where staff could have especially used some training. Jane talked about training in the context of best teaching the children: “. . . if we were trained, if we come in for our training, our training consists of this is what a lesson plan is.” Although the After School Funding Strategy Proposal ear-marked a substantial amount of money to go towards training (\$10,000), the sentiment among EBGC-EU staff was that there was no training dedicated to implementing the after-school initiative (After-School Strategy Funding Proposal, 2009). The training that took place was based on other programs, including CATCH, Quest, and Principles of Healthy Child Development (After-School Strategy Funding Proposal, 2009).

Along with their own research, KIs mentioned that they also used “common sense” when planning and carrying out the snacks. Since EBGC-EU has a track record in providing “fun education,” some KIs mentioned that a barrier in program delivery was not knowing how to make nutritional activities fun. Jackie talked about this barrier: “Trying to teach the kids about why you need to eat some of each type of food, and, you know, those types of things. And I think the barrier is making that fun.” The researcher also noted that some training in handling delicate issues around childhood obesity would have also helped. During the focus group, one parent mentioned that it would be nice to see the staff “having a good handle” on what they were teaching and delivering. The use of

common sense to inform activities for children can lead to staff transferring inaccurate and inconsistent information to children.

An issue that was broached by a management KI, Jill, involved some of the resistance to change in implementing the after-school initiative. She mentioned:

. . . I think. . . to be honest with you, I think one of our units is better at – I know you’re only talking about the Eastview unit – but one of our units I think grabbed hold of it [the after-school initiative] quicker and. . . I think it, here at Eastview, we [the staff] struggled a little bit with it. You know, that “gee they’re coming in and you’re giving them too much, they’re getting too much now”. . . But I know that some people did struggle with it. “They [the children] shouldn’t be getting that much [food],” because for years we had gone with we don’t have a lot and we were giving them the junk food.

This resistance to change could have been a result of the lack of orientation to program goals and objectives. Jill also mentioned that:

We want them to be active, and umm, I think sometimes there’s uh there’s a little bit of resistance to, to, just becoming a much more structured program than it was in the past.

In-service training has been recommended by Halpern (2003) in his extensive review of after-school care. It is important that this training be geared towards individuals involved at all levels of program delivery, especially in areas identified as “new” for the organization (i.e., the nutrition education component of the after-school initiative). In the case of the after-school initiative, it is necessary for the Ministry of Health Promotion and Sport to provide province-wide training to help organizations implement the initiative to its fullest potential. This training

should incorporate best practice recommendations that have been outlined by experts in the area of child obesity prevention.

The KIs interviewed in the present study discussed lack of time as a barrier to program delivery. One of the issues that came up repeatedly was that the wide variety of programming EBGC-EU offers outside of the after-school program means that less time is left to plan and execute each of the programs. In a study on individuals who participated in an evidence-based public health training initiative, participants noted that oftentimes, the practices they learned were not conducive to their schedules; in effect, their everyday responsibilities got in the way of appropriately implementing what they had learned (Baker, et al., 2009). In this study, Jill (a KI), discussed the limited time between finding out about the funding and having to implement the program, and talked about how for the first few months, EBGC-EU was “flying by the seat of their pants.” She also mentioned that “it felt like, as I said, for the first 6 months, we felt like we were just trying to figure it out.” Those months comprised of a valuable period of time that could have led to greater impacts on the children, had the staff been provided with appropriate resources from the beginning of the funding cycle. Jane talked about the association between lack of time and the development of resources

. . . if you want me to do a lesson plan, you need to pay me for that so also funding. Do you know what I mean? . . .
Umm, do we have the time? Probably not. Do we have the training time? Probably not.

Another KI talked about how it was the planning behind the programming that took up more time than the implementation, and that having access to resources rather than having to look for them would help save time and be more efficient.

The After-School Strategy Funding Proposal (2009) indicated that money received as part of the funding would be used in part towards purchasing nutrition teaching tools (i.e., CATCH manuals) and other related resources. However, as with the lack of initiative-specific training, these resources were not specifically for the after-school initiative. Furthermore, the lack of specificity in the objectives of the after-school initiative hindered the development of appropriate resources for use in the after-school snack program. With the appropriate training and clear objectives, staff would be better prepared to not only implement programming, but also to efficiently develop activities that would suit the after-school initiative.

4.4.1.2 Lack of access to knowledge and resources.

The discrepancies and overall lack of access to knowledge and resources in health promotion practice has been well documented. During the interviews for this study, the KIs talked about the resources used in planning the snacks and other activities, and how they were accessed. Jane talked about similar challenges in the context of the teen program: “Cause I’ve asked, ‘can I do this for the teen program?’ and I got ‘well, you have to go through this loophole, and this loophole.’” She also talked about finding resources: “Kay, I have no idea what the [heck] like what the food guide is so where do I find that information?” A recent study looked specifically at access to knowledge on areas of health promotion, and found that there was a lack of available information to those in health promotion, and the information that was there was not presented in a clear and efficient manner (LaPelle, Luckmann, Simpson, & Martin, 2006). The lack of

knowledge around how to access appropriate resources, on part of program staff, means that resources that are available may not have been used to their fullest potential in program development and delivery.

Though one KI mentioned that EBGC-EU was provided with the website of the Ministry of Health Promotion and Sport (MHPS) to use for the initiative, there was no mention of any further information or resources that would have helped in planning the after-school initiative. Providing curricular resources to after-school programs has been cited by Halpern (1999) as one way to strengthen programming. There was also a lack of communication between the MHPS and EBGC-EU. While some KIs talked about going online and successfully contacting outside organizations for resources, others mentioned the difficulty they had with planning and preparing the after-school snacks. Joanne talked about some of her efforts:

. . . I contacted the lung association, I did research on the internet, I went to the library and got some books, it would be so nice if there was a section in a book that said . . . activities that you could play with this age group...

Thus, Joanne identified a gap in having easy access to child-friendly and age-appropriate resources. Another KI, Jill, mentioned:

I know that there's different places that people can go. It always feels really disconnected. . .But I know there is a group working on it. And it comes up all the time, but it feels like it's never been really resolved.

Consequently, the difficulty in accessing resources hindered the program delivery of the after school initiative. Four of the KIs in particular talked about how it would have helped to have tested lesson plans and similar tools “ready-to-go”,

with one KI, Joe, mentioning the idea of an interactive game to teach children about nutrition.

. . . maybe more like fun and interactive type of things on their website that the kids can go in and do. . . he goes up and he, he eats like an apple and his energy metre goes up, or if he eats the bag of chips, his energy level goes down, right?

The researcher was introduced to an American website where a game similar to this is available for children. The Nourish Interactive website ([url: http://www.nourishinteractive.com/](http://www.nourishinteractive.com/)) is based on the American Food Pyramid, equivalent to Canada's Food Guide; the main game for children involves a fictional character who children must guide through various levels, with "pit stops" that are meant to teach children about nutrition and healthy eating (Nourish Interactive, 2010). At EBGC-EU, children spend some part of their after-school time in the computer lab; if an interactive tool like Nourish Interactive was developed based on Canada's Food Guide to Health Eating, the time in the computer lab could be utilized as an educational opportunity focused on nutrition. This could especially help children in the area of nutrition knowledge.

In terms of expanding their program, some KIs discussed the "red tape" that existed and difficulties in planning and executing an activity or initiative that involved the school board or other government ministries. Expanding programming in partnership with schools and other local organizations would allow for the development of a more comprehensive and better-encompassed "healthy environment." Jane talked about issues with partnering with school boards:

Can-are we allowed to go through the school board? You should seeee the crap that we have to go through just to get into one of the schools to talk to somebody

Thus there was some red tape to access to knowledge and resources, as well as to get access to other organizations and agencies that could have helped with implementation of the after-school initiative. The local school board could have helped facilitate some programming by providing resources that would help execute the after-school snack program. It is necessary for the provincial government to develop communication networks to ensure that the appropriate connections are made that are necessary for program success.

The gaps in knowledge and resources resulted in some confusion as to whether the program was focused on providing snacks to children, providing an educational component, or a combination of both. While some KIs mentioned that there had been few educational sessions, one KI in particular stated that educational sessions were well included in the program. During the children's activity, most children stated that they did not learn about nutrition at EBGC-EU – rather, they learned about nutrition at school. A parent, Rebecca, said:

Healthy, I don't know what they're [staff at EBGC-EU], whether they're teaching them healthy snacks..Or umm, I don't know...or just showing them...Yeah, I'm not sure.

One KI, Joanne, said this when asked about the nutrition education activities at EBGC-EU:

We do for the, well, we try to do it for the whole month. . . So, all 5 days, like, no, so for 4 weeks, what would that be? That'd be 20 days . . . Some of the activities might last 20 minutes . . . And some of them might last like a couple of minutes...

This confusion around a “food education” program and a “food experience” program underscores the need to provide organizations implementing the after-school initiative with a clear mandate, goals, and objectives. These guidelines should be set at the provincial level and passed on to community organizations to ensure successful program implementation. Appropriate access to knowledge and resources may have helped ensure that this program was in fact a nutrition education program with a food component. An interesting idea discussed in a recent study is “snacktivity” – authors mentioned that this word related to activity sessions that were to take place during the snack portion of the class (Taylor et al., 2007). Something similar would help define the goals of the initiative and would help EBGC-EU and others incorporate more activities and education sessions into their programming. This is an area where the Ministry of Health Promotion and Sport needs to play a more active role in providing the necessary knowledge and resources to align with their mandates, as well as to set a standard for programming across the province. Standards that already exist under the requirements for child care licensing in Ontario can be used as a guide for developing a similar set of standards for after-school programming. In particular, a set of nutrition standards similar to those for child care agencies need to be defined and implemented. This can include such requirements as the posting of menus, appropriate food handling and storage techniques, and a guide to follow in the planning of meals and snacks such as the Day Nurseries Act that has been established for child care agencies (Ontario Ministry of Child and Youth Services, 2008).

4.4.1.3 Instability of funds.

In many cases, funding for organizations comes at a time that can “make or break” a program. At EBGC-EU, the instability of program funding was clear from the initial meeting between the researcher and management at EBGC-EU. The heavy reliance on donations and funding in community organizations provides instability to the services that they offer (Weerawerdana, 2010). When talking specifically about after-school care, Halpern (2003) identified instability of funding as a factor that can lead to program deterioration. In the event that government funding is provided for particular initiatives, there is often no long-term plan or promise (Weerawerdana, 2010), as was the case for the present after-school initiative. Jill stated that “I truly don’t know what we would have done without this funding. I think we probably would have had to close one of our units.” While grateful for the funding, it was evident that the organization was nervous about whether this would be continued past the initial year promised by the government. The organization’s financial uncertainty may impact how management and board members approach their strategic planning since it may constrict the types of activities they are able to plan. A stable financial future can allow community organizations to make long-term plans to make the best use of their finances.

The KIs hoped this funding would continue so that the programming they were offering, and the subsequent standards that had now been set, would be maintained. Jane talked about this and said “if we lost the money for the groceries. . . And we relied solely on our donations, that changes their whole

snack.” The sentiment from management was that without this funding, EBGC-EU may have had to shut down one of their sites. In the event that funding were to cease, there were some KIs who feared that EBGC-EU would return to the snacks that were offered prior to the initiative. Findings emphasize that the government needs to show their investment in improving child health by making a long-term commitment not just with the overall after-school initiative, but also with the individual community organization to enable sustainability and long term success.

4.4.2 Familial barriers and gaps.

The rationale behind this exploratory study included gaining insights into how nutrition and healthy eating components of the after-school initiative affected children’s families in the short-term. During the focus group, parents discussed some of the barriers that prevented them from providing healthy food at home, mainly discussing the issue of lack of time combined with the availability of “unhealthy” convenience foods including Lunchables and chicken nuggets.

4.4.2.1 Socioeconomic considerations.

While the population EBGC-EU now serves is more heterogeneous with respect to socioeconomic status and cultural backgrounds, there are still families who utilize EBGC-EU that are classified as low-income. According to the 2009 Factbook provided by EBGC-EU, the club served 312 children who came from low-income families (Eastview Boys and Girls Club Factbook, 2009). The club also had 410 single-parent families who utilized EBGCs services in 2009, out of a total of 1,200 families that were served for that year; thus, the single parent

families made up almost 35% of the families that make use of EBGC's services (Eastview Boys and Girls Club Factbook, 2009). This is consistent with the literature, which suggests that after-school programming serves its greatest purpose to low-income children (Halpern, 2003). In 2009, 60 children/youth either had their club fees waived by EBGC or were financially supported in order for them to attend programming (Eastview Boys and Girls Club Factbook, 2009).

Some of the KIs recalled instances where children came to EBGC-EU with inadequate food, or talked to staff members in a manner that implied some income issues at home. Jill mentioned:

...I've seen kids come here for camp...eating a large bag of potato chips in the morning...And I remember saying to this one boy "wow, what's that, like breakfast of champions?" And he said "well, it's my lunch, but I was hungry now 'cause I haven't had breakfast."

While parents spoke both about food buying habits and related money and affordability issues during the focus group, most seemed to be proficient in providing healthy food to children. Some mentioned that they were single mothers and the cost of the program and the time the children can spend at EBGC-EU helped them with their busy schedules. The concept of "healthy binge eating" was brought up by one parent, Rita, where healthy food is eaten in plenty when available and economically affordable before going back to lower cost processed and "junk" food:

See, I'm a single mom so there's. . .pockets of time where I don't have. . .time to make. So I'll [buy] the pre-packaged stuff for like 2 or 3 weeks, maybe a month. And then I'll go and I'll buy all the healthy food. Which is what I actually just got done doing. And, my kids gobble that

stuff up. ‘Cause they miss that...So we do, I call it binge eating.

This behaviour could be associated with a lack of knowledge or financial resources regarding purchasing healthy food, although further research must be carried out to identify factors that lead to “healthy binge eating.” While this concept was only mentioned by one parent, this could be the case for other food insecure parents who utilize EBGC-EU services. The rising costs of fresh food items (Weeks, 2011) may further exacerbate the existing financial barriers that parents face in providing healthy food for their children. It can also be associated with the lack of time that many parents experience, which is discussed in the next subtheme.

The idea of healthy binge eating can be compared to the documented practice of buying plentiful food early on in the month when there is money available to do so, with lower dietary quality as the month progresses; dietary quality tends to be the poorest by month’s end (Ploeg, Manchino, & Lin, 2006).

In this study, a KI, Jackie, also alluded to this trend:

. . . it’s that paycheque kind of thing, right?...Where at the beginning of the week, or the beginning of the month, you get to buy all the groceries, and as you eat them up, you get less and less healthy until you’re at the end, and then you get to go again...Right? I mean its, its a typical cycle where you’re living on the canned goods at the end...Right?...And then you get all the fresh fruits, vegetables, ‘til they go bad, so you eat them all up really fast...And then at the end, you’re kind of left with nothing

The consumption of fruits and vegetables, in particular, has been well documented to be lower among those who are of low-income status (Bere, van Lenthe, Kleppe, & Brug, 2008 & Robinson-O’Brien et al., 2010). One American

study reported that children from low-income homes consumed the majority of their fruit and vegetable intake at school during school meals, which are not available in the vast majority of Canadian schools (Robinson-O'Brien et al., 2010). In essence, this means that children from low-income homes may have reduced access to fruits, vegetables, and other healthy foods at home (Bere et al., 2008), making exposure to these foods through initiatives like the snack program of vital importance. Studies looking at long-term practices are necessary to showcase whether initiatives like this one are effective. It may also be beneficial to for EBGC-EU to continue sending items home with parents and allowing them to “walk the talk” – that is, ensuring the environment of healthy eating grows beyond the walls of EBGC-EU. The provision of a program limited in scope to only an after-school setting is more of a band-aid approach and has limitations in addressing family food security issues. Expanding the programming beyond EBGC-EU and into the homes of the children participating in the snack program would allow for a more comprehensive “healthy eating” environment that could be more successful in addressing food insecurity issues and disparities in child health.

4.4.2.2 Lack of time.

Parents constantly talked about the issues they had with time, and how it was hard to stay away from many of the “convenience” foods in the grocery store. Factors that must be taken into consideration when creating nutrition interventions for those that are of low-income status, include parental work schedules, which can be erratic, as well as the amount of discretionary time that they may have as a

result (Kumanyika & Grier, 2006) One mother in this study (Roxanne) alluded to this:

Because it's so hard to stay away from those processed foods that's so convenient... You know? You just throw in a frozen this or a frozen that and, yeah, it's hard to stay away from those things during the week

Other parents also mentioned time limitations and the propensity to be attracted by convenience foods. Most parents who took part in this discussion talked about the convenience foods in a negative light and mentioned that they strived to stay away from them. This implies a lack of nutrition knowledge since not all “convenience foods” are unhealthy – healthy examples include breakfast cereal and frozen orange juice. Due to their busy lifestyles, parents talked about how pressed for time they often were. The same mother who talked about “healthy binge eating,” Rita, also mentioned that:

...I go to school full time, my kids are in football twice a week, I mean, we don't get home until 4 o'clock, we have to be out of the house by 5 o'clock some nights

This may then play a role in how time is prioritized, including how much time is spent on grocery shopping and preparing food for family meals. In trying to reach these parents through programming, it is necessary to take the busy schedules of parents into account. This is especially important if a program would like to expand to include more of a family component; for example, family dinner nights need to be organized in a way that enables both parents and children to attend.

4.4.2.3 Stigma.

Stigma associated with either seeking or participating in social assistance often keeps individuals, including parents, from making the most of services that

may be available to them. According to Raine, McIntyre, & Dayle (2003), this includes stigma associated with charitable feeding programs for children. During the interviews, some KIs discussed the informal supports that EBGC-EU provided, and the stigma that was often associated with asking EBGC-EU for help financially or with food. One KI, Jane, talked about parental pride that may be a hindering factor in utilizing social assistance:

. . . So if you're looking for the resources, but you're too shy or too. . . - "I'm too proud. . . Of what I am trying to do and I don't want anybody to know," there's a lot of very proud people that come in here. . . But being very proud, and unwilling to accept the fact that you need a little bit of help. . . Really puts a "okay, now I have to tell somebody that I'm having problems"

Jill talked about this in the context of food banks: "And there's such judgement that's passed for people who have to access umm food banks."

This stigma associated with food bank use has been documented in the literature, for example parents keeping the knowledge of food bank use secretive from children (Tarasuk & Beaton, 1999). In a study conducted in Canada on food insecurity and the associations with food bank use, 57% of women mentioned that their children knew of their reliance on food banks; 17% of women were adamant that their children never find out about their food bank use (Tarasuk & Beaton, 1999). Recent reports have identified that 402,000 Ontarians rely on food banks (Monsebraaten, 2011). The stigma that may be keeping parents from seeking social assistance needs to be taken into account when developing programs that are geared towards these groups.

5.0 Conclusions, Recommendations, and Personal Reflections

This chapter will summarize the positive outcomes and perceived gaps as identified through the findings of this study, present promising practices, provide recommendations, and conclude with personal reflections on the part of the researcher.

5.1 Positive Outcomes – An Overview

The after-school initiative at EBGC-EU led to positive nutrition-related immediate outcomes towards improving child health and reducing child obesity. These were primarily associated with the shifts that took place as a result of the program, and the facilitators that supported its success.

The logic model created for this study focused the researcher's attention on immediate outcomes in food and nutrition-related behaviour at three levels: the children participating in the after-school snack program; the staff involved in program implementation; and parents of children participating in the program. Positive outcomes included improvements in children's dietary behaviour (e.g., a demonstrated willingness to try new foods). This was attributed to the food experience component of the snack program where findings support improvements in the quality, quantity, and variety of the after-school snack. The increased willingness to try new foods was also noted by parents who referred to changes they saw in the children: changes in behaviour associated with the after-school initiative. These changes precipitated shifts in the buying habits of parents (i.e., purchasing new, healthier foods such as a variety of healthy cheese).

For staff, positive shifts were noted in two areas: increased staff-to-child ratio and changes in attitude associated with nutrition and healthy eating at EBGC-EU. For example, staff recognized the importance of acting as positive role models and taking a "practice what you preach" attitude towards the foods they ate around children. At the

organizational level, facilitators to program success included the funding, high levels of commitment among the staff, previous accreditation that EBGC-EU had completed, and the strengthening of existing community partnerships. In particular, the motivation of staff to do their best in adhering to requirements set forth by the provincial government led to improvements in nutritional quality, quantity, and variety of the after-school snack and strengthening partnerships with the community. The significance of the funding was also a resounding theme, alongside the commitment to “never go back” to the programming that was offered prior to the provincial funding, particularly the snack that was provided. This led to transformative changes where the standard of after-school programming delivered at EBGC-EU was raised, and the relationships with community partners were strengthened with a common goal to work towards improving child health. A series of promising practices are summarized below that relate to the shifts in programming and the facilitators identified in this study.

5.1.1 Promising practices

Promising practices are related to the shift in programming, as well as the program facilitators. The shifts point to promising practices contributing to immediate outcomes, especially in behaviour, in children at EBGC-EU:

- 1) Persistence and trial and error on the part of staff, parents, and caregivers are very important in offering novel foods to children.
- 2) Exposure to nutritious foods in an after-school setting can lead to an increased willingness to try new foods, as well as expanding food choices of parents in the grocery store.
- 3) The role of cooking and other hands-on nutrition-related activities in teaching

children life skills, such as budgeting, teamwork, and responsibility.

The program facilitators played a role in achieving the immediate outcomes described as the shift and include:

- 1) The role of funding in expanding program delivery, especially the snack component.
- 2) Improving staff numbers and qualifications, recognizing the value of a strong and committed workforce with appropriate backgrounds in the area of child care.
- 3) The importance of previous accreditation in helping to implement new initiatives, especially where training in nutrition and access to resources may be limited.
- 4) Building strong partnerships with community members and utilizing these partnerships to strengthen programming at all three pillars of the after-school initiative: physical activity, nutrition education, and personal health and wellness to improve self-esteem.

These promising practices contributed to the success of the after-school initiative and could inform programming at other sites.

5.2 Perceived Gaps – Areas for Improvement.

A number of areas were identified as “growing edges” – areas that require further development in order to strengthen program delivery. Although there were positive changes in children’s eating behaviour, gaps were documented in nutrition-related knowledge in children. Findings also suggest that life skills development could have

received more emphasis to allow children to foster life skills associated with cooking and meal planning. In this area in particular there was a paucity of data to suggest that children's life skills had increased. The hands-on activities (used successfully with teens) could have been modified to include children had the program not been hindered by a lack of time and training, and access to nutrition knowledge and resources. There were also some infrastructural barriers that were mentioned including the lack of a suitable kitchen for the large number of children who participate in the after-school program. While there were improvements made to the kitchen equipment as a result of the provincial funding, major structural changes would be necessary to enable a cooking program that can be provided to the nearly 100 children who participate daily in the after-school program at EBGC-EU. Therefore, funders must take this into consideration when providing subsidies to enable capital investments for structural changes that will allow for success of the after-school program on all fronts.

Findings also failed to document improvements in nutrition knowledge in children. This may be associated with the lack of nutrition-related training on the part of staff. Although staff at EBGC-EU was motivated to fulfilling the goals of the after-school initiative, they were not equipped with the appropriate nutrition-related training and resources to build the necessary capacity. This is crucial not only in ensuring that a program is being delivered according to the parameters set forth by the funder, but to also alleviate concerns around sustainability. Staff expressed some confusion around whether this was a "food experience" or a "nutrition education" program. Had there been appropriate training and access to resources among the staff, they would have been able

to develop a more comprehensive program from a nutrition perspective, which could have helped improve nutrition-related knowledge in children.

Many of the KIs spoke about how crucial the funding was to the program, and expressed serious concerns around sustainability. Building the necessary capacity would ensure that the program was delivered successfully, as well as to ensure program sustainability in times of financial uncertainty. There is a need to re-evaluate the provincial tool used in measuring the improvements in knowledge, since it may have presented difficulties in identifying whether the knowledge gained was a direct result of the after-school initiative. It may also be beneficial to EBGC-EU to develop their own evaluation tool to identify strengths and weaknesses of the program and to measure the impact at multiple levels over time.

Finally, a small number of parents were included in this study in order to analyze some of the broader socioeconomic determinants. Though there was some evidence to suggest that there were positive immediate changes in nutrition-related behaviour in the home, it was not possible to evaluate these developments in this study. The parents referred to some positive attitude changes that they attributed to the program. However, there were some barriers identified at the level of the family. These barriers, especially socioeconomic considerations, were supported with data from the 2009 Factbook Questionnaire. Parents appeared reluctant to discuss socioeconomic issues publically during the focus group. Since the 2009 Factbook Questionnaire acknowledged the prominence of low-income and single-parent families in the surrounding neighbourhoods, it may work to EBGC-EUs advantage to work towards more involved relationships with parents in order to appropriately assist with socioeconomic issues.

The findings informed “A Recipe for After-school Nutrition Program Success” (Figure 4) which outlines some key “ingredients” necessary for the implementation and delivery of an after-school nutrition program. It is hoped that this “recipe” will inform the development and implementation of successful after-school nutrition programs that will improve child health and reduce child obesity in the long run.

Figure 4 A Recipe for After-school Nutrition Program Success



Note: This recipe is informed by the findings of this study and was developed with the assistance of a multimedia developer.

5.3 Recommendations

Recommendations are presented, and are for consideration by: EBGC-EU-offering a not-for-profit after-school program, capacity building, families with children enrolled in the after-school initiative, government and policy makers, and the role of the researcher.

5.3.1 Recommendations for consideration by EBGC-EU.

- To strengthen programming related to nutrition and health, EBGC-EU could build partnerships with local universities and local health departments to benefit from subject area experts, resources, and evaluation tools;
- To address socioeconomic issues associated with food insecurity, EBGC-EU could collaborate with community organizations such as “Feed the Need Durham”, Food ‘4’ Thought, local food banks, etc. to share knowledge and resources to deal with underlying issues. For example, tangible tools such as Food Budget Kits can be offered alongside educational resources such as workshops and classes to develop skills associated with budgeting, shopping, cooking, etc.
- EBGC-EU could continue to place emphasis on the involvement of families in their programming, specifically in activities that would help address food insecurity issues and to cultivate practical food experience including cooking and food growing (i.e., parent-child cooking classes and other educational initiatives). This can be fostered through effective communication networks between families and the organizations, which can be facilitated through additional newsletters,

family events (i.e., pancake dinners and summer barbecues), development of/partnership with a community garden, etc.

5.3.2 Recommendations aimed at building capacities.

- EBGC-EU could ensure adequate training and development opportunities for all program staff in the area of nutrition education. This can support the focus of the program (a nutrition education program along with a food experience program), and ensure that programming is consistent with current practice guidelines.
- EBGC-EU could establish a youth engagement initiative whereby children who participate in the after-school program can become youth leaders instrumental in program delivery.
- EBGC-EU take a leadership role in encouraging organizations to apply for and work towards accreditation offered by government or outside parties, especially when training and resources are scarce.
- Accreditation programs that already exist could help organizations by including nutrition and nutrition education in their programs, and partner with governments to ensure that a national standard can be set and followed according to national health guidelines (i.e. Canada's Food Guide to Healthy Eating).
- Staff at EBGC-EU could continue to build on the success of play-based learning, adapting its principles into the development of a more comprehensive nutrition-education program.

5.3.3 Recommendations for consideration by families with children participating in after-school initiatives.

- Families at EBGC-EU could take advantage of and participate in available programming, resources, and support systems that may be offered through the community organization. This can be in the form of informal community support systems, such as informal food baskets, or the partnerships the organization holds with others in the community that may meet their needs, such as local food banks and soup kitchens.
- Parents could familiarize themselves with the program and its core themes, such as that of healthy eating, and try to “walk the talk” or role model to the best of their ability. This could help the program move away from being a “band-aid solution” by expanding the healthy living environment into the home.
- Families could talk and share their experiences with one another when they have the chance, especially with families who may be less likely to participate in the after-school snack program. This can facilitate stronger relationships within the community, help them learn parenting skills from one another, especially in developing healthy eating habits in children, and serve as an outreach to families who may be most in need.

5.3.4 Recommendations for consideration by government and policy-makers.

- The potential of community-based settings in the implementation of health promotion initiatives, including nutrition education, must be acknowledged. The existing track records, infrastructure, and expertise in child care need to be taken into consideration when developing initiatives and activities should suit the structural capabilities of the organization. Opportunities to access funding for

infrastructural improvements (i.e., kitchens for a child-friendly cooking program) can assist in successful program delivery.

- Challenges associated with short-term funding and planning beyond the funding cycle need to be taken into consideration in order to allow community organizations to confidently outline long term goals as part of their strategic plans. Strategies that build local capacities to leverage funding from a variety of sources would help build sustainability and alleviate the potential constraints that come with instability in funding.
- Decision-makers at the provincial level need to ensure that program guidelines and standards clear. There should also be support for the organizations to reach the goals and mandates that are set. This can be achieved by:
 - Providing access to program officers or consultants with responsibility for monitoring and advising on implementation should be in place. A point of contact with the Ministry of Health Promotion and Sport could also serve a “check in” function to ensure that the program is running smoothly.
 - Providing feedback as the program progresses: the Ministry of Health Promotion and Sport should provide valuable feedback to the organizations based on the reports that are completed by the organizations. This is to provide insight on what is working well and the areas that require development.
 - Facilitating communication between health agencies and community organizations: the local government, such as the Durham Region Health Department, have a responsibility to act as gatekeepers and facilitate open

lines of communication between community organizations and health agencies that may be able to provide resources for health promotion programs. There should also be continual contact between community organizations and national organizations including Eat Right Ontario (ERO) and Dietitians of Canada (DC) to ensure the organizations are up-to-speed on evidence-based practices.

- Building a network between participating community organizations: this can provide organizations with a support system to share success stories and growing pains and learn from one another. Suggestions to accomplish this include a newsletter put together by the Ministry of Health Promotion and Sport sharing network-wide news and building an electronic network in the form of a discussion board or similar online tool.
- In developing a program-specific provincial evaluation strategy, it is imperative to use an approach that differentiates between contributions and attributions. Program contributions towards improving child health and reducing child obesity should be acknowledged, while also identifying the challenges associated with determining attributions. Methodologies to discern contributions could include qualitative methods analyzing broader outcome indicators, especially in the area of behaviour change. Promising practices should be documented to showcase the success of programming.
- Implementing programming under the umbrella of “healthy living” necessitates the development of a compendium of appropriate, educational, and child-friendly resources that are evidence-based and focused on: nutrition education, physical

activity, and personal wellness. Focus should be placed on building a system to gather and facilitate access to a standard set of resources to all organizations in order to aid in uniform program delivery.

- Governments at all levels need to address socioeconomic considerations, particularly in the area of food insecurity. This may require environmental changes, such as identifying and eradicating “food deserts” as opposed to the band-aid solution of providing more funds for transportation. It may also involve policy reform to provide increased social assistance to families in need to allow them to purchase food congruent with a healthy lifestyle.
- The Ministry of Health Promotion could establish and implement nutrition and food safety standards that all community organizations participating in the after-school initiative abide by. In order to ensure that these standards are followed, the Ministry should provide the necessary and appropriate tools, resources, and training across the province to all participating community organizations.
- Decision makers need to take into consideration the true cost of eating healthy, particularly for low-income and food insecure families, when developing programs focused on improving the nutritional status of participants.
- The sensitivities that surround labels such as “at-risk” need to be respected in developing and naming programs geared towards specific individuals or groups. Alternative and better-suited terminology includes “people facing conditions of risk” or “material and social deprivation.”

5.3.5 Recommendations for future research.

- It is essential for the researcher to become familiar with the organizations involved in their community-based research. This includes spending time at the organization with the staff and building trust. Establishing a reciprocal relationship where both parties are invested in the research can help overcome barriers that may arise, such as difficulty recruiting study participants.
- Given that communities are diverse entities, a community-based approach can help to not only develop program specific results and recommendations, but can also empower the organization. Taking a collaborative approach can help to build further capacity in the organization and ensure sustainability of the organization.
- Future research needs to be carried out on the teen program offered by community organizations like EBGC-EU, as well as the families and individuals who utilize the services offered by these organizations. This would help to improve programs and steer them in the direction required by the community.
- Future research also needs to be carried out on all three pillars of the after-school initiative: physical activity, nutrition education, and personal health and wellness to improve self-esteem. This can provide a more inclusive picture of the immediate- and long-term outcomes of the after-school initiative and provide insight on how to successfully integrate these three pillars in vulnerable groups.

5.4 Personal Reflections

As an individual of South Asian descent born and raised in Oshawa, Ontario (a five minute drive from EBGC-EU), this project complemented the researcher very well. Food is a dominating influence in South Asian culture. As a child, the researcher took

monthly trips to Toronto with her family to buy Indian groceries for the coming month. School lunches were always a little more elaborate than those of her friends – deli meat, peanut butter and jelly sandwiches, and Cheez Whiz were foreign foods. When planning family gatherings, events, trips, etc., the first question asked, and often the topic of hours of discussion, remains: “So, what will we eat?” The theme of mangoes that resonates throughout this thesis is something the researcher has grown up with. During mango season, regular trips are made by the researcher’s family to Toronto to pick up a variety of mangoes, especially those indigenous to areas in India, Pakistan, and Mexico. In some cases, special shipments are organized by family and friends to ensure access to species of mangoes that formed a vital part of the childhoods of those born and raised in India (i.e., the researcher’s father). Thus, food (and mangoes) have played a very significant role in the researcher’s culture and upbringing.

However, the researcher’s love for nutrition did not flourish until her undergraduate years at the University of Toronto, where it became possible to make food and nourishment, something so entrenched in South Asian culture, into a career. Yet, there was a dichotomy; while many individuals brought their families to North America and other western countries for better lives, this same environment was, in fact, making many children “sick” through childhood obesity. This issue and the complexities behind it struck a chord with the researcher.

While not having attended the programming that Eastview offers, the importance of after-school programming and activities were clear. Throughout elementary school and high school, the researcher, like many children and teenagers, was part of various sports teams, and regularly participated in intramural programs. This kept her busy,

healthy, and allowed her to develop a love for staying active which was maintained into adulthood. She volunteered at EBGC-EU during her undergraduate years in order to build experience in working with children. In recent years, she has used the swimming facilities at EBGC-EU through her Mosque. The researcher's ties to Oshawa, and EBGC-EU, helped in developing and carrying out a research project that, in effect, was very close to home.

The researcher volunteered at EBGC-EU during the course of her thesis study in order to familiarize herself with the initiative and to interact with individuals at EBGC-EU. Observations from this experience were mainly focused on the snack and to see how it had changed from what was previously offered. However, this time spent at EBGC-EU helped to develop the themes that became the major findings of the study, and led to a few areas of reflection.

The food experience for the children began when they arrived at EBGC-EU, excited and full of energy. As soon as the first group of ten to twenty children arrived, the building was full of noise and children running from floor to floor. Observing subtleties around the snack was easy for the researcher – the scent of chicken noodle soup, the visual appeal of juicy, oversized grapes, and the social interaction that takes place before, during, and after a snack or a meal. While there was more than enough “to go around”, individuals responsible for food provision ensured that all children had equal access by having them line up and allowing each a certain amount on their first trip to the table. The researcher almost always saw children try and sneak in more when they thought nobody was looking. It seemed to be the same few children that did this on a regular basis. This could speak to two things: either children were generally hungry at

that time of day, after a full day of school, or that the snack was one of the only opportunities for children to eat the types of food that were being served. Given the documented propensity of low-income families that utilize the services offered by EBGC-EU, it may be that the snack is one of the only exposures to an abundance of fresh and healthy food. This requires further exploration in order to more accurately document the issues around food insecurity that may exist in the area.

Secondly, there was a very obvious commitment on part of the staff at EBGC-EU from the beginning of the research project. From the initial meeting at EBGC-EU to discuss the interest in this research project, to the meetings during the research process, the dedication on part of the staff to make this initiative a success was very evident. The management was very committed to this research project, especially considering the timelines attached to the thesis, and the necessary access to the various individuals involved with EBGC-EU. On some occasions, management expressed feelings of guilt around what the club had been serving in the past as part of the after-school snack. The management in particular, who have been an EBGC-EU for a number of years, had a strong connection to the children and families who utilized EBGC-EUs services. They often had personal relationships with some of the parents, including those who had issues with lodging and food security, and helped them out as necessary. The informal supports documented in the present study need to be explored further.

Finally, the researcher noted the strong relationships between the children who participated in the after-school program, and the staff at EBGC-EU. Not only were the staff very aware of the children's needs and habits, but the children were very attached to the staff. They often shared many of the personal issues they had outside of EBGC-EU –

this included arguments and rifts with siblings, trouble at school, and issues at home.

This trusting relationship not only spoke to the commitment of the staff at EBGC-EU, but also the sense of psychological safety the children had in order to feel comfortable enough to discuss personal issues. The background and training of the staff played a role: staff members had interest and dedication in working with children i.e., in preparation for teaching.

The time constraints associated with completing a Master's thesis limited the researcher from exploring the issues associated with the immediate outcomes of this after-school initiative. It is necessary to take a closer look at families who utilize the services offered by organizations like EBGC-EU in order to gain perspective on how to best develop programming to suit the needs of individual children and families. In addition, different sites that implemented the after-school initiative need to be analyzed to identify program-wide strengths and weaknesses, and to adjust programming accordingly. This can help to ensure community organizations are well equipped to deliver all facets of the after-school initiative successfully and to ensure behaviour maintenance over the long-term. It is hoped that this work will inform programming in community sites across the province, with the goal of improving child health and preventing childhood obesity. After all, "it takes a village to raise a child" (African proverb).

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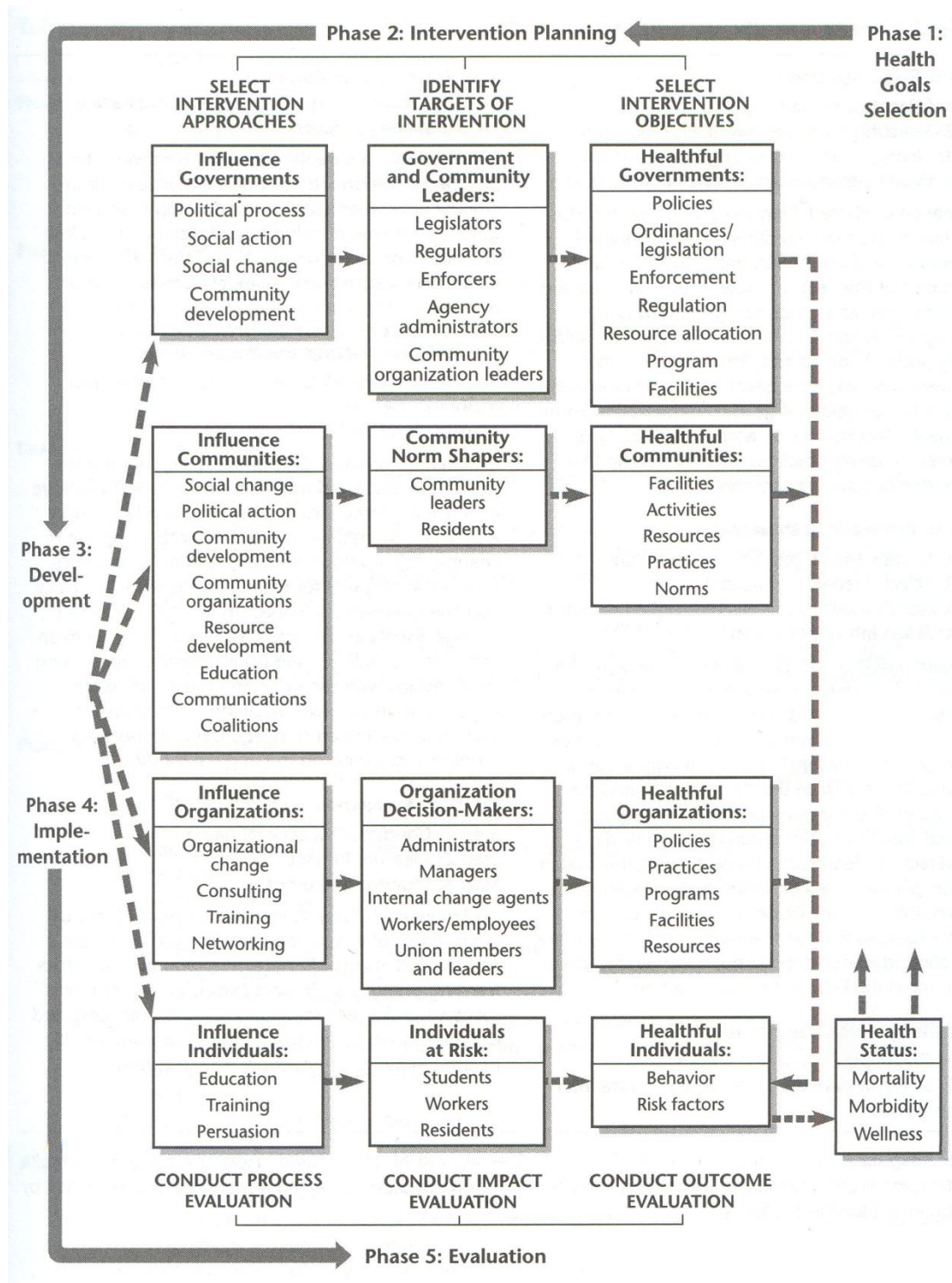
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Appendix A MATCH Framework





Appendix B Ethics Approval Letter

Date: May 11th, 2010

To: Salma Bham (Graduate Student) and Dr. Ellen Vogel (Supervisor)

From: Raymond Cox, REB Co-Chair

File #: 09-106

Title: An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity and personal wellness for at-risk children

The University of Ontario Institute of Technology Research Ethics Board has reviewed the above research proposal. The application in support of the above research project has been reviewed by the Research Ethics Board to ensure compliance with the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS) and the UOIT Research Ethics Policy and Procedures.

DECISION: Approved

COMMENTS AND CONDITIONS:

This project has been approved for the period of **May 11th, 2010 until May 10th, 2011 and is** subject to full REB ratification at the Research Ethics Board's next scheduled meeting. The approval may be extended upon request.

Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and approved by the REB. The Board must approve any modifications before they can be implemented. If you wish to modify your research project, please contact REB Administration, to obtain the Change Request Form.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, a school, community organization or other institution it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and approvals of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

Section F, Article 1.13, Review Procedures for Ongoing Research of the TCPS <http://www.pre.ethics.gc.ca/english/policystatement/policystatement.cfm> requires that ongoing research be monitored. A Final Report is required for all projects, with the exception of undergraduate projects, upon completion of the project. Researchers with projects lasting more than one year are required to submit a Renewal Request annually. Contact REB Administration to obtain a copy of the Renewal Request/Final Report form.

Please quote your REB file number on all future correspondence. Thank you.

REB Co-Chair Dr. Raymond Cox, FBIT raymond.cox@uoit.ca	Sascha Tuuha, Compliance Officer 905 721 8668 ext 3693 compliance@uoit.ca
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Appendix C
Letter of Permission



Eastview Boys and Girls Club

February 22, 2010

Ethics Research Board

UOIT

To Whom It May Concern:

The Eastview Boys and Girls Club is very pleased to be working with Salma Bahm, a UOIT student, who will be conducting research and an evaluation of the nutritional component of our after-school program at our Eastview Unit.

Salma will have access to statistics regarding our clientele and will also have access to our programming materials. She will work with the children by collecting information through the use of drawings and digital information about their experience with the Nutrition Program. Salma will also conduct focus groups with the parents/caregivers of some of the children who are involved with the program.

We trust that this will be a valuable learning experience for Salma and are confident that the information she gathers will be helpful to our organization and our efforts to increase our club member's knowledge around sound nutritional practices.

Should you require additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lisa McNee Baker". The signature is fluid and cursive.

Lisa McNee Baker

Executive Director

Appendix D

Interview Guide – Key Informant Interviews

Role of staff member in program: _____

Site of interview: _____

Interview date and time: _____

Signed consent form received _____

Study: An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity, and personal wellness for children

Introduction:

Thank you for volunteering your time to participate in this interview. This set of interviews is part of an exploratory study looking at the nutrition intervention component of the Ministry of Health Promotion (MHP) funded after-school initiative. The Eastview Boys & Girls Club was selected to receive funding to implement a program addressing three major areas: nutrition education, physical activity, and personal health and wellness to improve self esteem in children. The primary goals of the present study are to look at how the nutrition intervention has created conditions to promote child health and prevent of childhood obesity. We are also interested in learning more about the impact of the program on the children’s families. It is hoped that insights gained may strengthen the program, and possibly other community-based programs, though there is no guarantee of this. Interviewees are free to withdraw from this study without penalty at any time.

Interview Guide:

Key Concept	Rationale	Interview Questions
<p>1. Role of staff member in program</p> <p>Interviewer: I would like to begin this key informant interview by asking the individual to briefly describe how they came to be hired at this organization and to describe their role in the facilitation of the program.</p>	<p>General insight into staff responsibilities</p>	<p>I’d like to begin by asking you how you came to hold this position. What is your career background, and what motivated you to take this position?</p>
<p>Interviewer: From here, I would like to then ask about</p>	<p>Role in present program,</p>	<p>Have your responsibilities changed with the</p>

<p>this program specifically and how their role has changed from before this program was put in place.</p> <p>Interviewer: I would like to end this portion by asking if there was any training given to them to allow for the transition, particularly if their role was very different before.</p>	<p>Training for role</p>	<p>implementation of the nutrition intervention of the program? If so, how? Probe: Were you provided any training in order to facilitate this transition? If so, please describe.</p>
<p>2. Lived experience, through eyes of staff member</p> <p>Interviewer: I would like to begin by asking the staff members how they feel about the impacts of the program.</p> <p>Interviewer: Next, I would like to ask the participant about any impacts the program has had on their own lives, if any.</p>	<p>Children</p> <p>Program</p> <p>Individual experience</p>	<p>In what ways has this experience been transformative for children participating in the nutrition intervention, and their families. PROBE: What facet has stood out most? PROBE: Can you describe an example of why you think this is?</p> <p>How has this nutrition intervention changed from previous years?</p> <p>How about impacts on your own life? By being someone involved in the nutrition intervention, played a role in your life? PROBE: Have you made any changes, health wise, in your life? If so, how?</p>
<p>3. Program delivery</p> <p>Interviewer: I will begin this section by asking participants about the major facilitators to the nutrition</p>	<p>Facilitators</p>	<p>What do you think have been the major facilitators to the nutrition component of the intervention in</p>

<p>component, especially in their personal delivery of the program.</p> <p>Interviewer: I then want to ask the participants if there were any barriers to the nutrition intervention.</p> <p>Interviewer: I would like to ask the interviewees if they feel there are any socioeconomic factors that have played a role in creating the conditions to promote child health and prevent childhood obesity</p> <p>Interviewer: I would like to ask the participant about the lessons learned, in particular with what they perceive one can take away from this program from a program delivery standpoint.</p> <p>Interviewer: I would like to conclude by asking what they would recommend, as facilitators of the program,</p>	<p>Barriers</p> <p>Socioeconomic factors</p> <p>Lessons learned</p> <p>Recommendations</p>	<p>creating conditions that promote child health and prevent childhood obesity? PROBE: Can you provide specifics?</p> <p>What do you think have been the major barriers to the nutrition component of the intervention in creating conditions that promote child health and prevent childhood obesity? PROBE: Can you provide specifics?</p> <p>What do you think have been the socioeconomic factors that have played a role in the nutrition component of the intervention in creating conditions that promote child health and prevent childhood obesity? PROBE: Can you provide specifics?</p> <p>What are the “lessons learned” from this program? What do you thing is the most important thing to take away from it, in terms of impact and reach? PROBE: Do you think this would help in the implementation of other similar programs?</p> <p>Do you have any specific recommendations to improve delivery of the</p>
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<p>to further the program's effectiveness.</p>		<p>nutrition component of the program, in order to create conditions that promote child health and prevent childhood obesity?</p>
<p>4. Food Experiences</p> <p>Interviewer: In this section, I would like to ask the interviewee about the impact of the nutrition component of the program on the children, staff members, and them on an individual level.</p>	<p>Child participants</p> <p>Coworkers</p> <p>Individual</p>	<p>How has the nutrition component of the program affected the food experiences of children participating?</p> <p>How about staff members in general?</p> <p>How about yourself?</p>
<p>5. Funding</p> <p>Interviewer: I'd like to ask the participant about how the nutrition intervention would be effected should funding from the MHP cease.</p>		<p>In the event that funding for the program ceases, what would change about the nutrition component of the intervention?</p>
<p>6. Conclusion</p> <p>Interviewer: I'd like to take an opportunity now to thank you for participating in this focus group. If you have requested a transcript of this interview session, we will send them to you as soon as they become available.</p>		<p>Is there anything else you would like to add? Any additional thoughts or feelings you have about the impact of this program?</p>

Appendix E

Invitation and Consent Form – Key Informant Interviews

Invitation

You have been invited to participate in an exploratory study of the Ministry of Health Promotion (MHP) funded program targeting at-risk youth taking place at the Eastview Boys & Girls Club. This initiative began in September 2009 and has focused on child nutrition, physical wellness, and personal wellbeing. The present exploratory study will be carried out by researchers from the University of Ontario Institute of Technology (UOIT) as part of the Masters in Health Science program. We ask staff members to voluntarily participate in in-depth semi-structured interviews as part of this study, as described below. Interviews will be scheduled on a date/time convenient to the majority of interviewees. It is hoped that the information gained from this exploratory study will help improve this program and help other similar programs, while there is no guarantee of this. All information relating to the program, participation, and any risks or benefits follows. A consent form is also attached; if you would like to participate, please fill the consent form out and return to the front desk at Eastview Boys & Girls Club by Tuesday May 25, 2010. All information collected will remain confidential. This study has been given ethics approval by the UOIT ethics review board (file #09-106). Contact information is also included in this document; if you have any questions, please do not hesitate to contact Salma Bham.

What is the purpose of this interview?

An exploratory study is being carried out on the program implemented by the Ministry of Health Promotion in order to prevent childhood obesity. This present study will focus on the nutritional aspect of the program, looking at how Eastview Boys & Girls Club creates conditions that promote child health and prevent childhood obesity. One of the primary goals of the study is to examine facilitators, barriers, and socioeconomic factors related to the success of the program (as observed by staff members involved in its implementation) as well as the impact of the program on food experiences at the family and individual levels. In order to gauge this, one-on-one interviews will take place involving staff members who agree to participate.

What will the interview involve?

The interview will be one hour long taking place at the Eastview Boys & Girls Club. The researcher will ask general and probing questions to participants. The interview will be audio taped by the researcher in order for all information to be transcribed by a professional transcriber. This is to ensure that all information is collected and to ensure

that information being provided is not misconstrued in any way. Once the transcripts are made, copies will be made available to participants if requested. The identities of the participants will only be known to the researcher and the transcriber. It will be necessary for the and transcriber to sign a Confidentiality Agreement for the audio tapes. All information once collected, including the audio tapes and any hand written notes, will be kept in a locked area. The information provided will be completely anonymous; no names or personal information will be included or used in the completed study. The final study in its entirety will be mailed to participants if they wish to have a copy; this is the only time the provided mailing address will be used.

Are there any risks and/or benefits to participating in this interview?

It is the hope that information provided through the interview will allow the researcher to learn about the facilitators, barriers, and socioeconomic factors relating to this program through the eyes of the program staff. It will also provide insight into the food experiences of staff members, and their thoughts and feelings on the nutrition intervention of the program. By providing this feedback, individuals may feel a sense of contribution to potentially improving the program. The researcher will make every attempt to ensure the interview is comfortable for all participants. If a question makes an individual uncomfortable due to its sensitive nature, individuals can choose to not answer the question or ask to leave. It is to be noted that there is no guarantee that the information provided will lead to changes to the program.

Contact Information

Principal Investigator:

Salma Bham
Masters in Health Science candidate
University of Ontario Institute of Technology
2000 Simcoe St. North
Oshawa, ON; L1H 7K4
(905) 436-1806 OR (647) 291-1387
salma.bham@uoit

Co-investigator & Supervisor:

Ellen Vogel, PhD, RD, FDC
Associate Professor, Faculty of Health Sciences
University of Ontario Institute of Technology
2000 Simcoe St. North
Oshawa, ON; L1H 7K4
(905) 721-3111 (ext. 2180)
ellen.vogel@uoit.ca

The Research Ethics Review Board (REB) at UOIT has approved this study (file #09-106). If you have any questions or concerns regarding your rights to participation, or if you would like to speak to someone who is not directly involved with this study, please contact the REB office at UOIT Ethics and Compliance Officer, compliance@uoit.ca or telephone 905 721 8668 ext 3693.

Consent Form
Interview Participants

Study: *An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity, and personal wellness for at-risk children*

Location of interview:

Date and time of interview:

Name of participant: _____ (please print)

- I have read and understand the information regarding the study *An exploratory study of the nutrition intervention of an after-school project focused on nutrition, physical activity, and personal wellness for at-risk children*
- I understand that this study will explore the nutrition intervention of the program at the Eastview Boys and Girls club, an organization chosen by the MHP to implement their province-wide after-school initiative for at-risk youth.
- I understand that I have been asked to participate in an interview to discuss the program and am providing my consent to do so with this consent form.
- I understand that I will be asked questions on the effectiveness of the program from the experience of a staff member, as well as any impacts it has had on my own life.
- I understand that this interview will last one hour and will be audio recorded, with a transcriber producing transcripts of the information under a confidentiality agreement.
- I understand that everything I say will be confidential and my identity will remain anonymous.
- I understand that all information collected will be stored safely in the office of Dr. Ellen Vogel, Assistant Professor at UOIT until it is destroyed.
- I recognize that my participation is voluntary and I am free to withdraw at any time without any consequences
- I recognize that this exploratory study may not lead to direct changes to the program.
- I understand that this study is being conducted for research purposes and unidentifiable data may be published in academic journals
- I understand if I have any questions regarding my participation in this research study that I may contact the University of Ontario Institute of Technology Compliance Officer (905.721.8668 ext. 3693 or compliance@uoit.ca)

I, _____

1. Have read and understand the information concerning this research project
2. Realize that I am free to ask questions as necessary
3. Indicate free consent to participating in this research by signing this consent form

Participant signature: _____

Date: _____

Principal investigator signature: _____

Date: _____

Contact number and/or e-mail address I can be reached at (for scheduling purposes):

Would you like to have a DRAFT of the final study (please circle one)? YES NO

If YES, please provide name and mailing address:

Please indicate three one-hour time slots, with a location, that would work for you for this interview between June 8-June 18, 2010:

1. _____

2. _____

3. _____

Please return the signed consent form to the front desk at Eastview Boys & Girls Club by **Monday May 31, 2010**. If you are unable to drop this off at Eastview, please e-mail Salma (salma.bham@uoit.ca) and she will provide an alternate method of returning the consent form. Thank you!

Appendix F
Thank-you Letter – Key Informant Interviews

Salma Bham
BSc (Hons), MHSc candidate
University of Ontario Institute of Technology (UOIT)
2000 Simcoe Street North
Oshawa, ON
L1H 7K4
salma.bham@uoit.ca
(647) 291-1387

[INSERT DATE]

[INSERT EASTVIEW ADDRESS?]

Dear study participant,

I would like to thank you for agreeing to participate in the study *An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity, and personal wellness for children.*

The importance of providing children with an appropriate place to go after school is very important. The after-school initiative implemented by the Ministry of Health Promotion strives to do this while improving children's health through nutrition education, physical activity, and personal wellness. By providing your experiences as a individuals crucial in the implementation of this program, it is my hope as a researcher that the knowledge and insight obtained through this study will help in solidifying the important role of such programs and also identifying its strengths and weaknesses.

If you wish to obtain a copy of the transcript of the interview or a DRAFT of the study, please feel free to contact me at the above address. Thank you again for your time and consideration.

Sincerely,

Salma Bham

"It takes a village to raise a child."

–African Proverb

Appendix G

Interview Guide-Focus Group Interview (Parents/Guardians)

Relationship of interviewee to program participant: _____

Focus group date and time: May 19, 2010

Length of focus group _____

Signed consent form received _____

Study: An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity, and personal wellness for children

Introduction:

Thank you for volunteering your time to participate in this focus group. This focus group is part of an exploratory study looking at the nutrition intervention component of the Ministry of Health Promotion (MHP) funded after-school initiative. The Eastview Boys & Girls Club was selected to receive funding to implement a program addressing three major areas: nutrition education, physical activity, and personal health and wellness to improve self esteem in children. The primary goals of this study are to look at how the nutrition component has created conditions to promote child health and prevent childhood obesity. We are also interested in learning more about the impact of the program on the children’s families. It is hoped that insights gained may strengthen the program, and possibly other community-based programs, though this is not certain. Although focus groups cannot be anonymous, it will be important for all participants to respect one another’s confidentiality. Interviewees are free to withdraw from this study without penalty at any time.

Interview Guide:

Key Concept	Rationale	Interview Questions
<p>1. Parental perceptions of children</p> <p>Interviewer: In order to increase awareness of the intervention, especially the nutrition component, I’d like to begin by asking general questions about the children’s participation.</p>	<p>General feelings with regards to the program</p>	<p>I’d like to begin by going around the group and for each of you to mention the age of your child or children participating in this program and the length of time they have been participating .</p>

<p>Interviewer: From here, I would like to then ask probing questions depending on the kinds of answers I am getting as a response to the first question.</p> <p>Interviewer: I would then like to take the participants back to before their children began the program, and ask if and how their children's attitudes and lifestyles have changed since being part of the program, specifically focusing on the nutrition component.</p>	<p>Changes as compared to before enrollment</p>	<p>What is your understanding of the nutrition component of this intervention? Probe: How would you describe your child's participation in the nutrition component of the program?</p> <p>The program began in September 2009. After having participated in this program for the past school year, what differences have you seen in your children as compared to before they enrolled? Specifically with regards to nutrition.</p>
<p>2. Children's participation</p> <p>Interviewer: I would like to begin by asking the parents what it is that motivated their children to participate in this program.</p> <p>Interviewer: Next, I would like to identify the facilitators for the nutrition component and what it is that has helped make it a success for their children.</p> <p>Interviewer: I would like to end this portion by asking about any barriers, monetary or otherwise, that may have kept the intervention from being as successful as it could have been, in the eyes of the parents/caregivers.</p>	<p>Facilitators and barriers</p>	<p>What made you encourage your children to participate in this particular program? What provided the greatest "pull"?</p> <p>What aspects of the program do you think have helped contribute to your child's health and prevention of obesity? Probe: What do you identify as the key success factors?</p> <p>Are there any barriers that may have hindered your child's efforts to become healthier? Probe: If so, how do you think these barriers could have been addressed?</p> <p>Are there any other barriers that should be considered?</p>

		(financial, time wise, access to healthy foods, etc)
<p>3. Family & Food Experiences</p> <p>Interviewer: I will begin this section by asking participants about knowledge transfer from the children participating in the program to others in the household.</p> <p>Interviewer: I then want to ask the participants if they found it easy to take the information and actually live by it, by eating healthier.</p>	<p>Knowledge transfer</p> <p>Barriers to action</p>	<p>Have the nutrition activities your children participated in influenced the food experience of the household?</p> <p>Probe: Can you explain further?</p> <p>Probe: Were you able to make these changes easily? Are there any barriers that you see to eating a more nutritious diet?</p> <p>Food security is defined as: “DEFINITION TO INSERT.” Has this program played a role in changing your food security status? Why or why not?</p>
<p>4. Suggestions for the future</p> <p>Interviewer: I’d like to begin this portion of the focus group by asking the individuals what aspects of the program they liked have seen changes in from previous years.</p> <p>Interviewer: Now, I’d like to delve into what aspects, if any, the parents thought were either unnecessary or should be changed in order to improve program delivery.</p> <p>Interviewer: To end, I would</p>	<p>Changes in the program from before MHP funding</p> <p>Areas for change</p> <p>Additions to the program</p>	<p>Assuming children participated in the after-school program at Eastview Boys & Girls Club before, what is the same and what is different from before this year?</p> <p>Was there anything you would change about the nutrition intervention of the program? Probe: Anything you think may have been unnecessary, or requires further development in order to be more effective?</p> <p>Is there anything you think is missing from this</p>

<p>like to ask the parents if there is anything they would like to see included in this program in the future.</p>		<p>nutrition intervention? Probe: Is there anything that could be added or expanded upon to make it more effective?</p>
<p>5. Conclusion</p> <p>Interviewer: I'd like to take an opportunity now to thank you for participating in this focus group. If you have requested a transcript of this interview session, we will send them to you as soon as they become available.</p>		<p>Is there anything else you would like to add? Any additional thoughts or feelings you have about the impact of this program?</p>

Appendix H

Letter of Invitation – Parents/Guardians of 6-9 year old Children

Invitation

You have been invited to participate in an exploratory study of the Ministry of Health Promotion (MHP) funded program targeting at-risk youth taking place at the Eastview Boys & Girls Club. This initiative began in September 2009 and has focused on child nutrition, physical wellness, and personal wellbeing. The present exploratory study will be carried out by researchers from the University of Ontario Institute of Technology (UOIT) as part of the Masters in Health Science program. We ask parents and other family members to voluntarily participate in focus groups as part of this study, as described below, and will provide incentives for participation. Focus group interviews will be scheduled on a date/time convenient to the majority of interviewees. It is hoped that the information gained from this exploratory study will help improve this program and help other similar programs, while there is no guarantee of this. All information relating to the program, participation, incentives, and any risks or benefits follows. A consent form is also attached; if you would like to participate, please fill the consent form out and return to the front desk at Eastview Boys & Girls Club by Monday May 17, 2010. All information collected will remain confidential. This study has been given ethics approval by the UOIT ethics review board (file #09-106). Contact information is also included in this document; if you have any questions, please do not hesitate to contact Salma Bham.

What is the purpose of this focus group?

An exploratory study is being carried out on the program implemented by the Ministry of Health Promotion in order to prevent childhood obesity. This study will focus on the nutritional aspect of the program, looking at how Eastview Boys & Girls Club creates conditions that promote child health and prevent childhood obesity. One of the primary goals of the study is to examine facilitators, barriers, and socioeconomic factors related to the success of the program (as observed by parents/caregivers) as well as the impact of the program on food experiences at the family level. In order to gauge this, focus groups will be taking place involving parents/caregivers who agree to participate.

What will the focus group involve?

The focus group of 6-8 individuals will consist of a two hour session taking place at the Eastview Boys & Girls Club. A healthy dinner will be provided to all participants (half hour allotted for this), followed by an hour and a half for discussion of the various aspects of the program. The researcher will lead the discussion by asking general

questions to the group, followed by questions related to the responses she is getting from the participants.

The discussion will be audio taped by the researcher in order for all information to be transcribed by a professional transcriber. This is to ensure that all information is collected and to ensure that information being provided is not misconstrued in any way. Once the transcripts are made, portions of the transcript, as applicable, will be made available to participants if requested. The identities of the participants will only be known to the researcher and the transcriber. It will be necessary for the transcriber to sign a Confidentiality Agreement for the audio tapes. All information once collected from the group, including the audio tapes and any hand written notes, will be kept in a locked area. The information provided will be completely anonymous; no names or personal information will be included or used in the completed study. The final study in its entirety will be mailed to participants if they wish to have a copy; this is the only time the provided mailing address will be used.

Will there be any incentives provided for participating in the focus group?

A healthy meal will be provided to all participants, as well as a \$25 gift certificate for The Real Canadian Superstore.

Are there any risks and/or benefits to participating in this focus group?

It is the hope that the focus group will provide the parents of children participating in the program an outlet for sharing their thoughts and feelings with regards to the program. This includes sharing how they feel the program has affected their children, as well as any changes in their own lives. By providing this feedback, individuals may feel a sense of contribution to potentially improving the program. The researcher will make every attempt to ensure the focus group is comfortable for all participants. If a question makes an individual uncomfortable due to its sensitive nature, individuals can choose to not answer the question or ask to leave the focus group. It is to be noted that there is no guarantee that the information provided will lead to changes to the program.

When will this focus group take place? Will there be childcare available?

This focus group will take place at **Eastview Boys & Girls Club on Wednesday May 19 from 6PM-8PM**. The light meal will be served from 6-6:30PM followed by the focus group discussion. If you have any dietary restrictions, please indicate as such on the consent form. Because Eastview will be running one of their movie nights during this time, your children may join the movie night while you participate in this focus group.

Contact Information

Principal Investigator:

Salma Bham
Masters in Health Science candidate
University of Ontario Institute of Technology
2000 Simcoe St. North
Oshawa, ON; L1H 7K4
(905) 436-1806 OR (647) 291-1387
salma.bham@uoit

Co-investigator & Supervisor:

Ellen Vogel, PhD, RD, FDC
Associate Professor, Faculty of Health Sciences
University of Ontario Institute of Technology
2000 Simcoe St. North
Oshawa, ON; L1H 7K4
(905) 721-3111 (ext. 2180)
ellen.vogel@uoit.ca

The Research Ethics Review Board (REB) at UOIT has approved this study (file #09-106). If you have any questions or concerns regarding your rights to participation, or if you would like to speak to someone who is not directly involved with this study, please contact the REB office at UOIT Ethics and Compliance Officer, compliance@uoit.ca or telephone 905 721 8668 ext 3693.

Consent Form-parents/guardians

Study: *An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity, and personal wellness for children*

Location of focus group:

Date and time of focus group:

Name of participant: _____(please print)

- I have read and understand the information regarding the study *An exploratory study of the nutrition intervention of an after-school project focused on nutrition, physical activity, and personal wellness for at-risk children*
- I understand that this study will explore the nutrition intervention of the program at the Eastview Boys and Girls club, an organization chosen by the MHP to implement their province-wide after-school initiative for at-risk youth.
- I understand that I have been asked to participate in a focus group to discuss the program and am providing my consent to do so with this consent form.
- I understand that I will be asked questions on the impacts the program has had on my child(ren) as well as on my family.
- I understand that this focus group will last two hours and will be audio recorded, with a transcriber producing transcripts of the information under a confidentiality agreement.
- I understand that everything I say will be confidential and my identity will remain anonymous.
- I understand that all information collected will be stored safely in the office of Dr. Ellen Vogel, Assistant Professor at UOIT until it is destroyed.
- I recognize that my participation is voluntary and that I am free to withdraw at any time without any consequences
- I recognize that this evaluation may not lead to direct changes to the program.
- I understand that this study is being conducted for research purposes and unidentifiable data may be published in academic journals
- I understand if I have any questions regarding my participation in this research study that I may contact the University of Ontario Institute of Technology Compliance Officer (905.721.8668 ext. 3693 or compliance@uoit.ca)

I, _____

4. Have read and understand the information concerning this research project
5. Realize that I am free to ask questions as necessary
6. Indicate free consent to participating in this research by signing this consent form

Participant signature: _____

Date: _____

Principal investigator signature: _____

Date: _____

Contact number and/or e-mail address I can be reached at (for scheduling purposes):

Would you like to have a copy of the final study (please circle one)? YES NO

If YES, please provide name and mailing address:

If you have any dietary restrictions, please indicate: _____

Appendix I

Telephone Script

As noted on the REB application, this telephone script is to be used to remind parents of the packages sent home with their children.

****Script to be used on May 28, 2010 following unsuccessful distribution of the invitation packages. There was no response from parents, and one parent responded for the children's session. Phone calls are to be made before the second distribution, as recommended by Eastview management, in order to ensure that parents are aware of what is coming home with their children. ****

Hi [potential participant's name], my name is Salma Bham and I am a graduate student at the University of Ontario Institute of Technology located in Oshawa. I am doing a study at Eastview Boys & Girls Club related to the after-school program.

Lisa has informed me that your child/children are participating in the after school program. I sent invitations home with children to parents asking about participation in the study. If you did not receive the invitation, would you be interested in a brief conversation?

[IF NO] Thank you for your time. Have a great day!

[IF YES]

I am interested in the food experiences of children in the program and would like to talk to children, parents/guardians, program staff and Board members. To this end, I have invited children to participate in an informal discussion and related activity taking place in June. This will take about 45-minutes and children will be given lunch bags as a token of my appreciation.

I am also inviting parents to participate in a group interview where I hope to learn about the nutrition component of the after school program. This will take place on Wednesday June 16th from 6-8PM. Parents will be provided with a light meal at the start of the interview and a \$25 gift card to the Superstore at the end of the interview.

I am sending home invitations for the children's session and the group interview with parents with your child(ren). Would you and/or your child(ren) be interested in possibly participating?

[If NO] Thank you for your time. Have a great day!

[IF YES] Thank you; I appreciate your interest!

The invitations will be going home today with your child(ren). Please review the information and decide if you/your children would like to participate. If you wish to participate, please return the consent/assent forms for your child(ren) by June 4th, and the consent form for parents/guardians by June 11th to the front desk at Eastview Boys & Girls Club.

Do you have any further questions for me at this time?

[If NO] If you have any questions, please don't hesitate to contact me – my contact information will be in the invitation package. Thank you very much for your time. Have a great day!

[IF YES] Address questions.

If you have any further questions, please don't hesitate to contact me – my contact information will be in the invitation package. Thank you very much for your time. Have a great day!

Appendix J

Statement of Confidentiality for Investigator, Co-investigator, and Transcriber

An exploratory study of the nutrition intervention of an after-school project focused on nutrition, physical activity, and personal wellness for at-risk children

Name of Investigator, Co-Investigator, or Transcriber (please print):

PLEASE READ

Confidentiality and respect of privacy are crucial in research to ensure protection of the rights of research subjects. *Respect for human dignity also implies the principles of respect for privacy and confidentiality. In many cultures, privacy and confidentiality are considered fundamental to human dignity. Thus, standards of privacy and confidentiality protect the access, control and dissemination of personal information. In doing so, such standards help to protect mental or psychological integrity. Further, they are consonant with values underlying privacy, confidentiality and anonymity.* [Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans, 1998].

As it has been laid out by the Tri-Council Policy Statement, this current study will ensure anonymity and confidentiality for all research subjects. Once the interviews and focus group are recorded, any identifiers in the data collected will be removed prior to the passing on of the audio tapes to the transcriber. All data collected will be kept in a safe and secured area in a locked file cabinet in a locked office on the UOIT campus for a period of seven years after which all raw data will be destroyed (in accordance to UOIT policy). This includes all audio recordings of interviews and the focus group, their respective transcripts, and drawings and digitized results relating to children participating in the program. Digitized results will be made available to the children, and transcripts made available to the individual participants in advance of writing the final report. This report will also be made available to all participants by May 2011.

In signing below you are agreeing to respect the right to privacy of all participants in this study as well as that of other individuals who may be identified through the data collection and/or analysis process. As an investigator, co-investigator, or transcriber, all information shall not be shared in a public environment or with friends or family members to respect the confidentiality and anonymity rights that the participants deserve. The study and its participants are to be discussed only during research meetings.

In signing below you are indicating that you understand the following:

I understand the importance of providing anonymity and confidentiality to research participants;

I understand that while the raw data may contain references to the individual and/or other individuals, I understand that this information is to be kept strictly confidential;

I understand that the raw data are not to be discussed outside of research meetings;

I understand that data files (electronic and printed versions) are to be secured at all times (i.e., not left unattended). Further, data files will be stored as outlined in the Letter of Information and Consent approved by the UOIT Research Ethics Board.

In signing my name below, I agree to the above statements and promise to ensure the participants in this study anonymity and confidentiality.

Signature of the Investigator, Co-investigator, or Transcriber:

Date: _____

Appendix K
Thank-you Letter-Parents/guardians

Salma Bham
HBS, MHSc candidate
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(647) 291-1387

[INSERT DATE]

[INSERT EASTVIEW ADDRESS?]

Dear focus group participant,

I would like to thank you for agreeing to participate in the study *An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity, and personal wellness for children*. I hope you accept the attached gift certificate for The Real Canadian Superstore as a token of appreciation.

The importance of providing children with an appropriate place to go after school is very important. The after-school initiative implemented by the Ministry of Health Promotion strives to do this while improving children's health through nutrition education, physical activity, and personal wellness. By providing your experiences as parents/guardians, it is my hope as a researcher that the knowledge and insight obtained through this study will help in solidifying the important role of such programs and also identifying the strengths and weaknesses of such a program.

If you wish to obtain a copy of your portion of the transcript of the focus group or a copy of the final study, please feel free to contact me at the above noted address. Thank you again for your time and consideration.

Sincerely,

Salma Bham

"It takes a village to raise a child."

–African Proverb

Appendix L

Letter of Invitation – Children’s Activity (6-9 year olds)

Information for children (parents/guardians, please read to your child(ren)):

Invitation

Hi! My name is Salma Bham and I am inviting your child(ren) to help me with my project. Right now, I am doing some research on how the after-school program at Eastview Boys & Girls Club has helped them learn about food and health.

What will your child(ren) need to do? Your child(ren) would participate in a 45 minute activity during their usual after-school program. After their usual snack, we will talk about food with your child(ren) and ask them to draw pictures about how they think it keeps him or her healthy. The children will be audio-taped while they speak.

Will this information be shared with anyone? What your child(ren) talk about while they draw will be kept confidential, which means it will not be shared with anyone aside from the researchers and the other boys and girls at the activity.

Do your child(ren) have to participate? They do not have to participate. Even if they say yes now and do not feel okay with it during the activity, they can ask to leave at any time. If they ask to leave, what they have said on tape will be deleted.

Will your child(ren) receive a reward for completing the activity? The researchers will give your child(ren) a free lunch bag once they have completed the activity. They can use these to bring a healthy lunch to school.

When and where will this activity take place? A few dates and times are on the assent form that your child(ren) need to sign. Once signed, circle the date and time that your child(ren) will be able to attend.

What if I (the parent/guardian) or my child(ren) have more questions? If you have any more questions about this study, you can ask Salma or Dr. Ellen Vogel. Our phone numbers and e-mail addresses are on the next page.

For any questions related to ethics, you can contact the UOIT Compliance Officer at 905.721.8668 ext. 3693 or compliance@uoit.ca.

Contact Information

Principal Investigator:

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Co-investigator & Supervisor:

Ellen Vogel, PhD, RD, FDC
Associate Professor, Faculty of Health Sciences
University of Ontario Institute of Technology
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(905) 721-3111 (ext. 2180)
ellen.vogel@uoit.ca

The Research Ethics Review Board (REB) at UOIT has approved this study (file #09-106). If you have any questions or concerns regarding your rights to participation, or if you would like to speak to someone who is not directly involved with this study, please contact the REB office at UOIT Ethics and Compliance Officer, compliance@uoit.ca or telephone 905 721 8668 ext 3693.

Assent Form: For Children

1. Did your parent/guardian read this to you? **Yes** **No**
2. Do you understand what this project is about? **Yes** **No**
3. Do you have any questions? **Yes** **No**
4. Have your questions been answered? **Yes** **No**
5. Do you agree to your voice being recorded? **Yes** **No**
6. Do you understand that you can stop at any time? **Yes** **No**
7. Do you want to participate? **Yes** **No**

If you answered No to any of the above statements, do not sign and return this form.

If you are interested in participating, please write your name and the date below:

Your name: _____

Date: _____

Researcher name: _____

Researcher signature: _____

Date: _____

I would like to participate in the activity on (circle one):

- 1) Thursday June 3 – 3:15-4:45PM
- 2) Tuesday June 8 – 3:15-4:45PM
- 3) Wednesday June 9 – 3:15-4:45 PM

Please return this form (assent form) with the consent form (below) by **Monday May 21** to the front desk at Eastview Boys & Girls Club.

Consent Form: Parents/Guardians for Children’s Activity

- I have read and understand the information regarding the study *An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity, and personal wellness for children*
- I understand that this study will explore the nutrition component of the program at the Eastview Boys and Girls club, an organization chosen by the MHP to implement their province-wide after-school initiative.
- I understand that my child(ren) have been asked to participate in a drawing activity to discuss the program and draw how the program plays a role in their lives.
- I understand that this session will last 45 minutes and will be audio recorded, with a transcriber producing transcripts of the information under a confidentiality agreement.
- I understand that all information collected, including drawings, will be stored safely in the office of Dr. Ellen Vogel, Assistant Professor at UOIT until it is destroyed.
- I recognize that my child(ren)’s participation is voluntary and that he/she will be able to withdraw at any time.
- I recognize that this exploratory study may not lead to direct changes to the program.
- I understand that this study is being conducted for research purposes and unidentifiable data may be published in academic journals.
- I understand if I have any questions regarding my child(ren)’s participation in this research study that I may contact the UOIT Compliance Officer (905.721.8668 ext. 3693 or compliance@uoit.ca)

I, _____ hereby provide consent as the

parent/caregiver of

_____ to participate in this research study.

Parent/caregiver signature: _____

Date: _____

Principal investigator signature: _____

Date: _____

Contact number and/or e-mail address I can be reached at:

Would you like to have a copy of the final study (please circle one)? YES

NO

If YES, please provide name and mailing address:

Please return this form with the assent form by **Monday May 21, 2010** to the front desk at Eastview Boys & Girls Club.

Appendix M
Interview Guide – Children’s Session

Name of participant: _____

Date and time of session: _____

Signed assent/consent form received _____

Study: An exploratory study of the nutrition component of an after-school project focused on nutrition, physical activity, and personal wellness for children

Introduction:

Hi! Thank you for coming today. My name is Salma. During this session today, I would like to learn more about you at Eastview and the food you eat while you are here. I will ask you to draw some pictures of yourself at Eastview, including how you are feeling (happy, sad, etc) in this first box on this sheet. In the second box, I want you to draw what you eat while you are here at Eastview and how you feel about that. I will make a recording of what you say while you draw your pictures. If you have any questions, please put up your hand and we will talk about it. If you need to stop for any reason, let me know (including if you need to go to the bathroom). We will be here for about 45 minutes. If you want to stop before then and you don’t want to draw anymore, please let me know and I will take you back to your usual activity station.

Interview Guide:

Key Concept	Rationale	Drawing
7. Role of after-school program in daily life		Draw you at Eastview Boys & Girls Club at the after-school program. Include what you’re thinking and feeling
8. Food experiences and health		Draw how food plays a role when you are here at Eastview Boys & Girls Club. This can include you eating the snack, learning

		about the food, etc.
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Appendix N**Thank-you Verbal Script – Children’s Sessions**

To be read at the end of the children’s session by the principal investigator:

Okay everyone, if I could have your attention please? Thank you!

I want to thank you all today for participating in this activity. You helped me out by talking and drawing these pictures about nutrition and your time here at Eastview. I hope you enjoyed this as much as I did. Before you leave today, please come up and pick up a free lunch bag as a thank you – hopefully it will help you take healthy snacks and lunches to school every day! If you have any questions before you leave, let me know.