Body Image, Eating Attitudes and Behaviours, and Physical Activity:

A Multi-Method Study of School Age Children in Child Care

By

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Abstract

A multi-method qualitative study of a child care facility was conducted to examine (1) body image, (2) eating attitudes and behaviours, and (3) physical activity among Canadian school age children. The purpose was to recognize and understand the behaviours and social interactions of children related to these concepts at a before- and after-school child care program for children in Grades K-6. How these behaviours and interactions influenced and could be influenced by child care practice was also studied.

Observations of six- to 12-year-old children were made over a four-month period to examine interrelationships among the three concepts. These observations were in conjunction with selected interviews with children, informal conversations with child care staff, and with child learning activities conducted by the researcher.

Guided by ecological systems theory, the data were examined using content analysis and general inductive analysis. Four main themes emerged from the data: (1) "How to be a better, healthier person," (2) "Out of their hands," (3) "Puppets cutting their strings," and (4) "Reaching out." Findings showed that children were knowledgeable about ideas and behaviours that influenced health, which was due in part to formal and informal teaching about health at the Centre. The children also exhibited, or were learning to exhibit, healthy behaviours, which were congruent with the child care program's philosophy, goals, and children's rights and responsibilities. These healthy behaviours included a positive sense of self, healthy eating habits and food choices, and regular physical activity. Some children's behaviours also reflected the influences of sociocultural forces, specifically related to physical appearance and activity.

This research showed that early learning and child care practice can shape children's ideas and behaviour about body image, eating and activity. Implications for the establishment and delivery of child care programs, as well as the training and regulation of professional child care staff, are discussed.

Key words: Body image, children, development, eating, health, physical activity, early learning and school-age child care.

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Chapter I: Introduction

The examination of body image, eating attitudes and behaviour, and physical activity among school age children using before- and after-school child care is a relatively new research area, especially in Manitoba. However, the fact remains that younger children are displaying evidence of poor body image, disordered eating habits, and low physical activity. These issues have significant and long-term influences on the physical, cognitive, and emotional health of Canadian children, but there are gaps in the research literature which complicate our understanding of these issues.

Therefore, the observed behaviours, dialogue, and interaction of school age children related to eating, physical activity, and body image were studied in a school age child care centre for this research. Using ecological systems theory and ethnographic methods, the primary goal was to recognize and understand children's behaviours and social interactions related to these three issues, and their reciprocal influence child care practice. I documented: (1) The challenges and issues associated with body image, eating, and activity for school age children; (2) the social and cultural influences on children that affected eating habits and behaviours, physical activity, and body image; and (3) the implications of social and cultural expectations for children on child care practice. Four months of observation, guided by ecological systems theory, were analyzed using qualitative and some quantitative methods.

Research Purpose, Goals, and Questions

To examine body image, eating attitudes and behaviours, and physical activity among Canadian school age children, a multi-method qualitative study of a child care facility was conducted. Observations of six- to 12-year-old children in Grades K-6 were made

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over a four-month period in 2011 to examine interrelationships among the three concepts. These observations were in conjunction with selected interviews with children, informal conversations with child care staff, and with learning activities with the children. How children's behaviours and interactions influenced and could be influenced by child care practice was also studied.

Research goals. There were three goals of this research: (1) Describe the challenges and issues associated with body image, eating, and activity for school age children. (2) Explore the roles of the social and cultural environment of the Centre that influence school age children to enhance the development of healthy eating habits and behaviours, regular physical activity, and healthy body image. (3) Develop an understanding of how social and cultural expectations for children at a centre have implications for child care practice.

Research context. The research took place within a child care centre for school age children within Winnipeg, Manitoba, Canada (See Chapter 4 for more information on the Province and City, along with provincial rules and regulations licensing the Centre).

Previous research has shown that child care workers can influence children's ideas and behaviour around body image, eating and activity (for examples see Mrdjenovic & Levitsky, 2005; Nicklas, Baranowski, Baranowski, Cullen, Rittenberry, Olvera, 2001; Trost, Ward, & Senso, 2010). Therefore, it was known before the study began that ECE practice could influence children's ideas and behaviours. What was not known was the depth or breadth of these influences on school age children. Therefore, in selecting the research site, three questions were posed: (1) What is it about this setting that makes it worthy of examining? (2) What makes this a distinct or unique centre? (3) How will this

centre influence the ideas and behaviour of school age children? The answers to these questions will be addressed in the following pages and in Chapter 4 on *Context*.

Central Research Question. What are the observed behaviours and interactions of school age children and their caregivers related to eating, physical activity, and body image at a school age child care centre?

Research Sub-questions. Within the school age child care centre, the following research sub-questions were posed: (1) What are the challenges and issues associated with body image, eating, and activity for school age children? (2) What are the social and cultural influences on school age children that affect eating habits and behaviours, physical activity, and body image? (3) How do social and cultural expectations for children have implications for child care practice?

My Role as Researcher

While I am a graduate student at the University of Manitoba, I am also an Early Childhood Educator III and an Instructor in the Early Childhood Education program at Red River College in Winnipeg. I teach and train students to provide quality care to children in early learning and child care (ELCC) environments. Responsibilities of my position include classroom instruction and supervision of students during practicum placements in the community. It was through my interactions with Early Childhood Educators (ECEs) in the community that I was made aware of the centre that I eventually chose as my research site. It should be noted that there was no conflict of interest in selecting this site for my research: I was aware of this child care program, but I had no previous contact with it. I was not on the parent board, nor was I ever employed there.   I

did not have a student completing a practical experience at this centre, nor was it previously used for the practical training of my students.

My experience as an ECE and as an Instructor allowed me to develop the skills to be an effective observer, one that can be unobtrusive in a child care environment. In the early childhood field, and specifically for the ECEs trained at Red River College, documentations of children's behaviour are a regular occurrence and are often necessary while children are present. As such, it is not out of the ordinary for children to see ECEs writing notes in their presence. Therefore, during my observations, I wrote field notes and used both open and closed observational methods when the children were near. For documenting all of a child's behaviour, open methods such as anecdotal records were most useful, while documenting for targeted behaviours (e.g. type of physical activity), closed methods such as behaviour tallying and participation charts were used. (A comprehensive description of these data collection methods is available in Chapter 5, *Method.*) My observations were not disruptive to the daily routine of the Centre, to the responsibilities of the staff, or to the play and activities of the children.

In addition, my experience as an ECE and as an Instructor has provided me with the skills necessary to offer developmentally appropriate activities to school age children. These skills were particularly useful in developing and implementing learning activities that I conducted, in order to evoke behaviours related to body image, eating, and activity. Being knowledgeable about child development and play, and about school age children's interests, was invaluable in creating learning activities with which to gather data that could support my research goals.

Study Rationale

In compiling a review of the current literature and examining the theoretical perspectives relevant to body image, eating, and activity among school age children in child care, it was also important to explore the rationale for conducting this study, and the present state of the science surrounding these issues. A discussion of each is to follow, beginning with the current state of the science and the lack of pertinent information.

State of the Science

The examination of body image, eating attitudes and behaviour, and physical activity among school age children using before- and after-school care is a relatively new research area, especially in Manitoba. As such, there are several gaps in the current research literature. One of the most significant pieces of missing information regarding body image, eating, and activity among school age children is the Canadian picture. Much of the research available is from the United States or Australia. For instance, an abundance of research out of Australia on body image and eating has been provided by authors such as McCabe and Ricciardelli (McCabe & Ricciardelli, 2003b, 2005; McCabe, Ricciardelli, & Holt, 2010; McCabe, Ricciardelli, Stanford, Holt, Keegan, & Miller, 2007; Ricciardelli, McCabe, Lillis, & Thomas, 2006), Tiggemann (Clark & Tiggemann, 2006; Dohnt & Tiggemann, 2005; Hargreaves & Tiggemann, 2006; Lowes & Tiggemann, 2003), and from the United States by Smolak (Levine & Smolak, 2006; Murnen, Smolak, Mills, & Good, 2003; Smolak, 2004; Smolak & Levine, 2001; Smolak, Levine, & Schermer, 1999). The most prominent researcher in Canada is Gail McVey at the Hospital for Sick Children (SickKids) in Toronto (McVey, Davis, Tweed, & Shaw,

2004; McVey, Lieberman, Voorberg, Wardrope, & Blackmore, 2003; McVey, Tweed, & Blackmore, 2004, 2005, 2007; McVey, Pepler, Davis, Flett, & Abdolell, 2002).

In addition, the population of children studied in the research on body image and dieting should be taken into consideration. Specifically, there appears to be a lack of diversity in participant populations. First, most of the evidence relevant to this issue has been based on cross-sectional data (Ricciardelli & McCabe, 2001), where children of different ages are studied at one point in time. While this type of study can be useful for understanding an issue for children at different ages, it does not explore the developmental changes that may occur with body image and eating, and it does not provide evidence as to the long term health and developmental effects of poor body image and restrictive eating on children. Next, some research has examined the experiences of six- to 12-year old children (Abramovity & Birch, 2000; Birbeck & Drummond, 2006; Davison & Birch, 2001a; Dohnt & Tiggemann, 2005; Gross, Bronner, Welch, Dewberry-Moore, & Paige, 2004; Ricciardelli & McCabe, 2001; Smolak, 2004), but these studies are still limited in number and the tendency is to focus more on the experiences of girls than boys (Byely, Archibald, Graber, & Brooks-Gunn, 2000; Clark & Tiggemann, 2006; Lowes & Tiggemann, 2003; Sinton & Birch, 2006). For example, the majority of academic research on body image and the community resources to deal with it are primarily directed at adolescents, not at children in elementary schools (for examples see Dohnt & Tiggemann, 2005; McCabe & Ricciardelli, 2003; McCabe, Ricciardelli, & Holt, 2010; Neumark-Sztainer, Eisenberg, Fulkerson, Story, & Larson, 2008). In fact, Smolak (2004) stated that "we know little

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about the development of body image, particularly during the preschool and elementary school years" (pp. 19-20).

Moreover, in considering measurements of overweight and obese, a large number of studies utilize the Body Mass Index (BMI) to assess normal or healthy weight. For example, several studies have used BMI as part of assessments of children's and adolescent's perceptions of overweight (for examples see McVey, Davis, Tweed, & Shaw, 2004; McVey, Lieberman, Voorberg, Wardrope, & Blackmore, 2003; McVey, Tweed, & Blackmore, 2004, 2005, 2007; McVey, Pepler, Davis, Flett, & Abdolell, 2002) and corresponding weight loss or muscle-gaining behaviours (McCabe & Ricciardelli, 2003b, 2005; Ricciardelli, McCabe, Lillis, & Thomas, 2006). However, this measurement tool has been criticized. For instance, according to Maine (2011), this tool was not developed for individuals; rather, it was a population statistic that was "physiologically wrong." For example, it only considers height and weight measures and takes no account of bone density or muscle mass. The National Eating Disorder Information Centre (NEDIC) (2011) suggests that the BMI is not useful for individuals who are quite muscular. Since muscle weighs more than fat and bone is twice as dense as fat, a very tall, muscular person may be considered overweight according to the BMI (Maine, 2011). Indeed, many athletes have a high BMI (Maine, 2011). As well, this tool may foster a stigmatic response, wherein a healthy child is forced to diet because of a risk of health concerns for overweight individuals. However, Maine (2011) cited work by the Childhood Obesity Task Force (2005) which suggested that BMI measures did not accurately predict health or health risks for children.

Instead of a BMI measurement, the Edmonton Obesity Staging System (EOSS) may provide a better assessment. Developed by Sharma and Kushner (2009) at the University of Alberta, this tool examines a broader range of factors with which to assess overweight and obesity. Specifically, before assigning an EOSS score, the following steps must be taken: BMI is calculated; mental, mechanical and metabolic co-morbidities are identified (e.g. diabetes, sleep apnea); quality of life, mobility, and work performance are assessed; and laboratory tests are conducted (e.g. blood tests) (Sharma & Kushner, 2009). This tool also uses a staging system for assessing obesity, where different stages of obesity require different levels of medical intervention (e.g. Stage 0-1 require no medical intervention) (Sharma & Kushner, 2009).

It is important to note that while my own research was not concerned with assessing body weight with measurement tools, a significant piece of the literature has utilized the BMI as a critical variable in understanding children's body image and eating ideas and behaviours. As there has been criticism of using the BMI, careful consideration was made regarding the validity of information used in the literature review in Chapter 3.

The academic research on physical activity also provides limitations. With activity, much of the research focuses on extracurricular activities, including organized sports, and does not include unstructured physical play (e.g. rough and tumble play) as a significant piece of physical activity (Pellegrini & Smith, 1998). As well, many of the studies which measure physical activity levels do so using self-report tools (Faith, Leone, Ayers, Heo, & Pietrobelli, 2002; Sithole & Veugelers, 2008; Neumark-Sztainer et al., 2003), which may not be as accurate as using pedometers (i.e. step counters). Other studies use parental reports of children's activity, which may also be inaccurate considering that

parents are not witness to the physical activity that takes place at school or when children engage in unsupervised play. Moreover, as mentioned earlier, there is little focus on cultural activities (e.g. hoop dancing of the Anishinabe tribe) as part of physical activity measures for children.

Limitations have also been reported on the lack of research around positive body image, specifically, on individuals who are happy with the way they look. In two review articles, Cash (2005) and Grogan (2010) suggest that in the study of body image, too much research has focused on pathology instead of healthy body image and body image satisfaction. Research relevant to my own study included that conducted with adolescent girls in Grades 7 through 12 in Minnesota (Kelly, Wall, Eisenberg, Story, & Neumark-Sztainer, 2005); in Sweden with boys and girls 10 to 13 years of age (Frisén & Holmqvist, 2010) and 14 years of age (Holmqvist & Frisén, 2012); and in Australia with 5 to 9 year old girls. The American and Swedish studies attempted to identify the characteristics of children and adolescents with positive body image, while the Australian study attempted to promote appearance satisfaction using *Shapesville*, a children's book designed to foster positive body image.

There also appears to be theoretical limitations in the literature around body image, eating, and physical activity. In particular, very few research articles clearly identify a theoretical framework from which they are based; some mention the work of various theorists, but few seem to explicitly state a theoretical base (for examples see Austin, Haines, & Veugelers, 2009; Clark, 2008; Gehrman, Hovell, Sallis, & Keating, 2006; O'Dea & Caputi, 2001; Vander Wal & Thelen, 2000; Wood, Becker, & Thompson, 1996). However, Sinton and Birch (2006) used ecological systems (Bronfenbrenner &

Morris, 1998) and self-schema theories (Markus, 1977) to support their hypotheses about the influences on body image dissatisfaction in preadolescent females, while Clark and Tiggemann (2006) suggested that sociocultural theory supported results related to media and peer influences on body dissatisfaction. As well, Birbeck and Drummond (2006) used symbolic interactionism theory to support their findings about understanding body image and health among 5- to 6-year-old boys in Australia.

Last, there is very little research which has focused on school age child care educators and environments as being influential on children's body image, eating, and activity. The majority of research has been focused in two directions: On the role of the family and of the teacher and the school environment (See Chapter 4 for a comparison of school age child care and the primary school environment). Indeed, Lynch and Batal (2010) report a lack of information regarding children's nutritional development in child care settings, while Brown, McIver, Pfeiffer, Dowda, Addy, and Pate (2009) suggest there is a need to conduct research on how to "develop, disseminate, and diffuse evidence-based physical activity interventions to early childhood educators" (p. 56). Furthermore, Nicklas et al. (2001) indicate that more research needs to be conducted on how parents and ECEs affect the development of fruit and vegetable preferences and eating practices in the early years.

Of the research that has studied children's body image, eating, and activity in child care settings, most has been focused on the ideas and behaviours of preschool aged children (2-5 years). This research has been concentrated on eating (Gubbels, Kremers, Stafleau, Dagnelie, de Vries, & Thijs, 2009; Hughes, Patrick, Power, Fisher, Anderson, & Nicklas, 2007; Lanigan, 2010; Nicklas, Tsuei Goh, Goodell, Acuff, Reiher, Buday, & Ottenbacher, 2011) and physical activity (Copeland, Sherman, Kendeigh, Kalkwarf, &

Saelens, 2012; Copeland, Sherman, Kendeigh, Saelens, & Kalkwarf, 2009), on obesity and obesity prevention (Fuller, Keller, Olson, & Plymale, 2005; Herbst & Tekin, 2009; Story, Kaphingst, & French, 2010), and on the role of preschool care providers in influencing eating (Mrdjenovic & Levitsky, 2005; Nicklas, Baranowski, Baranowski, Cullen, Rittenberry, Olvera, 2001) and activity habits (Alhassan, Sirard, & Robinson, 2007; Trost, Fees, & Dzewaltowski, 2008; Trost, Ward, & Senso, 2010).

Rationale and Problem Statement

In Canadian society, there are increasing numbers of younger children with body image concerns, disordered eating, and low physical activity (Clark, 2008; McVey, Tweed, & Blackmore, 2005; NEDIC, 2003; Statistics Canada, 2010a). These issues have significant consequences for their immediate and long term health and development. Currently, the majority of the academic research being conducted on body image, eating, and activity are focused on older school age children and adolescents, not at children in the early primary grades.

It is important to explore other facets of the ecosystem, other than parental influence alone (as has been done previously) as a variety of sociocultural influences have an impact on children's ideas and behaviour. In particular, for six- to 12-year old children, enrolment in quality before- and after-school child care programs may help to foster a healthy body image, healthy eating habits and behaviours, and regular physical activity. Many facets of the ecosystem, such as health-related ideas and behaviours often develop early in life, so early childhood influences are important. Finally, researchers must consider a variety of theoretical perspectives to help explain the impact of sociocultural influences. Ecological systems theory, sociocultural theory, gender theories, and

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developmental theories need to be considered. What is learned from this research can be applied to parents, caregivers, and educators to encourage healthy attitudes and behaviours and discourage negative patterns.

Overview of Dissertation

In addition to the overview in this chapter, Chapter 2, *Literature Review*, cites relevant research on body image, eating attitudes and behaviours, and physical activity of children, including the sociocultural influences on these three concepts and the current state of the science. Chapter 3, *Theoretical Approaches*, explores Bronfenbrenner's ecological systems theory, the main theoretical framework for this research, and three supplemental perspectives: Sociocultural theory, gender theories, and developmental theories.

Chapter 4, *Research Context*, begins with an exploration of the Province of Manitoba and City of Winnipeg. It then contains a brief discussion of Canada's political system, the method of the funding system for child care, and the Manitoba child care rules and regulations for child care centres and staff qualifications. In addition, a demographic profile of the research site (i.e. the Centre) and the surrounding community are provided.

Chapter 5, *Methods*, describes the use of qualitative methods and, in particular, the use of content analysis and the general inductive approach. Sampling procedures and data collection in child care environments are also included, with a section on the process used to uphold ethical standards. Finally, methods used in this research are described in detail.

Chapter 6, *Results*, presents the research findings of the study. This chapter presents the results from which arose four main themes, and it provides specific examples from verbal and behavioural data to support the development of these themes.

Chapter 7, *Discussion*, shows how results were connected to the current literature, and the new information that was gained as a result of the research. This chapter provides support for the current research on body image, eating, and activity for school age children, and it explores the need for further research in these areas using early learning and child care as a framework.

Chapter 8, *Limitations, Future Directions, and Conclusions*, describes the study limitations, future directions for this line of research, and overall conclusions. A section on study implications is also included, focusing primarily on implications for research and theory, practice, education, and policy.

Chapter II: Literature Review

The following section reviews the pertinent literature relating to body image, eating attitudes and behaviours, and physical activity among children. The literature included in this chapter were chosen based on their relevance to the health and development of school age children in Canada, but particularly for those using before- and after-school age child care. In order to understand the impact of these issues on school age children, it is important to first understand the concept of health and perceptions of health. The social and cultural contexts in which children act and develop are also examined.

Health

According to the World Health Organization (1984), health is defined as:

> The extent to which an individual or group is able, on one hand, to realize aspirations and safety needs; and, on the other hand, to change or cope with the environment. Health is therefore seen as a resource for everyday life, not the objective for living; it is a positive concept emphasizing social and personal resources, as well as physical capacity. (Pimento & Kernested, 2010, p. 4)

Health, therefore, is a combination of biology, heredity, environment, and personal factors. It should be noted that these personal factors involve choice, cognition and evaluation, all of which affect body image, eating, and activity ideas and behaviours.

This amalgamation of factors may affect the health of children in positive or negative ways. Even when the combination keeps children healthy, they often do not have control over these factors (Pimento & Kernested, 2010). For instance, young children rarely have input into where they live, which schools they attend, how many siblings they have, or how much money their parents earn. Clear risks to children's health that are out of their control include living in poverty, isolation, and/or dangerous or overcrowded communities; parents' low educational achievement; and negative (e.g. harsh, punitive,

neglectful) parenting styles (Feldman, Hancock, Reilly, Minnes, & Cairns, 2000; Kohen, Brooks-Gunn, Leventhal, & Hertzman, 2002; Kotchick & Forehand, 2002).

While young children may not have control over the factors that influence their health, many do recognize what is needed to keep them healthy. A study by Irwin et al. in British Columbia examined how social contexts influenced five- to seven-year-old children's perceptions of health (Irwin, Johnson, Henderson, Dahinten, & Hertzman, 2006). In particular, "a child's connection to place and their feelings of safety" were connected to perspectives of health (p. 357). The children in this study indicated that there was a link between nutritious food and physical health, with some understanding of the reasons behind making healthy food choices, and why some foods were 'good' or 'bad' for them (Irwin et al., 2006). The children also mentioned that physical activity was linked to health, but indicated that they did not always have a safe environment in which to be active or friends in their community with whom to be active. Other findings indicated that being happy was linked to health and that health and self-care (e.g. brushing their teeth, respecting others) were connected (Irwin et al., 2006). Similar results were found in studies involving older Canadian children. For instance, Woodgate and Leach (2010) reported that 12- to 19-year-olds had a broad understanding of health-influencing factors, but also more specific comprehension of (and more focus on) lifestyle factors, such as physical activity and healthy eating, as influential on health. However, some confusion in health concepts was found in eight- to 12-year-old children in Wisconsin (Snethen & Broome, 2007). These children reported confusion about physical activity requirements, specifically frequency, intensity, and duration (Snethen &

Broome, 2007). Findings from this study should be interpreted with caution however, as there were only 17 participants and it was not clear how they were selected for the study.

Perceived health is also an important factor in actual health. According to Statistics Canada, perceived health refers to health in general, "not only the absence of disease or injury, but also physical, mental, and social well-being" (2010b, p. 1). Two aspects of perceived health are relevant to this study: Body weight and sense of belonging. For example, Canadians 12 years and over that were considered to be of *normal* weight reported "very good" or "excellent" health (2010b, p. 2). As well, individuals who have a sense of belonging to a community (e.g. child care centre) have better physical and mental health (Statistics Canada, 2010b). Canadians 12 years and over that reported a "very strong" or "somewhat strong" sense of belonging to a community reported better health than those reporting a weaker sense of belonging (Statistics Canada, 2010b).

The impact of the social environment appears to have an impact on children's health. Family, peers, sex and gender, culture and ethnicity, media, and socioeconomic status all influence the experiences and ideas of school age children around body image, eating, and activity, which ultimately affect children's health. Each of these will be discussed in the following pages, but first, this literature review will define and examine the issues of body image, eating attitudes and behaviours, and physical activity.

Body Image

Body image is composed of the thoughts, feelings, attitudes, and perceptions about a person's own physical appearance which in turn influences self-esteem and body satisfaction (Barlett, Harris, Smith, & Bonds-Raacke, 2005; Jarry, Kossert, & Ip, 2006). Essentially, it is the way people see themselves, how they think they look to other people,

and how they feel about what they see (Health Canada, 2000; Kim & Lennon, 2007).

Body image is conceived as being on a continuum. At one end of the continuum is

negative or poor body image, where persons have distorted perceptions of their bodies

and perceive that their bodies are unattractive to others (NEDA, 2006). With poor body

image, an individual may feel anxious, ashamed, or self-conscious about his or her body

or may believe that personal body size or shape is an indicator of failure (NEDA, 2006;

NEDIC, 2005a). Healthy body image is at the other end of the continuum, where the

body is perceived in its true shape and is believed to be attractive to others, and accepted

in its current form (NEDA, 2006). Here, an individual does not spend a significant

amount of time concerned with weight, food, or calories (NEDA, 2006).

Unfortunately, it appears that children are becoming self-conscious about their bodies

at much younger ages. In fact, many children do not like the way they look. Even

preschoolers have negative attitudes about body size (Ambrosi-Randic, 2000). Birbeck

and Drummond (2006) found that boys in Australia as young as five and six years of age

had body image concerns. The findings from this study are noteworthy, as the intention

was to address the lack of information regarding body image in elementary school age

boys. Thus, it is critical to consider these consequences for young children, both boys

and girls. Specifically, several researchers have identified preadolescent body dis-

satisfaction in connection to lowered self-esteem and psychological well-being, and to

increased risk of dieting and eating disorder behaviours, depression, and obesity

(Ricciardelli & McCabe, 2001; Smolak, 2004; Smolak & Levine, 2001).

While most of the research on this issue concentrates on the concept of body image,

other research has examined behaviour. Research by Neumark-Sztainer, Paxton, Hannan,

Haines, and Story (2006) found that body image ideas were linked to eating and activity behaviours. Although this study focused on young adolescents, it was determined that those adolescents who had a more positive body image also had healthy eating habits and physical activity behaviours when assessed five years later. Cash (2002a, 2002b; Cash & Pruzinky, 2002) has identified these two separate components of body image: Body image evaluation and body image investment. *Evaluation* refers to evaluative thoughts and beliefs about appearance and how satisfied one is with their body, while *investment* refers to the behaviours people use to manage or improve appearance. Similar ideas were reflected in work by Jarry, Kossert, and Ip (2006). They suggested that body image consists of both ideas and behaviours. Specifically, body-image *satisfaction* refers to how satisfied an individual is with his or her appearance while body-image *investment* is the value an individual places on physical appearance in defining his or her self and determining self-worth. As well, body-image *behaviour* refers to "appearance-related behaviours such as grooming, concealing, and avoiding the sight of one's body," while body-image *perception* relates to how close to accurate an individual is in estimating his or her body size (Jarry, Kossert, & Ip, 2006, p. 1).

It might be expected that one would find more information in the current literature about body image investment and behaviour, as opposed to ideas around satisfaction and evaluation. The reason lies in the concrete measurement of actual behaviours (e.g. using make-up to hide a blemish, how many times one combs his or her hair) versus abstract ideas of satisfaction with one's body image. Specifically, it is much easier to see a person performing body image behaviours, while getting an accurate evaluation of one's body image value can be difficult (e.g. may not actually know how satisfied a person is

with his or her own body image). Therefore, for the purposes of this study, it was expected that body image behaviours would be observed more often than body image ideas.

   Body image and self-concept. Changes in self-concept occur during middle childhood, which ultimately affect body image. Essentially, self-concept is *who you think you are*, and includes descriptive characteristics to define the self (e.g. I am tall, I am funny) and an "overall evaluative tone" linked to those characteristics (i.e. self-esteem) (Davison & Birch, 2001b, p. 46). There are several parts to self-concept. These include a general or global sense of self, physical appearance self (including body esteem), social self, academic self, and athletic self (Davison & Birch, 2001b).

   Self-concept can be influenced by cognition (e.g. self-understanding), culture (e.g. Western society – separateness and self-assertion emphasized), and social factors (e.g. family, peers, school, community) (for examples see Harter, 2003, 2006; Mead, 1934). For preschool aged and young school aged children, self-concept is concrete and is based on observable characteristics, such as name, appearance, possessions, and behaviour (Harter, 2006). Between the ages of eight and 11 years, the self-concept is refined. This older group of children can now describe self in terms of competencies (e.g. good cellist) and psychological traits (e.g. honest) (Harter, 2006). They also have the ability to compare their personal characteristics with those of their peers (Harter, 2003, 2006). For example, school age children are capable of social comparisons, where they can judge their own appearance, abilities, and behaviours in relation to those of their peers (Harter, 2006). At this age, children can also assess the reasons behind their strengths and limitations (e.g. not strong in math, therefore more studying is needed).

Research suggests that there is a connection between body image and self-concept; in particular, physical appearance evaluation is a part of self-concept (Ha, Marsh, Martin, & Halse, 2006). Unfortunately, body dissatisfaction may negatively influence a child's self-concept: "Concerns about body shape and weight have a significant influence on feelings of self-worth" (Ross & Wade, 2004, as cited in Ha et al., 2006, p. 2). A study by Davison and Birch (2001b) reported that overweight five-year-old girls had lower body esteem and lower self-concept, including lower perceived cognitive ability. A later study found similar results, where girls who were considered overweight at five and seven years of age reported lower self-concept (Davison & Birch, 2002). These results should be interpreted with caution, however, as the controversial BMI was used to assess the girls' weight status. Other research has found links between preadolescent overweight and lower self-concept during adolescence (Strauss, 2000). As well, in a study involving adolescent girls in South Australia, Tiggemann (2001) found that the girls rated academic achievement and intelligence higher than being thin, but found that slimness had a greater influence on self-concept and self-esteem than academic achievement and intelligence. It is important to note that the importance of physical appearance self-concept may decline with age (Tiggemann, 2004).

A large number of studies have made connections between childhood overweight and self-concept (for examples see Davison & Birch, 2001a, 2002b, 2002; Tiggemann, 2001, 2004), but Ha et al. (2006) suggest that there are gaps in the literature around body image and self-concept. Part of this may be due to a lack of clarity around terminology. Indeed, in a review article discussing measurement tools for child and adolescent self-esteem and self-concept, Butler and Gasson (2005) suggested that there was some confusion and

overlap around terminology, such as 'self-esteem,' 'self-concept,' 'self-image,' 'self-worth,' and 'self-awareness.' They argued that several definitions for self-esteem and self-concept have been identified but that there was a lack of a universal definition for each term (Butler & Gasson, 2005).

Body image and self-esteem. As soon as children become self-aware, they have emotions about themselves. Self-esteem is the opinion people have about themselves and how they respect and value themselves (NEDIC, 2005a). Self-esteem is one of the most important aspects of self-development, as it influences our emotional experiences, psychological adjustment, and behaviour (Berk, 2012). For example, children with high self-esteem tend to be better liked by classmates (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002) and are well-adjusted, sociable, and conscientious (Berk, 2012), while children with low self-esteem are often anxious, depressed, and exhibit anti-social behaviour (Kim & Cicchetti, 2006; Robins, Tracy, Trzesniewski, Potter, & Gosling, 2001). Although self-esteem can change over time (Hendel, 2006), middle childhood is an important time for "encouraging and fostering self-esteem in children since the development of self-esteem during this period leads to a better-adjusted, more confident adolescent" (Child & Family Canada, 2000, p. 1).

Although self-esteem is connected to social, emotional (McGee, Williams, & Nada-Raja, 2001), psychological (Paradise & Kernis, 2002), and behavioural development (Wild, Flisher, Bhana, & Lombar, 2004), children use four self-evaluations to create an overall sense of self-esteem (Harter, 2003, 2006). These are academic competence, physical or athletic competence, social competence, and physical appearance (Berk, 2012). All four self-evaluations combine into a general psychological image of the

individual. However, in middle childhood, perceived appearance is one of the most

important links to self-worth and self-esteem (Klomsten, Skaavik, & Espnes, 2004;

Shapka & Keating, 2005). Ata, Ludden, and Lally (2006) argued that self-esteem was

"so intrinsically linked to thoughts about one's body that physical appearance has

consistently been found to be the number one predictor of self-esteem at many ages" (p.

1024).

Unfortunately, for many children, self-esteem tends to drop in middle childhood. This

decrease is due to increased feedback about their abilities (Berk, 2012), their ability of

social comparison (Harter, 2006), and self-evaluation (Marsh, Craven, & Debus, 1998).

It is also due to perceived appearance. Kostanski and Gullone (2007) suggested that a

drop in self-esteem was correlated with body dissatisfaction, while Phares, Steinberg, and

Thompson (2004) reported that poor body image and low self-esteem seemed to develop

simultaneously in boys and girls.

In a recent Public Health Agency of Canada report on the body image perceptions of

Grades 6, 8, and 10 children, one-third to three-quarters of students said they wanted to

change at least one thing about their bodies (PHAC, 2006). Girls were more likely to

respond this way than boys (PHAC, 2006). As grade levels increased, children also

stated feeling less satisfied with their body size (PHAC, 2006). One reason may be the

transition into adolescence and its accompanying challenges (e.g. weight increase,

dating). As well, Smolak and Levine (2001) suggest that the "'thinness schema,' a

cognitive structure integrating thin-ideal, body dissatisfaction, and weight control

techniques, may be less consolidated in younger children than adolescents" (as cited in

Smolak, 2004, p. 20). Another reason may be that girls and women are more likely than

boys and men to connect their self-esteem to the way they look (Davidson & McCabe, 2006; Jarry, Kossert, & Ip, 2006). Thus, children connect their appearance to their personal value. Girls are also more likely to use appearance as a base for self-worth (About Kids Health, 2010), and turn to their appearance to restore feelings of self-worth when their self-esteem is threatened (Jarry, Kossert, & Ip, 2006).

> We are continually told that our confidence and self-esteem are derived from our personal appearance and sexiness, which encourages us to de-emphasize our personality development, social skills, intellect, occupational accomplishments, and caring responsibilities. (Baker, 2007, p. 19)

However, there are negative consequences for children when there is too much emphasis placed on the way that they look and when social expectations of appearance are imposed upon them. In particular, body image dissatisfaction and over-reliance on appearance as a source of self-esteem have a negative impact on quality of life (Jarry, Kossert, & Ip, 2006). Being aware of the social pressures to look a certain way and internalizing these expectations is related to body image dissatisfaction (Thompson & Stice, 2001) and disordered eating (Jarry, Kossert, Ip, 2006). As well, negative ideas about body image can lead to dieting and psychological problems with eating, low self-esteem, and lower body satisfaction (PHAC, 2006).

It should be noted that several studies have indicated a lack of consensus around the directional relationship of body image and self-esteem: Does body image influence self-esteem, or vice versa (for examples see Grogan, 2010; Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006; Tiggemann, 2005)? However, this lack of clarity needs to be examined further, as the primary focus for study and intervention in this area has been on adolescents and adults (Choma, Visser, Pozzebon, Bogaert, Busseri, & Sadava, 2010; Paxton et al., 2006; Petrie, Greenleaf, & Martin, 2010; Tiggemann, 2005).

In sum, the literature suggests that changes in self-concept and self-esteem occur during middle childhood, which may affect body image. As a result, more school age boys and girls are becoming self-conscious about their bodies at younger ages, often having negative attitudes about body size. Indeed, when asked, many children report that they would like to change at least one thing about their appearance. Many sociocultural influences play a role here, including parents, educators, peers, culture, and media.

<div align="center">**Eating Attitudes and Behaviours**</div>

Eating ideas and behaviours are developed at very young ages, and vary from one person to the next. Eating is also influenced by sociocultural factors, such as culture or ethnicity, socioeconomic status, parent education, sex or gender, and accessibility and availability of food. Some eating ideas and behaviours have a negative impact on the health of children. This negative impact can affect the physical, emotional, and/or cognitive health of children. The origins of eating ideas and behaviours and eating influences will be discussed in the following section.

Food Preferences

Several researchers, including Mennella, Jagnow, and Beauchamp (2001) and Illingworth and Lister (1964), have shown that children develop food preferences early in life, even before birth. Schaal, Marlier, and Soussignan (2000) found that a mother's diet during pregnancy affected their newborn's reactions to certain food odours. One group of mothers in this study consumed anise (a plant with a licorice-type flavour) during the last two weeks of their pregnancies, while another group of mothers did not. On the day of the birth, an anise odour was presented to the newborn infants. Babies born to mothers who consumed the anise spent more time turning towards the odour than the babies

whose mothers did not consume anise. In fact, the non-anise infants turned away from the odour with a negative facial expression (Schaal, Marlier, & Soussignan, 2000).

As well, research by Steiner, Glaser, Hawilo, and Berridge (2001) found that newborn infants relaxed their facial muscles when given sweet-tasting foods, but pursed their lips when given sour-tasting foods. Nicklas and associates reported a dislike for vegetables in three-year-old children (Nicklas, Baranowski, Baranowski, Cullen, Rittenberry, & Olvera, 2001), while Branen and Fletcher (1999) reported that in young adults, nutrition consideration in food selection was "related to the memory of their parents talking about nutrition during childhood" (as cited in Nicklas et al., 2001, p. 226).

It is important to consider that the development of food preferences may result from an amalgamation of factors. Ogden (2010) reviews developmental models, cognitive models (e.g. attitudes, social norms, perceived control, ambivalence), and psycho-physiological models (e.g. neurochemicals, chemical senses, food and mood, stress) of food choice. As the developmental model focuses on food preferences in childhood, it is most relevant to this research; therefore, a brief discussion follows.

According to Ogden (2010), the developmental model emphasizes "the importance of learning and experience and focuses on the development of food preferences in childhood" (p. 32). Within this model are three mechanisms through which children develop food preferences: Exposure, social learning, and associative learning (Ogden, 2010). Exposure to foods can change children's food intake and preferences. Many children display a fear and rejection of new or unfamiliar foods (called *neophobia*) (Ogden, 2010), but other research suggests that food preferences are learned though repeatedly exposing children to the new foods (Birch, Johnson, & Fisher, 1995). For

example, children are able to "identify and are willing to taste vegetables if their parents purchase them" (Busick, Brooks, Pernecky, Dawson, & Petzoldt, 2008, as cited in Ogden, 2010, p. 34). In addition, children may be more likely to try an unfamiliar food when it is paired with a familiar food or flavour (Pliner & Stallberg-White, 2000), or when prepared in a specific way. For example, for children in Grades 4 and 5, "raw vegetables with a dip or cooked (but not overcooked) and served with cheese or butter were preferred" (Baranowski, Domel, Gould, Baranowski, Leonard, Trieber et al., 1993, as cited in Nicklas et al., 2001, p. 225).

Social learning is another mechanism through which children develop food preferences (Ogden, 2010). The modelling or imitation of peers, parents and caregivers, and media can have an impact on food choices. Videos of older children enthusiastically eating refused foods were shown to children in England and Wales with a history of food refusal (Lowe, Horne, Tapper, Bowdery, & Egerton, 2004). Exposure to these older peers changed the younger children's food preferences and increased their intake of fruit and vegetables (Lowe et al., 2004). Findings should be read with caution, however, as a reward was provided (e.g. stickers, pens) when children ate a certain quantity and variety of fruit and vegetables. Therefore, it was not clear if the peer modelling alone led to a change in the children's eating behaviours. In a similar study in Pennsylvania, Hendy (2002) trained preschool children to serve as models for their peers during meal times. While seated with a group of children, child models were told to eat an assigned food that was not typically served during meals (e.g. dried papaya, dried apples) and to say, "These X taste good!" Research assistants observed the behaviour of the other children at the tables, and found that girl models were more effective than boy models in increasing food

acceptance among the other children. While these results support the notion of peer influence on food choices, questions could be raised as to how the child models were trained (e.g. rewards) and if it was ethical to train children to lie about food preference.

Parents and caregivers can also be important in the development of food preferences:

> Early parental influence was associated with the development of a children's relationship with food later in life. For example, young adult eating habits, such as eating all food on the plate, using food as an incentive or threat, eating dessert, and eating regularly scheduled meals were related to the same feeding practices reportedly used by their parents during their childhood. (Branen & Fletcher, 1999, as cited in Nicklas et al., 2001, p. 226)

It should be noted that while parents are a significant influence on children's food ideas and behaviours, there appears to be a lack of information in the literature about the following: (1) Adult modelling to encourage food acceptance in children; (2) the eating ideas and behaviours of diverse groups of children, especially boys; and (3) the influences of caregivers and extended family members, specifically Early Childhood Educators and grandparents. Hendy and Raudenbush (2000) suggested that little experimental research had been done on the effectiveness of adult modelling, including modelling by ECEs. They also suggested that of the few studies that were available on the success of adult modelling and children's food acceptance, the results were inconsistent. As well, Birch, Fisher, and Davison (2003) suggested that "the association between restrictive child-feeding practices and the behavioural controls of eating has been largely limited to cross-sectional studies of middle-class white children," especially girls (p. 215). Furthermore, of the few articles that addressed the influences of extended family members on children's food ideas and behaviours, most focused on the intergenerational influence in Chinese and Japanese families (See Cao, Svensson, Marcus, Zhang, Zhang, & Sobko, 2012; Deng, 2011; Jingxiong, Rosenqvist, Huishan,

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Greiner, Guangli, & Sarkadi, 2007; Watanabe, Lee, & Kawakubo, 2011). Nonetheless, Kaplan, Kiernan, and James (2006) suggest that grandparents, parents and children "need opportunities to learn together and communicate about ways to improve nutrition behaviours" (p. 298). Last, Lynch and Batal (2013) argue that as more and more children in Canada are enrolled in child care programs, more research is needed to understand the ECEs behaviour "in relation to food and, subsequently, their shaping of young children's nutritional behaviours during this very impressionable and formative period" (p. 108).

Associative learning is the final mechanism in the developmental model of food preferences. Associative learning involves contingent factors (i.e., food cues) and the impact on an individual's behaviour (Ogden, 2010). In particular, children's food preferences are affected when their food choices are rewarded, when food is a reward, when food is controlled, and when there are physiological consequences to food (Ogden, 2010). Hendy, Williams, and Camise (2005) found that receipt of tokens (which could be redeemed for prizes) increased children's food intake and affected food choice. It is not clear however, if these changes are sustainable, as the latter research found children's behaviour had reversed seven months after the study (Hendy et al., 2005). Offering food as a reward, on the other hand, has been found to increase, and sustain, the preference for that specific food (Ogden, 2010). The problem here is that when food is used as a reward, the value of the reward food (e.g. cake) increases, while the value of other food (e.g. vegetables) decreases, thus reducing children's preference for the less valued foods (Fisher & Birch, 2000). Finally, physiological consequences can affect food intake and food preferences. For example, an allergic reaction or a stomach upset to a certain food may reduce the likelihood that it will be consumed again (Ogden, 2010).

Some studies involving associative learning of children's food preferences have offered conflicting results. For example, Brown and Ogden (2004) reported children's increased intake of healthy snack food was associated with higher levels of parental control. On the other hand, research by Birch, Fisher, and Davison (2003) found that maternal restriction of food can promote overeating, but specify these results were only generalizable for Caucasian girls, not for boys or children from other cultural or ethnic groups. As well, parental reports of restrictive child-feeding practices for their five-year-old daughters predicted eating in the absence of hunger at seven years of age and a risk of overweight status (according to BMI measures) (Fisher & Birch, 2002). It is important to note that more than half of the mothers and three-quarters of the fathers in this study were considered overweight according to the BMI measures. However, the parents' own eating behaviours (e.g. overeating, dieting) were not seen as influential on children's eating behaviours or weight status, a fact that should have been addressed considering the literature available which suggests an important role of parent/caregiver health-related behaviours on children's health-related behaviours.

In light of these conflicts, it may be more useful to discuss *food parenting styles*, which are similar to Baumrind's (1971) parenting styles (Nicklas et al., 2001). These are typically characterized as permissive, authoritarian, and authoritative (Nicklas et al., 2001). Permissive food parenting may allow the child to eat what he or she wants, while authoritarian food parenting may involve insisting that the child needs to try one bite of food or bribing with promises of dessert. Authoritative food parenting, on the other hand, can show choice and repeatedly exposing children to new foods. According to Nicklas et al. (2001), "dessert reward and choice offering were equally effective in encouraging

food acceptance, but insisting produced fewer bites than choice offering" (p. 230).

Repeatedly exposing children to foods does increase food intake, "especially if it

involved opportunities for the children to handle the food and taste it" (Hendy, 1999, as

cited in Nicklas et al., 2001, p. 230). It should be noted that the behaviours of both

parents and ECEs are reflected in these food parenting styles.

Nutritional Requirements for School Age Children

According to Canada's Food Guide (Health Canada, 2007), children of different ages

have different nutritional requirements, including portion size and amounts of food. For

example, children ages four to eight should have five servings per day of fruits and

vegetables, four servings of grain products, two servings from the milk and alternatives

group, and one serving from the meat and alternatives group (Health Canada, 2007). For

children ages nine to 13, the recommendation is for six servings per day of fruit and

vegetables and grain products, while only having three to four servings from the milk and

alternatives group and one to two servings from the meat and alternatives group (Health

Canada, 2007).

Diet quality is an important consideration in understanding nutrition for school age

children. Diet quality consists of adequacy, moderation, variety and balance (Garrguet,

2009), and it can affect overall long term health. For example, according to Nicklas et al.

(2001), diets that include a high consumption of fruit, fruit juice, and vegetables are

linked to decreased risk of cardiovascular disease, stroke, diabetes, some forms of cancer,

and obesity. It is important to consider that quality rather than quantity of foods

consumed may be more important for child development. For instance, children who eat

regular meals and snacks but consume foods that are high in fat, sugar, salt, and calories

and low in nutrients may be of normal weight but may be malnourished. Serious consequences may be associated with malnutrition, such as stunted physical growth, low intelligence test scores, poor motor coordination, and difficulty paying attention (Grantham-McGregor, Walker, & Chang, 2000; Liu, Raine, Venables, Dalais, & Mednick, 2003).

But are most Canadian school age children getting the nutrients they need for optimal health and development? Based on results from the Canadian Community Health Survey, a 2010 publication by Statistics Canada suggests that 43.3% of individuals 12 years and older are consuming five or more fruits and vegetables a day. However, of this number, the majority of respondents were female (Statistics Canada, 2010a). Also using results from the Canadian Community Health Survey (Cycle 2.2 Nutrition), a recent Health Canada (2009) report stated that while Canadian children were getting sufficient amounts of most vitamins and minerals in their diet, there was a concern that they were not getting enough fibre and potassium. There may be several reasons for this. For example, O'Dea (2003) found that foods available in the home might be a barrier to healthy eating for school age children, such that foods like potato chips and pop could be selected by children rather than fruits and vegetables.

School age children are often overscheduled, shuttled from one activity to the next, often eating meals in the car (CBC, 2012). It may be less expensive and quicker for parents and caregivers to purchase fast food for children, consisting of fried foods, soft drinks, and low quantities of vitamins and minerals; however, intake of nutrients may be affected. Indeed, Canadian research by Taylor, Evers, and McKenna (2005) reported that children's diets were high in soft drinks, candy, and chocolate, but low in fruits and

vegetables. However, Neumark-Sztainer and associates (2003) found that children who ate dinner with their family had lower intakes of fried foods and soft drinks and higher intakes of fruits and vegetables.

The notion of nutrition requirements was important for this research study, as what is practiced in licensed child care centres in Manitoba may help affect the intake of required amounts of nutrients for school age children. Therefore, a discussion of the licensing requirements for child care centres as related to nutrition is addressed in Chapter 3.

Children and Obesity

Changes in eating habits are apparent in the school years. However, some of these changes may adversely affect children's health and development. In addition to too few fruits and vegetables, other changes may involve foods found in convenience stores, school vending machines, or in fast food restaurants, which do not have the highest nutrient value but may be purchased for their taste, because they are quick and easy to eat, and for their value for the amount of money paid (i.e. more food for little money). For example, Schlosser and Wilson (2006) reported that a Burger King Big Kids Double Cheeseburger meal had 900 calories, while Spurlock (2005) stated that a 12-ounce Coke or Pepsi had the equivalent of ten teaspoons of sugar.

Regularly eating foods very high in fat, salt, and calories and low in nutrient value can affect a child's health, which may result in childhood overweight or obesity. Over-weight and obesity are defined as "abnormal or excessive fat accumulation that may impair health" (World Health Organization, 2011, para. 2), often measured using the body mass index (BMI). This tool measures the amount of fat in relation to the amount of muscle using a calculation of an individual's height and weight (NEDIC, 2011).

For six to 11 year old children in Canada, the Canadian Health Measures Survey reported a slightly lower BMI than for the same age range of children in the United States. However, in a 2011 report, Statistics Canada suggested that 25% of Canadian children and youth were overweight or obese (Ball & McCargar, 2003; Tremblay, Katzmarzyk, & Willms, 2002; Tremblay & Willms, 2000). It is important to note that there has been conflicting information about the prevalence of childhood obesity, some stating that rates are stabilizing while others suggest an epidemic. For example, Beausoleil (2011) cited a report by Statistics Canada (2008) which implied that child and adult obesity rates had plateaued in Canada, while Wang and associates (in a later Statistics Canada report) suggested that childhood overweight had become "pandemic" (Wang, Wild, Kipp, Kuhle, & Veugelers, 2009, p. 21).

Regardless of the prevalence in Canada or in other countries, research has shown that obesity in children can lead to health problems. This includes adult-onset diabetes, high blood pressure, cancer, sleep disorders, heart disease and respiratory abnormalities (Calle, Rodriguez, Walker-Thurmond, & Thun, 2003; Krebs & Jacobson, 2003). Psychological problems can also occur, such as low self-esteem (Wardle & Cooke, 2005), feeling unattractive, eating disorders, depression, and early puberty and sexual problems (ANRED, 2007; Schwimmer, Burwinkle, & Varni, 2003). In 2003, the World Health Organization acknowledged that obesity was "the most visible preventable health condition related to illness and premature death" (as cited in Huettig, Rich, Engelbrecht, Sanborn, Essery, DiMarco et al., 2006, p. 26).

In Western society, there is an underlying message that *thin is good*, and *fat is bad* (Oliver, 2006; Ricciardelli & McCabe, 2001), which may contribute to body

dissatisfaction and to stereotypes about obesity. For example, self-reports of eight- to 16-year-old boys and girls in Ohio characterized obese classmates as being less physically attractive and less athletic than non-overweight peers; obese children in this study were also less likely to be seen as someone's best friend (Zeller, Reiter-Purtill, & Ramey, 2008). A message we receive in Canadian society is that in order to be healthy, popular, beautiful, and rich, one also needs to be thin. Children get this message very early in life. Children as young as three years of age are already aware of the cultural bias against overweight people (Musher-Eizenmann, Holub, Edwards-Leeper, Persson, & Goldstein, 2003). In fact, children report they are more afraid of becoming overweight than they are of cancer, nuclear war, or losing their parents (Gold, 2004; McVey, Tweed, & Blackmore, 2004).

While the earlier definition of health recognizes that biology, heredity, environment, and personal choices affect health, there are specific factors that may lead to an increased risk of obesity for children in the middle years. These risk factors include overweight parents (Salbe, Weyer, Lindsay, Ravussin, & Tataranni, 2002), family eating habits (e.g. overeating), response to food cues (e.g. sight, smell) (Jansen, Theunissen, Slechten, Nederkoorn, Boon, Mulkens, & Roefs, 2003; Temple, Giacomelli, Roemmich, & Epstein, 2007), early childhood malnutrition (Rogers, 2009), low physical activity, lack of sleep (Snell, Adam, & Duncan, 2007), and screen time (e.g. TV, video games, Internet) (Proctor, Moore, Gao, Cupples, Bradlee, Hood, et al., 2003). There is also a connection among low socioeconomic status, minority group membership, and obesity, such that the heaviest families are also the poorest from minority groups (e.g. First Nations Canadians, African Americans) (Anand, Yusef, Jacobs, Davis, Yi, & Gerstein, 2001; Ogden, Carroll,

Curtin, Lamb, & Flegal, 2010). In addition, some nutritious foods can be costly, especially when compared to seemingly inexpensive fast food meals or to junk food. For families living in remote areas, such as Northern Manitoba where access to nutrient-rich food is limited, some families may opt for buying a two-litre of Coke for only a few dollars, rather than pay up to $14 for a carton of milk (A. Paolucci, personal communication, October 14, 2007).

Several of these risk factors for childhood obesity may occur simultaneously. For example, research from the United States suggests that child care settings may not meet dietary or physical activity guidelines for young children (Story et al., 2010), which may be a risk factor for childhood obesity (Herbst & Tekin, 2009). In another example, many families living in poverty are recent immigrants (Social Planning Council of Winnipeg, 2009) and may only be able to afford housing in more crime-affected areas. This means they are less likely to have access to city parks and are less likely to let their children play outside unsupervised, which may lead to more sedentary activities (e.g. TV watching). Additionally, these families may not live near a grocery store, and thus have to rely on what food is available at a local convenience store. Food choices may therefore be restricted to cheaper foods, with fewer vitamins and higher fat content. It should be noted that low socioeconomic status and obesity are not absolutely related. Many families with lower incomes are able to provide their children with nutritious meals without over-feeding them.

In the present study, specific obesity measures or ratings were not taken. Only one or two children at the research site might have been considered overweight, based on visual assessments of their height and weight. The more significant concern for this research

was the negative perceptions of persons who were considered overweight or obese and the potential health implications of inactivity and poor nutrition in child care settings.

Children and Dieting

Dieting ideas and behaviours in young children are becoming more common. In an American study of five-year-old girls by Abramovity and Birch (2000), dieting ideas were found among many. The chance of the girls in this sample having dieting ideas doubled if their mothers were also dieting or were recently on a diet. In other examples, the National Eating Disorder Information Centre (NEDIC) (2003) in Toronto found that 40% of nine-year-old girls had dieted, and Ricciardelli and McCabe (2001) found ideas about dieting and dieting behaviours among six- to 11-year-old children in Australia. Finally, Lowes and Tiggemann (2003) suggested that by seven or eight years of age, the desire to be thinner was already entrenched in girls.

In addition, opting to miss meals is becoming more common among school age children. In a study conducted with 540 Grade 4 students in Maryland, children from urban communities were more likely to report skipping breakfast or lunch than suburban or rural students, and were more likely to report skipping breakfast and lunch a minimum of three times per week (Gross, Bronner, Welch, Dewberry-Moore, & Paige, 2004). Children from urban communities were also more likely to be African American; however, the authors of this study indicated that "because of limited sample size, it was not possible to determine whether differences found between geographic locations were because of ethnicity/cultural differences between schools in different geographic areas" (Gross et al., 2004, p. 422). Although children in many families cannot afford to have a daily breakfast, others skip their morning meals for a variety of reasons, including limited

time or not feeling hungry (Reddan, Wahlstrom, & Reicks, 2002) or wanting to sleep

until the last minute (Macleans, 2005). Other reasons could be related to parental

indifference (e.g. breakfast seen as optional) or to poor body image, such as feeling

dissatisfied with the normal development of their bodies (e.g. feeling 'fat' when clothes

are outgrown). Children in Grades 4 to 6 in Minnesota who were recipients of a school

breakfast program were less likely than those who did not participate in a breakfast

program to report body weight concerns, dieting, or breakfast skipping because of a fear

of weight gain (Reddan et al., 2002). In fact, these children reported that breakfast was

important for paying attention in school and for giving them energy (Reddan et al., 2002).

For many overweight children, rejection by peers and impaired social relationships

may occur. Unfortunately, the physical effects of dieting on social relationships may

actually promote further food restriction. For example, Myers, Raynor, and Epstein

(1998) found that a reduction in body size improved children's social relationships and

psychological functioning. However, there are consequences for children when they miss

meals, especially breakfast. For children and adolescents who skipped breakfast,

Nicklas, Reger, Myers, and O'Neil (2000) found that they had lower consumption of

vitamins A, E, C, B-6, and B-12; and lower consumption of iron, folate, potassium,

phosphorus, magnesium, and dietary fibre. In addition, other research has found a

correlation between eating breakfast and obesity, suggesting that breakfast may assist in

normalizing eating habits, weight control, and reducing over-snacking (Deshmukh-

Taskar, Nicklas, O'Neil, Keast, Radcliffe, & Cho, 2010). Furthermore, several American

studies cited by Reddan et al. (2002) suggested a link between breakfasts at home or at

school and improved school performance and attendance, and total nutrient consumption.

There are numerous health concerns with dieting for weight loss or weight maintenance. Both immediate and long-term consequences can be seen when children do not receive adequate nutrition. Marina Rountree-James from the Women's Health Clinic in Winnipeg argued that in the short term, children who diet exhibit an inability to concentrate; lose touch with their bodies' messages of hunger and fullness; feel weak, dizzy, or faint; and often develop digestive problems (personal communication, June 15, 2007). These children also reported feeling irritable, sad, or unmotivated, and experienced mood swings (M. Rountree-James, personal communication, June 15, 2007). Malnutrition is also a concern, as prolonged restricted eating during the school age years may lead to higher cortisol levels in the blood and increased heart rate (Fernald & Grantham-McGregor, 1998). In a report on children and dieting, McVey and Ferrari (2005) suggested that children who intentionally diet or who restrict their eating habits also risk developing future eating problems, weight gain, and obesity. Children who restrict calories below their required daily intake may also delay puberty and risk future osteoporosis (M. Rountree-James, personal communication, June 15, 2007).

Fortunately, only three out of sixty-two children observed in this research spoke about wanting to eat less. However, while even occasional dieting can be detrimental to growing bodies, it is chronic and habitual dieting that falls within the category of disordered eating (NEDIC, 2005b), which is discussed in the next section.

Disordered Eating

An issue that is of concern to parents, ECEs, and health practitioners is disordered eating among children. This is a relatively new concept for health practitioners, encompassing a broader definition of eating disorders, thus expanding the population of

individuals who do not fit into the continuum of normal eating behaviours. This definition involves a broad range of abnormal eating habits and patterns, including unhealthy weight control practices (e.g. extreme calorie restriction, use of meal supplements) and binge eating (Neumark-Sztainer et al., 2008), unhealthy eating (e.g. skipping meals, eating large quantities of high fat foods), chronic and habitual dieting, compulsive eating, behaviours associated with eating disorders, ignoring feelings of hunger and satiety (NEDIC, 2005), abuse of laxatives or diet pills (Levine & Smolak, 2006), exercising to lose weight, food preoccupation, or purging (Ricciardelli & McCabe, 2001). Ricciardelli and McCabe (2001) use a similar label, *eating disturbance*, to identify these behaviours. Some research suggests that young children are now at a higher risk of disordered eating than ever before. For example, a Canadian report found that one in five school age children in Edmonton were at risk of disordered eating (Hare & Drummond, 2002). As well, parental reports of restrictive child-feeding practices for their five-year-old daughters predicted eating in the absence of hunger two years later (Fisher & Birch, 2002). Parents' worry about children's food intake and food choices can inadvertently send children messages about body image concerns: "Parental concern and control in the feeding domain may send children the message that their weight status is undesirable and that they are not capable of controlling their eating habits" (Davison & Birch, 2001b, p. 47). Indeed, half of the girls in the Fisher and Birch (2000) study also reported negative self-evaluations for eating restricted foods.

Several research studies suggest that poor body image may lead to disordered eating (for examples see Klump, McGue, & Iacono, 2000; Martin, Wertheim, Prior, Smart, Sanson, & Oberklaid, 2000). However, with disordered eating, a concern is that

childhood eating disturbances are predictive of adolescent and adult eating disturbances (Kotler, Cohen, Davies, Pine, & Walsh, 2001) and will negatively affect optimal health and development. Indeed, there are numerous concerns for children's health and development. Children who restrict their eating habits may negatively affect physical growth and development patterns (Davies, Pearson, Huseman, Greger, Kimmel, & Recker, 1990; Packard & Krogstand, 2002), are at risk of overeating (McVey & Ferrari, 2005), or risk developing eating disorders (Edmunds & Hill, 1999). There are also issues with children's mental health. Food and weight preoccupation can become compulsive, and can interfere with daily living, in addition to being a link to emotional problems (NEDIC, 2005). For instance, Friedman (1997) argued that "feeling fat and worrying about weight affects how girls feel about themselves. It affects their relationships with other people, their self-confidence, and their sense of their own abilities" (p. 42). Overall, physical and mental issues associated with disordered eating need to be addressed in order to promote physical, social, emotional, and cognitive well-being of school age children.

Social Context of Eating

Quite often, the social context of eating influences how and when children eat. For instance, daily schedules in most child care facilities are quite rigid, such that snack and lunch times are set at specific times. Thus, children must eat when they are told to eat, not when they are hungry. Anecdotal evidence suggests that caregivers may also force children to eat when they are no longer hungry, not understanding that at different stages of development children's appetites become unpredictable or that their bodies require less food. In another example, caregivers may reward children with food for good or desired

behaviour. This sets up an emotional context for eating, such that children come to link food with feelings: If they are happy, they treat themselves with food, but if they are unhappy, they use food as a comfort. Other social contexts that may influence eating are meals while watching TV or playing video games, or eating in the car on the way to after-school activities. Eating during screen time may not allow children to recognize when they are full; they are distracted so they keep eating. Survey results from the U.S. suggest that TV influences what children eat and how much they eat (Crespo, Smit, Toriano, Bartlett, Macera, & Anderson, 2001), and has been linked to childhood obesity (Robinson, 2001). Indeed, research by Matheson, Killen, Wang, Varady, and Robinson (2004) found that children in the third and fifth grades consumed "a substantial proportion of their daily energy while watching television" (p. 1092). This research is notable, as the children were the primary respondents (although follow-up calls to parents confirmed the children's responses). This suggests that children are aware of what and how much they are eating, but perhaps not until after the food has been consumed. Overall, the result of these social contexts is that children are not taught to listen to their bodies to understand the cues for hunger and satiety (NEDIC, 2003).

In sum, the literature suggests that eating habits and ideas are developed at very young ages, and are influenced by a number of sociocultural factors, including parents, peers, educators, media, and the social context for eating. The literature also reports that more children are developing disordered eating habits, including dieting, overeating, and skipping meals, and many are not meeting the recommended nutritional requirements for fibre and potassium. However, the literature offers conflicting evidence regarding rates

of overweight and obesity for children in Canada. Nonetheless, eating habits and ideas are important in considering the overall health and development of school age children.

Physical Activity

Physical activity is defined as "any bodily movement that produces energy expenditure above resting levels" (Timmons, LeBlanc, Carson, & Tremblay, 2011, p. 31). For children, this could include walking, running, playing soccer or hockey, playing tag or climbing on a play structure, throwing a ball back and forth with a peer or a parent, dancing, or play fighting. Research suggests that physical activity habits or behaviours are developed during the preschool period (Janz, Burns, & Levy, 2005), which can have implications for life-long physical activity patterns.

Although it is often difficult to measure physical activity in preschool (Hinkley, Crawford, Salmon, Okely, & Heskethor, 2008) and school aged children, as their activity is often unstructured, many research studies suggest that children are not getting enough exercise or participating in enough physical activity (for examples see Brockman, Jago, Fox, Thompson, Cartwright, & Page, 2009; Neumark-Sztainer et al., 2003). A Government of Manitoba (2004) report suggested that less than half of Canadian children and youth expend enough energy on a daily basis to meet guidelines for healthy growth and development. It also appears that we are beginning to see an increase in sedentary behaviour involving little movement and little energy expenditure among children (Timmons et al., 2011). This may include watching TV, playing video games, or surfing the Internet. According to the Canadian Health Measures survey (2007), Canadian school age children "are sedentary 59% of the time between 3:00 pm and 6:00 pm, getting only 14 minutes of moderate to vigorous physical activity in this thee-hour

period" (as cited in the Active Healthy Kids Canada, 2011, p. 3). The 2014 Active Healthy Kids Canada Report Card found only 7% of children ages five to 11 were meeting the recommended physical activity guidelines (Active Healthy Kids Canada, 2014). This includes participating in 60 minutes of moderate to vigorous physical activity daily, and vigorous activities and activities that strengthen bone and muscle a minimum of three times per week (Canadian Society for Exercise Physiology, 2011). It should be noted that there are no universal physical activity guidelines for the required amount of daily activity (Hinkley, Salmon, Okley, Crawford, & Hesketh, 2011). However, the National Association for Sport and Physical Education (2002) recommends children to have more than two hours of structured and unstructured physical activity each day.

Research supports the claims that physical activity is beneficial for children's physical, social and emotional development (Copeland, Sherman, Kendeigh, Kalkwarf & Saelens, 2012). It can help prevent obesity (Copeland et al., 2011) and the onset of chronic diseases such as diabetes, cardiovascular disease, and some cancers, and can help reduce the risk for osteoporosis, high blood pressure, and depression (Statistics Canada, 2010c). There are also immediate benefits of daily physical activity, including improved academic performance (Canadian Association for Health, Physical Education, Recreation and Dance, 2006), greater self-esteem, and less stress and anxiety (Government of Manitoba, 2004). In addition, it has been suggested that there is a positive relationship between physical activity and self-esteem (Strauss, Rodzilsky, Burack, & Colin, 2001; Tremblay, Inman, & Wilms, 2000) and that individuals who have high levels of physical activity have a more positive view of their bodies. Regular training of endurance

exercise, such as running, cycling or swimming, was related to a more positive self-image (Kirkcaldy, Shephard, & Siefen, 2002). Only one study has suggested the converse: Zabinski, Calfas, Gehrman, Wilfley, and Sallis (2001) found that physical activity had a negative effect on body image.

Low Physical Activity and Sedentary Lifestyles

There are several contributors to low physical activity and sedentary lifestyles in school age children and their families. First is the factor of affordability. Not all families can afford to enrol their children in costly extra-curricular activities, such as hockey or gymnastics. In fact, children from lower income families may have fewer opportunities to be physically active after school (Active Healthy Kids Canada, 2011) and in general. According to the National Longitudinal Study of Children and Youth (NLSCY) 2000-2001, 88% of children ages six to nine from high income families played organized sports, compared to 49% of children ages six to nine from families living below the poverty line (Guevremont, Findlay, & Kohen, 2008). The same trend occurred for older children: 92 % of 10 to 13 year olds in high income families played organized sports versus 72% of children of the same ages living below the poverty line (Guevremont, Findlay, & Kohen, 2008).

The second factor is access. According to the Canadian Fitness and Lifestyle Research Institute (2010), 72% of parents said that their child did not have access to a supervised after-school program (e.g. after-school care, community centre). Having access to physical activities is a challenge for certain populations of school age children, especially for Aboriginal children in remote areas of Canada (Government of Manitoba, 2004). Children living on reserve may not have a recreation centre or basketball courts,

or caregivers keep them inside to ensure safety (Eni, Harvey, & Phillips-Beck, 2009). This challenge is also apparent for children in rural areas. The NLSCY 2000-2001 found that urban children aged six to nine and 14 to 17 were more likely than their rural counterparts to play organized sports (Guevremont, Findlay, & Kohen, 2008). Access to appropriate play spaces may also be a barrier to physical activity. Research has pointed to several factors that may limit access, including caregivers restrictions of children's activity based on a concern for injury (Dietze & Kashin, 2012). Unsafe playgrounds (e.g. broken glass, hot metal slides during summer months) and dangerous communities (e.g. high traffic areas, few pedestrian crosswalks) may increase caregivers' fears of injury, thus restricting children's access to areas where physical activity can take place. However, it should be noted that while the highest number of injuries in child care programs occur on the playground, and "motor vehicle collisions are the leading cause of injury-related death of children in Canada" (Pimento & Kernested, 2010, p. 362), children are most often injured at home (Pimento & Kernested, 2010).

Third, the involvement of parents in physical activities may be quite minimal, which may contribute to children's level of physical activity and sedentary behaviours. In one report, only 43% of parents stated that they were regularly active with their children (Government of Manitoba, 2004). This is important for children, not only for support in engaging in physical activity (Brockman et al., 2009), but also because parents can be role models for their children.

Fourth, physical activity tends to decrease as children approach puberty and adolescence (Brockman et al., 2009; Neumark-Sztainer et al., 2003). Lack of time, affordability, lack of support from parents (Brockman et al., 2009), and watching TV and

videos (Neumark-Sztainer et al., 2003) are some of the factors found to be related to this decline. A concern with one's appearance may also play a role. A study conducted in the U.S., Canada, the UK, Brazil, and Russia by Dove Canada (2010) found that six out of ten girls ages 10 to 17 avoided or quit physical activities because of body confidence issues.

Finally, an increase in screen time on TV, computers, or video games has contributed to sedentary lifestyles in school age children. For instance, watching too much TV is linked to less physical activity and higher rates of obesity (Proctor et al., 2003). In fact, Rideout, Foehr, and Roberts (2010) found that among eight to 18 year olds in the United States, media exposure (e.g. TV, cell phone, IPod, computer, video games) had increased from seven hours 29 minutes per day in 1999 to ten hours 45 minutes per day in 2009.

Activity Barriers in Child Care Environments

A discussion of physical activity barriers in child care environments is also necessary for this literature review. Anecdotal and empirical evidence suggests that children in child care settings often have limited access to physical activity opportunities. There are several reasons behind this, including concerns for safety, adequate space and equipment, and licensing requirements. First, safety concerns for children may limit or restrict physical activity. These may be concerns expressed by ECEs or parents (e.g. a parent may not want his toddler on the playground climber for fear of injury). In a U.S. study by Copeland and associates (2012), focus groups of caregivers from 39 centres revealed that children engaged in risky play (e.g. used equipment meant for older children, walked up the slide) when the overly-safe playground climbers were seen as boring or unchallenging (Copeland, Sherman, Kendeigh, Kalkwarf, & Saelens, 2012). Anecdotal

evidence from several Early Childhood Educators in Manitoba also suggests a fear of reprimand from the parents or the centre director if children are injured during physical activities. As well, anecdotal evidence from ECEs in Manitoba and the work by Copeland et al. (2012) suggests that concerns about crime and violence in the community may limit children's physical activity. Playground equipment may be vandalized or destroyed, or playgrounds may be littered with broken glass or hypodermic needles. Therefore, physical activity may be restricted for safety reasons. Space, equipment, and licensing may also restrict physical activity in child care centres. For child care settings in Manitoba, for example, licensing stipulates that children have daily outdoor play. However, regulations also stipulate that children should be kept indoors when temperatures reach -25 Celsius, when wind chill conditions are more than 1600 watts per square metre, or when other severe weather occurs (MCCP, 2005, p. 79). While centres in Manitoba are also required to provide space and equipment for large muscle movement, many child care facilities to do not have adequate space for children to run, jump, or climb, and therefore keeping them indoors restricts mobility and limits gross motor movements. For example, in one multi-age centre in Manitoba, the 'gym' was a small carpeted room that was also used as a lunch room, a nap room, and a storage room.

On the other hand, physical activity is more likely to be a part of children's lives when parents and ECEs believe it is significant and when they understand the benefits. Huettig et al. (2004, as cited in Huettig et al., 2006) found that when physical activity was a part of pre-kindergarten curriculum, parents saw it as important for their children. Huettig et al. (2006) also reported that when families had an understanding of the health benefits of physical activity, they were more likely to do physical activities at home. As well, an

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increase in activity for inactive teenage girls in the U.S. was more likely to occur when

they received support from parents, peers, and teachers, and when there were fewer time

restraints (Neumark-Sztainer, Story, Hannan, Tharp, & Rex, 2003). Furthermore, 12 to

14 year old children reported more vigorous physical activity when peers or close friends

were present (Salvy, Wojslawowicz Bowker, Roemmich, Romero, Kieffer, Paluch, &

Epstein, 2008), and when 10 to 14 year old girls had peer support for physical activity

(Springer, Kelder, & Hoelscher, 2006).

Two other factors that should be considered when exploring physical activity are sex

and gender. Specifically, there are often differences between boys and girls in physical

activity levels and activity types. According to Statistics Canada, 12 to 19 year old males

had the highest rates of moderate physical activity during leisure time (2010c, p. 1). As

well, boys are more likely than girls to be physically active during the 3:00-6:00pm

period after school (Active Healthy Kids Canada, 2011). In addition, the social

environment affects girls' and boys' participation and performance in physical activities:

Eccles, Freedman-Doan, Arberton, Yoon, Harold, and Wigfield (2002) found parents

spent more time helping their children with sports activities than helping them with math.

Moreover, girls reported feeling less positive than boys about their own sports ability

(Fredricks & Eccles, 2002). Overall, boys are typically more active than girls (Trost,

Pate, Sallis, Freedson, Taylor, Dowda, & Sirard, 2002).

Rough and Tumble Play

When examining physical activity in school age children, we must consider not only

organized activities but those that are unorganized as well. One form of unorganized

physical activity critical to child development is rough and tumble play. Rough and

tumble play is a form of peer interaction that involves "friendly chasing and play-fighting" (Berk, 2012, p. 431). This type of play in children seems to develop from parents' physical play with infants, especially fathers' play with sons (Paquette, 2004). Interestingly, rough and tumble play is not culturally specific, such that children from a variety of cultures engage in it (Pellegrini, 2004).

Unfortunately, for the untrained eye, rough and tumble play may be confused with aggression, and parents and ECEs may have safety concerns for the children involved (Tannock, 2007). Therefore, it is often disallowed in early childhood settings (Tannock, 2007). However, there are distinct differences between aggression and rough and tumble play (Burghardt, 2005; Pellegrini, 2004; Tannock, 2007). Rough and tumble play is voluntary, typically between children who like one another. Although there may be play fighting or chasing, the children can be seen smiling and laughing. Indeed, it is good natured and sociable play. Thus, the children will continue to play together after the rough and tumble episode. Aggression, on the other hand, is often mean-spirited and involves angry feelings. As expected, there is a lack of smiling or laughing, and there may be 'unfriendly' chasing. Ultimately, the children separate after the aggressive episode (Burghardt, 2005; Pellegrini, 2004; Tannock, 2007).

When comparing the rough and tumble play of boys and girls, there are often differences in the way this play is expressed. For instance, rough and tumble play in girls primarily involves running, chasing and brief physical contact, while for boys the play may be rougher, and may involve wrestling, restraining, and hitting (Carlson, 2006; Power, 2000; Scott & Panksepp, 2003). As well, this play occurs more often with boys overall (Carlson, 2006; Power, 2000).

While gender differences are apparent in rough and tumble play, it is important to note that this type of play is beneficial for both boys and girls. However, until recently the benefits of rough and tumble play were not completely understood, and organizations such as the National Association for the Education of Young Children (NAEYC) discouraged this type of play in early childhood settings (Bredekamp, 1986, as cited in Tannock, 2007). This idea has begun to change with additional research and the work of people like Carlson (2006). Thus, we are able to now see the cognitive, social, emotional, and physical benefits of this play for child development. This point is made clear by Tannock (2007):

> When children run in a chasing game, they are not only exercising their bodies, they are learning. They learn how their bodies move, how their playmates will respond when a change to the game is made, how to negotiate these changes to games, what to do when one of the children falls, and how to express their thoughts to the others involved in the game. (p. 357)

In looking more closely at the cognitive benefits of rough and tumble play in children, it should be noted that some of the research on the cognitive effects of social play have been done in rats. For example, the research of Sergio and Vivien Pellis (2007) at the University of Lethbridge compared the brains of young rats allowed to engage in social play versus young rats that had little opportunity for social play. They found that for the rats allowed time for social play, they had more cell development in areas of the brain responsible for problem solving and making decisions. For the social play-deprived rats, the researchers found that they were overly stressed by new situations and had difficulty developing coping strategies (Pellis & Pellis, 2007).

Rough and tumble play may also benefit children's social and emotional development. Researchers have argued that rough and tumble play is linked to social competence

(Tannock, 2007). Social competence describes a child's ability to "establish and maintain high quality and mutually satisfying relationships and to avoid negative treatment or victimization from others" (Welsh & Bierman, 2001, para. 2). ECEs in Tannock's 2007 study suggested that rough and tumble play taught children about compassion, personal boundaries, self-control, and personal abilities in comparison to other children involved in the play (p. 360). It appears that social competence is related to rough and tumble play because in this play, children get to practice different skills (e.g. reciprocal role-taking) that are needed for successful social interaction. In addition, rough and tumble play is linked to social problem solving (e.g. negotiating roles) (Pellis & Pellis, 2007) and it may help establish dominance hierarchies, which are the "consistent ordering of group members that predicts who will win when conflict arises" (i.e. winners and losers) (Berk, 2008, p. 432). Ultimately, dominance relations limit aggression among group members (Pellegrini & Smith, 1998). Finally, the rough and tumble play that occurs between fathers and their infants is linked to confidence in exploring the environment and approaching unfamiliar situations, such as play with peers (Paquette, 2004).

Physical benefits are also derived from rough and tumble play, and ultimately, other physical activities. Carlson (2006) argued that this type of play was beneficial not only for the development of relationships and social skills, but also for learning about positive and appropriate physical contact. With this play, children usually contact body parts such as arms, backs, and shoulders (Carlson, 2006). Carlson suggested that with rough and tumble play, "its purpose is clear, children choose to be touched, the tone is positive" (p. 35). This is an important point, especially for boys. According to Uba, "rough and tumble play enables boys to have contact with each other in a way that society agrees

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with" (PBS, 2007). According to Carlson (2006) and Perry (2011), touch is critical to child development. The importance of touch is highlighted by Carlson (2006), who summarized several historic studies where children who were deprived of touch failed to thrive or died. Research has also found that touch has beneficial results for premature infants (Field, 2001; Field, Hernandez-Reif, & Freedman, 2004), for children who have suffered burns and those with cerebral palsy (Hernandez-Reif, Field, Largie, Diego, Manigat, Seoanes, & Bornstein, 2005), and in the formation of secure attachments to caregivers (Ainsworth, Blehar, Waters, & Wall, 1978). Berk (2006) suggested that "the brain of a young child expects to encounter these tactile experiences, and only if it does will it develop normally" (as cited in Carlson, 2006, p. 11).

A final benefit of rough and tumble play is that it may provide motor practice for games-with-rules (e.g. tag = chasing and dodging). This is a critical point for this study, as some research suggests that rough and tumble play is a practice for more organized forms of physical activity, specifically organized sports. For example, Pellegrini and Smith (1998) suggested that rough and tumble play had several functions, including fostering physical strength and endurance, shaping the muscle fibres used in later "physically vigorous activities" (p. 583), and motor skill development.

There are several aspects of rough and tumble play that are not considered in the current literature. First, much of the research on the amount of time children spend engaged in physical activity only considers organized activities, such as hockey or soccer, not unstructured activities, such as rough and tumble play. Therefore, the claims of a physical activity crisis need to be evaluated carefully. Indeed, for many children, the only time they participate in organized physical activity may be during gym class at

school, while they may participate in rough and tumble play on a regular basis with parents or siblings, or with peers during outdoor breaks at school. Indeed, Blatchford (1996) found that 60% of primary school children in England participated in some type of physically active play during their outdoor breaks on the playground. Second, Active Healthy Kids Canada (2011) argues that "there is a lack of data available about the definition, frequency, intensity, and duration of active play" (p. 4). This means that this type of play may be restricted due to a lack of understanding about it and the benefits associated with it. As suggested earlier, rough and tumble play may be confused with aggressive play, and therefore may be eliminated in some child care environments (Tannock, 2007), thus reducing children's physical activity participation. Third, this lack of understanding about active play may affect parental- and self-report measures of children's physical activity. For instance, rigid survey tools that do not consider unstructured physically active play may actually limit the responses of participants. This means that children may be more active than some research suggests.

Organized Sports

Physical activity is linked to positive developmental outcomes for school age children. Participation in organized extracurricular physical activities, in particular, is associated with academic achievement, prosocial behaviours (Zaff, Moore, Papilo, & Williams, 2003), lower risk of school drop-out (Mahoney & Cairns, 1997), and lower risk of emotional and behavioural disorders (Offord, Lipman, & Duka, 1998).

Although the immediate and long term benefits of regular physical activity for children are clear, rates of organized physical activity in Canada are decreasing. A recent report by Statistics Canada suggested that among children ages five to 14, fewer children

took part in organized sports in 2005 than they did in 1992 (Clark, 2008). The drop was higher for boys than for girls. This is an important point, as boys' participation in organized sports has typically been higher than girls', which suggests that the gender gap between boys' and girls' rates of sports participation is narrowing (Clark, 2008).

The interrelationship of age and gender in sports participation has also been noted. According to the National Longitudinal Survey of Children and Youth (2000-2001), gender differences in participation in organized sports were apparent for children ages six to nine, but not among older children. Specifically, more boys than girls engaged in organized sports at this age (Guevremont, Findlay, & Kohen, 2008). Canadian research by Cameron, Wolfe, and Craig (2005) expanded this finding to include five to 12 year old children, and reported that boys at this age were more likely than girls to play sports.

Other factors which may influence children's participation in organized sports include type of sport, parent involvement, family structure, income, education, and place of residence. In Canada in 2005, participation in soccer was highest for boys and girls ages five to 14 (Clark, 2008). As well, child involvement in sports increased when their parents were coaches, referees, or sports administrators (Clark, 2008). This may be particularly true for fathers.

> Because sports are activities in which a child's success is visible and objectively measurable, and because fathers are more likely than mothers to have or claim expertise in sports, the development of athletic skills among children is often monitored by fathers who act as coaches, managers, agents, mentors, and advocates for their child athletes. (Coakley, 2005, p. 153)

In two-parent families, 74% of children aged six to nine played sports (Clark, 2008). This is in contrast to 58% of children aged six to nine living in a lone parent family (Guevremont, Findlay, & Kohen, 2008). In addition, Clark (2008) and Cameron, Wolfe,

and Craig (2005) also reported that Canadian children's rates of sports participation increased with family income and parent education. Specifically, those children who lived in families with higher incomes and with parents who had a graduate or university degrees were more likely to play organized sports than those living in lower income households or with parents who only had a high school diploma (Clark, 2008). Finally, geographic differences have been found in rates of sport participation among children and youth. Cameron, Wolfe, and Craig (2005) found that children in Manitoba, Newfoundland, and Prince Edward Island had the highest rates of sport participation, while children in the Northwest Territories had the lowest.

In sum, the literature points to a lack of physical activity among Canadian children. However, some of the results on inactivity may actually be due to difficulty in measuring unstructured physical activity, such as rough and tumble play or deliberate play, or due to international differences in daily recommended amounts of physical activity. As well, more recent research by the Government of Canada has been able to provide a fairly positive picture of activity participation among children, including that of Aboriginal children. However, future research should continue to address factors which influence physical activity and sport participation, with multivariate analysis to determine relative effects of accessibility, affordability, family support and participation, and culture.

While physical activity, body image, and eating attitudes and behaviours have an effect on children's health and development in a variety of ways, there are certain sociocultural influences that may exacerbate or reduce the impact of these issues on child health and development. These influences include family, peers, ECEs, media and

advertising, socioeconomic status, culture/ethnicity, age and child sexualization, and gender. A discussion of each is to follow.

Sociocultural Influences

School age children are often presented with information about the way they should look, feel, think, and behave. This information can be direct, from socialization by parents or other adults, or indirect, through media images. Some of the most significant influences on body image, eating attitudes and behaviours, and physical activity are parents and educators, peers, and the media. These influences may be mitigated or intensified by culture or ethnicity (Heinonen, Harvey, & Fox, 2005), age, gender, or socioeconomic status, all of which need to be examined for their developmental impact on children. Equally important, while the influences themselves need to be examined, *how* children learn about body image and eating attitudes and behaviours is critical. Thus, a description of the socialization process will begin this section.

Socialization is the "process of change that a person undergoes as a result of social influences" (LaRossa & Reitzes, 1993, p. 148). It may involve learning the basic skills for daily living (e.g. cooking) or learning the shared beliefs and values of the larger community (e.g. protection of human rights). Maccoby (2007) elaborated on this definition by including "the acceptance of values, standards, and customs of society as well as the ability to function in an adaptive way in the larger social context" (as cited in Grusec & Davidov, 2007, p. 284). Both parts of this definition involve learning the ways to function successfully and competently in the larger society; thus, socialization is the way in which people become productive members of their culture and society.

Families and Educators

Children in Canada, as in many other countries, are influenced by the social class membership of their parents, the number of parents or grandparents in the home, the work status and places of employment of parents or older siblings, presence of step-parents, and the type of child control by parents (Harvey, 2005). In the early years of life, parents and caregivers are the most influential on children's socialization. This is seen in attitudes and behaviours about body image and eating. In one study in Australia, dieting ideas in five-year-old girls were linked to present or recent dieting in their mothers (Abramovity & Birch, 2000). In another, children ate different foods when they were being watched by their parents than when they were not being observed (Klesges, Stein, Eck, Isbell, & Klesges, 1991).

Family environment also plays a role in children's behaviours around body image, eating and activity. For example, children whose parents are involved in sports are also more likely to be involved in sports (Cameron, Wolfe, & Craig, 2005). In another example, both mothers and fathers influenced the body image and body change strategies of teenage boys (McCabe & Ricciardelli, 2003a, 2004; Ricciardelli & McCabe, 2001). With fathers, paternal rejection and overprotection were linked to eating psychopathology in adult daughters (Jones, Leung, & Harris, 2006). Furthermore, Wardle (1995) stated that "parental attitudes must certainly affect their children indirectly through the foods purchased for and served in the household, influencing the children's exposure to them and their habits and preferences" (as cited in Brown & Ogden, 2004, p. 262). This point was supported by Brown and Ogden (2004), who found a strong association between

parent and child eating habits and food choices: Both parent and child self-reports of

snacking included less healthy food choices, such as potato chips, chocolate, and cookies.

As mentioned in Maccoby's (2007) definition above, socialization involves both the

acceptance of social and cultural values but also the ability to make personal changes so

that one fits in society (as cited in Grusec & Davidov, 2007). Part of the socialization

process takes place among family members, between siblings and or peers, and between

children and alternative caregivers (such as Early Childhood Educators or grandparents)

(see Laurenchuk & Harvey, 2001). However, it is primarily through family interactions

that the societal and cultural context is defined for each member: "As a mediator of

culture, the family operates as a formidable influence on identity, contributing to the

development of the self and the formation of self-image" (Walsh, 1993, as cited in

Haworth-Hoeppner, 2000, p. 213). Self-image is formed by the direct and indirect

influences of parents and caregivers on school age children (Laurenchuk & Harvey,

2001). Whether it is intentional or not, parents and caregivers do shape children's body

image, eating, and activity through direct instruction, such as telling a child they need to

lose weight or get more exercise, or through indirect means, such as discussing weight-

related concerns when children are present or adult participation in sports.

Many research studies have focused on the direct and indirect influence of mothers on

the body image and eating attitudes and behaviours of girls. For instance, among eight to

13 year old girls in New Mexico with poor body esteem, Hahn-Smith and Smith (2001)

found that their mothers were critical of the child's appearance. As well, "parents may

convey the message that maintaining an attractive physical appearance is the most

important goals for girls. Some may allow or encourage plastic surgery to help girls meet

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that goal" (APA Task Force, 2007, p. 2). In addition, maternal pressure on children

affects children's body dissatisfaction, "partly through increasing the child's awareness

of the sociocultural standard for appearance, but mostly by promoting internalization of

this standard" (Sands & Wardle, 2003, p. 200). However, while the research appears to

be focused on the role that mothers play in socializing young children, there are multiple

influences on children's body image, eating, and activity in boys and girls.

    Nicklas et al. (2001) suggested that the ways in which parents influence children's

food preferences and behaviours can also be applied to Early Childhood Educators. For

instance, as parents and ECEs often sit and eat with children at snack and meal times,

preschool children are more likely to eat if they see significant adults eating these foods

(Hendy, 1999). On the other hand, Hendy and Raudenbush (2000) found that Early

Childhood Educator modelling during meal times was more effective when the ECE

"displayed enthusiasm for the foods and showed that rewarding consequences came from

eating them" (as cited in Nicklas et al., 2001, p. 229). The results of this study should be

interpreted with caution, as it was conducted with preschool children only. This is not to

say that the same results would not be found with school age children, but compared to

preschool children, school age children understand that people may have different

perspectives, and thus may have different food preferences (Berk, 2012). Nonetheless,

child care providers often view themselves as playing critical roles in helping children to

develop healthy eating behaviours (Moore, Nelson, Marshall, Cooper, Zambas, Brewster,

& Atkin, 2005; Pagnini, Wilkenfeld, Ling, Booth, & Booth, 2007). Lynch and Batal

(2013) took this notion further, examining the strategies that child care providers utilize

to foster healthy eating behaviours in children, such as providing a positive eating

environment, and the influences on these strategies, such as personal beliefs, interactions with parents, and Canada's Food Guide. This last study is noteworthy as it addresses several factors that are typically missing from the literature: (1) The focus was on the Canadian context, (2) ecological theory was used to understand the strategies used by child care providers, and (3) it emphasized the significant role of ECEs in helping children develop healthy eating behaviours.

Similar information has been found on the influence of ECEs on children's physical activity. An older study by Poest, Williams, Witt and Atwood (1989) found that teachers with experience in early childhood education spent more instruction time on motor development than teachers trained in other areas. ECEs may also influence children's physical activities because of fears of injury or pressure to focus on school readiness. A U.S. study by Copeland et al. (2012) found several barriers to preschool children's physical activity in child care centres, including injury concerns and a focus on academics. For example, some child care staff reported that "stricter licensing codes intended to reduce children's injuries on playgrounds rendered playgrounds less physically challenging and interesting" (Copeland et al., 2012, p. 1), while others mentioned parental requests to limit their children's use of the playground (Copeland et al., 2012). As well, caregivers described feeling pressure by parents and the state to focus more on academics with the children than physical activity (Copeland et al., 2012).

Unfortunately, the personal needs of caregivers may also affect children's physical activity. Anecdotal reports from ECE students completing practicum placements suggest that some child care staff may keep children indoors because they feel it is too cold to go outside (although the temperature is above Manitoba's licensing mandate of -25 degree

Celsius), or they spend time socializing with other staff members instead of getting physically active with the children.

Peers

As children grow older and enter school, the influence of peers becomes increasingly more powerful. In particular, children's behaviour can be affected by the influence of peers, even over short periods of time (Martin & Fabes, 2001). In a study of inactive adolescent girls, Neumark-Sztainer and associates found that peer support for physical activity was one of the strongest links to changes in activity (Neumark-Sztainer, Story, Hanna, Tharp, & Rex, 2003). Stanek, Abbott, and Cramer (1990) also found that "children who had companionship at mealtimes ate more servings of the basic food groups" (as cited in Nicklas et al., 2001, p. 226). As well, classic research by Birch (1980) found that children's acceptance of refused vegetables increased when they were exposed to peers who enjoyed those same vegetables.

Not only do peers have an influence over the behaviour of school age children, they also have an influence over children's attitudes and ideas. For instance, peers often have similar attitudes about body size and weight (Paxton, Schutz, Wertheim, & Muir, 1999). Dohnt and Tiggemann (2006) also found that for five- to eight-year old girls in Australia, talking with peers about appearance, watching TV programs that focused on physical appearance, and believing that peers valued thinness was linked to body dissatisfaction and lower self-esteem. Indeed, peers appear to give more feedback to girls than to boys, especially regarding weight loss and muscle tone (McCabe & Ricciardelli, 2001b). The age of peers also has an effect. Wardle and Watters (2004) suggested that being at school with older students was linked to "having a thinner ideal, feeling more overweight,

having more friends who had dieted…and having lower self-esteem" (p. 589).

The influence of same-sex peers seems to be quite significant for school age children. While a preference for same-sex playmates begins in the preschool years (Maccoby & Jacklin, 1987), this preference strengthens throughout the middle childhood years. Compared to preschool aged children, six-and-a-half year old children are 11 times more likely to interact with same-sex than opposite-sex peers (Maccoby & Jacklin, 1987), and many children will select same-sex peers as playmates when given the choice (Maccoby, 1990; Maccoby & Jacklin, 1987; Thorne, 2001).

The influences of peers are evident in ideas about social acceptance. Girls, more so than boys, may change who they are because of peer influence in an attempt to gain social acceptance: "Girls struggle with a terrible choice: they can remain who they are – and thus be different from their friends and risk losing them – or they can become like everyone else" (Friedman, 1997, p. 32). Alpert-Gillis and Conell (1989) argued that girls depended more than boys on being "popular and attractive rather than competent and talented" (as cited in Garbarino, 2006, p. 153). Thus, the choice is for some children to conform and be accepted by peers, or stay who they are and risk rejection and isolation.

Clothing

Clothing and dress are used as body modifications and body supplements, to enhance and highlight or to hide and cover the body (Eichler, Evenson, & Lutz, 2000). The way that an individual adorns himself or herself communicates nonverbal information about the identity of the wearer, including how he or she feels about self and body (Eichler et al., 2000). Clothing and dress can also be used to evoke feelings or emotions and can foster or hinder the development of self-esteem (Eichler et al., 2000).

These ideas and concepts are important to consider when discussing the functions or uses of dress by children. Some research suggests that contemporary clothing and dress influences the body image of children; in particular, children are often dressed for an age and maturity level different from their own, and such age-inappropriate dress has the potential to have a negative impact on child development and well-being (Kilbourne, 1999). Other research argues that clothing may be used instead to hide or disguise imperfect or undesirable body parts, rather than to influence children's body image (Eichler et al., 2000; Frith & Gleeson, 2004). For example, *body subordinate* clothing (e.g. suit jacket, sweatshirt) may hide the shape and contour of the body (Eichler et al., 2000). Clothing and dress may also be used to highlight how people feel about themselves or their bodies (Sloan, n.d.). Large bulky clothing, such as a tent dress, may be worn to hide body shape. On the other hand, *body dominant* clothing allows observers to view the proportions and contours of the body (Eichler et al., 2000). Form-fitting garments, such as a bathing suit or yoga attire, may be worn to show off one's body. It could be argued that body dominant and body subordinate dress are linked to body image. For instance, an expression of body subordinate dress, such as wearing baggy sweaters or overalls, may relate to negative body image. Conversely, body subordinate dress is not always used to disguise the body or its parts: A traditional wedding dress (e.g. high collar, large train) is an example of body subordinate dress. However, Frith and Gleeson (2004) suggested that the literature in this area was lacking.

Cultural ideals are expressed in behaviour and activities (e.g. "She's the perfect mother," "That was a perfect vacation") (Eichler et al., 2000). Cultural ideals are the summary of aesthetic values, and ideals in dress are based on evaluations of the

characteristics of body and dress (Eichler et al., 2000). Even though people may seek

cultural ideals as a goal, they are actually achieved by few (e.g. Western ideal of beauty

to look like a supermodel). In fact, clothing is designed according to cultural ideals, but

not everyone has the same ideals (Eichler et al., 2000). Social, cultural, psychological or

physiological reasons, as well as beliefs, experience, or opinions may be provided for the

way an individual dresses and arranges bodily adornments (Eichler et al., 2000). For

instance, a 12-year-old child may be pressured by peers at school to wear brand names

clothing, such as DC runners and Calvin Klein jeans. However, this child may disagree

with the way that Calvin Klein portrays child models in his advertisements and select

other clothing choices based on these personal beliefs.

An individual is aware of and can assess his or her own appearance and the

appearance of others around him or her. As a result, the way an individual looks can be

changed for protection (e.g. tanning before a hot weather vacation so skin does not burn)

or in order to reach cultural ideals (e.g. restricting food intake to achieve a certain body

size). In fact, "in all cultures, most people attempt to enhance their appearance in some

way" (Eichler et al., 2000, p. 290). One way to accomplish this is through the art of

dress. Regardless of the type of body modification (e.g. tattoo, skin or hair dyes) or body

supplement (e.g. wrapped textile garment, bindi), the art of dress "draws attention to and

reveals personal and social information about the individual" (Eichler et al., 2000, p.

290). For example, ear piercing for infant girls not only clearly defines the child's

biology, but is also used as a body supplement to represent an aspect of femininity.

In addition, body form and posture is part of the visual information communicated

about the wearer of dress. Body posture and body movements can present the cultural

aesthetic ideal for "presentation of both the ideal body and fashionable dress in the West" (Eichler et al., 2000, p. 294), which is then related to the roles of women and girls or men and boys. For example, in advertisements, Erving Goffman (1979) argued that female models portrayed as being beneath or smaller than male models imply subservient roles. In another example, advertising in *Child* and *Parents* magazines portray boys as active (e.g. enthusiastically riding a bike) while girls are passive and sedentary (e.g. standing quietly holding flowers) (Kilbourne, 2003). Kilbourne (2003) maintains:

> Girls are often shown as playful clowns in ads, perpetuating the attitude that girls and women are childish and cannot be taken seriously, whereas even very young men are generally portrayed as secure, powerful, and serious. People in control of their lives stand upright, alert, and ready to meet the world. In contrast, females often appear off-balance, insecure, and weak. (p. 265)

Over the last few decades, clothing for children has become more and more adult-like. Here, children are dressed to look like mini-adults. Some social critics in the 1980's and 1990's argued that girls under 12 and boys under 14 years of age were "being rushed into adult-like appearance and behaviour" (Rubinstein, 2000, p. 2). While this representation of children as mini-adults has occurred in other historical periods (e.g. 15th century artists portrayed children as miniature adults), in the last decade it could be argued that this rush to adult life is happening for very young children. For example, training bras and bikinis are available for preschool aged girls. As well, clothes have the power to structure and control children's behaviour. For instance, the swaddling of infants restricts movement, while floor length dresses for girls restricts and limits the types of physical activities in which they can participate.

Overall, it is important to examine the function and purpose of clothing for children, as it may be linked to body image, not only in the cultural ideals of beauty that influence the

way a child feels about his- or herself, but also as a representation of the value of children in a society. In examining the current literature then, it would be expected that one would find more information about clothing that represents cultural ideals. Specifically, one would expect to find information about clothing that meets the sociocultural standards of beauty (i.e. peer- or media-influenced clothing choices).

Media and Advertising

Another significant influence on school age children is the media, including television, movies, books, the internet, video games, magazines, and newspapers. Influence may be quite significant since some children are exposed to thousands of advertisements per day on television and billboards, in magazines, and on the internet (Kilbourne, 1999). The media may play a role in children's food preferences. Social learning and advertising, in particular, has been found to influence food intake. A study by Halford, Gillespie, Brown, Pontin, and Dovey (2004) found that when children were shown food related and non-food related advertisements, the children ate more after seeing the food related ads. Radnitz, Byrne, Goldman, Sparks, Gantshar, and Tung (2009) also found that less nutritious foods were given almost twice the amount of television airtime in children's programs as nutrient-rich food. It could be argued that the result may be an increase in children's desire for and consumption of less nutritious food.

One of the strongest messages children get from the media is that they need to change the way they look, a message which can contribute to body image concerns (Barlett et al., 2005). The media often glamorizes thin, emaciated models, or overly muscular models, or display images of males and females that are not realistic (Kilbourne, 2003; Kilbourne & Jhally, 2010). The airbrushing and computer imaging of pictures of male and female

bodies often play a part in the finished products seen on television and in magazines. As well, some websites promote eating disorders, specifically anorexia (self-starvation) and bulimia (binging and purging), suggesting that they are lifestyle choices, not eating disorders (About Kids Health, 2010). Furthermore, toys often portray the human form in distorted ways, such as Barbie's unrealistic body measurements or ultra-muscular action figures (Pope, Olivardia, Gruber, & Borowiecki, 1999; Pope, Phillips, & Olivardia, 2000). In fact, Pope et al. (1999) suggested that social and cultural expectations for physical appearance may be communicated through unsuspected media, such as children's toys, but may contribute to body image concerns in both girls and boys. Specifically, "beliefs and desires are not entirely invented by each individual but rather are shaped by images in the media, advertising, the Internet, films and global culture" (Baker, 2007, p. 19). For example, reality television shows focused on personal make-overs tell viewers not to get older and to fix their imperfect bodies. In essence, the media portrays a body image that is considered socially acceptable, but unrealistic for children to obtain (Kilbourne & Jhally, 2010).

Images in children's media may not only promote the thin-ideal, but may attribute different characteristics to individuals who meet sociocultural expectations for attractiveness and to individuals who do not. In a content analysis of beauty and thinness messages in children's videos and books, Herbozo, Tantleff-Dunn, Gokee-Larose, and Thompson (2004) found that physically attractive characters were more likely to be kind, happy, successful, and friendly, while obese characters were more likely to be cruel, unattractive, evil, unfriendly, and disliked by others. In addition, these obese characters often thought about food or were put into food-related settings (Herbozo et al., 2004).

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Regardless of the type of images portrayed in the media, media exposure can have other negative effects on children. For example, children who watch a lot of television and movies are more likely to be overweight, as they snack while watching programs, exercise too little, and are influenced by the food in programs and commercials that foster unhealthy food choices (Foster, Gore, & West, 2006; Proctor et al., 2003). In another study, the introduction of Western television programs in Fiji was linked to an increase in disordered eating attitudes and behaviours among girls and women (Becker, Burwell, Gilman, Herzog, & Hamburg, 2002). As well, Durkin and Paxton (2002) found that among 241 adolescent girls in Australia, there was a decrease in body satisfaction and an increase in depression after viewing idealized images. Similar results were found by Levine et al. (1994). Furthermore, using a sample of 819 adolescent boys and 791 adolescent girls in Switzerland, Knauss, Paxton, and Alsaker (2007) examined the internalization of media body ideals and the perceived pressure to achieve this ideal. Girls in this sample exhibited higher body dissatisfaction, pressure, and internalization than boys. In this study, internalization was the strongest predictor of body dissatisfaction for girls; for boys, it was perceived pressure (Knauss et al., 2007). Similar results were found for Murnen, Smolak, Mills, and Good (2003) among six- to 12-year-old girls in the United States.

Furthermore, being unable to achieve an idealized body type may lead children to feel negatively about themselves. This is true for both girls and boys. With girls, Herbozo et al. (2004) found that "media aimed at children places greater emphasis on the cultural ideal body shape for females" (p. 30). The impact of this is explained by Friedman (1997): "When girls don't see themselves reflected in the popular culture, they come to

believe that something is wrong with them" (p. 65). With boys, Pope, Phillips, and

Olivardia (2000) suggested that action figures might be an influence on boys' desire to be

muscular and affect their self-esteem negatively. In a later focus group study, Hargreaves

and Tiggemann (2006) found that muscularity was the most common source of 14- to 16-

year-old boys' body image concerns, and that overall body image was a stronger concern

than many boys would admit. In fact, "men and boys do not necessarily view thinness as

an advantage and are as likely to want to be bigger or heavier as they are to want to be

thinner" (Frith & Gleeson, 2004, p. 41).

What is significant about advertising, in particular, is that it appears to be working.

The purpose of advertising is to sell a product, and it seems that the most effective ads

have an impact on image improvement (Gunter, Oates, & Blades, 2005).

> Girls with poor body image may be especially vulnerable to images of physical
> beauty they view in advertisements. Such advertising may reinforce the pressures
> on young people to conform to ideals of beauty that are hard or impossible to
> achieve. (Gunter et al., 2005, pp. 8-9)

However, only one in 10,000 girls and women will meet model dimensions without

dieting (Gold, 2004). As well, "TV may displace physical activity but also increase

caloric intake during viewing, as well as heighten interest in purchasing high-fat, high-

sugar, nutritionally empty products so heavily advertised" (Jordan, 2004, p. 199). For

young children, ads may be especially harmful, as they may not yet have the cognitive

ability to understand the underlying messages in the ads, or the purpose of advertising

(Gunter et al., 2005).

Advertising may also be harmful to children because of their power as consumers.

Children now have more disposable income and more say in household spending than

ever before. Gunter, Oates, and Blades (2005) suggested that the discretionary spending

by children in the United States increased to $28 billion in 2000. Advertising targeted to children is smart and savvy, and millions of dollars is spent on advertising to this unique audience. Part of advertising money is spent on learning what children's interests are and what they would be interested in buying (or asking their parents to buy for them). The other part is spent on product placements in restaurants (e.g. toys from popular movies in McDonald's Happy Meals), in stores (e.g. breakfast cereals at children's eye level in grocery stores), in television commercials (e.g. loud and noisy for boys, music and pastel colours for girls), and in schools (e.g. drink machines). No longer are the corporations only focusing on teenagers with part-time jobs. It appears that all children are potential consumers, regardless of whether they are even able to verbalize their needs to their caregivers. Research by Smolucha (2003) supports this notion, suggesting that preschoolers are, in essence, being treated like teenagers.

> During the past 20 years, teen clothing and music have been marketed for preschoolers. Four-year-old girls have adopted the bare midriff look associated with rock stars like Brittany Spears, Christina Aguilera, and the Spice Girls. Boys as young as two years of age wear Harley-Davidson biker jackets biker jackets and pro-wrestling t-shirts. (pp. 153-154)

Other researchers have focussed on eight to 12 year old children, often referred to as *tweens*. Several authors suggest that the tween generation has been socially constructed for marketing and merchandising purposes (Cook & Kaiser, 2004; Hymowitz, 1999). According to Steyer (2002), in the United States in 1998,

> four-to 12-year olds were responsible for some $27 billion in discretionary spending - about four times the amount they spent a decade earlier. Even more important, they directly or indirectly influenced some $500 billion in spending by their parents. (p. 102)

In essence, children, but especially girls, are socialized at a very young age to be shoppers (Brown, 2011).

Sex and Gender

The term 'gender' was adopted by Money in 1955 as an umbrella concept to distinguish the continuum of femininity and masculinity from male or female biological sex (Bullough, 2003). More recently, Momsen (2010) defined gender as "the socially acquired notions of masculinity and femininity by which women and men are identified" (p. 2). In essence, gender is sociocultural (Fox & Murray, 2000). Unfortunately the definition of gender is often misunderstood, frequently seen as synonymous, rather than correlated, with the definition of *sex* (Momsen, 2010).

Some argue that gender is both a biological category *and* a social category. The first category is essentially physical. Human beings are separated into groups based on chromosomes, hormones, and physical construction. The second category separates individuals into groups based on varying degrees of personal characteristics or behaviours, such as assertiveness or passivity (Golombok & Fivush, 1994). It is important to note that the roots of the social category are consistently viewed as being contained in the biological category: Biological sex is the 'sign' through which gender is read. This statement is supported with the case of David Reimer (Colapinto, 2000). David was born a boy, but after a botched circumcision as an infant, his parents decided to raise him as a girl. He was not told about being born a boy until he was 13 years of age. However, David indicated that throughout his life, he felt that he was a boy, and preferred to play with boys rather than girls. Eventually, he had sex reassignment surgery and lived the remainder of his life as a man, before his death in 2004. Kruijver, Zhou, Pool, Hofman, Gooren, and Swaab (2000) summarized this strong biological component

of gender as follows: "The brain helps to shape our gender" (as cited in Steckly & Letts, 2010, p. 355).

Gender behaviour can be observed at structural, interactional, and individual levels (Lorber & Moore, 2002). First, gender is an ever-changing system of "social relationships" (Murray, 1996, p. 370), which interacts with and influences societal institutions, such as family and religion (Lorber & Moore, 2002). The composition of families and other institutions is directed in large part by sex and gender. Second, gender is how people conduct themselves in relation to the socially expected attitudes and activities for women and men (Murray, 1996). Essentially, gender is something that we *do* (i.e. Is reflected in behaviour), and it is a manner in which people relate to one another (West & Zimmerman, 1987). Gendered behaviour is prescribed to the social rules and roles set out for men and women, and these gender roles are patterns of behaviour based on social and cultural expectations associated with sex and gender (Andersen, 1997). Therefore,

> through interaction with caregivers, socialization in childhood, peer pressure in adolescence, and gendered work and family roles, people are divided into two groups and made to be different in behavior, attitudes, and emotions. (Lorber & Moore, 2002, p. 4)

Third, gender is an "attribute of individuals" (Murray, 1996, p. 370) and *doing gender* occurs in interaction with others. Some research suggests that gender differences occur because of the existence of social power inequalities between women and men (Murray, 1996), *power* meaning: (1) The ability to influence others, despite opposition (Tepperman & Curtis, 2009), or (2) the "ability to influence important decisions," such as political (e.g. voting), economic (e.g. career, access to money), or personal decisions (e.g. whom to marry) (Blood, Tuttle, Lakey, 1983, as cited in Anderson & Collins, 1998, p. 181). For

example, *mother* and *father* are social categories that have certain levels of power and specific meanings attached to them. These meanings are not simply for individuals, but also for society as a whole. Typically, in a patriarchal society, women or mothers have less socially endorsed power than men or fathers (Lesnick, 2005).

Right from birth, gender is important: It influences our experiences with the world, personal interests, and interactions with other people (Leaper & Friedman, 2007). Ideas about gender, whether personal or social, are influenced by an individual's personal experiences and their family, friends, the media, and the education system (Leaper & Friedman, 2007). Therefore, we may have ideas or expectations about how a person should or should not behave based on sex, and sex-typed expectations emerge early in life: At birth, the knowledge of a child's sex or gender elicits "a set of expectations consistent with beliefs about gender role-appropriate traits" from parents (Sandnabba & Ahlberg, 1999, p. 250). As a result, parents often socialize sons and daughters differently, such that they interact with them in a different manner (Raley & Bianchi, 2006; Lundberg, 2005). In three classic studies by Fagot (1974, 1978) and Fagot and Hagan (1991), parents interacted differently with sons and daughters, and gave more positive reactions to girls involved in female-typed toy play and boys involved in male-typed toy play (Fagot & Leinbach, 1989). For example, parents rewarded boys with positive responses when they played with blocks, and rewarded girls in the same manner when they played with dolls. Parents also gave negative responses when girls manipulated objects, or engaged in large motor behaviour (e.g. running, jumping, climbing), and fathers gave more negative responses to boys when they played with dolls or other soft toys. Moreover, Fagot discovered that parents talked more to girls and

allowed boys more independence, while boys were left alone to play more often (Fagot 1974, 1978). In the later study by Fagot and Hagan (1991), boys were also rewarded for negative, assertive behaviours.

As a result of this differential socialization, choices in children's play and activities are affected. Children who are encouraged to play with dolls and toy furniture or sports equipment and tools are more likely to choose these items when they are given a choice: "They are familiar with these objects and they know what can be done with them" (Pomerleau, Bolduc, Malcuit, & Cossette, 1990, p. 366). As well, repetitive play with certain objects is "likely to promote the development of specific skills, abilities and behaviours" (Pomerleau et al., 1990, p. 366). For example, girls are ahead of boys in fine motor abilities and balance skills, while boys are slightly ahead in force and power skills (Haywood & Getchell, 2005). The same can be said for activity selection. For example, in a Master's thesis, one participant mentioned that her husband would not allow his son to participate in gymnastics because he thought it was for girls. She also mentioned that she would not want her adolescent son involved in ballet because it was not what she thought of as masculine (Andrushko, 2005). Therefore, the assumption could be made that the more often boys and girls are directed into different activities, the more often they will select these activities when given the choice. However, the separation of boys and girls is not only about activity. This appears to be the start of something much more significant. Serbin, Moller, Gulko, Powlishta, and Colburne (1994) suggested that "sex segregation affects children's development by channelling their interests and experiences and by limiting the kinds of behaviours and activities in which they engage" (as cited in

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Fabes, Hanish, & Martin, 2003, p. 1040). Thus, boys and girls often experience the world in different ways.

With body image, eating, and activity, gender is a critical issue to be considered. It must be illustrated that body image, in particular, is not just an issue for girls, although much of the research has focused on their experiences. Instead, it is a sex and gender issue, not only because boys report fewer body image concerns than girls (Cohane & Pope, 2001; McCabe & Ricciardelli, 2004), but also because girls and boys experience body image concerns in different ways. For example, girls in Canada, the U.S., and Australia typically report a stronger desire to be thin (Lowes & Tiggemann, 2003; McVey, Tweed, & Blackmore, 2005; Phares, Steinberg, & Thompson, 2004) and are more focused on dieting and weight (Phares et al., 2004) than boys. Indeed, "by the time of adolescence, the majority of girls have developed weight and body concerns and many have tried dieting or other strategies to alter their physical appearance" (Phares et al., 2004, p. 422). On the other hand, boys in the U.S. and Australia typically report a desire to be both thinner and more muscular (Cohane & Pope, 2001; McCabe & Ricciardelli, 2004). As well, with preschool children, mothers communicate to their daughters about losing weight and to their sons about gaining muscle (McCabe et al., 2007).

Eating attitudes and behaviours are not only a female issue, although food activities, including grocery shopping and cooking, were traditionally female-dominated activities. According to Ogden (2010), personal meanings about food have a close connection to gender identity, especially for females. However, with eating, gender differences appear to be related to issues of control for girls and women, rather than issues of health. Ogden (2010) states further: "Food represents sexuality, conflicts between guilt and pleasure and

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between eating and denial, and an expression of self-control" (p. 66). This conflict appears in the literature around dieting, but it is important to note that since food activities appear to be less female-dominated (i.e. men and boys are involved in cooking, food preparation, and grocery shopping), the issue of dieting has also become more of a concern for men and boys. McVey and Ferrari (2005) reported that 30% of girls and 25% of boys 10 to 14 years in Toronto dieted to lose weight.

With physical activity, there are stereotypical expectations for boys and girls (Fagot, 1974, 1978). Parents gave negative responses when girls manipulated objects, or engaged in large motor behaviour, such as running, jumping, or climbing (Fagot & Hagan, 1991). Other research has shown that fathers and adult males perpetuate gender role differentiation more than mothers or other female caregivers (Langlois & Downs, 1980; Leve & Fagot, 1997; Ruble, 1988) and encourage "greater conformity to traditional gender roles" (Kiecolt & Acock, 1988, p. 710). Research by Fagot (1978), Langlois and Downs (1980), and Wood et al. (2002) suggested that fathers were often more concerned than mothers about their children behaving in a gender-stereotypical manner, such as playing with sex-appropriate toys, especially for sons. Therefore, boys and girls may be directed into different activities based on their sex or gender, not on the child's interest. For instance, in North America, organized sports such as hockey or football may be more strongly encouraged for boys, while gymnastics and figure skating may be more strongly encouraged for girls.

Additionally, physical activity among girls, in particular, may be limited by clothing. Specifically, some girls may not have access to clothing that is appropriate for physical activity, either due to a lack of finances or to cultural expectations of clothing for girls

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(e.g. skirts with school uniforms), which may then affect their participation in the activities and resulting skill development.

> Clothing facilitates a wide range of activities through functional specificity, for example, having the right kinds of clothing in order to participate and compete in any given sport means the body is more able to perform to its optimal level of ability. (Pole, 2007, p. 73)

Using focus groups and interviews with child care providers, Copeland, Sherman, Kendeigh, Saelens and Kalkwar (2009) found that inappropriate clothing for children was often a barrier to physical activity in child care environments. Dwyer, Higgs, Hardy, and Baur (2008) found this same barrier for girls of Middle Eastern and Chinese descent.

There are many reasons behind the continued segregation of boys and girls, specifically with regard to body image, eating, and activity. With body image, part of these differences may be due to biology. For example, school age girls and boys have similar muscle strength, but by adolescence, boys have greater physical strength than girls (Nichols, 1990). By about eight years of age, girls also have slightly more body fat than boys, increasing into adolescence (Siervogel, Maynard, Wisemandle, Roche, Guo, Chumlea, & Towne, 2000). Second, gender differences may be due to the sociocultural acceptance of more diverse body shapes among males. Anderson and Di Domenico (1992) reported that media images included a wider variety of acceptable body shapes and sizes for males than for females. As elementary school children indicate that media images influence their feelings about their bodies (Haines, Neumark-Sztainer, & Thiel, 2007), this portrayal of more diverse body types for males has a significant consequence for girls. For example, daughters, more than sons, are likely to be rated as overweight by parents (Striegel-Moore & Kearney-Cooke, 1994). The reasoning here is that parents are more likely to enforce societal expectations of appearance for daughters, specifically the

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thin-ideal (Striegel-Moore & Kearney-Cooke, 1994). However, the idea that boys have

fewer body image concerns than girls needs to be explored in more detail; indeed,

Birbeck and Drummond (2006), Smolak (2004), and Dohnt and Tiggemann (2005)

suggested that few studies have explored body image dissatisfaction among preschool

and school age children. As well, in the studies that have examined body image in boys,

there may be a lack of candour in research participants. A recent report by Hargreaves

and Tiggemann (2006) found that 14- to16-year-old boys in Australia did not like to talk

about body image, as they considered it a female issue. Cohane and Pope's (2001)

review of 17 studies of boys and body image reinforces this last point. They suggested

that selection bias, response bias, and unrealistic figure drawings used to elicit responses

from boys may mean that body image dissatisfaction among boys may actually be higher

than was reported in these studies (Cohane & Pope, 2001).

Culture and Ethnicity

Culture and ethnicity must also be considered as influential on the ideas and

behaviours of school age children around body image, eating, and physical activity.

Verkuyten (1990) reported that body image satisfaction was the "greatest single predictor

of self-esteem for adolescents of different ethnicities" (as cited in Wood, Becker, &

Thompson, 1996, p. 86). On the other hand, African American fourth and seventh grade

children reported less concern with weight and with dieting than Caucasian children of

the same age in the U.S. (Adams, Sargent, Thompson, Richter, Corwin, & Rogan, 2000).

Similar results were reported by Kelly and colleagues. Using survey data from over 2000

adolescent girls involved in Project EAT (Eating Among Teens) in Minnesota, Kelly et

al. (2005) found that African American girls were three times more likely than Caucasian

girls to express high body satisfaction (Kelly, Wall, Eisenberg, Story, & Neumark-Sztainer, 2005). It should be noted that survey data was also gathered from over 2000 adolescent boys, but these responses were not addressed in the current article, nor were there reasons given for why the responses were excluded. This is a significant piece to consider, as there is a lack of information around boys and body image, but the information that is available suggests that both boys and girls have body image concerns.

The African American children in the aforementioned studies also reported that they perceived less concern about weight from family and friends than Caucasian children (Adams et al., 2000; Kelly et al., 2005). Adams et al. (2000) suggested that "obesity is culturally defined and not equally stigmatized in all cultures" (p. 92). An example of this is found in China, where the idea that being overweight indicates prosperity and health (Berk, 2012). As well, in the Chinese culture, boys are typically more valued than girls, and as a result may receive bigger portions during meals, resulting in higher rates of overweight and obesity than among girls (Berk, 2012).

Culture and ethnicity may also provide contrary evidence to the current research around body image. For example, the majority of the research evidence on body image has been gained primarily through the use of Caucasian participants. However, Thompson, Corwin, Rogan, and Sargent (1999) found ethnic differences around body dissatisfaction between Caucasian and African American participants, such that Caucasian children in seventh grade reported more body image dissatisfaction than African American children in the same grade. Similar findings were reported in an earlier study by Thompson, Corwin, and Sargent (1997) and by Schreiber, Robins, Striegel-Moore, Obarzanek, Morrison, and Wright (1996). The reasons behind the

differing effects for Caucasian and African American children are not completely clear, but Lawrence and Thelen (1995) suggested that children in the latter group may not receive the same messages about dieting and thinness from their family and peers. However, Canadian research by McVey, Tweed, and Blackmore (2004, 2005, 2007) and McVey and Davis (2002) has examined a more diverse population of children and found contradictory results to those of Thompson et al. (1999) and Schreiber et al. (1995). In particular, Canadian children of Caucasian, Asian, South Asian, East Asian, African, and Aboriginal ancestry reported weight loss behaviours and disordered eating (McVey & Davis, 2002; McVey, Tweed, & Blackmore, 2004).

There appears to be a lack of research concerning the physical activity needs and behaviours of children from diverse cultures. This is especially true for Aboriginal children in Canada. For many national reports on children's activity participation, factors associated with physical activity typically include child age and sex, parent education and income, geographic location, and family structure. Little was mentioned about culture or ethnicity. However, one recent report by Statistics Canada examined the involvement of Aboriginal children in organized sports and cultural activities (Smith, Findlay, & Crompton, 2011). Using data from the 2006 Aboriginal Peoples Survey, information was analyzed regarding physical activity of children living off-reserve. The report suggested that 69% of children were involved in sports at least once per week, and this number was higher for boys and for children nine to 11 years of age, except in the case of Inuit children, who were more active between 12 to 14 years (Smith, Findlay, & Crompton, 2011).

As suggested with the Clark (2008) study (also from Statistics Canada), there are

certain factors which may influence Aboriginal children's weekly participation in organized sports, including family structure, income, and parent education (Smith, Findlay, & Crompton, 2011). For instance, 72% of children living with two parents were more likely to participate in sports, but were less like to participate if they had more than three siblings. Children whose parents had completed high school, college or university were also more likely to be involved in sports. As well, the higher the family income, the greater the likelihood of children participating in sports (Smith, Findlay, & Crompton, 2011). It should also be noted that while sport was the most popular physical activity among Aboriginal children in this report (Smith, Findlay, & Crompton, 2011) cultural activities such as dancing should also be considered in assessments of activity for Aboriginal children in Canada.

In examining culture and ethnicity as influential on body image, eating, and activity, it is also important to explore sociocultural expectations for diversity in the media. Specifically, media images are important for defining and perpetuating what children should do, be and look like. Unfortunately, what is shown appears to be primarily an image of white, middle- to upper-class individuals, who are well educated and well dressed, and have no limitations in ability. In advertising, most models are Caucasian, and the clothes and image they sell can be very expensive. There also appears to be a lack of diversity in children's media, specifically literature. For instance, the main characters in popular children's books are typically male (e.g. *Harry Potter*) with females playing supporting roles, and few are of an ethnicity other than Caucasian (except *Nanabush* and the characters in Robert Munsch's books) or have additional support needs (*Big Brother Dustin*, by Carol Carter). One could hypothesize that this would be

upsetting for non-Caucasian children (especially girls), who have additional support needs, or who are from lower income families.

Child care settings are not exempt from these stereotypical images. In many of these settings, children's individual cultures are not featured, which may contribute to concerns around body image, eating, and activity. Anecdotal evidence from visits to child care facilities in Winnipeg suggest that pictures of children on facility walls are often not representative of the children themselves. Pictures may be primarily of Caucasian children, and rarely are there pictures of children with additional support needs. As well, this anecdotal evidence highlights an emphasis on the traditions of the Christian religion, where only Christmas concerts are conducted, art activities involve making Christmas presents for families, and stories about Santa Claus are prominent.

Socioeconomic Status

As many social factors influence the socialization process, it is important that socio-economic status is also considered for its impact on the health and development of school age children. For example, with organized sports in Canada, higher family socio-economic status is linked to higher rates of participation for Aboriginal and non-Aboriginal children (Clark, 2008; Smith, Findlay, & Crompton, 2011). As well, some research suggests that body image and weight concerns vary according to socioeconomic status. A study in South Carolina found that among fourth and seventh grade children, female children from higher socioeconomic groups were more likely to diet compared to girls in lower socioeconomic groups (Adams et al., 2000). As well, a study by Hoffman and Kloska (1995) found American parents who were lower in socio-economic status groups and were less educated were more likely to hold stereotypical views of women

and men. As some research suggests that clothing is seen as a measure of success, even in children, parents may dress their children in expensive designer clothing in order to be seen as *good* parents, which ultimately present the child's body as "a trophy to the material success of her or his parents" (Pole, 2007, p. 73).

Socioeconomic status may also affect eating ideas and behaviours. Irwin et al. (2006) found some caregivers indicated that while children were taught about the link between health and consumption of nutritious food, these individuals experienced food security issues as a result of family poverty. There appeared to be a discrepancy between what the children were taught and the reality of a lack of nutritious food at home; the concern expressed by the researchers was that the children may not understand the difference.

The Value of Competition

In thinking about physical activity and children, it is important to explore the issue of competition. Even among very young children, competition appears in such activities as tee-ball, soccer, gymnastics, and dance. Some classic works explore the idea that competition is innate (Kagan & Moss, 1962) while other research suggests it is a learned behaviour (Kohnt, 1986; Martens, 1976). Interrelated with ideas about the origins of competition are theories about the benefits or consequences of such behaviour on children. On one hand, competition may be seen as a motivator for personal achievement and success, and may help children to focus on one interest, to encourage self-discipline and personal sacrifice, and to encourage social comparison (Robson, 2004). Conversely, it has been suggested that competition negatively impacts performance (e. g. anxiety leads to mistakes) (Kohnt, 1986). Hoffman (1986) also suggested that highly competitive athletes may train to the point of exhaustion or injury. As well, Kohnt (1986) suggested

that since there were only a small number of winners and a large number of losers, competition made the 'losers' feel incompetent, while Robson (2004) suggested this could also make them jealous of the winners. This is often encouraged by coaches who focus on the star athletes rather than a team approach to winning (Robson, 2004). For young children, competition may be associated with increased stress and anxiety, and ultimately less enjoyment of the activity, which in turn may limit overall skill development (Ryan, 1995) and increase the likelihood of dropping out (Murphy, 1999). Robson (2004) described a survey of almost 6000 children and youth in which 37% were planning to withdraw from organized sports, one of the reasons being that the coaches put too much pressure on them. Last, the emphasis in competition is on 'product' (e.g. gold medal) not on 'process' (e.g. training), and for children this detracts from the learning process (e.g. learning from mistakes) (Murphy, 1999) and from having fun.

One issue that should be explored to help understand the power of competition is the male identity and organized sports. According to research by Messner (1989), organized sports for boys at early ages was about having relationships with other boys and adult males: "It was not winning and victories that seemed important at first; it was something 'fun' to do with fathers, older brothers and uncles, and eventually with same-aged peers" (as cited in Anderson & Collins, 1998, p. 198). However, this early importance placed on relationships seems to change for older school age boys (Messner, 1989).

> By the ages or 9 or 10, the less skilled boys were already becoming alienated from – or weeded out of – the highly competitive and hierarchical system of organized sports. Those who did experience some early successes received recognition from adult males (especially fathers and older brothers) and help high status among peers. As a result, they began to pour more and more of their energies into athletic participation. It was only after they learned that they would get recognition from other people for being a good athlete – indeed, that this attention was contingent upon *being a winner* – that performance and winning (the

dominant values of organized sports) became extremely important. (as cited in
Anderson & Collins, 1998, p. 198)

Therefore, competition may alienate less skilled players, may negatively impact self-esteem (i.e. 'I'm only liked when I win'), may have an impact on social relationships between boys, and between boys and the significant adult males in their lives.

While competition appears to be common in Western society, there is a recent trend that supports the notion that young children should be able to play organized sports without the anxiety and pressure associated with competition (Murphy, 1999). For example, Hockey Calgary recently eliminated scoring goals for children in hockey leagues that are under eight years of age (CBC, 2011). Instead, some research suggests that young children should be able to focus on the process in organized sports, such as skill building, instead of the product, i.e. winning or losing (Durand-Bush, Salmela, & Becomeya, 2001; Murphy, 1999). Interestingly, success in sport has been linked to the athlete begin able to focus on the process of performance rather than the product (Durand-Bush et al., 2001).

Summary

This chapter provided an overview of the literature focused on body image, eating, and physical activity among children. It also explored the sociocultural factors which influence the ideas, attitudes and behaviours associated with each of these three concepts. These factors include family and educators, peers, clothing, media and advertising, sex and gender, culture and ethnicity, socioeconomic status, and competition.

It is important to note that this research project stemmed from gaps in the literature concerning the body image, eating, and activity ideas and behaviours of school age children: The concepts were logically related, but not connected. One way to address

these gaps was an observational study in a fairly close environment. What needs to be studied is as follows. First, there seems to be a lack of information on these three issues from a Canadian perspective. A majority of the research on body image and eating derives from the United States (for examples see Levine & Smolak, 2006; Murnen et al., 2003; Smolak, 2004) and Australia (for examples see Clark & Tiggemann, 2006; Hargreaves & Tiggemann, 2006; McCabe et al., 2010; McCabe et al., 2007). The most prominent researcher in Canada is Gail McVey (McVey et al., 2004; McVey et al., 2003; McVey et al., 2004, 2005, 2007; McVey et al., 2002). As well, there appears to be a lack of information regarding positive body image and healthy eating habits (Cash, 2005; Frisén & Holmqvist, 2010; Grogan, 2010; Holmqvist & Frisén, 2012; Kelly et al., 2005).

Second, there appears to be a lack of diversity in participant populations, particularly around body image and eating. Most of the evidence relevant to this issue has been based on cross-sectional data (Ricciardelli & McCabe, 2001), on the experiences of adolescent rather than of school age children (Abramovity & Birch, 2000; Birbeck & Drummond, 2006; Dohnt & Tiggemann, 2005; Gross et al., 2004; Smolak, 2004), and on the experiences of girls more than boys (Clark & Tiggemann, 2006; Lowes & Tiggemann, 2003; Sinton & Birch, 2006).

Third, a large number of studies utilize the Body Mass Index (BMI) to assess normal or healthy weight in children (for examples see McVey et al., 2004; McVey et al., 2003; McVey et al., 2004, 2005, 2007) and corresponding weight loss or muscle-gaining behaviours (for examples see McCabe & Ricciardelli, 2003b, 2005; Ricciardelli et al., 2006). However, this measurement tool has been criticized (Maine, 2011; NEDIC, 2011).

Next, the literature on physical activity provides limitations, both in focus of study and measurement of activity. For instance, commonly used self-reports and parent reports may be inaccurate measures of children's activity (Faith, Leone, Ayers, Heo, & Pietrobelli, 2002; Sithole & Veugelers, 2008; Neumark-Sztainer et al., 2003), while there appears to be a lack of research concerning unstructured physical play (e.g. rough and tumble play) and cultural activities (e.g. hoop dancing of the Anishinabe tribe) as part of physical activity measures for children.

Last, there is very little research which has focused on school age child care educators and environments as being influential on children's body image, eating, and activity (Brown et al., 2009; Lynch & Batal, 2010; Nicklas et al., 2001). Of the research that has studied these issues in child care settings, most has been focused on the ideas and behaviours of preschool aged children (for examples see Copeland et al., 2012; Copeland et al., 2009; Gubbels et al., 2009; Hughes et al., 2007; Lanigan, 2010; Nicklas, et al., 2011), on obesity and obesity prevention (Fuller et al., 2005; Herbst & Tekin, 2009; Story et al., 2010), and on the role of preschool care providers in influencing eating (Mrdjenovic & Levitsky, 2005; Nicklas et al., 2001) and activity habits (Alhassan at al., 2007; Trost et al., 2008; Trost et al., 2010).

Chapter III: Theoretical Approaches

Theory-building and testing is important in scientific research. With qualitative research, it is important for the researcher to be flexible, to be open to theoretical frameworks that may be helpful to explain data that are being collected. For this thesis, ecological systems theory was especially useful, and it was used to guide data collection and assist in organizing and explaining the findings. This theory was critical in my understanding of body image, eating, and activity among school age children using before- and after-school child care.

Ecological Systems Theory

The ecological systems theory was first introduced by Bronfenbrenner in the 1970's. It was conceptualized further in 1979 in *The Ecology of Human Development: Experiments by Nature and Design*. Bronfenbrenner suggested that in order to understand human development over the lifespan, we needed to consider "the entire ecological system in which growth occurs" (Bronfenbrenner, 1994b, p. 1643). He stated that although the family was the primary context in which development occurred, it was not the only one (Bronfenbrenner, 1986). The young child, then, is seen as developing "within a complex system of relationships affected by multiple levels of the surrounding environment" (Berk, 2012, pp. 25-26).

Bronfenbrenner (1979) suggested that one of the most "unorthodox" aspects of this theory was his notion of development (p. 9). Specifically, he viewed development as "what is perceived, desired, feared, thought about, or acquired as knowledge, and how the nature of this psychological material changes as a function of a person's exposure to and interaction with the environment" (1979, p. 9). However, development is not a one-sided

process, where the environment acts on and affects the child. Bronfenbrenner (1979) argued that children contributed in part to their development. He suggested that this idea was influenced by the work of Piaget (1952), in that children construct knowledge by interacting with their environment. In addition, "development is neither entirely controlled by environmental circumstances nor driven solely by inner dispositions. Rather, children and their environments form a network of interdependent effects" (Berk, 2012, p. 27).

There are two general propositions in this theory. The first states that development takes place over time through regular, increasingly complex, and reciprocal interactions between a child and the individuals, objects, or symbols in his or her immediate environment (Bronfenbrenner, 1994b). Bronfenbrenner (1979) called these long lasting forms of interaction *proximal processes*, ones that are near the child. Examples of these processes include activities between a parent and a child, between a child and a peer, collaborative or solitary play, reading, physical activity, or learning new skills (Bronfenbrenner, 1994b). The second proposition states that "the form, power, content, and direction of the proximal processes effecting development vary systematically" as a combined function of the characteristics of the child; of the environmental context in which the processes take place; and of the nature of the developmental outcomes (Bronfenbrenner, 1994b, p. 1644). An example which highlights the second proposition involves the classic works of Drillien (1963) who studied developmental outcomes of low birth weight children, where social class was classified as the environmental context, while birth weight was the characteristic of the child.

Within the ecological systems model, there are four interrelated structures or environments that combine to form an entire system which affects child development (Bronfenbrenner, 1979, 1994a, 1994b). Bronfenbrenner (1994b) likened these to Russian nesting dolls, one inside the other. The child is at the centre of this system and the levels surround them. These four environments are the microsystem, the mesosystem, the exosystem, and the macrosystem.

The microsystem is the innermost level, the one closest to the child. It is where the child lives and 'works' (e.g. home, school, child care centre, neighbourhood). This environment is composed of daily activities, face-to-face interactions, and social roles in the child's immediate settings (Bronfenbrenner, 1994a, 1994b). Parents, siblings, peers, teachers, ECEs, and extended family members are within this level, and it is here that proximal processes occur "to produce and sustain development" (Bronfenbrenner, 1994b, p. 1645). Bronfenbrenner (1994a) suggested that interactions at this level are reciprocal and bidirectional, where parents or caregivers affect children's behaviour, but the child's personality, physical attributes, and characteristics also affect the parents' or caregivers' behaviour (e.g. an easy-going, happy child triggers positive, patient reactions from caregivers). Bronfenbrenner also suggested that when these parent-child interactions occur over time, they have a lasting impact on child development (Crockenberg & Leerkes, 2003). At this level, third parties may also indirectly influence parent-child interaction and ultimately child development. For example, if there is marital conflict, there may also be a subsequent change in parenting style (e.g. unrealistic demands, inconsistent guidance), which may produce a change in child behaviour (e.g. aggression, anxiety) (Caldera & Lindsay, 2006).

The second level in the ecological systems theory is the mesosystem. This system includes the connections between two or more of children's immediate settings or microsystems (e.g. home, child care centre, school, community play areas), which then have an impact on the child (Bronfenbrenner, 1979, 1994a, 1994b). For example, the mesosystem interaction may involve a relationship between the home and the child care centre, or between the child's school and the parents' workplace. More specific examples include a child's academic success being affected by their parents' assistance with homework, or a child's behaviour (e.g. following rules) at a child care centre being affected by their parents' support of the Centre philosophy and resulting child care practices.

The exosystem is the third level. This system does not involve children as active participants. Instead, it is composed of social settings and institutions that indirectly affect children's experiences in the microsystem (Bronfenbrenner, 1979, 1994a). Bronfenbrenner (1986) suggested that children's psychological development could be affected by "what occurs in the other settings in which their parents' live their lives" (p. 723). The exosystem may include formal organizations, such as parents' workplaces, churches, or health and education services in the neighbourhood, or informal supports, such as parent's friends, extended family members, and coworkers. A more specific example may include decisions made by the city government council that affects the quality of parks or libraries that the child and his or her family visit.

Finally, the macrosystem, the outermost level in the theory, is composed of values, laws, customs, and resources that influence experiences and interactions within all other systems (Bronfenbrenner, 1994a, 1994b). This is the "larger cultural context that defines

the child's interpretation of the people and events in each of the systems that make up his/her developmental context" (Bronfenbrenner & Morris, 1998, as cited in Jordan, 2004, p. 196). An example is child abuse laws designed to prevent child maltreatment. What priority this level gives to children affects the support and resources they receive at inner levels (e.g. child abuse laws affect parenting practices) (Bronfenbrenner, 1994a, 1994b; Bronfenbrenner & Morris, 1998).

It should be noted that the environment is constantly changing. Life events (e.g. birth of a sibling, move to a new school) and their timing change existing relationships between children and their environments, which ultimately produces new factors that affect child development (Bronfenbrenner, 1994a, 1994b). Bronfenbrenner's later works examined the impact of time in the ecological systems model, called the *chronosystem* (Bronfenbrenner, 1994a, 1994b; Bronfenbrenner & Morris, 1998). Time's influence depends on whether the life event is imposed upon children or whether they create or change their own settings and experiences (Bronfenbrenner, 1994a, 1994b; Bronfenbrenner & Morris, 1998). Bronfenbrenner (1994b) noted: "A chronosystem encompasses change or consistency over time not only in the characteristics of the person but also of the environment in which that person lives" (p. 1646). One example might be that girls are more likely to pursue post-secondary education and careers than girls did 30 to 40 years ago.

The ecological systems theory was useful to formulate the research questions and the overall approach for this project. It was a logical choice to guide this research for a number of reasons. First and most importantly, a child care centre is itself an ecosystem, a version of a social system. The study Centre was a controlled setting, similar to a

laboratory for observing. Here, one could find stable relationships of children with their peers and with child care staff, some spanning at least six years, since some children had attended the program throughout elementary school. Therefore, it was important for the lasting impact on child development at the microsystem level (Crockenberg & Leerkes, 2003).

Second, Bronfenbrenner's idea of development was supported by the research methods utilized in this thesis. In particular, it was important to consider what children perceived or thought about or gained as 'knowledge' that could be obtained through observation. Bronfenbrenner (1979) argued that a child's development could be "inferred from patterns of activity as these are expressed in both verbal and non-verbal behaviour, particularly in the activities, roles, and relations in which the person engages" (p. 11). Therefore, use of the ecological systems theory supported both the methods and data collection in this research.

Third, ecological systems theory was useful in this research since children are influenced by multiple levels of an environment, which combine to affect development (Bronfenbrenner, 1979, 1994a, 1994b). Overall child development is influenced by the microsystem (e.g. imitation of caregivers, influences on play) (Pellegrini & Boyd, 1993), the mesosystem (e.g. child care program delivery is affected by parents' support of the Centre philosophy), the exosystem (e.g. provincial child care licensing regulations), and the macrosystem (e.g. sociocultural value of appearance). Observations of children with peers and with caregivers in a child care setting provided opportunity to understand the influences on children's ideas and behaviour around body image, eating, and activity.

While ecological systems theory has obvious benefit to the research at hand, a brief evaluation of this approach is important. First, Berk (2012) stated that this theory offered "the most differentiated and complete account of contextual influences on children's development" (p. 25). Thus, an emphasis is placed on the substantial variety of sociocultural influences on child development. As well, Thomas (2000) suggested that the most significant contribution of this theory is the emphasis on the need for research that examined individual and contextual variables in child development. Further to this point, Jordan (2004) cited the work of Garbarino (1982), who suggested that one of the most useful aspects of this theory was that it focused on the characteristics of the child, the home environment, and the larger social and cultural environment at the same time.

One of the most frequent criticisms of ecological systems theory is that there is a lack of consideration of the role that biology and cognition play in development. Darling (2007), a former student of Bronfenbrenner's, described how his ideas in *The Ecology of Human Development* did not focus on one specific area, such as biological or cognitive development, but instead emphasized "the interrelationship of different processes and their contextual variation" (p. 203). However, this criticism appears to have been remedied in Bronfenbrenner's later work, which evolved to become the *bioecological model* (Bronfenbrenner, 2005; Bronfenbrenner & Morris, 2006). This model explored how the "child's biologically influenced dispositions join with environmental forces to mold development" (Berk, 2012, p. 26). For example, a child's age, intelligence, or temperament are brought into social situations, which may influence interactions and ultimately that child's development (e.g. parents interact differently with sons and daughters) (Bronfenbrenner, 1995; Bronfenbrenner & Morris, 1998).

A second criticism of the ecological systems theory involves the physical environment. Evans (2006) suggested that physical environmental variables (e.g. pollution, child care type and quality), specifically multiple variables, were not considered. Jordan (2004) takes this a step further, suggesting that although Bronfenbrenner examined the "reciprocal influences of children and their systems" (p. 197), he did not thoroughly explore the influence of the media on these systems. Indeed, Darling (2007) suggested that Bronfenbrenner used *The Ecology of Human Development* to create 50 hypotheses about developmental processes across the lifespan, but she reported that they had seldom been tested.

Overall, while there are both positive and negative aspects to the ecological systems theory, it was the approach that provided the most guidance while designing and organizing this research, as well as providing an analytic framework for analysis and interpretation of results.

Supplemental Theoretical Approaches

Although an ecological model was important in this research, some additional theoretical insights were also useful, especially in data analysis. Sociocultural theory, gender theories, and developmental theories were useful to explain findings, such as the concept of power. A discussion of each supplemental perspective follows.

Sociocultural Theory

Sociocultural theory was originally developed by Vygotsky. He examined social influences and social context on a person's cognitive development. The focus here is on how *culture* (i.e. values, beliefs, and customs) is transmitted from one person to the next

(Vygotsky, 1978). However, social interaction is necessary for children to acquire the ways of thinking and behaving that make up a community's culture (Vygotsky, 1978).

There are two features of social interaction that are needed in order for learning to take place. These are intersubjectivity (Newson & Newson, 1975) and scaffolding (Vygotsky, 1978). With intersubjectivity, the learner and the expert each have different ideas or viewpoints about a particular concept, and as a result, they adjust to one another's perspective to reach shared understandings (Newson & Newson, 1975). For example, an adult can translate his or her ideas into words that the child can understand, using developmentally appropriate language. On the other hand, scaffolding involves adjusting the amount and kind of support offered by the expert to fit the child's current level of performance and understanding (Vygotsky, 1978). It may begin with direct instruction of a concept, but may then progress into offering suggestions, asking questions, and prompting (Vygotsky, 1978). For instance, in order for a child to learn how to play soccer, a parent might begin by explaining the rules of soccer to the child. They may also explain the roles for each team member, and then provide opportunities for the child to practice. Once the child's skills at the sport begin developing, the parent may move to providing feedback and suggestions for improvement of skills. When the child's skills have reached a level where formal demonstration is possible, such as during a soccer game, the parent may then vocalize which skills the child should use at specific points during the game.

According to Lantolf (2000), the most important concept within this theory is that learning is a *socially mediated* process. Here, children depend on the support that adults and more expert peers provide as children try new tasks (Vygotsky, 1978). Language is

important to this process, and as children's ability to produce and comprehend language increases, so does the collaboration between children and the 'experts.' For example, preschoolers can ask questions or ask for clarification, and school age children can ask the experts to provide concrete or abstract examples of cultural concepts. As a result of the increase in language development, learning takes place: "Through joint activities with more mature members of their society, children master activities and think in ways that have meaning in their culture" (Vygotsky, 1978, as cited in Berk, 2008, p. 227).

From sociocultural theory, the concept of learning as a *socially mediated* process was useful to this research. Specifically, in order for children to learn the ways of a culture, they need to interact with more experienced peers and adults (Vygotsky, 1978). This seemed important for my research, as observations of interactions between and among children as well as adults was necessary to understand the sociocultural influence on school age children's ideas and behaviour. Learning was also important in considering the sociocultural implications for child care practice.

Three additional concepts in sociocultural theory were useful in this research. These are assisted discovery, peer collaboration, and make-believe play. According to Vygotsky (1978), in early learning environments, children's learning is guided by more experienced adults and peers with explanations, demonstrations, and verbal prompts. Peer collaboration assists this process, whereby children with different skills and abilities work together in groups to help and teach one another (Vygotsky, 1978). Play is also important for cognitive development, especially make-believe play. Here, Vygotsky (1978) argued that "as children create imaginary situations, they learn to follow internal ideas and social rules" (as cited in Berk, 2008, p. 336). An example of this would be a

child pretending that they are a 'daddy' and their doll is a 'baby,' where the rules of parenting behaviour are followed (Vygotsky, 1978).

Furthermore, Herbozo et al. (2004) suggested that "one of the most empirically supported theoretical explanations for the development of body image and eating disturbance among women is the sociocultural model" (p. 22). Although the focus here is typically on adult women, it was useful in order to understand body image and eating ideas and behaviours in girls.

Gender Theories

Gender was a critical element to be considered in this research. However, most theories about gender do not explain the development of gender as resulting from *nature* or *nurture*, but instead reflect the influence of both (Leaper & Friedman, 2007). For instance, theories that reflect s*ocial-structural processes* in gender development suggest that status and power in a society shape personal circumstances, including how they impinge on behaviour, such as power inequities in the home (Leaper & Friedman 2007). As well, theories that reflect *social-interactive processes*, such as sociocultural theory, describe how social interaction and daily activities help us learn about our culture, and how certain behaviours are practiced more often than others, as there are incentives for their continuation. Within social-interactive theories, differential opportunities based on sex or gender may be a form of discrimination, but their continued practice leads to "gender differences in expectations, values, preferences, and skills" (e.g. boys play with trucks – spatial relations; girls play with dolls – social relationships) (Leaper & Friedman 2007, p. 562).

In addition, gender schema theory and cognitive developmental theory, for example, are reflective of *cognitive-motivational processes* of gender development. Within these theories, once gender schemas are acquired, "children play an active role in their gender development and a process of self-socialization ensues" (Leaper & Friedman 2007, p. 562). Through observation and interactions with others, children learn about the meaning and consequences of gendered behaviour (e.g. tomboy vs. sissy), and behaviour becomes internally regulated (e.g. personal values influence behaviour). The resulting gender concept influences the development of a social identity as a member of a specific gender group, including in-group biases (e.g. tend to notice materials in environment that fit within their meaning of male or female), and within-group assimilation (e.g. children reinforce each other's behaviours based on what is 'normal' in their group) (Leaper & Friedman 2007). Those with the most status and power are more likely to maintain group and role boundaries (e.g. less gender-flexible behaviour allowed for boys) (Bigler, Brown, & Markell, 2001). In our society, the characteristics of high status groups are valued more than those of low status groups (e.g. independence valued more than dependence; masculine characteristics valued more than female characteristics) (Liben, Bigler, & Krogh, 2001), but it is acceptable for lower status groups to emulate higher status groups (e.g. more acceptable for females to 'try on' masculine characteristics) (Andrushko, 2005).

The concepts in feminist theory, especially feminist social constructionist theory, also appeared to be useful when considering gender as an influence on eating, activity, and body image. Feminist scholars suggest that gender is socially constructed and is "a society's division of people into differentiated categories of 'women' and 'men'" (Lorber

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& Moore, 2002, p. 4). In essence, gender represents sociocultural meanings of masculine and feminine (Fox & Murray, 2000). It is constructed at all levels of family and social life (Thompson & Walker, 1995) and organizes "every aspect of family life, including roles, everyday practices, images, and power" (Baca Zinn, 2000, p. 46). This last concept is critical, as feminist scholars argue that gender is linked to distributions of power in a society (Fox & Murray, 2000). The notion that gender is socially constructed helps us to understand the obvious and hidden processes that create gender differences, "and then assign value and privilege on the basis of sex" (Fox & Murray, 2000, p. 1164). Fox and Murray (2000) argued that this was typically to the benefit of men and to the detriment of women.

Thompson and Walker (1995) suggested that in order to effectively examine the social construction of gender, we must move past the idea of gender as an individual characteristic and realize that it influenced all levels of social life. Moreover, Kimball (1995) suggested that in order to analyze gender, we must ask two questions: (1) How are gender differences constructed, and (2) why are gender differences constructed?

The concept that gender is constructed was useful to this research. In particular, feminist social constructionist and sociocultural theory examine the 'what' and the 'how' of gender development. Findings of differential treatment of boys and girls (such that adults interacted with and expected different behaviours from boys and girls) provide evidence of gendered health ideas and behaviours. As well, feminist theorists can explain a variety of gendered ideas, attitudes, and behaviours around the concept of power for men and boys and the lack of power for women and girls. Therefore, as gender differences are noticeable in the literature on body image, eating, and physical activity, it

was important that they were also considered as possible influences on the ideas and behaviours of school age children for this research project. Observational data were collected and analyzed separately for boys and girls, in order to uncover gender differences and similarities.

Developmental Theories

Children grow and develop at their own pace, and thus, differences can be observed among children. However, an understanding of the developmental changes for school age children may provide insight as to the impact of eating, physical activity, and body image on their overall health and development. Specifically, the manner in which a six-year-old child thinks about and behaves regarding body image, eating, and activity may be quite different than the thoughts and behaviour of a 12-year old child. Thus, the work of Piaget and Erikson provide other viewpoints which were helpful in interpreting the research results. Each is outlined below.

Piaget. According to Jean Piaget (1952), children are actively involved in their own learning. In particular, children construct their own knowledge: They learn by doing. In his cognitive-developmental theory, Piaget proposed that children passed through four stages, each with distinct changes to cognition: (1) Sensorimotor (birth to two years), (2) preoperational (two to seven years), (3) concrete operational (seven to 11 years), and (4) formal operational (11 years and older). A brief discussion of the latter three stages follows.

For *preoperational* children, the major achievement at this stage is the ability to mentally represent objects and events (Piaget, 1930, 1952). This includes language and make-believe play. As well, children have the ability to use symbols, which are things

that resemble what they represent (e.g. a drawing of a child's house). Preoperational

children also have the ability to understand the concepts of *past* and *future* (e.g. "Mommy

will be home soon," or "Remember when you went to the zoo?"). However, Piaget

suggested that children at this stage could not deal with abstract ideas. They are focused

on the present, with physical objects they can represent easily (e.g. pretending to cook

after seeing a parent do the same) (Piaget, 1930, 1952).

The most relevant aspect of this stage to the present study is the concept of

egocentrism (Piaget, 1930, 1952). This is the inability to separate other's views from

one's own. Piaget (1930, 1952) suggested that children at this stage of development

could not yet take the perspective of another person. For example, when a child is asked

to guess his or her mother's favorite food, the child will state that their mother's favorite

food is the same as the child's. Essentially, young children see the world from their

perspective, without an understanding that there could be other viewpoints. An

interesting consideration here is that the preoperational child assumes their thinking is

logical and correct, and even when faced with a contradiction, the other person must still

be wrong (Piaget, 1930, 1952).

Children seven to 11 years old, Piaget thought were in the *concrete operational* stage,

the third stage in his theory of cognitive development (Piaget, 1930, 1952). He also

argued that there were changes to children's cognitive abilities during the school years.

Piaget (1930, 1952) suggested that their thoughts were more organized, logical, and

flexible than that of preschool aged children, and that their ability to reason also became

logical. Children in the concrete operational stage have the capacity for *decentration*,

that is, the ability to focus on several different parts of a problem and relate them (Piaget,

1930, 1952). For example, a school age child can now understand that her father can also be a brother, a cousin, and an uncle. Reversibility is also demonstrated, which is the ability to "think through a series of steps and then mentally reverse direction, returning to starting point" (Piaget, 1930, 1952, as cited in Berk, 2012, p. 438).

Although Piaget (1930, 1952) thought that children were active learners with rich, structured minds, he suggested that there were limitations to the cognitive ability of children in the middle years. In particular, he suggested that they could only think logically and in an organized manner when information was present or recalled: What *is* not what *could be* (Piaget, 1936, as cited in Miller, 1993). For example, children at this stage of development have difficulty with abstract ideas (e.g. If Sally is taller than Mary, and Mary is taller than Susan, who is Susan taller than?) (Berk, 2008).

The final stage in Piaget's cognitive-developmental theory is the *formal operational stage*. For individuals ages 11 and older, there is now the capacity for systematic reasoning and problem solving and the ability to think logically about abstract concepts (Inhelder & Piaget, 1958). This includes the ability to think about hypothetical situations, and to think about one's own thoughts or the thoughts of others (Miller, 1993). This transition to perspective taking is important to this research, as the changes "support self-concept and self-esteem" (Selman, 1976, as cited in Berk, 2012, p. 491). Compared to the previous three stages, this stage is "more speculative and free from the immediate environment and circumstances. It involves thinking about possibilities, as well as comparing reality with things that might or might not be" (Inhelder & Piaget, 1958, as cited in Craig, Kermis, & Digdon, 2001, p. 484). Individuals can mentally manipulate

ideas about known facts but also ideas that are divergent from facts (i.e. they can argue hypothetical points for the sake of discussion) (Inhelder & Piaget, 1958).

It is important to note that Piaget made significant contributions to the field of child development; indeed, his theory of cognitive development is likely the most well-known (Miller, 1993). In early childhood education, there are some criticisms of his approach. For example, Piaget focused on limitations in children's cognitive abilities, rather than what they are able to do at each stage. He also dismissed social and emotional factors (Murray, 1983) and language as being critical to cognitive development. Vygotsky, on the other hand, thought language was critical to cognitive development (1978).

Erikson. The emotional development of school age children was observed by Erikson (1950). In particular, the fourth stage of Erikson's psychosocial theory, "Industry versus Inferiority," explores the combination of adult expectations and children's drive toward mastery (Erikson, 1950). The central emotional issue of this stage is whether children develop feelings of competence and ability (Industry) or whether they believe that their best efforts are inadequate (Inferiority) (Erikson, 1950). School provides opportunities for the development of Industry (e.g. learn the value of division of labour, and develop a sense of moral responsibility). Some examples of Industry in school age children involve being productive, taking pride in what one does, accepting responsibility and leadership, and recognizing one's success (Berk, 2012). With Inferiority, children generally experience a lack of confidence in their own abilities and a sense of inadequacy (Erikson, 1950). Family, teachers, and peers can contribute to these negative feelings. For instance, Inferiority may result if "family life has not prepared children for school life or when teachers and peers destroy children's feelings of competence and mastery with

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negative responses" (Erikson, 1950, as cited in Berk, 2008, p. 482). Specific examples of Inferiority in school age children are: Giving up easily, asking others to do things, avoiding responsibility and leadership, attributing success to luck or accident, competing, and doubting abilities in all areas (Berk, 2012).

Thus, in taking developmental theories into account (and the often significant differences between younger and older school age children), it was important for this research that observations were made for younger and older school age children. It was expected that older children would be able to think more abstractly than younger children about concepts such as health, and to think hypothetically about factors which influence their health. It was also expected that older children would have a greater capacity than younger children for perspective-taking (the six-year-old children were expected to be somewhat egocentric), which is important for self-concept and self-esteem, and for surmising how one's actions can affect another person (e.g. appearance-related teasing). Finally, it was expected that the majority of older children would have developed a sense of Industry, which would translate into high self-esteem and a more positive self-concept.

The concepts in developmental theories appeared to be useful for this thesis, in particular, the concept that age-related behaviours in children can be predicted and explained (e.g. differences in health-related attitudes and behaviours of six year olds as compared to 12 year olds). This was important when considering observations of younger and older school age children.

Summary

In summary, ecological system theory was critical in my understanding of body image, eating, and activity among school age children using before- and after-school

child care. In particular, it provided the most guidance while designing and organizing this research, and in organizing and explaining the research findings.

However, there were some results for which other theoretical models provided additional insight into the observations I made. Gender theories were helpful for interpreting the findings related to gender differences. Because of the developmental differences between the youngest and oldest children in this research, attention to developmental theories, especially the work of Piaget (1952) and Erikson (1950), was necessary. Finally, while ecological systems evaluates macrosystem influences on children's health and well-being, sociocultural theory was also useful for a broader understanding of how children learn about social and cultural expectations.

Chapter IV: Context

As the number of dual-earner families has increased in Canada, from 31% in 1976 to 67% in 2008 (Statistics Canada, 2011), there has been a corresponding need for child care. There has also been an increase in the number of lone parent-families (Baker, 2007), predominantly headed by women (Roy, 2006). Thus, the role of child care in the lives of many families cannot be understated. However, what is not consistently examined is the impact of early learning and child care environments on children's health and development. Therefore, the context of school age child care was an important consideration for this research project, as setting influences behaviour (see Bronfenbrenner 1979, 1994).

In order to understand the research context, it is important to understand the broader social climate; that is, what is happening within the microsystem, the exosystem and the macrosystem need to be explored.

Canadian Political Policy as Related to Child Care

Within Canada, there are three tiers of government: Federal, provincial/territorial, and municipal. The federal government is responsible for matters that affect the entire country (e.g. citizenship, immigration, foreign trade, and defense) (Ontario Council of Agencies Serving Immigrants, 2011). The provincial and territorial governments are responsible for matters that affect each province or territory and are specifically responsible for education and health care (OCASI, 2011). The municipal governments of towns, cities, or villages are responsible for local matters (e.g. emergency services, city streets) (OCASI, 2011). Some responsibilities are shared between levels of government.

For example, most funding for education is provided by municipal governments with provincial governments providing infrastructure and regulations.

Funding of Early Learning and Child Care

According to Friendly and Prentice (2009), the federal government does not typically fund early learning and child care. The exception here is for Aboriginal peoples and military families. Indeed, it was not until 2003 that this government contributed specifically to child care. Currently, there are two federal transfer payments provided to the provinces annually for early learning and child care. These are the Multilateral Framework Agreement on Early Learning and Child Care ($350 million) and the Child Care Spaces Initiative ($250 million) (Friendly & Prentice, 2009).

Public education, including kindergarten, is 'free' to families (provincial funding and municipal property taxes pay for this) (Manitoba Education, n.d.); however, funding for child care is not covered by provincial and municipal taxes.

> "Outside Quebec, child care is a user-paid service that is mostly financed through parent fees, fee subsidies for low-income families, and some direct funding to programs. Parent fees make up the biggest portion of this financing". (Friendly & Prentice, 2009, p. 38)

Still, not all families are eligible for subsidies, and for some low-income families, child care fees are not totally covered by subsidies (Friendly & Prentice, 2009). To help supplement operating costs, provincial operating grants are available to non-profit child care facilities to enhance quality or to increase wages (Friendly & Prentice, 2009).

Provincial Child Care Context

In Manitoba, the provincial government is responsible for the operation of licensed early learning and child care. According to Manitoba Family Services and Labour (n.d.), the government ensures quality early learning and child care in several ways. Child care

centres and homes are licensed and monitored according to the *Community Child Care Standards Act* and its regulations. This is accomplished through the use of child care coordinators, of which there are 30 employed by the provincial government (Early Childhood Development, 2012). "A minimum of three monitoring visits are conducted per year, one of which is a re-licensing visit. Coordinators must be certified ECE IIIs, and have a minimum of five years of supervisory experience in child care" (Early Childhood Development, 2012). The provincial government ensures quality for children and their families in several other ways, including:

- providing subsidies "for child care fees to licensed facilities for eligible families"

- providing operating grants "to eligible licensed centres and homes"

- "helping centres and home providers support children with special needs"

- "regulating and assessing the education credentials of early childhood educators and child care assistants who work in licensed centres and awarding classification levels", and

- providing competency-based assessment and training for child care assistants and family child care providers with prior learning and experience" (Government of Manitoba, n.d).

According to the Manitoba Child Care Program (n.d.), there are more than 1,150 licensed child care facilities with approximately 26,000 spaces in Manitoba. Over 30,000 children, including over 1,300 children with additional support needs, use these spaces every year (MCCP, n.d.). Some of these spaces are located in child care centres, while others are located in family care homes. Children ages three months to five years attend infant and preschool programs, while children six to 12 years of age attend before- and

after-school programs. In cities such as Winnipeg, one-third of available child care spaces are allocated for school age children (Prentice, 2007). Approximately 2,000 Early Childhood Educators work in child care centres in Manitoba, and over 550 family child care providers caring for children in homes (Manitoba Child Care Program, n.d).

In Manitoba, early learning and child care settings may be licensed or unlicensed facilities. I chose a school age child care centre for this research, one which was licensed under the province of Manitoba. In 1983, *The Community Child Care Standards Act* was established to ensure that child care and early learning provided in licensed centres and homes met certain standards (MCCP, n.d.). This centre held a *regular license*, which meant that the Centre met the requirements as outlined by provincial government legislation and regulations, including the maximum number and ages of children that may be in care at any one time. In order for the centre to receive a license, it must be evaluated by a child care co-ordinator from the Manitoba Child Care Program (MCCP, 2005).

In Manitoba, licensed school age child care facilities are required to follow specific regulations in regard to the care and well-being of children ages six to 12 years of age. A school age child care centre, as defined by the *Community Child Care Standards Act*, Regulation 62/86, is "a facility in which child care is provided to more than eight children who are enrolled in kindergarten to grade six" (MCCP, 2005, p. 14). The licensing requirements for these school age facilities are found in the *Best Practices Manual for Early Learning and Child Care Centres*, a manual that includes licensing requirements for staff training, adult-to-child ratios, indoor and outdoor space, and nutrition and feeding of school age children.

Within any licensed child care facility in Manitoba, a certain number of staff must be trained, that is, have received their ECE Level II or III. For staff training in school age centres, there are certain specifications for not only the type of training that must be obtained but also who must have it. According to Section 7(2) in the *Best Practices* manual, the centre director must have a minimum of Early Childhood Educator II training and a minimum of one year experience working with children in the child care field (or a similar setting), or have an Early Childhood Educator III designation. An explanation of the ECE II and ECE III designations, as per the Manitoba Child Care Program (2005, pp. 11-12), are as follows:

> *Early Childhood Educator III or ECE III:*
> (a) Has obtained a degree from an educational institution in a child care program approved by Manitoba Education, Citizenship and Youth;
> (b) has obtained: (i) a diploma in a child care program approved by Manitoba Education, Citizenship and Youth, and (ii) a certificate from an educational institution in an area of specialization in child care approved by Manitoba Education, Citizenship and Youth; or (c) has completed a competency assessment program approved by the director and has obtained a certificate from an educational institution in an area of specialization in child care approved by Manitoba Education, Citizenship and Youth.
>
> *Early Childhood Educator II or ECE II:*
> (a) Has obtained a diploma from an educational institution in a child care program approved by Manitoba Education, Citizenship and Youth;
> (b) has completed an educational program approved by the director that is equivalent to the diploma program referred to in clause (a); or
> (c) has successfully completed a competency assessment program approved by the director.

According to Section 7(5) of the manual, at least half of the school age centre staff, whether they are permanent full-time or regular part-time, must have a diploma or a degree in early childhood education (MCCP, 2005). Specifically, if these individuals are considered in the staff-to-child ratio (the maximum number of children that a staff member is responsible for at any given time) they must be an ECE II or ECE III (MCCP,

2005). The remainder of the staff may include Child Care Assistants. As per the

Community Child Care Standards Act, Regulation 62/86, a Child Care Assistant is "a

person who is not eligible on the basis of educational requirements for classification at

the Early Childhood Educator II or Early Childhood Educator III level and who is

employed by a licensee who operates a child care centre" (MCCP, 2005, p. 11).

Within the ECE II diploma in the Early Childhood Education program at Red River

College, for example, is advanced study in child development, guidance strategies,

planning and designing the child care environment, health and well-being, and

professional behaviour. Some specific courses include working with children from

diverse cultures and with additional support needs, providing nurturing care, applying

behaviour management strategies, and developing partnerships with families,

professionals, and communities. Application of knowledge from academic study will

influence the type of practice demonstrated by Early Childhood Educators and ultimately

the behaviour and attitudes of the children. For instance, knowledge of how quickly

children imitate others will lead to increased awareness of being a positive role model

(e.g. joining children in physically active play).

The ages and number of children in a school age centre are also regulated. For a

school age facility that cares for children ages six to 12 years, Section 8(2) of the manual

stipulates that the staff-to-child ratio is no larger than 1:15 (one adult to every 15

children), with a maximum group size of 30 children (MCCP, 2005, p. 47). Group size is

"the maximum number of children with which a child may be engaged in an activity at

one time in a child care centre" (MCCP, 2005, p. 13).

Within many school age programs in Manitoba, there exists an indirect supervision policy (MCCP, 2005, p. 48). This type of supervision allows children who attend school age care to have brief periods of time away from the direct supervision of adults. This may involve leaving the room to get a drink of water or to use the washroom. For this type of supervision, written approval must be obtained from parents or guardians and the indirect supervision policy must be approved by MCCP. The Centre for this research study did allow children to be unsupervised for brief periods. However, the children were required to notify a staff member when leaving.

The space inside and outside of a child care facility is an important consideration for the health and well-being of the children. According to Section 9(1) of the *Best Practices* manual, each centre must provide a minimum of 3.3 square meters of free and useable indoor floor area for every child that attends the program during the centre's hours of operation. This amount of space does not include hallways, washrooms, kitchen, storage, or other space not used by the children for play. Shelving units that contain toys, art supplies, games, or other materials for the children's use are considered in the 3.3 meters if they make up no more than 20% of the floor area (MCCP, 2005). As for the outdoor space, Section 9(3) states that for school age centres, the centre must provide or have access to outdoor play space that provides for "a minimum of seven square meters per child and accommodates the greater of 50 per cent of the number of licensed spaces or 55 square meters" (MCCP, 2005, p. 61). With school age child care centres, the outdoor space must also be located within 700 meters of the centre (MCCP, 2005).

Additionally, provincial licensing requires that snacks and meals provided by licensed child care facilities must follow certain nutrition guidelines at all meal times, as per

Canada's Food Guide (Health Canada, 2007). Section 13, Regulation 16(3) of the *Best Practices* Manual states that where a <u>meal</u> is provided, registered dieticians recommend a balanced meal including at least: (1) One serving of milk or alternatives, (2) one serving of meat or alternatives, (3) one serving of grain products, and (4) two servings of vegetables and fruit. An example of a meal which meets these requirements is pasta with vegetarian ground round, tomato sauce and cheddar cheese, as well as apples and milk. These requirements are outlined in Canada's Food Guide (Health Canada, 2007).

Regulation 16(3) also states that where a <u>snack</u> is provided, the snack should promote good dental health and consist of at least: (1) One serving of grain products, (2) one serving of vegetables and fruit, and (3) either one serving from milk or alternatives **or** one serving from meat or alternatives. An example of a snack which meets these requirements is whole wheat tortilla wraps baked with cinnamon, brown sugar, and butter, and served with milk and pears. These requirements are also outlined in Canada's Food Guide.

What is significant about the meal and snack regulations is that while every licensed centre must provide a balanced meal or snack for the children, it is the children that have direct control over eating, and the adults that care for them have indirect control over feeding (Pimento & Kernested, 2010). In particular, children decide how much and whether they will eat, while adults are responsible for what children eat, and when and where they eat (Pimento & Kernested, 2010, p. 245).

While there are no regulations regarding daily physical activity in child care centres, there are regulations around daily outdoor play. According to the *Best Practices* manual, "All children, including infants, are expected to have outdoor play every day" (p. 79). As

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well, "as school age children participate in recess during a regular school day, these children may choose to participate in outdoor play. However, centres must provide the opportunity for daily outdoor play" (p. 79).

The Need for School Age Child Care

Child care programs are microcosms, quite different than other environments that contain groups of children, such as the public school system. School age child care programs, in particular, differ in many ways from primary school environments. The primary purpose and function of the school is education/academics and meeting curriculum goals, whereas school age care primarily provides adult supervised care on a regular basis for children between ages of six and 12 (Bender, Flatter, & Sorrentino, 2005). School age child care is used during hours and days when parents are not available and when school is not in session (e.g. holidays, weekends, early dismissal), and provides a developmentally appropriate program for children and support to families who need it (Bender, Flatter, & Sorrentino, 2005, p. 14). The philosophy of the school sees the child as the client, with teaching as the focus, while the philosophy of school age programs sees the family and the child as the client, and the intent is to provide a service and support to parents (Bender et al., 2005; Martin & Corson, 2007).

The general program structure for the school and school age care differs as well. School is formal and structured, provides didactic instruction, allows children some self-discovery, and separates children by age (Bender et al., 2005; Martin & Corson, 2007). On the other hand, school age care has less structure and more child-initiated programs, and there is a smaller adult-to-child ratio (Bender et al., 2005; Martin & Corson, 2007).

The program focus also differs, with schools providing education and school age care providing care and support to families (Bender et al., 2005; Martin & Corson, 2007).

Differences between the school and school age child care are also found in the role of the educator. Primary school teachers provide instruction and information, and they can be used as resources. Early Childhood Educators working in school age child care provide guidance and support, but are also there to supervise children. ECEs can similarly be used as a resource (Bender et al., 2005; Martin & Corson, 2007). As well, a university degree is typically required to teach kindergarten, but training in early childhood education is not required (Friendly & Prentice, 2009).

While both the school and school age programs strive to meet children's needs, their respective directions are distinct. For instance, schools attempt to meets children's needs for academic success and increase their knowledge and skills. School age child care programs attempt to meet children's needs for social success, safety (in place of parents), and recreation (Bender et al., 2005; Martin & Corson, 2007). In quality programs, overall child development is fostered.

Play should also be considered in this discussion. The nature of play is different for the school age child as compared to younger ones, which means that the program at a school age child care facility also needs to be different (Piaget, 1952). According to Martin and Corson (2007), children's play in the middle years is orderly, more logical, and more patterned than preschoolers. It is also rule governed, more realistic, more intensely social (frequently group focused), and more competitive (Martin & Corson, 2007). Children's play also demonstrates their emerging intellectual, physical, and social skills. Therefore, in considering the nature of play, there needs to be specific criteria for

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schedules in school age programs. First, there needs to be a balance of active and quiet

experiences, a mix of indoor and outdoor play opportunities, and opportunities to be part

of the whole group or to be alone (Bender et al., 2005; RRC, 2011). Next, as children are

quite regimented during the school day, it is important for school age child care programs

to have child-initiated experiences, and to have a mix of structure, choice, and flexibility

in programming and activities (Bender et al., 2005; RRC, 2011). Furthermore, as time is

often restricted during the school day, it is important that schedules provide children with

enough time to complete tasks (Bender et al., 2005; RRC, 2011). Essentially, the focus in

any school age program is on providing children with independence and choice.

Part of this focus on independence and choice allows for children to be *members* of

their programs, not just recipients of adult-provided care. One example of this is group

meetings. Similar to staff meetings, group members (i.e. staff and children) come

together to discuss any issues that have arisen (e.g. bullying), to build relationships, and

to work together to improve the child care program. In group meetings, there are several

learning opportunities for children. Children can express themselves and offer thoughts,

and as a result, children see their thoughts valued (RRC, 2011). Group meetings can

build a strong sense of community, help children understand other perspectives, and

encourage children to learn respectful listening (RRC, 2011). These opportunities can all

influence children's self-esteem and sense of worth (RRC, 2011).

Group meetings also offer children the opportunity to be involved in planning (Bender

et al., 2005; RRC, 2011). This may include planning activities or curriculum, or helping

to set up the child care environment. There are several benefits to consulting and

including children in planning for school age programs. These include establishing

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independence from adults, learning to negotiate, developing feelings of security, and forming friendships with peers (Bender et al., 2005). Children also have an opportunity to accept themselves as worthwhile persons, and to clarify the adult versus the child world (Bender et al., 2005). These meetings are also a way to demonstrate that children are valued and respected (RRC, 2011). It is important to note that while not all school age programs conduct group meetings, the children who attend school age care generally have more say in what happens in their program and are more in charge of their own person (e.g. indirect supervision).

Community and Centre Profile

To further understand the research context (i.e. the microsystem) it is important to highlight the characteristics not only of the research site, but also of the community which houses it. This section will begin with a profile of the neighbourhood.

Neighbourhood Profile

My research study took place in a city in Manitoba, with a population of approximately 750,000 (City of Winnipeg, 2013). The research setting was a school age child care centre located within an elementary school in the north eastern corner of the city. The total population for this neighbourhood (within the school catchment area) was 5245 (Statistics Canada, 2006 Census Data), and the largest age groups were men ages 15 to 19 years and women aged 45 to 49 years. The total population of children ages five to nine years was 160 boys and 180 girls, while for children ages 10 to 14, the numbers were 235 and 170 respectively (Statistics Canada, 2006 Census Data).

The 2006 Census data also revealed that most of the people in this community (90.9%) spoke English only, but other languages were reported, including Tagalog, German,

Ukrainian, and Spanish. The largest visible minority populations within this community were Filipino (29.2%) and Black (20%). As well, 2.4% of the neighbourhood population identified as Métis, 2.8% as North American Indian (Note: These numbers are lower than the city averages of 6% and 4% respectively), and 0.4% as Inuit (Statistics Canada, 2006 Census Data).

Of the adults in this community, marital status in the 2006 Census data was as follows: 31.6% of the neighbourhood residents were single (never married), 58.8% were legally married (and not separated), 5.1% were divorced, and 2.4% were widowed. These numbers are very similar to the percentages for the city as a whole. As well, the average number of people per household was three, with 34.6% of census families consisting of two people and 9.2% having five or more people. As well, the majority of census families lived in single family households (86.6%) and the minority (0.9%) were multiple family households. However, for census family structure, the results were as follows: Married couples with children at home equalled 54.2%; common-law couples with children at home, 3.2%; one female parent 11.7%; and one male parent 1.6%. For census families with children, 32.7% had one child, 53% had two children, and 14.3% had three or more children (Statistics Canada, 2006 Census Data).

The education level of this population was as follows: For those individuals age 15 and older, 30.7% had a high school diploma or equivalent, while 16.8% had a college diploma or equivalent, 12.5% had a bachelor's degree, 2.4% had a master's degree, and 0.6% had earned a doctorate (Statistics Canada, 2006 Census Data).

As for labour force participation for individuals 15 to 24 years, 725 were part of the labour force, and for individuals 25 years and over 2535 were part of the labour force.

Overall, 95.9% of adults were involved in paid employment while 4.1% were self-employed. The paid employment number is 1% higher than the number for the city as a whole, while the self-employment number is 1% lower. The average employment income in 2005 was $45,889 for men and $30,380 for women, with the average household income for census families being $94,694, higher than the city average of $63,023. The number of census family households in the community that made over $100,000 in 2005 was 35.2%, while 2.3% made between $10,000 and $19,999 (Statistics Canada, 2006 Census Data).

A profile of the elementary school in which the study took place was also done. The school opened its doors in 1987 and offered English and French Immersion programs to children from kindergarten to Grade 6. Each of these programs has unique catchment areas, with the French immersion program area being larger than the English. Enrollment in the school has also fluctuated over the years. For example, in 1991, six relocatable classrooms were added to the school due to high enrollment. On the other hand, in 1992, the school offered Kindergarten to Grade 5 and in 1995, once again became Kindergarten to Grade 6. It remains in this delivery method presently. (Note: Confidential information was obtained from the Assistant Superintendent of this school division in July of 2012.)

As to the physical setting of the school, there are two gymnasiums (one large, one small), a library, two music rooms (one large, one small), a large staff room with a full kitchen, administration offices, and multiple classrooms. The library and administration offices are located at the centre of the school, with the remaining rooms and spaces surrounding them. Outside of the school, there is a garden (which is maintained by the child care centre staff and children) and a large playground. The playground includes

two areas with large play structures (pea gravel lies underneath and surrounding the structures), a large grassy field, and a cement pad with basketball-type hoops.

Centre Characteristics

Centre ABC is a licensed school age child care program located within an elementary school. The Centre rents the space from the school, but also uses of many of the school amenities (e.g. gym, music room). For parents who require child care for out-of-school hours, the Centre provides a before- and after-school program for the children who attend the elementary school. The morning program begins at 7:00 a.m. and runs until 9:00 a.m., when school starts. The afternoon program begins at 3:17 p.m., when school is finished, and it runs until 6:00 p.m. There is no lunch program at this Centre. A morning and afternoon snack are provided by the Centre, with a *social snack* held three afternoons per week and a *reflection snack* held twice per week.

Social snacks are run twice on these afternoons, the first time being with the younger children (K-3) and then again with the older children (Grades 4-6). While each group eats, the other group plays group games in the large gym. With this type of snack, children have an opportunity to spend time with and converse with peers. For example, twice per week, a salad bar is served. The children are seated and then rise to serve themselves buffet-style. They return to their tables and are allowed to talk quietly with one another. This is a social event, where indoor voices are encouraged and moving around is allowed. With a reflection snack, on the other hand, the focus is more on the individual and all of the age groups are involved. The lights are dimmed and soft music play in the background. The children are discouraged from social conversation, and are

encouraged to reflect on themselves and their day, as well as reflecting on the food they are eating and how it is nourishing their bodies.

The Centre is also open during school in-service days and during the summer months. On these days, a full day program is provided, including morning and afternoon free time activities, choices of planned activities, and field trips. During these days, children bring their lunches from home. On in-service days, a quiet time is also offered where children have a chance to lie quietly on individual mats and read a book or take a nap.

It should be noted that parents pay fees to have their children enrolled at the Centre. The amount of the fee depends on the hours of care provided. Fees are assessed based on regular school day attendance, and on in-service and school holiday attendance. For the latter, fees differ depending on if care is less than four hours per day, between four and ten hours per day, and over ten hours (MCCP, n.d.).

The Centre employed 12 staff members. Three staff members were trained and held ECE Level II or III certifications, while the rest were considered Child Care Assistants, according to MCCP. Two were teachers (had received a Bachelor of Education), so according to MCCP they had the equivalent of an ECE II. The remainder of the regular staff were in post-secondary education:

- Director- ECE III
- Assistant Director – Bachelor of Education (Phys. Ed): ECE II equivalent
- Staff 1 - Bachelor of Education (Phys. Ed): ECE II equivalent
- Staff 2 – Bachelor of Education and Kinesiology (in progress): CCA equivalent
- Staff 3 – Student in Bachelor of Nursing program: CCA equivalent
- Staff 4 – Student in Bachelor of Fine Arts program: CCA equivalent
- Staff 5 – Student in Bachelor of Human Ecology (Textile Sciences) program: CCA equivalent
- Staff 6 – Student in Bachelor of Arts program: CCA equivalent
- Staff 7- Student in Bachelor of Science program: CCA equivalent

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There were also three staff members who were in high school and were not considered in the ratio of required number of adults to number of children. It is important to note that during my time at the Centre, there was no staff turnover. Indeed, from discussions with the Director and Assistant Director, most of the staff had been employed at the Centre for several years. As well, the three high school aged staff previously attended at the Centre as young children.

At the time of my data collection, the Centre had more than 70 children enrolled in its program. Sixty-two of these children and their parents agreed to participate in my research (30 boys and 32 girls). Of the 62 children, one was in kindergarten; seven were in Grade 1; six in Grade 2; eleven in Grade 3; 17 in Grade 4; six in Grade 5; and 14 in Grade 6.

It is important to note that further exploration of the children's demographic profiles was not conducted. Factors such as ethnicity, religion, family income, and family circumstances were not assessed; however, it is possible to speculate. Based on observation, the majority of children appeared to be Caucasian. As well, most of the children appeared to come from two-parent families, while a few had parents who were separated or divorced. Evidence of parental separation or divorce was obtained from conversations with the children (e.g. a Grade 6 girl spoke about the differences in meal times at her mom's house and her dad's house), and from observing separate parent mail files (i.e. one for the mother and one for the father). As for parent labour force participation, informal conversations with some parents suggested diverse situations: One parent spoke about being a stay-at-home-mom, one spoke about returning to post-secondary education, and another mentioned being a doctor.

Moreover, the children were dressed well (e.g. Aeropostale clothing, hockey jerseys),

attended a school in a neighbourhood where the average family income was higher than

the city average ($94,000 versus $63,000), and spoke about participation in costly extra-

curricular activities. Several children also brought hand-held electronic gadgets, such as

an ITouch tablet or a DS video game unit, to the Centre. In fact, none of the children

received subsidized care, which meant that child care fees were partially paid to the

centre by Manitoba Early Learning and Child Care, while the remainder was paid by the

child's family (Government of Manitoba, n.d.). This service is intended for families who

struggle financially; middle- and modest-income families do not typically qualify for

subsidized care (Friendly & Prentice, 2009).

Centre Philosophy

The centre philosophy is used as a guide for the daily operation of each child care

centre. Although each licensed facility must meet the requirements set forth by the

Government of Manitoba (see *Best Practices*), the philosophy is a statement about the

guiding principles and values that operate within and above the licensing requirements.

Therefore, one centre may be different from the next. The Centre philosophy for this

research study is as follows:

> *Centre ABC is a licensed facility that is committed to providing high quality care*
> *and programming for school age children, Grade one through to Grade 6. Centre*
> *ABC recognizes that all who are a part of it (children, staff, Board members,*
> *parents/guardians, families, volunteers) come to it with unique skills, abilities and*
> *needs, and that they come from varying family and cultural backgrounds. We*
> *believe that diversity can enrich the program. This understanding and recognition*
> *is the foundation of the program that we offer to children and families. We believe*
> *that we are a human community and that we each have responsibilities to all*
> *members of our community by being accepting and respectful of one another.*
> (Director of Centre ABC, personal communication, 2011)

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In addition to this philosophy, the Centre has several goals and objectives that consider the developmental ability of each child. These include: (1) Helping children develop a sense of worth and dignity by offering "social activities and learning experiences which encourage the development of self-confidence and the ability to get along with others" and (2) helping children sustain good health and improve her/his physical abilities through the provision of nutritious snacks and daily physical activity (Director of Centre ABC, personal communication, 2011).

Furthermore, the Centre maintains children's rights and responsibilities, not only in how children are treated but also in how children treat others. For example, "Children have the right to be treated with dignity, respect and fairness," and conversely, they have the responsibility to "treat others with dignity, respect, and fairly, and to use their words when problem solving." In addition, "Children have the privilege of enjoying a delicious, nutritious, and pleasant snack/lunch," while they have the responsibility "to be respectful towards people, property, and nature" (Director of Centre ABC, personal communication, 2011).

Within the daily operation of the child care program, there were specific practices which reflected the philosophy and goals of the Centre. For example, several of the older children were part of a leadership group and were encouraged to develop and demonstrate 25 leadership skills. A list of these behaviours was posted on a bulletin board, including the following:

> loud, clear voice; honest and truthful; kindness; patience; respect; fairness; responsible; reasonable; creativity; independence; preparedness; cooperation; helpfulness; understanding; knowledge; leadership; serious; positivity; courteous; caring; kind; friendly; calm; focused; dependable; encouraging.

Second, as a part of their morning routine, large group meetings were held at the Centre.

A wide range of topics were presented to the children (e.g. health, active living,

Aboriginal teachings, and teamwork). The intent of the meetings was to instill values,

but the topics were presented in a child-friendly way; specifically what was 'cool' or not

'cool.' A list of these values was also posted on a bulletin board:

What's cool:
- "Treat people how you want to be treated – nicely and kindly"
- "Always treating others with dignity and respect"
- "Taking care of each other (pets/grandparents/home/belongings/equipment)"
- "Being kind to the earth by recycling, reusing and reducing"
- "Being healthy and active – sports, walking, playing outside, active Wii games"
- "Always playing fairly and with good sportsmanship."

What's not cool:
- "Pick on people for how they look or dress"
- "Fighting with people and hurting them physically or hurting their feelings"
- "Being a bully"
- "Cheating and not playing fair in games like dodge ball"
- "Breaking a promise you have made to someone"
- "Ditching friends at recess and leaving them all alone"
- "Embarrassing someone on purpose and hurting their feelings"

In addition, codes of conduct for free time activities were posted on a bulletin board

along with a list words from the Virtues Project in the border around the board (The

Virtues Project, n.d.). Words such as 'fairness,' 'respect,' and 'caring' were included in

this border. The idea here is that if children are given the words, they will put them into

practice in their daily lives (The Virtues Project, n.d.).

Relationship to Ecosystems Theory

The context of this research clearly demonstrates a connection to ecosystems theory;

in particular, the idea that children are influenced by multiple levels of an environment

(Bronfenbrenner, 1979, 1994a, 1994b). For instance, the delivery of the Centre

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philosophy has a direct impact on children and their well-being, which correlates with Bronfenbrenner's ideas about the microsystem. Next, the Centre characteristics, such as licensing requirements and staff training, indirectly affects children's behaviour, which correlates with Bronfenbrenner's ideas about the exosystem. Last, the neighbourhood profile fits with the mesosystem (e.g. connection between Centre and school), exosystem (e.g. parent's workplaces) and macrosystem (e.g. federal transfer payments for child care).

Chapter V: Method

In order to address the research questions in this project, a multi-method qualitative study was undertaken, involving multiple population samples and data collection methods. This chapter describes the use of qualitative methods, in particular, the use of content analysis and the general inductive approach. Sampling procedures and data collection respective of children in child care environments are also included, with a section on the ethical considerations maintained in this research project. The section on ethics highlights the procedure in reporting a child in need of protection, as required by the Province of Manitoba.

Ethnography

Guided by ecological systems theory (Bronfenbrenner, 1979, 1994), ethnographic research techniques were used in this research project. According to Emerson and associates (1995) ethnography is the "study of people as they go about their everyday lives" (as cited in Buchbinder, Longhofer, Barrett, Lawson, & Floersch, 2006, p. 47). It is a way to learn "*about* people *from* people" (Fetterman, 1989, as cited in Moffitt & Vollman, 2004, p. 193). It can involve the study of groups, such as communities (e.g. graduate students) or institutions (e.g. schools) (Galman, 2007), which have something in common, such as sharing a work site, a personal care facility, or a management philosophy (Boyle, 1994). The ethnographer's role in a study is to participate

> overtly or covertly in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking questions – in fact, collecting whatever data are available to throw light on the issues that are the focus of research. (Hammersley & Atkinson, 1995, as cited in Walsh, 2004, p. 226)

A significant aspect of ethnography is to understand people within a particular social or cultural group. Culture is "the way things are done in a community or institution" and can be seen in the practices and beliefs of a group (Galman, 2007, p. 12). Ethnographers attempt to describe and interpret cultural behaviour and demonstrate why and when it occurs (Polit & Beck, 2008; Spradley, 1980), including patterns of thought and behaviour (Deitrick, Bokovoy, Stern, & Panik, 2006) and ways of life or cultural phenomenon within the context of a specific group (Speziale & Carpenter, 2007). Ideally, the ethnographer attempts to gain an *emic* perspective (i.e. an insider's view) which is "the situation from the point of view of the participant" (Deitrick, et al., 2006, p. 317), and an *etic* perspective, which is the outsider's or researcher's view (Creswell, 2007; Polit & Beck, 2008). The outsider's view is often subjective, and may not completely represent the emic view, but it is used to supplement knowledge about the particular group of people being studied (Buchbinder, et al., 2006). Therefore, it is a combination of the insider and the outsider perspectives that help to provide a holistic understanding of the group. This layered view of social interaction is central to ecological systems theory (Bronfenbrenner, 1994, 1994b, 1998).

As this research project occurred within a child care facility, it was critical to determine whether ethnographic techniques were appropriate. There were several pieces of evidence to suggest that it was. First, ethnography is useful for studying child development. Classic research by Mead and Wolfenstein (1955) and Whiting (1963), and more recent work by Leavitt (1996) examined child development in different social and cultural contexts. In addition, "the sustained longitudinal nature of ethnography is appropriate for the continuing study of children, while ethnography is likewise well-

equipped to capture the critical transition periods that shape processes of human development" (Buchbinder et al., 2006, p. 49). Buchbinder et al. (2006) argued that the rich, descriptive data that comes from an ethnographic study can help researchers and child care practitioners to have a clear understanding of the social, cognitive, and physical development of children occurring within the child care environment. Second, ethnography "fosters an intimate rapport with the researcher and the researched that differs markedly from other research relationships, allowing researchers to access the long removed world of childhood from an insider's perspective" (Corsaro & Milinari, 2000, as cited in Buchbinder et al., 2006, p. 49). Essentially, the amount of time a researcher spends with children in a child care environment, observing and interacting with them, getting to know their habits and routines, helps the children to trust the researcher. Once trust has been established, the researcher can get to know the children, not only as a group but as individuals. This then helps to understand the emic perspective (Irwin, Johnson, Henderson, Dahinten, & Hertzman, 2006). Buchbinder et al. (2006) argued that ethnography also allows for a deeper understanding of the child care environment, information which could be made available to ECEs, which can then help to improve ECE-child relationships.

Child care centres can be thought of as "cultural institutions with a local knowledge structure" (Buchbinder et al., 2006, p. 48). As in other aspects of a child's development, the quality of care provided and children's behaviour within a centre is influenced by the centre philosophy and by societal and cultural expectations. All licensed child care facilities in Manitoba follow Canada's Food Guide in selecting nutritious foods and preparing quality meals for children. However, what is considered *quality* food is not

universal, and may differ from one centre to the next. For example, providing children with milk, hot dogs, and ketchup are seen by some centres as adhering to Canada's Food Guide, as a dairy, meat, and vegetable food group are represented. This may be the reality for some families as well: "Ethnography positions the child care centre as a cultural reality embedded deeply in the social fabric of everyday life – for both children and their caregivers" (Buchbinder, et al., 2006, p. 46).

Sampling Procedures

For ethnographic research, sampling includes events and group members, both key and general informants (Polit & Beck, 2008; Woodgate, 2000). Informants help decipher cultural information and help interpret what is seen (Polit & Beck, 2008). Key informants are the primary participants selected, as they know more about the phenomenon under investigation (Lofland & Lofland, 1995; Woodgate, 2000). For this study of body image, eating and activity in school age children, the key informants were six- to 12-year-old children. On the other hand, general informants are individuals who are important in the lives of the children but know less about the phenomenon (Lofland & Lofland, 1995; Woodgate, 2000). General informants for this study included parents and Early Childhood Educators, as they were some of the shapers and observers of the eating attitudes and behaviours, physical activity, and body image of school age children.

Key informants were girls and boys ages six to 12 years using before- and after-school child care. In order to be eligible for participation in this study, the children must have attended the program on a daily basis, such that they used the program for morning and/or afternoon care, on all regular school days, and on school in-service days. There were several reasons for selecting a population of children who attended school age care.

The first was exposure to alternative caregivers. Most of the literature suggests that parents are the most important first socializing agents, but Early Childhood Educators have an influence as well. Alternative role models may have an impact on children's body image, eating attitudes and behaviours, and physical activity. Second, children in school age care are exposed to a curriculum that is concerned with fostering their physical, social, emotional, and cognitive development, not just their academic skills. For example, licensed centres in Manitoba follow the Canada's Food Guide, where they must provide three out of the four basic food groups at snack and all four food groups at each meal. As well, the curriculum in licensed centres often mandates that physical activity should be a part of the program. Therefore, children may be receiving additional information about their health and development from a source that is non-familial and non-academic.

The general informants for this study were Early Childhood Educators, Child Care Assistants, and parents. The information provided by these groups was used to supplement the knowledge gained from the key informants. In order to be eligible for participation in this study, ECEs and centre staff had to be employed in a school age child care program, working with children ages six to 12 years for at least five hours of their total work day. This helped to ensure that they had sufficient time to observe the behaviour of the children in their care. It is important to note that two of the Early Childhood Educators at this facility worked five days per week, while the Child Care Assistants had varied schedules; however, all of the CCAs worked at least two shifts per week. In order for parents to act as general informants they needed to have a child enrolled at the study centre.

Direct and indirect means were utilized to recruit participants. For the child care facility, I approached a Director of a school age child care program about conducting research at her facility. I explained the research project, including the method and the ethical safeguards that were used to protect the children and staff. I also offered to present my information at a parent board meeting and at a staff meeting. This allowed the parents and staff to ask questions about the research and to voice any concerns.

Once the director agreed for her Centre to be the observation site, I arranged to be at the Centre twice in order to distribute the information and consent forms to the parents. The Director assisted in this process by informing the parents about my research in an August (2010) newsletter. I then asked the Director to post a list of dates of when I would be returning to the Centre so that parents could ask questions about the research or about the consent forms.

In order to obtain consent from the children, I asked the Director to introduce me and allow me to talk to the children as one large group. This was done at an afternoon group meeting. I spoke briefly about the research and what I would be doing at the Centre, and explained the consent form in child-friendly language (e.g. "No one can make you do this"). The children then had an opportunity to ask questions about the research or about being observed. Only a few questions were asked, and those were primarily about attendance at the wrap-up party at the end of my research.

As each family submitted the consent forms, I asked the parents and child/ren if they had any questions. Most did not. I also indicated that if they had questions in the future, or if the child/ren wanted to withdraw from the study at a later date, they were free to do so. In the end, 62 children consented to be a part of my research study.

Data Collection

Data Collection: Children in Child Care Settings

Participant observation was the primary method of data collection. The reason for this choice of method was so that I could observe school age children making decisions about eating, play, and activities. My role in this was to be the main research instrument (Speziale & Carpenter, 2007; Walsh, 2004). This role is critical, as the practice of ethnography is accomplished by becoming part of the daily life of a social or cultural group, which is done by accessing the field, observing interactions and behaviour, writing field notes, talking to group members, and examining artifacts (e.g. art) produced by group members (Byrne, 2001; Pope, 2005; Speziale & Carpenter, 2007; Walsh, 2004).

According to Junker (1960), there are four roles that can be occupied by a researcher involved in participant observation. The first is *complete participant*, where the researcher essentially goes undercover to become a part of a particular cultural group. While the researcher is fully engaged with the participants, the cultural group members do not realize that he or she is conducting research. The second role is that of *complete observer*, where the researcher watches the group, but does not interact with them. Third is the role of *participant as observer*. In this role, both the researcher and the participants know that research is conducted, the identity of the researcher is known to the participants (Hesse-Biber & Leavy, 2006), and there is an emphasis on interaction with group members (Junker, 1960). Finally is the role of *observer as participant*. Here, the identity of the researcher is known to the participants, but how much they engage with participants is limited (Hesse-Biber & Leavy, 2006). Specifically, there is a tendency towards observation more than participation, but both are performed (Junker, 1960).

The type of participant observation role that I assumed in this research was somewhere between Junker's (1960) roles of *participant as observer* and *observer as participant*. According to Walsh (2004), most ethnography balances these two roles:

> Overt observer roles can never be entirely fixed and can and do change (the opposite is true if research is covert). Indeed, changes in the observer's role in the field over the course of fieldwork may be vital in producing new information, generating new data, and creating new and fruitful problems and lines of inquiry that extend the scope of the research. (p. 230)

The responsibilities involved in participant observation were divided into two main parts. The first part involved observations of school age children, while the second part involved interaction with children and child care staff. For 15-20 hours per week almost four months (September 2010 to December 2010), I made observations and conducted learning activities at a heterogeneous school age child care facility. These observations and learning activities occurred before children went to school (7:00-9:00 a.m.), at the end of the school day (3:00-6:00 p.m.), and on in-service days.

Over the four months, the majority of my time was spent observing children at play, during snack and lunch times, and during physical activity. In my role as an instrument, I observed and documented what children said and did regarding body image, eating, and activity during free play time, during specific activities or routines (e.g. snack time, outdoor activities), as well as during their interaction with other children, and with the ECEs and other staff. Informal interviews with children and informal conversations with child care staff and parents were conducted as well. It should be noted here that there were a few times I talked with parents, informally, when they dropping off their children at the Centre in the morning or when they were waiting for their children to gather their things at the end of the day.

With the anecdotal observation method, I used a written narrative to document natural and spontaneous behaviours as they occurred or as I remembered how they occurred (Wylie, 2009) (See Appendices A and B). This type of observation describes an incident of a child's behaviour in a factual, objective manner. Anecdotal records are like telling a story, and they allow the observer to document *who*, *where*, and *when* of a situation (Wylie, 2009). For example,

> J. sits on a chair facing the window. She picks up a book from the floor and opens it. She flips to the first page and moves her lips, but no sound can be heard. She flips to the second page and moves her lips. B. walks toward J. and stands looking at the pages of the book.

As part of this method, I also noted the time that the observation occurred, the location in the Centre, and the ages of the children being observed. Anecdotal methods of recording are useful because they require very little preparation and can be conducted anywhere, they can be used to document the behaviour of one or more individuals at different times of day (e.g. ECEs and children at morning snack vs afternoon snack), and they can document many behaviour samples (e.g. play settings, interactions) (Wylie, 2009). However, there are also two main disadvantages of this method: (1) The entire process is time consuming, i.e., to write, rewrite, and interpret, and; (2) if the observation is recalled, the time delay may lead to bias (Wylie, 2009). With *remembered* observations, the observer writes a narrative about an incident or behaviour after it has occurred, attempting to remember and record as much information as possible (Wylie, 2009). However, there may be details missing from memory. Thus, I document what I *think* happened, which may not accurately represent the actual situation. Regardless of the potential disadvantages, I used this observation method on a regular basis over the course

of my time at the Centre. I also used a digital tape recorder to document what I recalled, and that information was then transcribed into a Microsoft Word document.

In addition, I developed participation charts to document children's physical activity and eating behaviours (See Appendix C). This type of chart not only measures the frequency of an individual's or a group's participation, but also the duration of the time spent at an activity, who was involved in the activity (e.g. peers), and what kinds of interaction occurred (Wylie, 2009). Participation charts are a form of enumeration, which is "a process by which previously derived or defined units of analysis are subjected to systematic counting or enumeration" (Goetz & LeCompte, 1981, p. 61). Enumerative methods may be used in ethnographic studies to supplement descriptive data (Goetz & LeCompte, 1981). Here, enumeration offers descriptive material or "functions to provide supportive evidence for the existence and validity of research categories" (Goetz & LeCompte, 1981, p. 61). By using the participation charts several times per week, I began to see patterns developing. For instance, I noticed that boys participated in free-time physical activities more often than girls, and I noticed a pattern in attendance at morning snack (e.g. the same group of children consistently attended).

Time was an important factor for these observations, not only the time when they occurred but also the amount of time required for transcription of the observation records. It was crucial that I documented behaviours that occurred at specific times of day (e.g. morning snack, afternoon free time), but also that I was open to a free-running style of observation where I wrote everything I saw and heard (See Appendix D for an observation schedule). The use of the participation charts was useful for documenting behaviour that was observed at the time that a certain activity occurred (e.g. outdoor

play). The anecdotal record was used at different times of day and for various lengths of time. However, for everything documented during the observations, the transcription of these records took a significant amount of time to complete; approximately one hour of observation meant three hours of transcribing. Therefore, I hired and trained a research assistant to transcribe my written notes and my recorded observations.

When conducting the observations, I was seated or standing near the children in the same area of the room or on the playground. I also followed them to other areas of the facility as they moved (e.g. from playroom to the gym). This helped to ensure that I could see and hear their behaviour. It was also important that the children were aware of my role as a researcher, a role not hidden from them. This was assisted by carrying around my field notebook and by answering the children's questions about the things that I was writing in this book. For example, on a number of occasions, the children asked what I was writing. I answered that I was making note of who was playing soccer, how many children were eating morning snack, how long the children played in the large gym, and so on.

I also observed the food choices that were made available. I was provided a copy of the weekly menus at the Centre, which included the types of snacks that were provided (e.g. cheese and crackers versus cheese scones). I also documented the children's participation (e.g. involvement in food preparation and serving snacks), the children's reactions to the food (e.g. all children readily come to eat or children ask for second helpings) and the behaviour of the ECEs at snack times (e.g. sitting with the children, eating the same snack as the children). It was important to observe the staff members at these times, as they were role models for the children.

As another part of my observations, I observed the physical activity choices that were made available. At the beginning and end of each day, free time in the large gym was available; however, activities and materials were regularly pre-selected by the staff members (e.g. basketballs and skipping ropes, or hockey). In addition, group games in the large gym occurred daily. These were typically fast paced, team-oriented physical activities (e.g. dodgeball), and either included all of the children together, or the older (Grades 4-6) and younger groups (Grades 1-3) were separated. As with the observations of food and eating behaviours, observations of the staff were conducted here, as their involvement in physical activities could have an impact on the type and amount of physical activity in which children engaged.

During my observations of the children, situations arose that required further insight from the children and staff. If the children discussed or displayed elements of body image, eating, or physical activity, I asked for an informal interview to elaborate on or to clarify the children's behaviour. These 'interviews' took the form of open-ended questions (e.g. "Why do you think it happens that way?") and probe questions (e.g. "You mentioned X. What did you mean by that?"). Most informal interviews were less than a minute in length. With these informal interviews, it was important that I intervened in a natural, unobtrusive way that would allow me to provide the children with my undivided attention that would allow them to feel that what they had to say was important. Therefore, it was important to write field notes as soon after the incident as possible, or to create a remembered observation record.

There were also opportunities to speak to staff about body image, eating, and activity. I asked several of the ECEs and CCAs what they thought about these issues as they arose.

For instance, I spoke to an ECE about an observation involving a group of Grade 4 boys calling each other "chubby." I also spoke to a CCA about the gender differences in children's physical activity, after observing that very few girls participated in free time organized sports.

For the first two weeks spent at the Centre, all of my time was spent observing. However, starting in the third week, I began conducting learning activities with the children (See Appendix E). These were planned experiences that were common in child care centres but that were designed to elicit data related to body image, eating, and activity. The activities were as follows:

- 'What I like about me' art activity
- The perogy factory
- 'Wrap it up' cooking activity
- *Shapesville* group meeting discussion
- Uncooked playdoh activity
- Centre ABC Café
- Fingerprint Reindeer Family Holiday Card

While all of the activity plans were reviewed by the Director prior to implementation, several of these plans were developed before I began at the Centre while the remainder were developed after I began my observations. These later plans used an emergent curriculum approach, where activities were based on the subjective information that was gathered from observations and were based on the children's interests (RRC, 2009). A schedule of all of the activities I conducted was posted on a bulletin board for parents, staff, and children to review.

Although these later plans used information gathered during observation of the children, I developed them in such a way that they could elicit data related to body image, eating, and activity. It is important to point out that while I am a trained ECE III, my role

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within this environment was to be a researcher, not an ECE. While I interacted with the children during activities or prepared snack with them, my role was primarily to document their behaviour.

As the research instrument, I had a significant role in identifying, analyzing and interpreting the culture (Polit & Beck, 2008; Speziale & Carpenter, 2007). This is the issue of reflexivity. According to Boyle (1994), reflexivity implies that the "researcher is a part of the world that she or he studies and is affected by it" (p. 165). Pellatt (2003) suggests that reflexivity "acknowledges the subjectivity inherent to ethnographic studies and is used to describe the ways in which the researcher affects the research process and the outcomes" (as cited in Oliffe, 2005, p. 395). Thus, I was a type of filter for the data, and as such had an influence on the data. For my specific role in the research, this meant questioning my assumptions, considering my effect on the child care setting and on the behaviour of those in it, focusing on my reactions to what participants said and did, and examining my assumptions about body image, eating, and activity in school age children (Galman, 2007; Tonkiss, 2004). As I was a part of the study, I needed to be cognizant of researcher subjectivity. According to Galman (2007), as a research instrument, my study could not be completely objective; thus, I kept track of this subjectivity through written documentation, where I recorded my reactions and assumptions, and reflected on them throughout the research process.

Data Collection: Early Childhood Educator's Roles

It was important to consider ECEs for participation in this research, as they have an influence on the behaviour and attitudes of the children in their care. Many educators care for the same children over a period of several years, and may have developed

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relationships with the children. This caring role is more than simply keeping the children safe. ECEs may influence the food habits and eating behaviours of the children in their care through their own habits, such as eating lunch with the children, through food choices and menu planning for the Centre, such as using the Canada's Food Guide to promote healthy eating, and through their own creativity and culinary skills (e.g. making ice cream with natural ingredients). They may also influence the children's physical activity through the activities they implement, such as outdoor scavenger hunts and parachute games, and by getting physically active with the children (i.e. engage with the children on the field, not on the sidelines shouting directions). Furthermore, the body image ideas and behaviours that are demonstrated by ECEs can influence the body image ideas and behaviours of the children in their care. Anecdotal evidence from Early Childhood Education students suggested that when ECEs at one centre in Winnipeg talked about feeling fat and dieting in front of a group of children, these same issues were overheard in the children's dialogue within a matter of days.

Part of the influence of ECEs on children may also be due to adult-to-child ratios. Licensed school age programs in Manitoba have a 1:15 ratio, which is significantly lower than many teacher-to-student ratios in primary school classrooms. As such, there is more opportunity for one-on-one time between children and ECEs, and for closer observations of children's behaviour. For instance, during lunch or snack times, ECEs often sit at tables with small numbers of children. As well, because of the nature of school age care, many of the activities provided allow for lower numbers of participants, such as chess and board games.

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Data Collection: Field Notes

As mentioned in the previous sections, field notes were gathered during my observations at the child care facility and immediately after the informal interviews and conversations. According to Walsh (2004), field notes are the most common means of recording observations in ethnography. Walsh (2004) suggested that these notes were "fairly concrete descriptions of social processes and their contexts and which set out to capture their various properties and features" (p. 234). Walsh (2004) and Fetterman (1989) suggest guidelines. First, field notes should be written as soon as possible after events or behaviours occur. This may help with recall of the information, as memory of the behaviour may become less descriptive or may be forgotten altogether after a significant period of time. Second, Fetterman (1989) recommends that written observation records should be kept separate from notes, ideas, or other comments. These notes can later be transcribed. Third, the goal of the field notes should be towards a thick description, which is the "written record of cultural interpretation" (Fetterman, 1989, p. 114). Events and behaviours should be described in detail, including direct quotes and non-verbal communication (e.g. facial expressions, gestures), who was present, a description of the setting, and when the event or behaviour occurred. According to Fetterman (1989), the goal of field notes is to "convey the feel as well as the facts of an observed event" (p. 114). This is demonstrated with a thick description, which can include a variety of situations, the cultural meaning of an event or behaviour, and the researcher's analysis (Fetterman, 1989). It is important to note that this description may begin as overly detailed and repetitive entries in field notes, but eventually moves from a general to a specific focus as the notes transform into written text. Fetterman (1989)

argued that ethnographic writing was the process of *reduction*, where the goal was to "represent reality in a concise but complete fashion, not to reproduce every detail and word" (p. 115).

For this research, I wrote field notes about behaviours, interactions, toys and materials, and the general layout of the Centre (Byrne, 2001). I documented events and behaviours of interest as soon I observed them, but if this was not possible (such as when I was conducting learning activities with the children) I excused myself at the next available opportunity. If no opportunity presented itself, I wrote remembered observations after the children had left the Centre and end-of-day reflections in my field notes. These reflections included ideas for activities (also called *decisions*), *inferences* about an event or behaviour (my subjective opinions about the data), or general comments about the information gathered during my daily observations (RRC, 2011). It should be noted that I did not use quantitative measurement tools, such as the Body-Image Ideals Questionnaire (Cash & Szymanski, 1995) or the Piers-Harris children's self-concept scale (Piers, 1996). Instead, I watched for verbal and behavioural observations as indicators.

As often as possible throughout my time at the Centre, I had the research assistant transcribe the observation records and field notes. This was done for two reasons. First, if my field notes became lost or damaged, I had a backup hard copy of the notes. Second, transcribing notes on a regular basis provided me with the opportunity to reflect on what I had documented, possibly giving me ideas for learning activities or specific behaviours to look for. Moreover, as data collection and data analysis occur at the same time when using ethnographic techniques, regular transcription of field notes helped me to recognize

emerging patterns in the data, and helped me to recognize when I needed to find out more about a certain topic (for organization of field notes, see Appendix F).

Ethical Considerations

There are three basic ethical principles of conducting research with human participants: Respect for persons, concern for welfare, and justice (Tri-Council Working Group, 2010). In essence, these three principles stipulate that when children are involved in research, they should be offered the same respect and protection as adults. However, because children are seen as vulnerable and at risk of being exploited (Allmark, 2002; Morrow & Richards, 1996), there are additional considerations for research involving children. These issues will be addressed in the following paragraphs.

As per ethics protocol for the Joint-Faculty Ethics Review Board at the University of Manitoba, the participants were made aware of their voluntary participation for this research project, and informed written consent for their involvement was obtained on a consent form. Three groups of potential participants were contacted, and ethical consent was sought prior to data collection. The groups were: (1) The child care Centre Director; (2) the children in the before- and after-school centre; and (3) the parents of the children (see Appendix G for the individual forms). As each of these individuals or groups played a necessary but unique role in this research, a different consent form was created for each. In the case of the children, it was critical that consent was designed in child-friendly language. In order to maintain informed consent, the children were given the information in a language they could understand (e.g. "No one will get mad at you if you don't want to be a part of this study"). Furthermore, as some of the children did not have firm grasp of written language, consent was also obtained orally. It is important to note

that even if I did obtain parental consent for the child to be a part of the research, the child had the final say in participation: If child said 'no,' then he or she did not participate, even if the parent said 'yes' (Mishna, Antle, & Regehr, 2004). This was the case for three of the children in this research study. As such, their behaviours and interactions were not documented.

One of the most important considerations in ethics is the right to self-determination. It is critical that the participants receive enough information that they are able to make informed decisions about participation. This is relevant for both children and adults. It is the responsibility of the researcher to ensure that potential participants understand the purpose of the research, what could happen if they decide to participate, and if there is any risk involved. Thus, all of the participants, including the children being observed, were made aware that they could withdraw their participation at any time without consequence. Especially when conducting research with children, it is important that they are continually reassured that they may withdraw from the research at any time without consequence (Helseth & Slettebo, 2004). Therefore, whenever appropriate, I reminded the children that I was observing them, and that they could choose not to be included in the observation. For example, children occasionally asked what I was writing in my research journal. I explained that I was writing about what I saw and heard people do at the Centre (e.g. They were playing soccer, they had morning snack), and I asked the children for permission to write about them.

Participants were also made aware that the information they provided was to be used only for thesis research purposes, and they were free not to answer specific questions or to ask for more clarification. The participants' identities were not be revealed in written

reports of this research, nor were participants be identified by position or social situation. In making reference to their personal narrative in the written work, I addressed each child by pseudonym. These names were selected randomly, the only similarity being the first letter of the child's name and the pseudonym. For the child care staff, I used generic terms such as 'adult' or 'staff member' to refer to each individual. It is important to note that since there was one only male staff member, to avoid revealing his identity, his sex or gender was not identified in the written work. Instead, all of the child care staff members were labelled as 'female.'

Reporting a Child in Need of Protection

Privacy and confidentiality of participants are essential elements in any research project, but an issue that is relevant to research with children is the issue of informing the parents about the child's responses, or allowing the parents to be present during research proceedings with the child (Allmark, 2002; Coyne, 1998; Helseth & Slettebo, 2004). Parents may want to know if their child is upset or is experiencing difficulties at school or at daycare. Although the parents are interested in the well-being of their child, information provided by participants, regardless of age or ability, cannot be shared with anyone but the researcher: "All informants must have the right to confidentiality and integrity, regardless of their age or position" (Helseth & Slettebo, 2004, p. 305). However, one exception should be made in cases where the child speaks of child abuse. According to the Government of Manitoba *Child and Family Services Act* (1985), a researcher is required by law to report suspected child abuse, even though confidentiality has been established. In particular, this law states:

Reporting a Child in Need of Protection
18(1)   Subject to subsection (1.1), where a person has information that leads the person reasonably to believe that a child is or might be in need of protection as provided in section 17, the person shall forthwith report the information to an agency or to a parent or guardian of the child.

Duty to report
18(2)   Notwithstanding the provisions of any other Act, subsections (1) and (1.0.1) apply even where the person has acquired the information through the discharge of professional duties or within a confidential relationship, but nothing in this subsection abrogates any privilege that may exist because of the relationship between a solicitor and the solicitor's client.

It was necessary to inform parents of this law.

In order to show my appreciation, the parents, staff, and the children were informed that a summary of the research findings would be made available to them at the conclusion of the research. The child care staff also received honoraria for their involvement. In particular, the staff received a catered dinner and each received a gift card. The Director and Assistant Director were each presented with a $75 gift card, while the other 10 staff members were each given a $10 gift card. To show my appreciation to the children, I hosted a pizza and cake party at the end of my four months at the Centre. To show appreciation to their parents, I provided each family with a travel mug from the University of Manitoba.

Data Analysis

Analysis is the process of focusing what the data are *saying* (Galman, 2007), and in ethnography, data analysis is primarily a "search for patterns" (Spradley, 1980, as cited in Speziale & Carpenter, 2007, p. 215). Once these patterns have been identified, the researcher looks for "relationships between and across these patterns" (Galman, 2007, p. 87). According to Gallman (2007), the process of data analysis in ethnography "can be open-ended and quite individualized" (p. 87), but is by no means unstructured or random.

Cyclical Nature of Data Collection and Analysis

In ethnography, analysis occurs in three ways: (1) data analysis is performed while still collecting data; (2) data analysis is performed at the end of the study, whether the researcher is still in the field or just after completion of data collection; and (3) data analysis is performed after the researcher has been out of the field for a period of time (Galman, 2007). The first point illustrates the cyclical nature of data collection and analysis, as questions about the people being studied constantly arise from new pieces of collected data (Byrne, 2001). Essentially, the data that are collected in the field at one point in time helps the researcher to know what to watch for, what to take note of, or what questions to ask during the next visit to the field (Hammersley & Atkinson, 1995). Thus, the researcher is constantly interviewing, observing, analyzing, and collecting artifacts (Speziale & Carpenter, 2007), and must analyze their field notes after each time in the field "in order to know what to look for during your next period of participant observation" (Spradley, 1980, p. 34). The researcher may also need to adapt or add to data collection methods as the culture changes (Robertson & Boyle, 1984). For example, although observations were the primary method of data collection at the Centre, informal interviews with children and conversations staff were also required when the children discussed or displayed elements of body image, eating, or physical activity.

Verbal and Observed Data Analysis

For the purpose of this research, the data analysis techniques were separated according to verbal data and observed data. The verbal data included what the children or staff said during observations, or during informal interviews or conversations. The behavioural data included actions (e.g. playing soccer, eating snack), level of activity (e.g. frequency

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and duration of soccer participation), and body language and facial expressions (e.g. hand on hip, smiling). The reasons for separating the verbal and behavioural data were threefold. First, very young children may demonstrate behaviours that might be considered health-related or health-promoting (e.g. eating from the four food groups, daily physical activity), but may not yet be able to verbalize why they engage in these behaviours. Second, inconsistencies between ideas and behaviour (i.e. say one thing but does another) may offer insight into sociocultural values and expectations for children. For example, a child may discuss the importance of liking him- or herself, but may spend a great deal of time critiquing his or her appearance or clothing. Third, consistency in findings between the verbal and behavioural data may provide validity to the research.

In particular, content analysis was used to examine the verbal dialogue recorded during my observations and the informal interviews and conversations. On the other hand, the general inductive approach and the work of Thomas (2003, 2006), was used to examine the behaviours (e.g. body language, gestures) of the children and the adults at the Centre. According to Fetterman (1989), this dual approach to analysis is appropriate as ethnographers "analyze written and electronic data in much the same way that they analyze observed behaviour" (p. 96). For example, triangulation occurs within documents and between data collection methods to test for internal consistency, and analysis of text and of behaviour involves searching for patterns and key events (Fetterman, 1989).

Regardless of the type of data being examined, according to Galman (2007) and Lecompte and Schenshul (1999), there are three phases of ethnographic data analysis: (1) Collecting and organizing the data, (2) identifying patterns in the data, and (3) searching for relationships between and across the patterns.

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The first part of the analysis process is to read through all of the data as they are collected in the field. This means reading and re-reading the data in order to become familiar with them (Hammersley & Atkinson, 1995). Here, the researcher examines recently collected data, making mental notes and identifying subjectivity. These were entered into field notes. As the data were collected and read, they needed to be stored in an organized manner, which involved making backup copies of all transcripts and entering written field notes into Microsoft Word. The data were then easy to access, such as separating written documents into labelled folders and creating a filing system (Galman, 2007).

Although data collection and analysis occur at the same time, data analysis is a "process of sifting and thinking and waiting for patterns to emerge" (Galman, 2007, p. 85). When using ethnographic techniques, these patterns are considered a form of reliability (Fetterman, 1989). While waiting for patterns, I kept track of ideas or hunches about these patterns throughout the data collection process in a research journal (Galman, 2007). Eventually, the large collection of data became smaller collections of data that helped to answer the research questions (Lecompte & Schenshul, 1999). Walsh (2004) recommended two steps in this process of dividing the data. The first step began by creating "preliminary concepts that make analytic sense of what is going on in the social setting" (Walsh, 2004, p. 235). This occurred by sifting through the data, specifically by reviewing the entire collection of data to see if any patterns emerged, how the data linked together or to the theory, or if anything was inconsistent (i.e. behaviour vs. verbal response), surprising, or puzzling (Walsh, 2004). Hammersley and Atkinson (1995) also suggested asking, "What becomes clear that was not clear before?" The question was

asked frequently as more patterns emerged from my data. Still, Walsh warns that this

initial pattern sweep "cannot be anything but sensitizing, a loose connection of orienting

categories which gives a general sense of reference and guidelines in approaching the

field" (2004, p. 235).

The second step was to move from the preliminary concepts to definitive concepts,

characterized as a "stable set of categories for the systematic coding of data" (Walsh,

2004, p. 235). At this stage, the concepts referred to exactly what was included in a

particular category of data (i.e. what fits and what does not) and allowed for analysis

between categories. Constant comparison was the technique I used to classify data to fit

into one category and then took note of its relationship to and difference from other

pieces of data within the category (Walsh, 2004). This technique helped to create new

categories and subcategories (Walsh, 2004).

Lecompte and Schensul (1999) suggested two ways to think about performing the data

analysis, through either a 'top-down' or a 'bottom-up' approach. Within the top-down

approach, codes developed by the researcher are applied to the data in order to organize

and make sense of the data. On the other hand, the bottom-up approach is more

inductive, where the codes are generated from the data after the researcher has

exhaustively read and examined the data (Lecompte & Schenshul, 1999). For the

purposes of this research project, the final phase of analysis followed more of an

inductive, bottom-up approach.

Once I had exhausted my study of the data, I came away with a *working* notion of the

data (Lecompte & Schenshul, 1999). This included the important ideas and themes, how

those ideas and themes fit together, and how those themes and relationships fit into the

bigger picture (Lecompte & Schenshul, 1999). However, according to Lecompte and Schenshul (1999) this may involve 'playing' around with the data. For example, some codes were eliminated while others were added, some categories were expanded while others were divided into subcategories, and several initial themes were rejected.

Coding

For both the verbal and observed data, coding involved a natural, hands-on approach. Specifically, I used pencils and pens on the transcribed data to write down any ideas about the content, possible codes arising from the data, or markers to highlight particular words or sections. Lecompte and Schensul (1999) called this *playing with the data*. Although this was a time consuming endeavour, it allowed me to become completely involved with the data. A list of these codes and their meanings were kept in a notebook, which for the purposes of this research project, were included as part of the field notes.

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Content Analysis

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Content analysis was used to analyze the verbal data from my observations at the child care Centre. Content analysis allows researchers to use an author's or a speaker's words to understand the viewpoints of individuals and groups in our society (Berg, 2001). It also helps to bring about a meaning in text through the construction of themes (Priest, Roberts, & Woods, 2002). Holsti (1968), Tesch (1990), and Berg (2001) supported using content analyses. Berg (2001) suggested this type of examination could allow researchers to grasp how the authors of the text see their social reality.

This analysis method was important for the examination of body image, eating and activity among children. Many other researchers in relevant fields have utilized this method successfully with research involving all three issues among children. For

example, Robinson, Callister, and Jankoski (2008) conducted a quantitative content analysis of the portrayal of body weight of characters from children's television shows on Nickelodeon, Disney, and Discovery Kids channels, while Martins, Williams, Harrison and Ratan (2009) performed a quantitative content analysis on female imagery in video games, including those rated for children. Similar research (but qualitative) was performed by Herbozo et al. (2004) examining beauty and thinness messages in children's books and videos (Herbozo et al., 2004). Interestingly, a significant number of studies used content analysis to examine the effect of media and advertising on children's body image, eating, and activity.

Types and Forms of Content Analysis

There are two main types of content analysis: Latent and manifest. According to Graneheim and Lundman (2004), both types "deal with interpretation but the interpretations vary in depth and level of abstraction" (p. 106). Manifest content analysis is a more clear-cut type of analysis, where the investigator searches for particular words, ideas or themes (Ahuva, 2001); that is, "what the text says" (Graneheim & Lundman, 2004, p. 106). These words, ideas, or themes are then used to generate information on the data content. This method highlights information found in the surface structure of the text, but does not provide as much richness or depth to the research as latent content analysis (Mayan, 2001). For example, the term 'breakfast skipping' is taken at face value to imply that someone has missed breakfast.

On the other hand, latent content analysis is the process of finding, coding, and sorting out the main patterns in the data (Mayan, 2001); that is, "what the text talks about" (Graneheim & Lundman, 2004, p. 106). Here, the meanings of words or parts of the text

are examined within the context of all the data, the subtle meanings are pulled out, and the section of the text is placed in an appropriate category (Ahuva, 2001). This method allows the researcher to look at the text in more depth, providing information on the deeper structure. Using the same example as above, the term 'breakfast skipping' not only means that an individual missed a morning meal, but also implies intent behind this behaviour, such that the meal was missed for different reasons (e.g. running late, dieting). Both types of content analysis were identified in the data analysis.

Performing Content Analysis

Content analysis is achieved by establishing clear rules or "criteria of selection" (Berg, 2001, p. 240) that involves coding participants' "open-ended talk into closed categories" (Wilkinson, 2003, p. 196), which summarize and organize the data. According to Berg (2001), content analysis follows several steps:

1. The data were collected and changed into text
2. The codes were developed
3. The codes were applied to the data
4. The codes were structured around categories
5. The coded data were separated by category ("Categorization")
6. The meaning was taken out of the analyzed text ("Conceptualizing")

In the following paragraphs, the steps used to conduct a content analysis are described.

Step 1 - Data were collected and changed into text. The data that were used from my observations included anecdotal observation records, participation charts, and field notes (e.g. informal interviews). Within all of these observation records, the verbal dialogue was recorded verbatim or was paraphrased. As often as possible, once the daily observations and field notes were completed, I had the research assistant transcribe this information. It was these data that I used to conduct the content analysis, which I

completed after consultation with my thesis advisor. Using data transcription, I

immersed myself in the data and searched for patterns.

Step 2 - Codes were developed. For this research project, the coding was developed

after the observations and interviews were transcribed. Codes are labels applied to the

data, which assist in the collection of information of interest (Morse & Richards, 2002).

Before I began coding, I printed a hard copy of the transcripts. I read the transcripts

several times. For my purposes, I examined words, sentences, and paragraphs in the

whole text, with the intention of eventually locating overarching themes. I highlighted

words or sections of the data that stood out to me, including common words or ideas. I

made note of my overall impressions, points of interest, and anything unusual or anything

that stood out from the rest of the surrounding text, such as any inconsistencies or

contradictions. I wrote these comments or ideas in the margins of the printed pages. If

there were similarities in my thoughts or comments across the transcribed data, I kept

track of them in my field notes. These notes also gave me ideas for possible codes, and I

attached the labels or codes to pieces of data that answered my research questions.

Step 3 - Codes were applied to the data. With this step, I kept a running tab of the

labels or codes across observed dialogue. Over 200 codes were initially developed,

including:

1. Pressure on children to succeed
2. Playing with food
3. Physical activity as a way to connect
4. Appearance as a source of humour
5. Appearance-related teasing
6. Clothing as restricting ability
7. Adult influence through participation
8. Food reflection
9. Teaching values and responsibility
10. Stereotypes about appearance

11. Respect and consideration for others
12. Weight concerns
13. Fat is 'bad'
14. Peer-assisted learning (Vygotsky)
15. Taking the fun out of the game

I then went back to each transcript to see how the codes fit. Specifically, I looked to see if there were data from different transcripts that professed similar ideas or information. For example, the code of 'playing with food' was applied to dialogue about eating behaviours at snack and lunch times and to children's dialogue during dramatic play using toy food items.

   Step 4 - Codes were structured around categories. The next step was categorizing. Categories are produced and developed during the coding process, each having similar statements, patterns, relationships, and discrepancies (Berg, 2001). Essentially, a category is a thread that can be seen throughout the codes (Graneheim & Lundman, 2004). According to Krippendorff (1980), a category answers the 'what' question in content analysis. Graneheim and Lundman (2004) argued that creating categories was "a core feature of qualitative content analysis" (p. 107). In order to categorize the data, I needed to make links among coded data that appeared similar, and group those similar pieces into categories. Membership into a particular category required some element of similarity. For example, membership in a category such as '(I'm not) Ok just the way I am' included data related to body objectification, weight concerns, experimenting with identity, and appearance as a source of humour.

   For the categorization process, I began from a broad perspective. I first read each transcript looking for the larger picture, which I then followed by locating key codes and any key categories. This perspective is similar to the notion of a concept map, where the

main idea is in the centre, and the supplementary ideas are built around it. In my first few readings of the transcribed data, I found certain ideas in the text stood out more than others. For example, the notion of girls being restricted in physical activity came across consistently. Here, girls vocalized that they left activities (e.g. hockey, soccer) because the boys played too roughly or that they did not get much opportunity to play (e.g. the boys did not pass the puck to the girls). The more I read the transcripts, the more patterns started to emerge across observations. In fact, each time I read the transcripts, I was able to locate similar ideas which came together as overall themes.

Coding for themes often requires the researcher to produce and reflect on personal reactions to interviews. For this project, these data were apparent in the notes I wrote in the margins of the transcribed text and in my field notes. Essentially, the notes included my personal reaction to each observation or conversation, and ideas and questions that arose while these took place. These notes were written immediately after the observations and conversations occurred while the ideas and information were still fresh in my mind, but also occurred later after a period of reflection. This reflection involved taking the data, finding common words or ideas across transcripts, and seeing how the pieces fit general categories that were rooted in the data (Morse & Richards, 2002).

Step 5 - Coded data were separated by category ('Categorization'). After several readings, I listed the categories that emerged from the data. The categories each had similar statements, patterns, relationships, and discrepancies (Berg, 2001). The labels for the categories were key words used by the participants, or ideas from the data based on my previous experience or from the literature review. In order to categorize the data, I needed to make links among coded data that appeared similar, and group those similar

pieces together. Again, membership into a particular category required some element of sameness. Therefore, I took my list of 200 codes and began separating them into groups. Almost immediately, some groupings showed similarities in code names (e.g. 'stress in children' and 'knowledge of stress in children') and I was able to combine these to reduce the number of codes included in a grouping. The first combination of data created 25 subcategories. They are as follows:

Teaching values
Teaching about health
Taking down the person
Building up the person
Being a 'team' player
Food behaviours
The cognitive/physical eater
Food control
The eating environment
Play 'ball'
Microsystem influences on physical activity
Stereotypes
Gender Differences
We just want to play
Social/socialization
Detriments to health
Health perceptions
Health knowledge
Pressure to succeed – taking the fun out of the game
Keeping children out of the game
My body is not my own
(I'm not) ok just the way I am
Microsystem influences on appearance
Acceptance
Appearance is a way to communicate

I did not limit the number of subcategories, but instead added onto the list as new subcategories emerged. However, I needed to decide whether the categories were to be mutually exclusive and how broad or narrow the categories would be (Weber, 1990). At one point, I found certain preliminary groupings were too large and too general, so I

divided them into more specific categories. For example, a grouping entitled 'appearance' was separated into the subcategories 'My body is not my own,' '(I'm not) ok just the way I am,' 'Acceptance,' and 'Appearance is a way to communicate.'

In some cases, at this point in the analysis negative data arose, which meant that certain words or phrases were different from what most of the other participants expressed (Mayan, 2001). When this occurred, I needed to examine the rest of the transcripts for similar statements or information (Mayan, 2001). If no similar occurrences were found, then the first case was considered an anomaly, but if similar cases were found, then a new category was established (Mayan, 2001). For example, the code 'parents not active with children' came about during one observation of a parent coming to the centre to take her child home. This idea did not come about during any of the other verbal data, although it was discussed in the literature review. Therefore, it did not contribute to the development of any of the themes.

Step 6 - Meaning was formulated from text analysis ('Conceptualizing').
Conceptualizing involves moving to "more general, higher-level, and more abstract constructs" (Morse & Richards, 2002, p. 133). Essentially, once the research has moved from categories to concepts, it has moved from "description to analysis" (Morse & Richards, 2002, p. 133). This step involves combining the categories in order to find relationships among them and to uncover the big picture (Mayan, 2001), which ultimately become the themes that are used to answer the research questions. Themes are common ideas or concepts that run through the data (Miller, 1997; Morse & Richards, 2002). They are also more persistent than a topic or a category (Morse & Richards, 2002), mainly because they are found consistently across data. Each theme I located was

composed of words, sentences, or paragraphs, which had similar meanings or relationships (Weber, 1990). For example, the category of 'healthy knowledge' contributed to the theme of 'How to be a better, healthier person.'

In order to help organize the categories into themes, I returned to the verbal data and grouped the information into the original codes and categories. I expected to get a visual picture of the emerging themes. These themes developed from a combination of the categories. The major categories were as follows:

Teaching
Health
Restricting behaviours/lack of control
Getting respect and taking control
Food is an 'experience'
Socialization

A visual representation of the content analysis process, including examples of codes, subcategories, major categories and resulting themes is available in Appendix H.

General Inductive Approach

The general inductive approach was used in this research to analyze the remaining behavioural data. This approach was outlined by Thomas (2003, 2006) as a way to assist researchers who found literature on qualitative analyses confusing and difficult to use and who wished for a "straightforward set of procedures to follow" (2006, p. 238). Thomas (2003, 2006) argued that many journal authors described the use of a general inductive approach, but suggested that a specific label for the analysis plan was not provided to the audience. The intent of this approach is to assist the researcher in understanding and finding meaning in complex data, which comes about through the development of themes (Thomas, 2006). The purpose of this approach is first to condense the data into summary format, second to build connections between the research objectives and the summary

findings (i.e. how do the findings answer the research questions), and third to develop a framework "that summarizes the raw data and conveys key themes and processes" (Thomas, 2003, p. 4). One of the benefits, according to Thomas (2003) is that it allows the research findings to emerge "without the restraints imposed by structured methodologies" (p. 2).

This analysis method was important for the examination of body image, eating and activity. Other researchers in similar fields have utilized this method successfully with research involving children but only a few have used this method in studying children. Dorey, Roberts, Maddison, Meagher-Lundberg, Dixon and Ni Mhurchu (2009) used focus groups in New Zealand to study television habits among children as related to sedentary activity and overweight status. Dixon and colleagues also used focus groups to study parents' and children's perceptions of active video games as a way to address sedentary behaviour and obesity in children (Dixon, Maddison, Ni Mhurchu, Jull, Meagher-Lundberg, & Widdowson, 2010). Using focus groups, Cox, Schofield and Colt (2010) studied the personal, parental, and third party influences on 11 to 12 year old children's physical activity. Galli and Reel (2009) used the general inductive approach in analyzing body image among male athletes. Although this study interviewed adult male athletes, it addressed the impact of sport on body image, sociocultural influences on body image, body satisfaction and dissatisfaction, and body enhancing behaviours (Galli & Reel, 2009).

Performing General Inductive Analysis

As with the analysis of the verbal data, there are several steps in inductive analysis (Thomas, 2006, 2003). These are:

1. Preparation of the raw data ('data cleaning')
2. Close reading of the text
3. Creation of categories
4. Overlapping coding and uncoded text
5. Continuing revision and refinement of category system

A description of this process is to follow.

Step 1 - Preparation of the raw data ('data cleaning'). The preparation of the data

begins with data transcription. These data, from my observation of participants'

behaviour, were analyzed. The behaviours were documented in a descriptive but

objective manner (e.g. child had a smile on his face, child played soccer for 45 minutes).

Once the documentation was completed, the research assistant transcribed this

information into a Word document, under my direction. These transcripts were then

printed for ease of analysis. It was these data that I used to conduct the general inductive

analysis, which I completed after consultation with my thesis advisor.

Step 2 - Close reading of the text. Once the data transcripts were printed, a close

reading and re-reading of the transcripts was conducted (Thomas, 2006). I immersed

myself in the data and searched for patterns. Thomas (2006) suggested that at this step,

the researcher should read the raw data so as to become familiar with the content,

specifically as it relates to research objectives, and to achieve an understanding of the

possible themes in the text. Therefore, in the close reading of the data, I examined words,

sentences, and paragraphs in the whole text, with the intention of eventually locating

overarching themes. I highlighted words or sections of the data that stood out to me,

including common words or ideas. I made note of my overall impressions, points of

interest, and anything unusual or anything that stood out from the rest of the surrounding

text, such as any inconsistencies or contradictions. I wrote these comments or ideas in

the margins of the printed pages. If there were similarities in my thoughts or comments across the transcribed data, I kept track of them in my field notes. The more I read the transcripts, the more patterns started to emerge across observations.

Step 3 - Creation of categories. At this step, I began to identify categories and preliminary ideas for themes. This was achieved through coding of the data and data reduction. Essentially, the codes were developed and applied to the data, and similar codes were grouped together to form initial categories. As before, I kept a running tab of the labels or codes across data. One hundred and twenty six codes were initially developed. Some of these codes included:

1. Growing up too fast
2. Respect and consideration for others
3. Sociocultural influences on appearance
4. Adult influences on body image concerns
5. Social aspect of eating important
6. 'Good' eaters/'picky' eaters
7. Food rules
8. Using materials in different ways
9. Sex segregation
10. Sex/Gender differences in physical activity skills
11. Peer support for physical activity skills
12. Gender differences in activity choices
13. 'Getting in position'
14. Boys as gatekeepers of activities
15. Poor sportsmanship

After several readings of the coded data, I listed the categories that began to emerge. According to Thomas (2003, 2006), categories are the "core" of inductive analysis (2003, p. 4) and have five possible characteristics: Label, description, text or data associated with category, links, and type of model in which each category is embedded. First, the *label* is a word or phrase used to identify the category. The label "often carries inherent meanings that may or may not reflect the specific features of the category" (2006, p.

240). Second, the *description* describes the meaning of the category. This includes

important characteristics, scope, and limitations. Third, the *text or data associated with*

category are examples of the data that "illustrate meanings, associations, and perspectives

associated with the category" (2006, p. 240). Next are the *links*, as each individual

category may have connections to other categories. The links are based on

"commonalities in meanings between the categories or assumed causal relationships"

(2006, p. 240). The connections may indicate a hierarchy, such that the categories may

be superordinate, subordinate, or equal to one another. Last is the *type of model in which*

category is embedded. This model summarizes the data and conveys the main themes.

Categories may or may not be embedded in a model, theory, or framework. In the

inductive process, the model, theory, or framework represents an end to inductive

analysis (Thomas, 2006).

   Following Thomas' (2003, 2006) process, I took the list of 126 codes and made links

among coded data that appeared similar, and grouped those similar pieces together.

Some groupings showed similarities in code names (e.g. 'Adult influence on physical

activity' and 'Adult participation in physical activity') and I was able to combine these to

reduce the number of codes included in a grouping. Category labels emerged from the

combined data. For example, the codes of 'Building up the person' and 'Food control'

were combined into the category 'Getting respect and taking control.' Some of the

descriptions of meaning for the categories were straightforward (e.g. 'Gender

differences'), but others such as 'Playing with food' required me to write a brief

description of the category in my research journal (e.g. children chose different ways to

play with their food at meals times, playing with food = exploring food, manipulation of

food, food role play). As for the data associated with the categories, I used key words or phrases to illustrate perspectives within each category. For example, the category of 'Building up the person' included key words from the data such as *respect*, *confidence*, and *self-concept*. In exploring the links between individual categories, the first combination created 17 subcategories. They are as follows:

Play 'ball'
Food behaviours
Food control
Physical activity 'equipment'
Building connections
'Eating' environment
Getting children in the kitchen
Health promotion
Taking the fun out of the game
Microsystem influences
Being a 'team' player
Keeping children out of the game
(I'm not) ok just the way I am
Building up the person
Gender differences
We just want to play
'Mikey doesn't like it': Detriments to health

As for the fifth characteristic of categories, *type of model in which category is embedded*, while certain preliminary themes began to emerge with these 17 subcategories, I felt that it was too early in the process to make definitive claims for the main themes. Therefore, this characteristic became more useful in Step 5 of the analytic process.

Step 4 - Overlapping coding and uncoded text. For this step, I went back to each transcript to see how the codes fit. Specifically, I looked to see if there were data from different transcripts that professed similar ideas or information. Here, I was looking to see if a piece of data could be coded into more than one category or if any negative data

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arose. In essence, I was looking for more links between categories. Thomas (2006) suggested that at this step, the researcher should try to "reduce overlap and redundancy among the categories" (p. 242). While examining codes for redundancy, I discovered that some of my codes that appeared dissimilar were actually connected in indirect ways. For instance, the code of 'competition' fit under both eating behaviour and physical activity concepts. Therefore, the food 'competition' code and the physical activity 'competition' code were combined under the category of 'Restricting behaviours.'

In addition, at this step I looked for negative data. As in the analysis of the verbal data, negative data arose in the behavioural analysis. With the general inductive approach, significant pieces of data may not be included in a category because it is not relevant to the research objectives (Thomas, 2006). However, as my observations were focused specifically on body image, eating, and activity, only small pieces of coded data did not contribute to the overall themes. For instance, the code 'children want an audience' was not relevant to the research questions and therefore was not included in a major category.

Step 5 - Continuing revision and refinement of category system. This step involves combining the categories in order to find relationships among them or inconsistencies and to uncover the big picture. In order to help organize the categories into themes, I returned to the behavioural data and grouped the information into the original codes and categories. Six major categories developed. They are as follows:

Restricting behaviours
Food is an experience
Getting in the game
Getting respect and taking control
Health
The social child in a social world

While the six superordinate categories provided clear ideas about the participants'

experiences, they were still too broad to answer the research questions. Therefore, I went

back once again to the categories and the raw data to see if further combinations could be

made. This continued until three themes remained.

As mentioned on the previous page, the fifth characteristic of categories (*type of*

model in which category is embedded), was more relevant in this last step of analysis.

While no specific framework or model was identified, two theories were useful in

summarizing the experiences of school age children around body image, eating, and

activity: Ecological systems theory and sociocultural theory. Gender theories and

developmental theories were also useful.

A visual depiction of the general inductive analysis process, including examples of

codes, subcategories, major categories and resulting themes, is available in Appendix H.

Summary of Analysis

For the purpose of this research project, the data analysis techniques were separated

according to verbal data and observed data. Content analysis was used to examine the

verbal dialogue recorded during my observations and the informal conversations, while

the general inductive approach was used to examine the behaviours (e.g. body language,

gestures) of the children and the adults at the Centre. A similar process of analysis was

used for both these research methods.

The first part of the analysis process involved reading and re-reading through all of the

data as they were collected in order to become familiar with them (Hammersley &

Atkinson, 1995). Initial impressions were entered into field notes. As more data was

collected and analyzed, and while I waited for patterns to emerge, I kept track of ideas or

hunches about these patterns throughout the data collection process in a research journal.

Eventually, the large collection of data became smaller collections of data. The next step

in analysis was to move from these preliminary concepts to definitive concepts, or

categories, which referred to what was included in a particular category of data (i.e. what

fits and what does not) and allowed for analysis between categories. Constant

comparison was the technique I used to classify data to fit into one category and then

took note of its relationship to and difference from other pieces of data within the

category, which helped to create new categories and subcategories (Walsh, 2004).

Once I had exhausted my study of the data, I had developed a working notion of the

data (Lecompte & Schenshul, 1999). This included the important ideas and themes, how

those ideas and themes fit together, and how those themes and relationships fit into the

bigger picture (Lecompte & Schenshul, 1999). However, according to Lecompte and

Schenshul (1999) this may involve 'playing' around with the data. For example, some

codes were eliminated while others were added, some categories were expanded while

others were divided into subcategories, and several initial themes were rejected.

At the end, the analysis of the verbal and behavioural data revealed several categories.

In examining and combining the major categories, four main themes presented

themselves. These themes were:

1.   How to be a better, healthier person
2.   Out of their hands
3.   Puppets cutting their strings
4.   Reaching out

It is important to note that the first two themes were found consistently throughout the

verbal and behavioural data, while the third and fourth themes were uncovered in the

verbal and behavioural data respectively. This repetition of the first two themes in the two forms of data provides and an indication of reliability.

Summary of Method

Guided by ecological systems theory, ethnographic research techniques were used in this research. Observations of six- to 12-year-old children were made over a four-month period to examine interrelationships among the concepts of body image, eating, and activity. These observations were in conjunction with selected interviews with children, informal conversations with child care staff, and with child learning activities that I personally conducted. The reason for this choice of method was so that I could observe school age children making decisions about eating, play, and activities. My role in this was to be the research instrument, which is critical in becoming a part of the daily life of a social or cultural group.

Once the data had been transcribed by a research assistant, the data were examined using content analysis and general inductive analysis. Content analysis was used to analyze the verbal data from my observations. It allows researchers to use an author's or a speaker's words to understand the viewpoints of individuals and groups in our society (Berg, 2001). The general inductive approach was used to analyze the remaining behavioural data. The intent of this approach to data analysis is to assist the researcher in understanding and finding meaning in complex data (Thomas, 2003, 2006).

At the end, the analysis of the data revealed several categories. In examining and combining the major categories, four main themes presented themselves, which were: (1) "How to be a better, healthier person;" (2) "Out of their hands;" (3) "Puppets cutting their strings," and; (4) "Reaching out."

Chapter VI – Results

This chapter presents the findings that arose from analysis of the data. Using content analysis and general inductive analysis, the findings ultimately helped to further the goals of this research, which were to: (1) Describe the challenges and issues associated with body image, eating, and activity for school age children; (2) explore the roles of the social and cultural environment of the Centre that influence school age children to enhance the development of healthy eating habits and behaviours, regular physical activity, and healthy body image; and (3) develop an understanding of how social and cultural expectations for children at a centre have implications for child care practice.

In this chapter, the common themes that arose from the data are discussed, supported by specific examples from the data. These themes include, "How to be a better, healthier person," "Out of their hands," "Puppets cutting their strings," and "Reaching out." For a discussion of each, excerpts from the data are provided to lend support for the development of each theme.

Theme 1 - How to be a better, healthier person

Within this first theme, the central idea is 'health.' Here, children exhibited (or were learning to exhibit) healthy behaviours (i.e. those focused on health promotion and health maintenance), which could foster overall development and well-being. Most of this was facilitated by the Centre philosophy, goals, and children's rights and responsibilities, where child and staff behaviours were reflective of these ideals. In essence, what was put forth as intangible ideals was seen in tangible behaviour. For instance, one of the Centre goals was to help children to sustain good health. This was implemented in part through the provision of nutritious snacks. Furthermore, healthy behaviours in children were

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encouraged through social activities; by providing them with experiences and materials; by allowing children independence (i.e. time to 'be') and choice; and through staff modelling of health-related behaviours. Examples were observed during snack times, opportunities for play, and in the ways in which the staff interacted with the children.

During the analysis, several key categories arose on which to build the first theme, including 'Teaching,' 'health,' 'Food is an experience,' and 'Getting in the game.' All of these categories included data related to body image, eating, and activity. A discussion of each, as part of the overall theme, will be provided in the following section.

Teaching

A significant piece of the first theme focuses on the transmission of healthy ideas and behaviours to children. Specifically, Centre staff members were consistently observed teaching children about health and teaching values which could foster healthy development. For instance, during formal meeting times and informal conversations with children, staff members were observed talking to children about types of health (e.g. physical, mental, spiritual), daily physical activity requirements (e.g. minutes per day), information about food and nutrition (e.g. following Canada's Food Guide), and healthy/unhealthy eating habits (e.g. portion sizes). On several occasions, one staff member was observed talking to the children about the effects of food (e.g. "Let it nourish you"), about a physiological connection to food (e.g. "Bring your body down to a level that is more relaxed. Then you can enjoy the taste and the texture of your food"), and about food as being important for health (e.g. the children were asked to suggest reasons why lower-sodium soup was offered at snack). As well, during two formal group meetings, a second staff member spoke to the children about the dimensions of health,

physical fitness, active daily living, and the importance of exercise. During one of these

meetings, the children had the opportunity to try a circuit training exercise with several

different physical activities, such as a balance station and step-ups on portable risers.

Distinctive to this child care Centre (based on anecdotal evidence), detailed health

knowledge was held by staff members and by some of the older children. Two staff

members had teaching degrees in physical education, and several other staff members

were university students in health-related fields (e.g. nursing, kinesiology, human

ecology), who often shared what they were learning at school with the children. For

example, during one group meeting, a staff member discussed food choices and portion

sizes. The staff member discussed what the portion sizes should be for a balanced diet, as

per Canada's Food Guide (how much fruit, vegetables, and grains children should have).

Sustaining good health was an additional goal for the Centre. From the data, it was

observed that teaching health education and health promotion occurred through

modelling and demonstrations of health-related behaviours. For instance, the Director

facilitated a group meeting about relaxation, which included laughter yoga. It consisted

of breathing exercises with some arm movements (e.g. clapping) and body movements

(e.g. side-to-side sway), which she demonstrated for the children. As well, during snack

times, most of the staff ate with the children or standing near the children. Thus, the

children were able to see what the staff ate, how much they ate, and how they ate. On

several occasions, the staff members were involved in food role play with the children.

These staff played the role of customers, which involved ordering and pretending to eat

food, paying for food, and leaving tips. Most often, however, staff modelling focused on

physical activities: The staff members at the Centre regularly became physically active

with the children. Staff members, including the Director and Assistant Director, were observed playing free time activities with the children, such as tennis, badminton, basketball, skipping rope, hula hoops, volleyball, scoops and balls, football, racquetball, spongee polo (a game similar to hockey, but instead with foam padded polo mallets), and gymnastics. They were also engaged in planned group activities with the children, including silent circle, yoga, dancing, 'fruit salad' game, dodgeball, and benchball.

In addition to teaching about health, several staff members were observed teaching values that were reflective of the Centre philosophy and goals (see *Centre Philosophy* in Chapter 4) and which could have an indirect impact upon health. Included were discussions with children about daily physical activity as a goal or objective, practice being linked to success, and process being more important than product (i.e. winning is not important). As well, the Centre philosophy and goals were translated into daily ECE practice, such as encouraging prosocial behaviours during daily routines (e.g. cooperation and courtesy at snack times), providing children with choices (e.g. choices of vegetables during afternoon snack), and modelling the idea that food was a privilege (e.g. not wasting food). This last concept was reflected in children's discussions about food. For example, during a group meeting held before Thanksgiving, the children were asked to talk about the things for which they were thankful. Some of their answers included being 'thankful for food;' being 'thankful for family, shelter, food and water, and health;' and being 'thankful for clothes, food, and life.'

Health

Another key piece of the first theme focused on perceptions of health, health knowledge, and detriments to health. Within this second category, children, parents, and

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ECEs discussed ideas about health, with a focus on health promotion. For example, a

parent spoke about the changes they had made as a family to their eating habits;

specifically, she mentioned that they had made fruit and vegetables more readily

available at home, and took chips and chocolate out of the home. Health promotion also

occurred around daily physical activity as a goal or objective. While the philosophy at

this Centre mandated opportunities for daily physical activities, the desire for and

enjoyment of these activities was expressed by the children. For example, during an

activity that highlighted children's abilities and likes and dislikes, Sterling (Grade 4)

wrote that he liked to spend his time "watching movies and playing hockey," while

Stephen (Grade 4) wrote that he liked to spend his time "watching AFV (America's

Funniest Videos) and playing hockey." When the children were asked about their

interests or activities they would like to see in the Centre, a large number of children

indicated sports or other physical activities. During one observation, the Director

brainstormed with the children for activity ideas, asking about their interests in and what

they liked to do. Ideas about the clubs that should be provided at the Centre were also

offered. A number of sports and other physical activities were indicated by the children:

- **Boys** (K-3)
    - Soccer, hockey, basketball, dodgeball, rock climbing
- **Boys** (Grades 4-6)
    - Soccer club, floor hockey, spongee polo, dodgeball club, tag club, target club, football club, hockey, volleyball, badminton, dance club, wrestling, running, archery, swimming, fishing, sports, basketball, climbing, play structure, fit club.
- **Girls** (Grades 1-3)
    - T-ball, silent circle, "playing on play structure", flashlight tag, circle games, dodgeball (staff vs. children), going to the park, dance party, ringette, horseback riding.
- **Girls** (Grades 4-6)
    - Yoga, fort building, soccer, dance, gymnastics

Therefore, while daily physical activity was a part of the Centre philosophy, and thus a part of the daily program, it was not seen by the children as something they were forced to do.

Conversations about detriments to health also occurred during formal and informal interactions between staff and children and between parents and their children. Included were conversations about stress, body weight, dieting behaviour, caloric content of food, and using food as a reward.

> Example 1:
> During a formal group meeting, a staff member asked the children about things that made them feel stress. The conversation became focused on organized sports. Several children indicated that it had become more stressful as they grew older with their parents making them play competitive sports.

> Example 2:
> I observed a parent comment that her son (Grade 4) was concerned about his weight. She mentioned that she and her son had discussed healthy eating and physical activity as a way to be healthier and to maintain a healthy weight.

As well, Maureen (Grade 6) suggested that daily food requirements were the reason why the Centre had chosen to offer lower-sodium soup during snack. She said that too much salt could cause high cholesterol, and mentioned that "you're supposed to have a bit of salt each day, but not too much, and you're supposed to have fat each day, but not too much fat." Lochlan (boy, Grade 4) also mentioned that he was learning about "obese" in gym class. He said they were learning about how the body moved, about cartilage, and how being obese could hurt the body. Indeed, it appeared that several of the children knew what made a person healthy and what made a person sick. What was most notable here was that adults were having health-related conversations with these children, and that these discussion were not only about what to do to promote and maintain health but why these behaviours were important.

Possible detriments to health were also noted with regards to eating behaviour. While it was suggested by a staff member that the children typically ate well, there were three boys who were more selective in their food choices. These three children often refused salad and vegetables over 25 observations of afternoon snack. Zeke (boy, Grade 1) was observed refusing these foods 11 times, while Trevor (boy, Grade 2) and Kieran (boy, Grade 4) were observed refusing these foods six times each. It appeared that these three children also had more limited snack preferences overall, often choosing only bread for snack or no snack at all. It is important to note that for Zeke, the presence of older peers may be significant in broadening his food repertoire. During one afternoon observation, Eoman (boy, Grade 6) encouraged Zeke to try the Hash Brown Surprise being served (a casserole-type snack that Zeke had refused to eat). After some convincing, Zeke did so and indicated that he enjoyed it.

It should be noted that these three children were not the only ones to refuse certain snack food items. For instance, 13 other children also refused salad and/or vegetables on at least one other occasion from September to December 2010. However, some of these children did not want salad when it was offered, but had raw vegetables instead.

'Food is an Experience'

The Centre goals (see *Centre Philosophy* in Chapter 4) were apparent in the ways in which food was allowed to be an experience for children. With this third category, food was not just about feeding a hungry body. Here, children were observed playing with their food, reflecting on themselves and their food, socializing with others during snack and lunch times, and appeared to have specific rules for how certain foods were to be eaten. The idea of *playing with food* was noteworthy within this theme. On several

occasions, children manipulated the shape or taste of their food, thus experimenting with their food. Other examples of these behaviours included:

- Children mimicked dipping chips into salsa and lifted it up to their mouths.
- Ronan (boy, Grade 5) and Aidan (boy, Grade 4) ate their Caesar salad on their buns.
- Aidan (Grade 4) dipped his bread crust into his juice.
- Lochlan (Grade 3) licked the butter off her bun.
- Maura (Grade 3) ate around the edges of a bun, ate through a sandwich so the crust was in the shape of a circle, and mashed her snack of Hash Brown Surprise before eating it.
- Ronan (Grade 4) said that he liked to pull the middle out of the bread and eat the crust first.
- Maureen and Keeley (both girls, Grade 6) separated out the chocolate chips from their banana muffins. They said they did it so the last taste was chocolate.

Indeed, it appeared as though many of the children enjoyed their meals, not just for the taste of the food, but also for the exploration of the food. This idea of playing with food also extended into the children's play and activities. For instance, during an open-ended art activity (where the children could create whatever they wanted), three children were observed painting hamburgers. These children painted different parts of the hamburgers using different colours of paint, including white paint for mayonnaise, purple for the bun, and red for a tomato. Other items included in the pictures were mustard, relish, lettuce, and onion.

In addition to children playing with food, dialogue and behaviour related to food behaviours emerged in this theme. As suggested earlier, food behaviours and preferences are established at very young ages (Nicklas et al., 2001; Ogden, 2010). Evidence was consistent throughout my observations. For instance, several children spoke about preferred foods.

Example 1:
Maureen (girl, Grade 6) said, "I love all vegetables."

Example 2:
> Zeke (Grade 1) said that he loved chicken noodle soup. He also said that he had a great afternoon because he had pizza bagel bites and he loved them.

Example 3:
> Jarlath (Grade 3) was making a sighing noise while eating crackers with honey. I said, "That was a big sigh", and she said, "I really love honey" as she licked the honey off her crackers. She also said that her favourite food was wieners and she loved them cut up and put into beans.

It should be noted that the word "love" was used frequently when children discussed their favourite foods. Indeed, food and eating were seen as positive concepts. For instance, when children were asked general questions about the activities that interested them, the topics of food and eating often arose. On one occasion, the Director was brainstorming with the children about activity ideas (i.e. what they were interested in; what they liked to do). Several of the children's suggestions involved food, eating, and cooking. These suggestions are as follows:

- **Girls** (Grades 1-3)
    - Making caramel apples, making muffins, baking, Slurpees and ice cream, make pizzas, popcorn with DVDs, hamburger day/party, candy day.
- **Boys** (Grades 4-6)
    - Cooking, eating, snack making and eating, French toast
- **Girls** (Grades 4-6)
    - Cooking, baking

On several occasions, children's behaviour suggested an interest in cooking. This interest was apparent during three learning activities which involved cooking with children, including making cranberry pinwheel wraps, perogies (Ukrainian dumplings filled with mashed potato and cheese), and playdoh. For each of these activities, large groups of children participated (e.g. approximately 50 children made perogies), and those children who did not participate indicated they wanted to be involved in future cooking activities. Children also displayed behaviours that were representative of previous

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experiences with cooking (e.g. flipping an egg in a pan) or baking, or eating in restaurants

(e.g. taking a customer's order, leaving a tip for a server), which were demonstrated

through playing with toy food and items and engaging in food role play.

    Example 1:
> Karla (girl, Grade 1) talked about enjoying baking cupcakes, and Liadan (girl, Grade 1) spoke about what you could do with icing. One of the girls also talked about using food colouring to change the colour of icing.

    Example 2:
> Of the 12 children that participated in the 'Wrap it up' learning activity, almost all had previously helped their families with grocery shopping and had some experience with cooking. Maureen (girl, Grade 6) mentioned making Pancetta, Jarlath (girl, Grade 3) had made quesadillas, Karla (girl, Grade 1) had made wraps, and Bridget (girl, Grade 6) had made ice cream. Maureen also mentioned that she and her sister had attended cooking camp in the summer, while Liadan (girl, Grade 1) said that she had used an adult knife and had chopped vegetables.

Quite often during these observations, when one child mentioned their food experiences

or preferences, other children were keen to also talk about their experiences or

preferences. Once, a child expressed her opinion about Caesar dressing, and five others

mentioned their preferences and food rules (e.g. one child said her family bought a

Jeanne's cake for birthdays, another said she did not like carrots, and a third said he did

not like water). These occurred with groups of girls, groups of boys, and in mixed

groups. As well, food role play allowed children to recall previously experienced or

observed eating experiences, at home or in restaurants, and allowed them to explore their

understanding of how food was prepared and how a restaurant operated.

    Example 1:
> During restaurant role play, Alma (girl, Grade 6) served food to the staff and other children. Three other girls had play money (from the *Life* game). Maureen (girl, Grade 6) then joined Alma in preparing food. Alma poured coffee for Jane (girl, Grade 5).

Example 2:

For one learning activity, the children were provided with a Café role play activity. The small gym was set up with tables and chairs, a large cardboard box, toy food items and utensils, trays, blank menu sheets, clipboards with paper, computer keyboards, phones, a miniature kitchen, and dress up clothes. The children were invited to play with the area. More than 20 boys and girls played with the area over the course of the day. Roles were observed in children's play: some of the children took on leadership roles (e.g. manager), some took food orders, some cooked, some created menus, and others went about setting up the space. An opening was cut into the cardboard box, which some of the children made into a drive thru. Children also 'applied' for jobs at the café, and once hired could become employees of the month. The boys and girls equally took on the roles of customer and server, but only boys were the cooks and only girls were the cleaning (e.g. maid) and administrative staff (e.g. answering the phone, using cash register). As well, only the boys put on the dress up items (e.g. hats, aprons, shawls, purses).

Example 3:

Four boys (two in Grade 1 and two in Grade 4) were playing with the toy food items. The boys took on the roles of server (e.g. "Who's ready for breakfast?" "Would you like a carrot?"), cook (e.g. a child was told to "take the grease off" a food item), host (e.g. Declan played with toy money and talked into a microphone on the cash register), and patron ("We have a sausage burger. Declan would like the sausage burger special," Aidan said as he brought his hand to his mouth and made a chewing sound).

With this type of play, both boys and girls were observed manipulating their food and engaging in food role play with toy food items; however, the role play occurred more often among girls. When boys did engage in food role play, they typically did so in the company of other children and the play tended to turn violent or elements of danger were noted.

Example 1:

Three boys were playing with the toy food items. Tyrone (boy, Grade 1) used a knife to open a cash register and put money inside. Sterling (Grade 4) pretended to use a knife to cut off his hand and Aidan (Grade 4) pretended to cut me with the knife.

Example 2:

Sterling (Grade 4) had a toy knife and chased Aidan (both Grade 4).

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Thus, food role play among groups of boys was not typically representative of previous cooking or eating experiences.

Within the eating environment, the Centre goals and the rights of the children were reflected. Specifically, staff demonstrated and encouraged the children to demonstrate behaviours specific to personal and social health, and promoted children's right to a nutritious snack in a positive eating environment (see *Centre Philosophy* in Chapter 4). This was evident during social snack and reflection snack. For instance, during one observation, a staff member said to the children, "This is an opportunity to appreciate the food that you are about to eat, to think about your day…nobody can take that away from you." On another occasion, the Assistant Director said, "With this being a very busy week, really take the next 10 minutes to reflect (on your day, on your food, on the music, on yourselves). This is all for you." The Assistant Director also said that the reflection snack was healthy for their bodies and minds; it was a time for the children to taste, digest, and enjoy their food and to "listen to their bodies." Indeed, the children were told to take their time to eat, and if they were not finished snack by the time they needed to transition to the next activity, they were allowed to stay and eat. According to the Director, a reflection snack was really a time for children to relax, as their lives were so busy and they often had activities immediately after they left the Centre at the end of the day. Overall, a sense of respect for the children was exhibited within the eating environment.

Perhaps as a result of the Centre goals and child rights embedded in the eating environment, children's behaviour was reflective of the Centre's values. During one group meeting, the children were asked why they were provided with nutritious food at

snack times. One child said it was in order to "stay healthy" and to keep their bodies and minds working, while another child said it was to "give you energy." Most of the children appeared to enjoy food and ate in response to hunger cues, as shown at the end of each afternoon snack, when most of their plates were cleared of food. In another example, they were asked about their favourite snacks at the Centre and to write their choice on a "My favourite things" sign posted on the bulletin board. While some of the children expressed single snack items, such as Chocolate Chip Dream Cake (Maura), Cheesymato Pasta (Kieran and Stephen), or veggie straws (Sheila), Keeley said her favourites included "everything."

   The internalization of the Centre's values was also apparent in a systematic analysis of snack participation. I examined the frequency of morning snack participation for all 62 children during the months of October to December 2010. I chose to analyze morning snack as attendance was optional and occurred during free time, and therefore provided information about self-selected snack participation. Two main patterns were noted: Frequency of attendance for individual children and gender differences in attendance. With individual attendance, data showed that several of the children came for morning snack on a consistent basis, regularly self-selecting snack over other activities, such as going outside. Of 29 morning snack observations, eight children had very high attendance, ranging from 21 to 26 times in attendance, and there were consistently more girls than boys in attendance (of at least 60% of the documented observations). Girls were also more likely than boys to be frequent attendees at morning snack. It should be noted here that only two children mentioned having snack at the Centre rather than breakfast at home.

I also examined afternoon snack preferences over the September to December 2010 time period, looking at how and what children ate. Attendance at this snack time was required; however, the children had the choice of whether or not to have something to eat or drink. Upon calculating the number of food items that were consumed over the four-month time period, the data showed that children were more likely to have the main menu item and a beverage rather than fruit. Typically, this main item was from the Canada Food Guide *Grains and Alternatives* group (e.g. muffin, croissant). While the children seemed to eat more of the carbohydrates overall (e.g. Kieran and Zeke only ate bread during Salad Bar snack), fruit and vegetables were consumed by all the rest of the children. In addition, most of the children had iced tea or juice during afternoon snack, while only a few drank water. Overall, the children appeared hungry after school, and according to one staff member, always ate what was put in front of them, including vegetables and salad. Many frequently asked for seconds.

Snacks that were enjoyed by greater numbers of children included Chocolate Chip Dream Cake, Hash Brown Surprise, chicken noodle soup, popcorn chicken, veggie straws, puffed wheat cake, and popcorn. Bread with butter was also a snack item that was consumed consistently by almost all of the children. The Centre provided French bread or buns with a salad bar, and on those days typically all of the children ate bread. Alternatively, certain snacks were refused in larger numbers, for example, worms and dirt (chocolate pudding with gummie worms and Oreo cookie crumbs), pasta salad, and pizza bagel bites. As well, cheese was one item that was refused by a number of children.

Overall, many of the children had a positive relationship with food. This relationship included speaking about food in a positive way, smiling while eating, speaking

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enthusiastically about food or eating, engaging in symbolic food play (e.g. playing

'restaurant'), expressing enjoyment of food or eating, and discussing favourite food items

or eating locations. During conversations with the children at snack times, I noticed that

they all smiled when they spoke about the foods they liked and they appeared to enjoy the

food they ate at the Centre.

> Example 1:
> Maura (Grade 3) licked her plate after eating Caesar salad and tossed salad. Aidan (Grade 4) also licked his plate after eating salad, and licked his bowl after eating perogies with sour cream. As well, Maureen (Grade 6) licked her plate after eating Hash Brown Surprise and ketchup.

> Example 2:
> Lochlan (Grade 4) had two helpings of Hash Brown Surprise with ketchup. He also dragged his fork across his plate, taking off the remaining ketchup.

> Example 3:
> Trevor (Grade 2) made 'mmm, mmm, mmm' noises while eating his Kraft dinner.

> Example 4:
> Alana (Grade 2) had a smile on her face while she was eating snack.

This positive relationship with food was observed in overall food enjoyment, but also in

nutritious food choices. For example, these children regularly ate vegetables, and often

asked for second and third helpings.

> Example 1:
> During afternoon snack, several of the older children had seconds of veggies. Three or four children were really excited to have more peppers.

> Example 2:
> Jonathan (Grade 4) sounded disappointed that salad bar was not being served. He also had a disappointed look on his face.

> Example 3:
> During afternoon snack, several children were very excited to get seconds of vegetables. On several occasions, the children also asked for second helpings of other snack items, including seconds of banana, perogies, feta wraps, bread, pasta, and pancakes.

As suggested earlier in this section, snack times at the Centre were a mix of self-reflective and social experiences. Children routinely engaged in a reflection snack and a social snack, with the first type of snack being more relaxed and focused on the individual and the other being much more of a social event and focused on peer interaction.

Example 1:
On several occasions, children were seen laughing and smiling with their peers during snack.

Example 2:
All of the children (except for 2) were seated at the tables in the small gym for reflection snack. The lights were dimmed and there was soft music playing. The two children not seated at the tables were snack helpers. They took turns announcing what would be served for snack: They walked around to each table with platters of food and offered food to the children who were seated. Children who did not want to eat during reflection snack were encouraged to put their heads down and rest. The use of manners was encouraged by the staff, and "please" and "thank you" could be heard throughout the gym. At the end of snack, there was no food left in the serving bowls.

The practice of taking time for oneself and to build relationships appeared to encourage a positive eating environment, and thus a more positive relationship with food. The connection to relationships may be especially important for school age children: During a systematic analysis of morning snack behaviour, it was observed that several of the children attended morning snack, but did not eat or only had a beverage, which suggests that attendance at morning snack was a social time for some children. For example, Sheila and Grainne, Keelin and Jarlath, and Tara and Alana attended together, and several of the Grade 6 girls attended snack together.

'Getting in the Game'

This fourth category focused on physical activity and the equipment necessary for it to take place. In particular, this category focused on the environmental requirements for

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activity (e.g. clothing, materials, time), the personal requirements for activity (e.g. balance, coordination, previous experience), and how children executed these activities.

Licensing requirements for child care centres in Manitoba stipulate daily large and small muscle activity (MCCP, 2005); therefore, daily physical activity was a goal for the Centre.   However, while attendance during group games was required, free time physical activity was an option. The opportunities during free time and group games were seen as part of the 'equipment' necessary for physical activities. What was observed then was a match between the Centre's values around physical activity and children's behaviour. For instance, only two (Sheila and Grainne) of the 62 children were not observed taking part in any free time physical activities, although they were observed on several occasions taking part in the required daily large group physical activities. As well, on the days when the greatest number of children engaged in free time physical activity, the children mostly played in paired or group activities. For example, Aidan participated in tennis, flag football, dancing, and soccer, while Rory (Grade 5) participated in scooters, soccer, handball, hockey, and volleyball. Other activities on these days included basketball, spongee polo, scoops and balls, bouncers, badminton, Giant's Treasure game, broomball, skipping ropes, badminton, and playing on the outdoor play structure.

Individual patterns in physical activity were apparent. Certain boys participated more frequently than others in free time physical activity. Eoman (Grade 6) appeared consistently across all four months of observation and had the highest total number of free time physical activities. Declan (Grade 1) had the second highest number, and seven other boys (Rory, Lochlan, Ronan, Sterling, Aidan, Brendan, Killian) were also among the highest attendees during this time period. In looking at individual activity choices for

these boys, there were also clear patterns. For example, with Eoman and Declan, soccer appeared to be their favourite activity.

Individual patterns in physical activity were also noted for girls. Certain girls participated more frequently than others. Patricia (Grade 3) had the highest number of free time physical activities during September, October and November (although she was away for two weeks during this period). Six other girls (Caitlin, Jarlath, Keelin, Keeley, Liadan, Kerry) were also among the highest attendees during this time period and during December.

Indeed, while some of the children were quite active, and thus did not need much incentive to get moving, other children were often observed in less active play and appeared to need more motivation (i.e. daily scheduled group physical activities) to get their bodies moving. However, music appeared to be one factor which not only motivated all the children to get active, but it encouraged spontaneous physical activity.

Example 1:
Music was playing during free time soccer. Declan (boy, Grade 1) was dancing while in goal.

Example 2:
The children were playing a group game called frogs on a lily pad (similar to musical chairs). Two of the Grade 4 girls were doing the 'Staying Alive' dance (hand on one hip, other hand points to ceiling and then to the ground). Two Grade 6 girls were singing along to the music and dancing. As the game went on, more boys were dancing and fewer were running around. Sterling (boy, Grade 4) was doing hip hop moves. Zeke, Declan, and Terrence (boys, Grades 1 & 3) were all dancing. Declan (Grade 1) was also pumping his fist in the air.

In addition, opportunities to improve physical skills were observed during many of the free time physical activities and group games, in line with the Centre's goals. Several games and activities involved the use of coordination (e.g. soccer, hockey), flexibility (e.g. gymnastics), balance (e.g. scooter tag, bouncers), and control of body movements

(e.g. dancing statues and silent circle games). As well, while these opportunities allowed children to practice physical skills, it was apparent that several of the children came to the activities with a certain skill level, such that they had previous experience with the activity.

    Example 1:
        Jarlath (girl, Grade 3) could successfully use the hula hoop while walking, bending down, lunging back, and walking backwards. Brendan (boy, Grade 3) could successfully use several hula hoops for a long period of time.

    Example 2:
        Jarlath was in goal during free time soccer. She moved around as if she was anticipating where the ball would go (moving side-to-side and front and back with her arms out).

    Example 3:
        Several boys were playing flag football in the large gym. Some of the boys could put a spin on the ball (e.g. Killian, Wes, Bran) and throw quite far.

Overall, children just wanted to play, and these behaviours appeared to be simply a part of the children's experiences in physical activity, none of which was observed to decrease physical activity.

In sum, this theme extended throughout all three of the major topics in the research, and clearly supported the second research goal, which was to *explore the roles of the social and cultural environment of the Centre that influence school age children to enhance the development of healthy eating habits and behaviours, regular physical activity, and healthy body image*. In particular, this theme highlighted how the children exhibited (or were learning to exhibit) healthy ideas and behaviours (i.e. those focused on health promotion and health maintenance), which were directly influenced by the child care program philosophy, goals, and children's rights and responsibilities. Social activities (e.g. snack times), learning experiences and materials (e.g. toy food, cooking

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activities), independence and choice (e.g. children playing with their food) and staff teaching and modelling of health-related behaviours were all linked to the demonstration of healthy behaviours in the children. These healthy behaviours included a positive sense of self, healthy eating habits and food choices, and regular physical activity. As well, the children had established food preferences, spoke about food rules, and experimented with their food. Food intake was also influenced by the eating environment of the Centre, which allowed choice at snack times, self-reflection, and social interaction.

Theme 2 - Out of their hands

For the second theme, the central idea is 'influence.' Here, it appeared that children's ideas and behaviour were the result of sociocultural forces. Similar to puppets, children seemed to be controlled and directed. In particular, adults (parents, ECEs, CCAs) and peers were important influences in the lives of this group of children. While a caregivers' role is to care for children and make choices for them that protect them and foster their growth (e.g. buying nutritious food), this direction and control appeared above and beyond typical caregiving practices. For instance, parental control of children's food intake was noted (e.g. restricting food intake for fear of childhood obesity), as well as adults directing children into specific activities (e.g. hockey versus gymnastics). In addition, the lack of control children had in their lives seemed to restrict their behaviour. For example, children's physical activity was restricted by their peers (e.g. boys acting as gatekeepers of girls' physical activity) and by a series of lessons from adults about how they should act, think, and feel (e.g. parents as coaches in activities).

During the analysis, two major categories arose to build this theme: 'Socialization' and 'Restricting behaviours/lack of control.' Both of these categories included data

related to body image, eating, and activity. A discussion of each, as part of the overall theme, appears in the following section.

Socialization

Socialization is defined as the process of acquiring the skills necessary to function successfully in a social group (Grusec, 2002). Utilizing the work of Durkheim, Cook (2003) stated that "children cannot choose to be socialized, but are born into an already existing social world, in which they have a position described by others" (p. 257). The last part of this statement is relevant to this category, as the impact of sociocultural influences (e.g. peers, family, media) and the transmission of social and cultural values or expectations were noted in the behaviour of several children. For example, a child was overheard saying that a boy should get a haircut because he looked like a girl. (Note: The age and sex of the speaker is unknown). Maureen (Grade 6) also said everyone in her class was wearing fake glasses and singing songs from the movie "Grease." When asked why they were wearing the glasses, she said they were "cool." As well, a girl in Grade 6 (Gia) said that when she was older, she wanted to have a daughter, not a son, because she would have "better shopping tastes," reflecting the socialization of girls to be shoppers (Brown, 2011).

Some of these examples imply that sociocultural factors influence children to imitate adult behaviours. Girls spoke of drinking alcohol (Grade 2 and Grade 6), while others mentioned dating and relationships (Grade 2 and Grade 6). Also, a boy in Grade 4 put on a party headband and asked, "Do I look hot?" It is important to note that some children were aware of sociocultural influences, such as media. Sterling (Grade 4) mentioned that

even when the media was visual, children paid attention. He said that he had heard on

the radio that children who played a lot of video games were more hyper and violent.

> Example 1:
>> Keeley's (Grade 6) Halloween costume included high heels, shorts, a tank top and a see-through vampire cape.

> Example 2:
>> Rory (Grade 5) was wearing a long red cape. He had it wrapped around his body and was walking around swinging his hips. He stopped and 'flashed' me.

> Example 3:
>> Two Grade 6 girls (Alma and Gia) performed a 'mop show' for the staff. They danced around the gym equipment room with two mops and sang, "Sexy lady" (a staff member said the song was from a TV commercial).

In these examples, the sexualisation of children is implied. Here, the children were

dressed in age-inappropriate clothing, their body language was sexually suggestive, and

they were knowledgeable about aspects of sexuality. However, it is not clear who or

what influenced the children's behaviour.

> Example 4:
>> Two girls, Polly (Grade 2) and Patricia (Grade 3), had their nails professionally done.

> Example 5:
>> During snack time, Alana (Grade 2) was observed pretending that her milk was beer.

In the fourth and fifth examples, common adult practices were exhibited in seven- and

eight-year-old girls. As children often pretend play things that they have seen by the

significant people in their lives (Bandura, 1977; Piaget, 1952) this might be something

the child had witnessed at home (e.g. parents drinking alcohol) or at the Centre (e.g. an

adult or another child had her nails manicured professionally). With the example

involving the nails, this might also be something that children can do with adult family

members; that is, going to a spa or salon. It is important to note that this activity may

actually be dangerous to young children. The chemicals contained in nail polish and nail polish remover are extremely toxic (e.g. formaldehyde used in nail hardener is a known carcinogen) (Safe Cosmetics, 2011).

Appearance was a concept that was used to ascertain sociocultural influence, such as from parents, ECEs, peers, and the media. For instance, a girl in Grade 6 (Alma) expressed concern about gaining weight over the Thanksgiving weekend. She told a staff member that she had two dinners to attend and was concerned about putting on weight as a result. Moreover, during an art activity where children drew a self-portrait, a staff member said that for Liadan (Grade 1), it was very important for her to have the lines of her clothes just right and for the lines in her clothes to be drawn a certain way. Finally, during an art activity, two Grade 6 girls (Maureen and Kerry) created a fashion magazine with a touch and feel feature of the magazine (with a female character wearing a sparkly dress on the front), and a 'Guess who's wearing what' game (five dresses were drawn, each with a number from 1 to 5). The object of the game was to guess which dress belonged to which celebrity: Lady Gaga, Katie Parry, Leah Michelle, or Kelly Clarkson, which suggested that fashion and clothing were important to girls and they took note of what celebrities were doing and wearing.

Socialization was also apparent in children's clothes: They wore clothes with slogans, celebrities' names, and brand names. For instance, the slogan on Gia's (Grade 6) shirt said, "You know it's all about me," while several of the boys and one girl wore jerseys (i.e. hockey, football, and soccer) with player's names on the back (e.g. Sydney Crosby Pittsburgh Penguins jersey). This type of clothing behaviour in essence speaks for the wearer: The way that a person dresses himself or herself can non-verbally communicate

information about identity, including how he or she feels about self and body (Eicher, Evenson, & Lutz, 2000). For example, Liadan (Grade 1) wore a Chicago Black Hawks hockey jersey that was white and pink with sparkles. Here, the child appeared to be communicating that she enjoyed hockey, but did so in a way that communicated that she was also still feminine. In another example, Maura (Grade 3) was wearing fake glasses with tape in the middle (between the eyes). When asked why she had the tape, she pointed to her t-shirt. It had a picture of a cookie wearing glasses with a white bridge across the nose. The t-shirt also said, "One smart cookie." Here, the child appeared to be making a reference to her self-concept, which included seeing herself as an intelligent person. In a final example, Gia (Grade 6) wore a shirt that said, "Freedom to be a Juicy Girl" (Juicy Girl is a clothing brand). However, this shirt demonstrates a conflicting message: Freedom with branding.

Sociocultural influence was also noted in gender stereotypical clothing for the boys and girls in this research project. This involved differences in clothing type and colour and in pattern design. For instance, the Centre held a Pyjama Day for the children, where they could wear their pyjamas all day. Some examples of the girls' pyjamas included a flannel Mickey Mouse set with hearts, a purple t-shirt and pants with penguins and ruffles on the hems, and satin pants with bears and clouds. For the boys, pyjamas included a blue sports set, a blue and grey sports set, and a black top with camouflage pants. Overall, most of the girls' pyjamas had animals, snowflakes, and flowers on them, while the boys' pyjamas had sports, toys or camouflage. As well, the girls' colours were mostly pink, purple, or other light colours, while the boys' were dark colours (blue, green, black, red).

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As for clothing type, on a regular basis, the boys and the girls wore clothing that appeared comfortable and functional. This included jeans, t-shirts, and sweatshirts. However, on several occasions, including a Halloween party and Christmas concert, the children wore clothing that was more traditional or dressy. For example, the children at the Centre were participants in their school Christmas concert. During one observation, most of the girls arrived at the Centre in dress clothes, while many of the boys wore a dress shirt with jeans. Several of the girls' dresses were quite elaborate and many wore necklaces, headbands, and dress shoes. Some of the girls also wore sparkly lip gloss or lipstick. A boy in Grade 4 and a boy in Grade 6 were wearing ties, but overall the boys seemed underdressed in comparison to the girls. As for Halloween, the boys and girls also had quite different costumes. The boys' costumes included the Grim Reaper, a prisoner, a horse, Superman, a skeleton, Darth Vader, a football player, Indiana Jones, ninjas, Kung Fu, a punk, and a Storm Trooper. Thus, the boys' costumes implied movement and activity, aggression and violence, anti-social activity, and power. On the other hand, the girls' costumes included Minnie Mouse, Hannah Montana, Barbie, Katy Perry, a pyjama girl, a witch, a pirate, and a vampire. The girls' costumes implied performing, celebrity, anti-social activity, power, and violence. Very few of the children wore gender-neutral costumes (e.g. one child was a "messed up" pumpkin and another was a blueberry), and four of the children wore costumes traditionally for the other sex (e.g. Grade 3 girl - Mad Hatter; Grade 5 boy - skeleton witch; two Grade 6 boys – the "British Sisters").

Further evidence of socialization was observed during physical activity and snack times. Throughout my observations, the staff regularly became physically active with the

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children, participating in organized games with them (e.g. ribbon tag) or in free time activities (e.g. skipping rope, hula hoops). As well, when children would arrive at the Centre and find their peers engaging in physical activities during free time, they would often join in the activity. In fact, the majority of free time physical activities were conducted in pairs or small groups, regardless of whether the activity was basketball or hula hoops. Peers and adults also appeared to be influential on children's food behaviour and food preferences.

> Example 1:
> A restaurant menu was created by three girls in Grade 2. The restaurant was called the 'Awesome Triplets Restaurant.' Inside the menu, the food choices were: Spaghetti, pizza, hotdogs, hamburgers, pasta, chicken, cake, pie, brownies, ice cream, chocolate pizza, candy, water, martinis, milk, and juice.

> Example 2:
> During Salad Bar snack, several children pointed at specific pieces of bread they wanted. However, Maura, as snack helper, picked different pieces for them. They looked at her with disappointed looks on their faces.

> Example 3:
> During afternoon snack, Catrina (Grade 3) put a piece of cucumber on the edge of her cup (similar to a garnish). Two girls in Grade 2 had done this in the past.

While peers were clearly influential on children's food behaviours in the last two examples, adult influence was observed. Specifically, food preparation, role play, and artistic representation imply that adults had provided food-related opportunities for the children. These opportunities may have included involving children in food preparation at home or at the Centre, taking children to restaurants, and making certain foods available to children.

Restricting Behaviour/Lack of Control

The second concept in this theme involves restricted behaviour and a loss of control. The topics of eating, activity, and body image were apparent here.

The control of children's food and eating behaviour arose in this theme. While the Centre provided choice (and therefore control) during snack times, such as whether or not to eat, during school in-services parents sent a bag lunch for their children. The items that were included in the lunches were documented. Overall, the majority of the lunches contained fruit, vegetables, sandwiches, and a drink. However, during one observation, some of the lunch items appeared to have excess sugar or salt, and additives and preservatives.

Example 1:
> For lunch, Lochlan (Grade 3) had Lunchables with processed meat, cheese, crackers and a Kit Kat bar. Terrence (Grade 3) had a pizza pop, Keelin (Grade 3) had blue fish crackers, Zeke (Grade 1) had Beefaroni, and four children had sports drinks (e.g. Powerade and Gatorade).

As this was an in-service day, these items might have been considered treats. However, what needs to be considered is how much, if any, control children had over what was included in their bag lunches. Research has suggested that children have control over how much and whether they or not they eat (Pimento & Kernested, 2010), but it appears that there are attempts at control by the adults in these children's lives.

Example 1:
> I observed a parent getting her child from the Centre and I heard her comment that her older son had a "limited repertoire" of what he would eat, so she had to include high fibre and low fat items, otherwise he would become a "porky boy." During another observation, this same parent had made her daughter (Grade 3) a second waffle for breakfast because the child had put too much syrup on the first one.

Example 2:
> Keeley (Grade 6) said her mom always told her to put as much food on her plate as she was going to eat. Then she said, "Actually, a bit less" than she was going to eat.

Within the first example, there was an obvious concern about obesity with the control of the boy's weight, and in the second example, the obesity concern was implied in asking

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the child to eat less than she actually wanted to eat. However, there may some age-related differences in obesity concerns. A separate example illustrates this: A Grade 4 boy was observed talking about being a fat baby, although he had previously expressed concerns about currently being overweight. As the children in the first two examples were older school age children, it may be that being overweight as an infant or a very young child was the only time where 'fat was ok.'

> Example 3:
> Mairead (Grade 4) said she did not like cheese, including cheese strings. She said that her mom tried to hide cheese in her sandwiches.

> Example 4:
> During a Playdoh learning activity, almost all of the children indicated that they had been told not to play with their food. They said that they made people, mountains and volcanoes out of mashed potatoes (and the volcano had gravy). They also described smearing food in their hair and on their faces. The children were asked why they were told not play with their food. Their answers included: playing with their food was dirty and it got everything dirty, there were germs, and other people did not want to get dirty.

In the third example, the parent's concern for nutrient intake was implied, as evidenced by the mother's deception. In the last example, the children used the food items and possibly utensils in a creative, constructive way, but not in the way the adults wanted them too. There appeared to be two things occurring here: (1) Sociocultural expectations around food and how it should be used, and (2) restrictions around food, even when it involved play food.

The control of children's food and eating habits appeared as way to regulate behaviour, not only for 'what to do' around food and eating behaviour, but also 'what *not* to do.' However, it is not only children's behaviour that is being controlled but other adults' as well. Policing at the Centre occurred between adults in front of the children, which might influence children's eating preferences and behaviours.

Example 1:
    A staff brought an extra-large coffee to the Centre. Another staff commented, "Do you know how many calories are in that?"

Example 2:
    During lunch (which was brought from home by each child), a staff member said to the children, "...makin' sure you're eating all the good healthy stuff first. Eat your chips later."

Example 3:
    During snack, a staff member asked the children if they were finished eating. The children said "no," and the staff replied, "Holy, you guys are slow."

While these comments might have been meant to promote health, each of these three examples probably had some impact on children's ideas and behaviour. With the first example, the use of the phrasing "Do you know how many" appeared to be scolding the purchaser of the coffee, implying that if the individual knew the caloric content of the sugared coffee, then that person would not be drinking it. Thus, there was an expectation that there should be a low consumption of calories, as higher intakes of calories might risk increases in weight; essentially 'fat is bad.' In the second example, using the phrase "good healthy stuff" implied that there was a contrast between healthy and unhealthy food (i.e. potato chips). However, the speaker did not clarify what *was* healthy; therefore, the staff member left this decision to the children. This may be problematic for children who do not know how to interpret food labels (e.g. Sunny D drink has vitamin C, but is extremely high in sugar) or who have a lack of understanding of 'healthy' versus 'unhealthy' food. For example, Terrence (Grade 3) said, "I didn't have any junk in my lunch today," but he had a pizza pop, an item which is high in salt and fat. As well, by giving the children instructions as to which foods to eat first, it implies that certain foods have higher value than others: In order to get to the delicious potato chips, you need to struggle through an apple. Thus, the preference for restricted food increases, while the

value of the nutritious food decreases (Nicklas et al., 2001). Finally, while the last comment might have been meant to be humorous (typically the children at the Centre were allowed to take their time and eat), the use of the word "slow" implied that the children should be eating their meals as a certain speed; in fact, eating much faster. Again, this suggested that there was an expectation for how children should eat, which did not leave room for individual eating habits.

It is clear that at very young ages, children understand that there are certain expectations around physical appearance. They understand that it is important to look a certain way, specifically to be attractive and thin, and if they do so, they will be accepted and considered 'normal.' However, the power of these sociocultural expectations may lead children to monitor and influence the appearance of others. In particular, children may 'police' differences in physical appearance, suggesting that even school age children enforce social or cultural standards of beauty. Specific examples of policing are as follows:

Example 1:
A child in the girl's change room was overheard saying, "I dare you to wear that outside."

Example 2:
A Grade 6 boy commented to Gia (girl, Grade 6) about kissing a boy with "hideous glasses."

In these examples, the words "dare" and "hideous" expressed a lack of acceptance with appearance, especially that which did not conform to sociocultural expectations.

Example 3:
Several boys in Grade 4 were calling each other "chubby."

Example 4:
A girl in Grade 2 and a girl in Grade 3 were teasing a staff member about having a "big butt."

In the third and fourth examples, by using the words "big" and "chubby," it establishes that there is an expectation or a standard for size, and the implication is that these individuals are not achieving it.

Example 5:
Bridget (Grade 6) expressed that she was bothered by something on a staff member's face: "Right here. You have this dot and it's bugging me."

With this example, it appeared that even small differences or anomalies in a person's physical appearance could be seen as imperfections, as evidenced by the child's statement that the dot was "bugging" her. Thus, at the age of 12, the importance of physical beauty was understood by this child. Indeed, there is a 'right' and a 'wrong' with physical appearance, and judging by five these examples, the speakers felt the other's appearance was 'wrong.'

During my observations, behavioural policing occurred most often via appearance-related teasing (e.g. calling a tall person 'stretch' or a very thin person 'skinny-minnie'), and it occurred between children, between children and adults, and between adults. While children and adults may regulate one another's personal appearance through teasing, there are often additional consequences for not adhering to sociocultural expectations. For instance, Jonathan (Grade 4) said that children were excluded at recess for the way that they were dressed (i.e. for not wearing the right' clothes). As well, a staff member described an incident of bullying at recess, where one boy in Grade 4 called Aidan (Grade 4) "chubby." Indeed, although some research suggests that peers give more body image feedback to girls (McCabe & Ricciardelli, 2001b) boys clearly exhibit these behaviours as well.

Another consequence of appearance-related teasing may be acceptance of the behaviour. For example, Gia (Grade 6) spoke about her extended family coming for Thanksgiving and for Grandparents Day at the school. Gia said her Grandpa was going to make fun of her. The Director inquired about what and the child said it was just his 'thing' to do. It appeared that this child had accepted her grandfather's teasing as just being a part of who he was.

Sociocultural expectations may be transmitted to children when families, child care staff, and peers make informal comments about eating, activity and body image.

> Example 1:
> During an informal conversation, a parent mentioned that her younger daughter was "cursed" with the mother's body type, while the older child could eat anything she wanted. The mother said it was difficult with her own parents because they were "old school" and talked about certain foods as being fattening ("Don't eat that! You'll get fat!").

With this first example, using the word "cursed" implied not only that certain body types did not meet sociocultural expectations, but that the individual had a lack of control over their body shape and form. Essentially, it is like a lottery and only a lucky few could ever be bestowed with a socially acceptable body.

> Example 2:
> An adult made a comment to a boy in Grade 6 (Eoman) about his new jacket. The adult said it was a good look for him...all he needed to do was lose a few pounds.

This example also supports the influence of sociocultural expectations. The compliment (the jacket looks good on the child) followed by appearance-related teasing (losing weight) suggested that the child did not actually look good at all: The only way he would actually look good was if he was thinner.

> Example 3:
> A staff member said to a child, "I don't like hot dogs either," while a second staff member talked about the breakfast they would prepare on the weekend.

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This example involves support of the child's food preferences. Here, the child's food preferences were reinforced by the fact that the adults liked or disliked the same food as the child.

Example 4:
A staff member was sitting on the ground outside on the playground. She said, "My butt is probably white from chalk." Colleen (Grade 4) then said the same thing and helped the staff to see if she had all the chalk off her pants.

Here, appearance becomes the focus for the child, as evidenced by the imitation of the adult's concern for their own appearance. Overall, in looking at these examples more closely, we can see that sociocultural expectations were expressed and certain behaviours were supported.

For some children, sociocultural influences may lead to negative self-perceptions. This was apparent in some children's dissatisfaction with their own appearance and with other's appearance.

Example 1:
During an informal conversation with a parent, the parent said that her son (Grade 4) was concerned about his weight. He had mentioned being concerned that he weighed too much and was bigger than a friend (who was also in Grade 4), but who was taller and leaner. He asked his mother why he was not more like his friend, and said that he needed to do more on the treadmill.

In this example, the concern with the boy weighing 'too much' implied that there were expectations or standards for weight, and by being overweight, the child did not meet these standards and thus was not 'normal.'

Example 2:
During an art activity, Jarlath (Grade 3) seemed very upset that Zeke (Grade 1) did not like her self-portrait because her head was too big.

This example highlights the importance of other's opinions about one's personal appearance, even their artistically represented appearance. Although the child was told

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that it was important that she liked her own picture, the negative reaction from the other

child seemed to upset her, regardless of what she thought of her work.

Example 3:
> Kerry (Grade 6) said she was going to be a Barbie next Halloween. She
> mentioned Barbie dolls and said her grandma had a really old Barbie. She then
> asked, "Do Barbies get fatter over time?"

Here, the comment about Barbie gaining weight might have been a joke or a reflection on

the changing shape of Barbie over the years (e.g. more curvy 50 years ago), but it should

be noted that the child chose to use the word "fatter" and not 'taller' or 'bigger' to

describe the doll's changing shape. This implied that the change in the doll's appearance

was negative, that 'fat is bad,' and being an overweight person (or a Barbie doll) was not

acceptable.

Example 5:
> Liadan (Grade 1) described how her father was "really strong <u>but</u> has a big belly"
> that hung over his pants and he could not fasten his button.

By the child using the word "but" to connect the ideas of strength and overweight in the

description of her father implied a fault: It was okay to be strong but it was not okay to be

overweight.

Behaviours showing experimenting with identity were also observed at the Centre.

Example 1:
> Bran (Grade 6) dyed his hair blonde and Jonathan (Grade 4) dyed his bangs
> purple, while Gia (Grade 6) had highlights in her hair and Maeve (Grade 5) had a
> purple streak in her hair.

Example 2:
> During the course of the observations, Silly Bands became popular at the Centre.
> These were plastic bracelets that came in different shapes (e.g. lion, Hello Kitty
> character, rocket ship). Over several weeks, more and more children had them.
> Both boys and girls worn them up the arm, beginning at the wrist, and were often
> worn on both arms. Multiple Silly Bands were also worn at one time (e.g.
> Sterling appeared to have around 30 or more).

Example 3:
> Bran (Grade 6) walked into the small gym with his hands on his head (his hair was sticking up). He appeared embarrassed.

While these behaviours did not clearly point to body image concerns in the children who exhibited them, it did indicate a fad, which could have a connection to self-esteem.

It is important to note that the Early Childhood Education field predominately attracts women to care for children. Indeed, Prentice (2004) speaks of "women's distinct relationship to child care" (p. 205). As such, children using child care arrangements are more likely to be exposed to the ideas and behaviour of women. This reflects a gender imbalance, where children, especially girls, learn what it is like to be an adult woman. Literature shows that mothers have a significant influence on their children (Bandura, 1977; McCabe et al., 2007). Girls' body image is often shaped by their family of origin, especially their mothers' attitudes and behaviours (Benedikt, Wertheim, & Love, 1998). This influence can be extended to Early Childhood Educators, as children attending school age child care are exposed to female ECEs on a daily basis, often over a period of years. Specific to this research, during my morning observations, I noticed that there were often social conversations between staff members or between the children and staff. Most of these conversations took place in groups with children (especially groups of girls) and staff members sitting at large tables in the small gym. Staff members often asked the children about their personal lives, likes and dislikes, trips, and school. It was during these conversations that staff members often spoke about their educations (e.g. the classes they were taking at university) and about their personal lives (e.g. watching *Glee*, going out with friends). Therefore, if children were participants or were nearby these conversations, they could be learning about female 'adult' life (e.g. going out and

drinking) or about sociocultural influences (as expressed by singers like Lady Gaga or on shows like *Glee*), passing on cultural ideas and attitudes.

Gender differences were also apparent throughout my observations. Patterns were noted with regards to differences in physical activity: Over four months observing, of those children participating in free play physical activities (in at least 60% of the documented observations), **boys** were the highest attendees. There were also differences in the overall number of times the boys and the girls participated in free time physical activities (466 times for boys, 215 times for girls).

Sex differences were also noted in the type of physical activities selected. Boys' favourite free time physical activities, in order, were: (1) Soccer, (2) scooters, (3) ringette and spongee polo, (4) tennis, and (5) basketball (see Table 1). Girls' favourite free time physical activities, in order, were: (1) Scooters, (2) dancing, (3) bouncers and ringette, (4) hula hoops, and (5) soccer (See Table 2).

Table 1

Frequency of Boys' Participation by Activity Type (n=30)
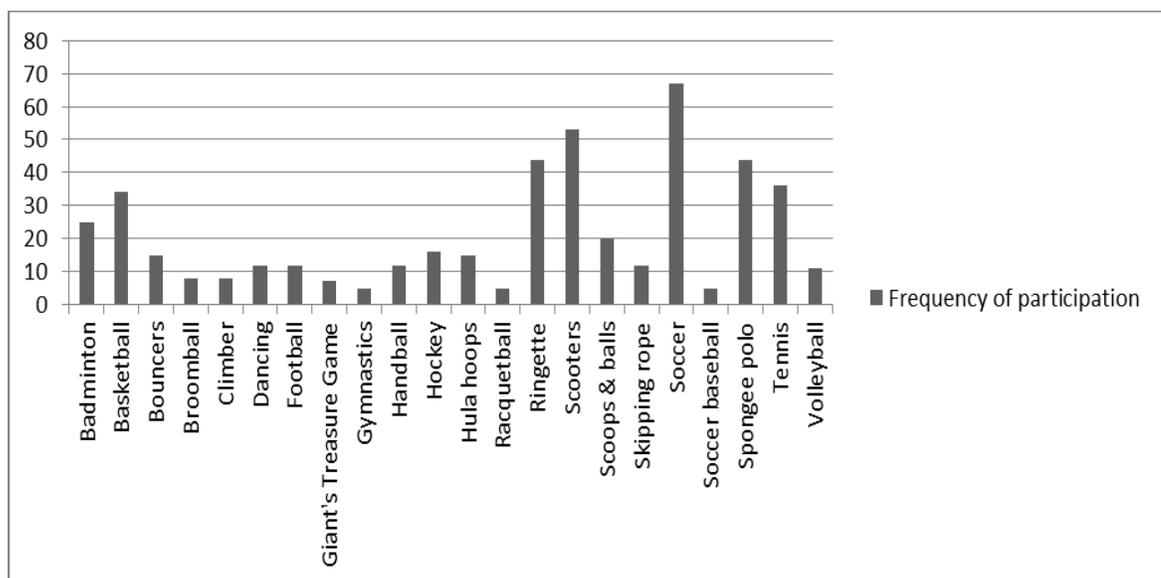
Table 2

Frequency of Girls' Participation by Activity Type (n=32)
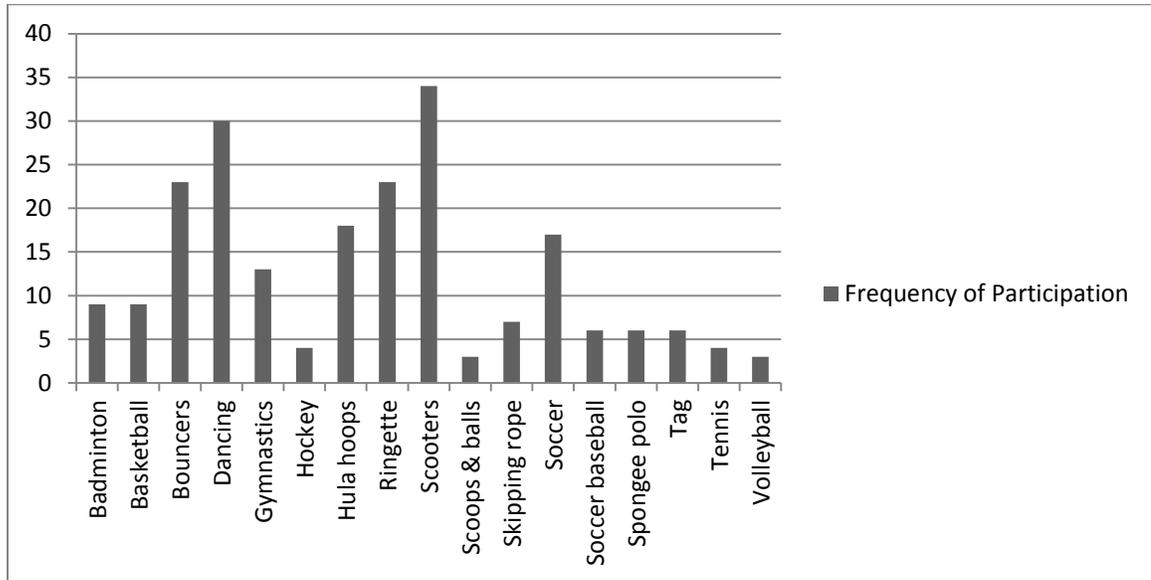
   In an informal conversation, a staff member said that for patterns in sport behaviours, the boys typically played soccer and other similar games, while the girls danced, or played with hula hoops or scooters. The staff member said this was the case both indoors and outdoors. She indicated that more boys played soccer than the girls, but they were also very skilled at the sport.

   While sex differences were noted in specific activities overall, there were also differences in the number of activities selected (22 activities for boys, 17 activities for girls). As there were more activities selected by boys, slight gender differences were noted in activity choices, such that boys' activities included more hitting, kicking, and throwing of objects.

   These differences were also apparent in the children's discussions of their physical activity preferences, thus lending support to my documentation of the children's behaviour. Within these discussions, it was clear that the boys' activity preferences had

more focus on specific skills, such as getting a puck into a goal or a ball into a basket. There were also more activities that involve rules (e.g. penalty kicks in soccer, taking shots from the foul line in basketball). Similarly to the information in Tables 1 and 2, these activities involve more hitting, kicking, and throwing of objects than the girls' activity preferences. Also within this discussion, many of the girls' activity preferences involved the use of open-ended materials (e.g. hoops, skipping rope), which might be used in more than one way; in fact, many of the activities were open-ended (e.g. music and dance club) where they could be performed in different ways. Finally, the boys' activities had more emphasis on competition (i.e. keeping score, winner/loser).

It is interesting to note that gender differences in physical activity were noted within the Centre but also in the community. Specifically, I took note of the extracurricular activities in which the children were involved (as indicated by the children), either through the school or in the community, or those done with their families (see Table 3).

Table 3

Children's Extracurricular Activities (n=62)
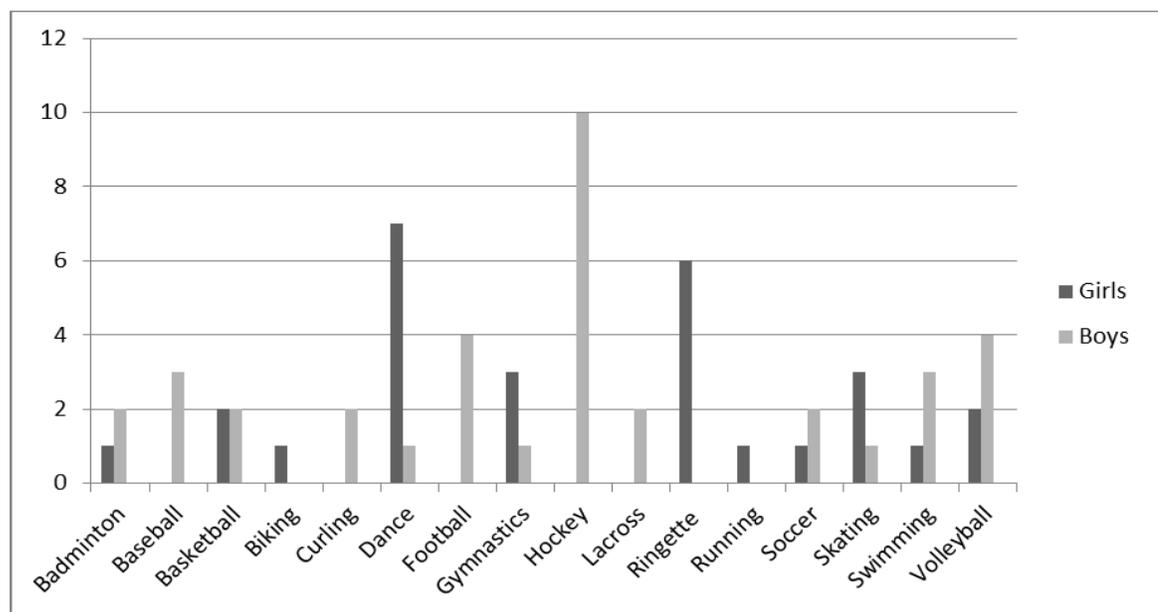
The numbers of girls compared to boys who participated in extracurricular activities was relatively the same (17 girls, 18 boys); however, there were still some gender differences in extracurricular activity participation. For example, hockey was a favourite sport among the boys, while dance and ringette were favourites for the girls.

Gender differences were not only apparent in choices of activities and types of play, but also in display of skills.

Example 1:
Outside on the playground, most of the boys were playing with other boys. Some were playing football while others were playing soccer or baseball. Most of the girls were on the play structure, but some were talking to and helping staff members. One girl was bouncing a basketball while talking to another girl.

Example 2:
During one afternoon observation, the children were involved in a group dodge ball game in the large gym. Overall, the boys had more force behind their throws than the girls. The boys also seemed to be able to throw farther and lower to the ground (more like a baseball pitcher). In another Dodgeball game at a later date, several of the boys were really whipping the balls hard and at one another. Several of the younger children, especially girls, were called "out" first.

Example 3:
As part of the child care program, different clubs were run in the afternoons. The children made a list of the different kinds of clubs that could be offered, but in the end, the staff members selected three clubs the children could be members: Survivor, Sports illustrated, Let's Get Moving. Each of the clubs offered different activities and games. For example, Survivor had a survival course activity and using maps and a compass, Sports illustrated had Flag Football and Soccer Baseball, and Let's Get Moving had Musical Chairs and a hip hop workout dance. In the Survivor club, participants were 12 boys and 2 girls; Sports Illustrated, 12 boys; and Let's Get Moving, 19 girls, 1 boy.

While some of the examples suggest biological differences, such that boys have more muscle mass than girls and thus may throw a ball faster (Berk, 2012), the reason behind different types of play and differential selection of activities is unclear. In thinking about selection of activities, boys and girls may have been directed into these activities early in life and later choose them from habit or because they already have the skills to

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participate. Alternatively, there may have been a strong peer influence on selection of these activities, such as children at this age tend to spend time with same-sex peers and often follow their friends' interests rather than their own.

Recognition of gender differences was common for the children in this study. Several of the children spoke of an acceptance of gender differences and that there were gender differences in activity choices and skills. For instance, I brought a set of children's cookbooks to the Centre, one stating that it was intended for girls and the other for boys. I showed the books to three older boys and asked why they thought there were different books for boys and girls. Angus (boy, Grade 5) said "Boys like more meat," explaining why the boys' book had more meat recipes. I then asked, "Why are there more recipes for girls?" and the child said, "Girls like to cook more than boys." I showed the books to a group of girls next and asked the same questions. Keeley (Grade 6) said that there might be a difference because there were more desserts for girls. Colleen (Grade 4) also said there was a difference because, "That's what makes the world go round," and she drew a circle in the air with her index finger. While children may acknowledge gender differences, the implication here was that behaviour restrictions and a lack of control might be tolerated because that was 'the way things worked,' suggesting that there would be no challenging the idea that there were differences in cooking between boys and girls.

Restrictions in behaviour and a lack of control were evident in children's stereotypical ideas about gender. Once, a staff member mimicked lifting weights. Tara (Grade 2) said, "That's what boys do, cuz they're sweaty," suggesting that lifting weights was a male activity and sweating was disagreeable. Another time, Maureen (Grade 6) said that aggressive sports like soccer were more for the boys. As well, Gia (Grade 6) said that

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Bran (Grade 6) ran "like a girl" by kicking his heels up behind his bum. I asked, "How do boys run?" and she demonstrated by running with her heels lower to the ground. I said that since I did that, did that mean I ran like a boy? She said, "No," because that was how she ran too. With the phrase "like a girl" comes the implication that this behaviour is less accepted than if one ran like a boy. Essentially, the suggestion was that the boys' behaviour had higher value, and thus it was acceptable if Gia imitated this behaviour, but not vice versa: It was all right for girls to 'try on' behaviours associated with a masculine role, but not for boys to 'try on' behaviours associated with a feminine role.

Example 1:
Catrina (Grade 3) said, "Look at the boys playing with the jump ropes." She said that they do not know how to do it.

Example 2:
Declan (Grade 1) said, "I don't like girls when they sing. They're so awful..."

Example 3:
A group of children were asked about their favourite activities in the large gym, specifically activities they would like to request for future program planning. A Grade 6 girl (Maureen) requested dancing and gymnastics. However, several boys said 'no' or groaned when she said this.

The lack of acceptance of behaviours from the other sex is evident in the negative phrasing in each of the examples. In the first example, stating "Look at the boys" brought attention to their perceived lack of skills in using the jump ropes. Conversely, this implies that girls *do* know how to use jump ropes, and thus have achieved a certain skill level. Similar claims can be made for the second example, where the child made a blanket statement which suggested all girls lack in singing talent, while boys excel. With the third example, by stating "no" or groaning when dance and gymnastics were suggested as activities implied that these were perceived as 'girls activities,' and thus would not have many male participants. Interestingly, on several occasions, many of the

boys did participate in dancing activities (especially if they were large group activities) and in gymnastics activities, but according to one staff member, boys and girls would only play sports together depending on the activity.

Example 1:
In the afternoon on the playground, a group of boys and girls were seen playing on the climber together. The Director said that the children were starting to realize that it was okay to do things together.

However, the concern may be not only in participating in stereotypically female activities but also in the way that girls and boys play.

Example 1:
A staff member said there had always been sex differences in the use of the hula hoops. She said, in the past, the boys tried to hook them on the basketball net or roll them and try to move through them.

Therefore, perhaps the negative reaction to the activity suggestion above may be due to a concern that the boys think they have to play like the girls during more structured activities.

Within this theme, one concept of concern that arose was restricting children's access to physical activities. In particular, within the category of 'Keeping children out of the game,' boys were gatekeepers of girls' physical activity, with the result being that they were forcing girls to the sidelines and restricting the amount and type of girls' physical activity. On more than one occasion, girls indicated that they did not want to play the sport that was being offered in the large gym, but instead wanted to watch the game. As well, Jarlath (girl, Grade 3) mentioned that when the boys played ringette, they had to play in goal. In another observation, boys-only soccer was taking place in the large gym. A staff soon came into the small gym and announced, "The boys are requesting the girls to play." Girls' activity may also be restricted by the manner in which boys play. For

instance, Alison (Grade 1) mentioned that she was not going to play ringette anymore because it was "too rough." She said there were only four girls on her team and the boys played rougher than the girls. She said it was "more calm" when just the girls played. As well, a Grade 6 girl (Maureen) was asked why she did not enjoy going into the large gym during free time. She mentioned that she wanted to do something less aggressive that was more for the girls. She thought soccer, for example, was more for the boys, so the girls did not want to play. In addition, Patricia (Grade 3) was observed leaving a game of spongee polo before it had ended. She was asked why she left the game, and she said that the boys played too roughly and that she was not getting much chance to play. A similar situation had also occurred with this child during a ringette game. Unfortunately, Patricia had previously indicated that she really enjoyed ringette, so a lack of playing time might have resulted in giving up the activity. Within these examples lies an indication that girls and boys engage in these same activities quite differently, as evidenced by the words "rough" and "aggressive" versus "calm" and "less aggressive." More importantly, the children recognized that these sports were played differently depending on the participants.

The second part of this theme of children restricting the behaviour of other children should be explored for long term consequences, especially if these restrictions have an impact on health.

Example 1:
    During a game of tag on the playground, some of the boys tagged the girls so that they were 'out,' but it was not observed that the girls tagged the boys.

Example 2:
    A girl in Grade 3 was observed participating in ringette (a game similar to hockey, but played with a plastic ring instead of a puck) during free time. At one

point, she wanted to play in goal, but appeared very hesitant to ask permission from the Grade 1 boy who was already in net.

Example 3:
During one observation of children playing ringette in the large gym, the girls appeared to be pushed out of the game by the boys. They did not get the ring and the ring was not passed to them by other players. Liadan (girl, Grade 1) stayed on the sidelines often and two Grade 6 girls left the game.

Another example of this was demonstrated by Patricia, a girl also in Grade 3. At the beginning of my observations at the Centre, this child was enthusiastic about participating in free time physical activities, which typically occurred with large groups of boys. She played hockey with gusto, chasing after pucks, attempting to score goals, and going into face-offs with older boys. She also played for long periods of time, often staying until it was time for the group to move onto the next activity. However, as the months went on, I noticed several incidents where the boys rarely passed the puck to her during the game, or were quite aggressive, and she left before the activities were finished. It is important to note that the girls were not observed approaching staff members or other children about the activity restrictions; thus, some boy-dominated games appeared to be accepted or tolerated by the girls.

Perhaps as a result of the gatekeeping, the older girls gave direction to or assisted the younger girls during competitive games. This was also seen between staff and the younger children. Certain allowances were made for the younger children during games, especially for girls, such as being allowed to move closer to a target. While this may be seen as unfair to the older or more skilled children, it may actually encourage younger children and girls to partake in and remain in activities when they might not otherwise.

The competitive nature of play may be one reason why the girls were forced to the sidelines. For example, Eoman (Grade 6) appeared to be a sports superstar, where he

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consistently played sports and played them well. However, he often seemed to want to win by himself (i.e. score goals without team members' assistance). Therefore, it was difficult to tell if boys rarely passed the ball/puck/ring to the girls because they were girls or because the boys were competitive and wanted to win.

These restrictions in activity did not go unnoticed by the staff members. In fact, a staff member indicated that the girls were pushed out of the games fairly often; she said, "The boys take over" (although during my observations I did not hear the girls complain about it). Only one instance was documented where a staff member directly intervened during an instance of pushing the girls to the sidelines.

Example 1:
The Assistant Director said to Tyrone (boy, Grade 1), "You need to give her some confidence and be a nice supportive player."

However, at two large group meetings with the children, staff attempted to address the gatekeeping behaviour. One meeting focused on how winning was less important than having fun and the values that were learned, and the other meeting explored children's ideas of what was keeping them out of the gym and what would bring them in for physical activities. A staff member also said that the boys taking over physical activities was the reason why the Centre often provided girls-only sports, although I observed just one girls-only game during my time at the Centre. Unfortunately, the child care staff did not always have the power to intervene in girls' restricted activity. For example, Keeley (Grade 6) indicated that at school the girls did not have much opportunity to play extracurricular sports during the lunch hour. During a later observation, Keeley said that the girls in her class at lunch recess wanted to play soccer, but the boys wanted to play hockey, and since there were more boys than girls, the teacher let them play hockey.

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It is important to note that while these observable restrictions in girls' activity were addressed by child care staff, one aspect of gatekeeping may be unconscious. In particular, the child care staff's selection of activities during free time and the preference by school staff given to boys' extracurricular activities may indirectly lead to gatekeeping of girls' activity. Over four months of observing, soccer and basketball were the two activities that were most frequently offered during free time (see Table 4). Boys were more likely to participate in free time physical activity if soccer, scooters, ringette, spongee polo, tennis, or basketball were offered, while girls were more likely to participate in free time physical activity if scooters, dancing, bouncers, ringette, hula hoops, or soccer were available. If the total number of activities, which were the favourites of both boys and girls were added together, the boys' preferred activities were offered slightly more often by staff during free time than the girls' preferred activities (boys, 46; girls, 38 times, which was 17% more often boys' favourite activities). In addition, it appeared that there were more extra-curricular physical activities offered to the boys by the school. For instance, several older boys left the Centre early in the mornings to play hockey during September, badminton during October, and volleyball during November. There was no indication that the girls were doing anything similar until November, when several of the Grade 5 and 6 girls were observed playing morning extra-curricular volleyball. Indeed, the large gym had to be closed to the Centre early on some mornings to make room for these school activities, but typically it was boys that occupied the gym during this time.

To a lesser extent, older children and adults also restricted younger children's activity. There seemed to be different routes of narrowing children's access to physical activities.

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Direct restrictions in activity by age took place during extracurricular activities outside of the Centre.

Example 1:
Polly said she was involved in gymnastics. She said that she was the only Grade 2 person (everyone else was in Grade 3 and up). She also said that some of the activities were hard because she was small. She said that she did a trick on the trampoline where she had to jump and then jump onto a mat. She said the mat was up to her head (raises her hand to her head), so she did a headstand instead of a handstand because she was too little to reach the mat.

Table 4

Frequency of occurrence during free time by activity type
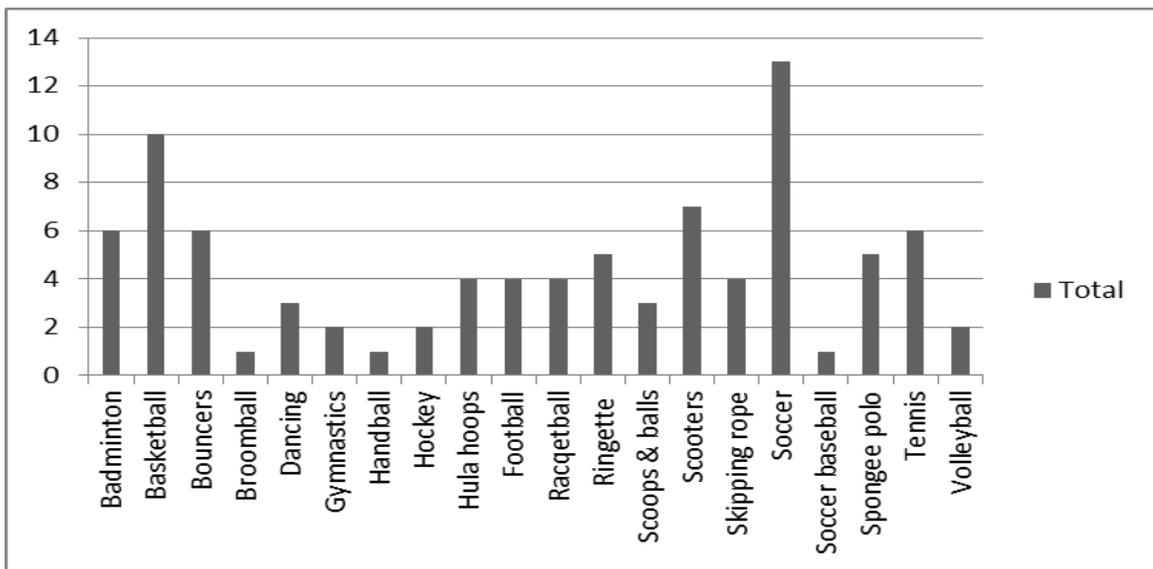
Clothing was another factor which restricted children's physical activity. For many of the children at the Centre, the type of running shoes that were worn did not allow for the laces to be tied. The Assistant Director said that the shoes were designed to just slide on and off. With other children, the fashion for shoes appeared to be that the laces were left untied. The concern here is not only children's safety but also limitations during activities. For example, on several occasions, children's shoes came off during physical activities, such as soccer and dancing. Other articles of clothing were also observed

restricting activity. For instance, Maura (Grade 3) said that she did not like wearing jeans because they did not allow her to do cartwheels. She said she preferred to wear tights or leggings. I noticed this child wore tights or leggings consistently throughout my observations. Clothing may also prohibit certain kinds of movement (i.e. running) or limit movement (i.e. cannot run as fast).

Language was also observed as potentially restricting children's behaviour, not just in appearance-related teasing but in general conversations. The term "guys" was used by some of the children (e.g. Jarlath - Grade 3: "Can you guys pass the green?") and often by staff members when addressing groups of children. For example, a staff member said, "You guys have been travelling and I'm not calling you on it." This type of exclusionary language could influence girls' participation in physical activity, especially if they do not identify as a guy. For example, boys were most often engaged in sports at the Centre (e.g. hockey, soccer), and during one particular observation, a staff member said to the children, "If you guys want to come outside with me and play soccer-baseball..." Most of the boys went outside to play the game, while five boys and 10 girls stayed inside to do an art project. The concern here is that if girls do not identify as one of the guys, they may assume the invitation for the activity does not include them and thus may choose more sedentary activities.

Sociocultural expectations, specifically around physical activities and organized sports, were demonstrated in children's behaviour. During my observations, several staff members spoke to the children about the value of physical activity, and how winning was less important than having fun and the values that were learned. However, several children directly and indirectly expressed the idea that winning and competition *were*

important. For instance, during an afternoon observation, a staff member announced that the children would be playing a game of fruit salad (non-competitive game) instead of silent circle (competitive game). Several children made an "Awww" sound, but then the staff stated that they would play silent circle after the game of fruit salad. The children cheered loudly. In another observation, Darren (Grade 5) said that he "always" loses silent circle. I suggested that he might win the next time (because everyone gets a turn to win), but he just shook his head. In another observation, one of the Grade 5 boys was overheard saying, "I'm the best at basketball. I'm so good." As well, during a game of spongee polo in the big gym, Sterling (boy, Grade 4) said to Declan (boy, Grade 1), "We can't let them score." Declan responded, "We still won."

Interestingly, several children exhibited competitive behaviours even during non-competitive activities. For instance, a group of boys were playing with the hula hoops in the large gym during free time. They were using more than one hoop at a time and were heard saying, "I need one more. I need one more." The boys then started timing themselves. Jonathan (Grade 4) said, "I got second because it hit my arm" and Lochlan (Grade 4) said, "…like three seconds ahead of me. I got like 10, like 12" when comparing his hula time to the other boys. After a few rounds, Jonathan (Grade 4) said, "I won!" While competitive behaviour was most often exhibited by the boys, the girls were not exempt from it. For example, when several children began competing to see how many hoops they could swing around their bodies, Catrina (girl, Grade 3) said to Brendan (boy, Grade 3), "I'd like to see you beat that."

It is important to note that although the Centre philosophy and goals reflected the idea of process over product and thus winning was not as important as playing the game, the

strength of the sociocultural notion of competition was apparent. For example, during an

afternoon observation, doubles tennis was announced as an activity in the big gym. After

the children were given an opportunity to learn the rules of the game and to rally the ball

back and forth between players, a staff member decided that there would be a tennis

tournament, where one pair of children would be the winners. In two other observations,

parents were seen reinforcing competitive behaviours in their children.

> Example 1:
> Patricia (Grade 3) was playing ringette in the large gym. Her father arrived to
> pick her up, but allowed her to keep playing. At one point, Patricia had the ring
> but it got away from her. She began to walk. Her father yelled, "Don't give up!"
> He also gave her directions (e.g. "Get in the open").

> Example 2:
> Stephen's (Grade 4) mother was watching him play tennis in the large gym. She
> said, "Nice" when he made a good play, and she told him that he should move his
> feet. She also caught her breath when there was match point.

With these examples, the parents' comments and behaviours imply a certain competitive

element. While neither parent spoke about winning, their behaviours, including offering

suggestions for strategy, implied that they wanted their children to be better players.

Overall, even when there were procedures in place to reduce competition in children's

play, it was still present in behaviour of children, staff, and parents. Thus, the pressure to

compete is often more powerful than notions of learning new skills and having fun.

One aspect of the notion of children restricting the behaviour of others was deemed

socially acceptable; specifically, competition and winning as important in physical

activity. Behaviours such as teasing and taunting were exhibited by the children at the

Centre; however, these behaviours were utilized in such a way as to throw the other team

off their game. Anecdotal evidence suggests this type of sports psychology appears to be

common in organized sports, both in child and adult activities. In addition, a few

children were observed exhibiting poor sportsmanship (e.g. being upset when they were called "out" of a game) and were seen attempting to manipulate the outcome of activities, which led to the assumption that these children had learned the mentality of 'winning is important.' In addition, for some of the more skilled players, the individual was observed to be more important than the team during physical activities, such that the star players would not always pass to teammates when asked, or would attempt to score goals without the support of their teams (i.e. breakaways).

Children feeling pressure to compete was linked closely with feeling pressure to succeed or to be perfect. While school age children are beginning to understand their own abilities in relation to that of their peers (Harter, 2003, 2006), and appear to use competition for self-assessment, there appeared to be an underlying idea of children feeling pressure to succeed and to be the best, and thus a lack of control.

> Example 1:
> During an art project (Christmas stockings), many of the children expressed frustration that their creation did not look a certain way. Several talked about how they were doing it the 'wrong' way. Other children also expressed frustration at not being able to sew with the string or use the hole punchers (Lochlan said, "I can't do it"). Some because visibly upset (e.g. Darren) that their art was not looking like the model/demo.

The examples in the previous paragraph involving Declan (Grade 1) and Darren (Grade 5) are also evidence of this. By Declan using the word "still" in "We still won" implies that product was more important that process; that regardless of how they played the game or if they had fun, winning was all that mattered. By using the word "always" suggests that Darren has never won the game and this reality was devastating. Furthermore, while the majority of the children at the Centre seemed accepting of themselves and their abilities, a few of them expressed a lack of confidence in their

abilities, especially when it came to physical activity (e.g. Catrina – Grade 3: "Don't throw to me. I suck at this game;" Angus – Grade 5: "It's too hard for me;" Keeley – Grade 6: "I can't play"). Fortunately, this was not a common occurrence, such that the children expressed sureness in their abilities more often than a lack of confidence.

It may be that some of the children recognized this pressure to succeed. During one formal group meeting, a staff member asked the children about things that made them feel stress, and the conversation became focused on the pressure children felt during organized sports. Several children indicated that they felt pressure from their parents and their coaches to participate, even when they did not want to, and some children indicated feeling pressure from the competitive nature of the activities.

In sum, this theme extended throughout all three of the major topics in the research. It also supported the first research goal, which was to *describe the challenges and issues associated with body image, eating, and activity for school age children*, the second goal, *explore the roles of the social and cultural environment of the Centre that influence school age children to enhance the development of healthy eating habits and behaviours, regular physical activity, and healthy body image*, as well as the third goal, which was to *develop an understanding of how social and cultural expectations for children at a centre have implications for child care practice*. Overall, this theme addressed the notions of socialization and restricted behaviour. Children's behaviour appeared to be controlled or directed by sociocultural factors (e.g. peers, parents, media), and they had a lack of control in their lives, which restricted their behaviour. Children's behaviour reflected these sociocultural influences, such that they adopted and/or encouraged assimilation to certain values or expectations, specifically in regards to physical appearance and

competition. Restricting children's access to physical activities was also prominent

within this theme: Boys were often gatekeepers of girls' physical activities.

Theme 3 - Puppets cutting their strings

For the third theme, the central idea was 'liberation.' While the second theme likened

children to puppets, in that their actions were controlled and directed by others, in this

third theme the children have 'cut their strings.' They were observed taking initiative,

taking control, and moving beyond stereotypes as related to body image, eating, and

activity. For instance, several of the children expressed ideas that contradicted

stereotypical expectations of physical appearance, including statements about size not

being equal to ability, acceptance of size and self, appearance being a source of pride, and

acceptance of diversity and individuality. In addition, while children often had limited

control in their lives (e.g. parents decide where to live and where children will go to

school), one area where they appeared to take control was around food and eating; in

particular, around creating food 'rules.' Furthermore, the notion of 'kids just want to be

kids' emerged here: Children would do almost anything to play, including playing with

children of the other sex, playing with children of a different age, and using materials in

ways that were not intended. One other important part of this theme was the fact that the

Centre staff supported children's 'liberation.' In particular, a sense of respect was

demonstrated for children's ideas, for their need to play, and for their burgeoning

independence and autonomy. Moreover, the staff encouraged the children to do the

same for one another. Therefore, this theme included the category 'Getting respect and

taking control.'

Getting Respect and Taking Control

At the Centre, children were provided with opportunities to be independent and to

make personal choices. As the lives of young children are often scripted by parents and

caregivers, this provided children with an element of control. One area where this was

demonstrated was around food and eating. In particular, children's creation of food rules

was relevant. Many of the children spoke about food rules, which involved restrictions or

limitations on what food was to be eaten, and how or when it was to be eaten.

> Example 1:
> During morning snack, some of the children picked out the raisins or chocolate
> chips from their trail mix. Some said they were saving the best for last. Others
> said, "Raisins are disgusting." The children said they picked out the items
> because it was their favourite or because they hated it and would not eat it.

> Example 2:
> Keeley (Grade 6) mentioned that she did not usually eat breakfast at her mom's
> because she usually ate at the Centre. She said as long as it was good, she would
> eat it, and it usually was.

> Example 3:
> Polly (Grade 2) mentioned how she loved Caesar dressing on lettuce, but not as
> dip for vegetables, and the only vegetable she liked to dip was carrots.

These rules were also exhibited through a sense of order in the way children ate their

food. For instance, Seamus (Grade 1) ate all of the fish crackers from his trail mix first

(this mix included chocolate chips, fish crackers, pretzels, Shreddies cereal, and raisins).

On several occasions, children removed the chocolate chips from trail mix, banana

chocolate chip muffins, pea butter balls (a dessert which uses pea butter), and Chocolate

Chip Dream Cake. They ate these items last. Furthermore, children were observed

making formations or shapes with fruit gummies, or sorting their gummies into similar

piles according to colour. This was likewise done with trail mix, where similar items

were grouped together. Another example involved several children picking red peppers

from their pasta salad. It should be noted that during other snack times, many of these children ate peppers when they were cut small and served with dip.

Food rules were exhibited by both boys and girls and a wide age range of the children. These rules point to early food preferences, but there was a lack of information as to the origin of these rules. Specifically, it was not clear if they were an imitated behaviour (e.g. a parent or sibling had the same food preferences) or if the issue was that these foods were unfamiliar. As well, while the children did not identify these behaviours as 'rules,' the behaviours did follow the definition of a rule, which is a "principle or regulation which governs conduct, action, procedure, arrangement" (Dictionary.com).

Respect was also an important idea within this theme. This included respect for self and for others. Specifically, children were given respect and were encouraged to do the same for others (e.g. raising money for local charities, serving muffins on Parent Appreciation day). These behaviours were consistent with the Centre's maintenance of children's rights and responsibilities, such as "*Children have the right to be treated with dignity, respect and fairness,*" and "*Children have the responsibility to treat others with dignity, respect…*" For example, during one group meeting, a staff member mentioned that it was International Tolerance day. The staff asked the children what they thought it meant, and then spoke about being accepting of people regardless of their shape, size, or ability. Other examples include the following:

Example 1:
A staff member talked about respecting the other 'patrons' when watching a video, just like at a movie theatre, and respecting their space.

Example 2:
During a game of tag with younger children, the girls did not want to be 'it,' so a boy in Grade 5 (as Staff Assistant) said one of the boys should tag the girls, and

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another child should tag the boys. A staff member said there should not be any gender divisions and said, "Everybody tag everybody."

Example 3:
Staff members encouraged self-reflection during daily snack routines (e.g. "Do your body, your brain a favour...make this about you and this moment"), and especially with regards reflecting on their body's messages. Reflection snack was a time for the children to taste and digest their food and to "listen to their bodies."

Notions of respect for the self and others were expressed by the children during learning activities and group meetings. For example, during one learning activity, the children were asked about the main message in the story, *Shapesville*, which is about a town filled with diverse characters of differing abilities. Some of the children's ideas included, "Good to be different," "No matter the size or shape you are a star," "Everyone is special," and "Just be you. Don't try to be someone else." When asked about the reasons that children teased one another about things they liked about themselves, the children responded with, "Because someone did it to them," "They feel hurt inside," "Blaming other people," "They feel bad," "They think it's funny," "Because they are jealous of that person," "Because they feel bad about themselves," "They feel bad and it makes them feel better when others feel bad," "Bully," and "Older siblings or parents makes them feel bad (takes power away from them)." Another example of 'respect for the self' involved the children creating bully-free zone posters during a group meeting. The children worked in pairs and developed their own bully-free zone slogans. Some of the poster slogans included, "Be confident," "Be yourself," and "Make others feel good about themselves." Finally, during a morning group meeting, the children learned about the Fountain of Peace. The Assistant Director spoke about a woman from Manitoba who wanted to build a peaceful world and said it should start with children. The Assistant Director also told the children that peace did not just have to happen on Remembrance

Day. The children were asked what peace meant to them. Gia (Grade 6) suggested that a peaceful world meant you could be yourself.

Respect for the self was also demonstrated during individual activities. For example, during a learning activity called, 'What I like about me,' I noticed that several of the children expressed pride in themselves and their accomplishments. For this activity, the children drew an outline of their body on large pieces of paper, followed by drawing the things they really liked about themselves (e.g. their hair, being funny, being good at soccer). A large group of children participated, although the group primarily consisted of girls. The children were asked about what they had drawn, and they said the following:

- Grainne (Grade 3) said she really liked her ears.
- Seamus (Grade 1) said he really liked his heart and tummy.
- Keeley (Grade 6) liked that she was a good dancer and liked her hair and her eyes.
- Liadan (Grade 1) said that she liked her hair because it was in a pony-tail.
- Caitlin (Grade 4) said that she really liked her nose.
- Jane and Maeve (female, Grade 5) had drawn themselves as Halloween characters and really liked themselves in character.
- Zeke (Grade 1) said he liked his spine.
- Sheila (Grade 4) mentioned that she was going to draw herself doing ballet, possibly wearing ballet slippers, because she really liked herself doing ballet.

In these examples, a respect for self appeared in the form of pride and confidence. This pride and confidence in one's ability also appeared in other observations.

Example 1:
Shannon (Grade 5) said she did not care for badminton but liked hula hoops and said that she was really good at it.

Example 2:
Brendan (Grade 3) said about using a hula hoop: "I could probably do this standing on my hands."

Example 3:
The Centre set up opportunities for children to highlight their abilities and likes/dislikes in an activity called, *The star in me*. Two children per week had their information posted on a bulletin board. For example, two boys in Grade 4 (Sterling and Stephen) described their abilities and their future aspirations.

Sterling wrote that he was, "really good at hockey, making people laugh and running," while Stephen wrote that he was, "really good at hockey." Both boys wanted to be professional hockey players when they grew up.

Most of the children expressed a sense of confidence in their abilities. While this may be due to an increased understanding of self-concept (i.e. who they think they are), the Centre philosophy, goals and rights and responsibilities appeared to be at work here, fostering children's self-esteem.

Respect and consideration for others, as promoted by the Centre's philosophy and children's rights and responsibilities, was also demonstrated during physical activity. As part of the goal of daily physical activity, specific skills sessions were held on a regular basis, such as soccer skills and stick handling skills. Before these sessions began, the children were required to pledge to give everyone an equal chance, to demonstrate a positive attitude, to play fairly and safely, and to respect fellow players and the staff and their decisions. Thus, the notion of peer support in physical activity was evident.

Example 1:
The Assistant Director said to Tyrone (boy, Grade 1), "You need to give her some confidence and be a nice supportive player."

Example 2:
During a game of girls-only round-robin soccer, the older girls appeared to help the younger ones. For example, Maureen (Grade 6) set up the ball for another child.

Example 3:
During a girls-only game of round-robin soccer, Keelin (Grade 3) missed a goal. She had a bewildered and disbelieving look on her face. Another child hugged her.

Finally, the idea of respect promoted by the Centre's philosophy was demonstrated in children's play. Specifically, a respect and value for play was exhibited by the staff: Children had opportunities to play with what, with whom, and in whichever way they felt

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inspired to play. As children learn through play (Dietz & Kashin, 2012), this time to 'be'

may have a positive impact on health and development. Several children were observed

taking appropriate risks, trying something new, and using materials in different ways.

Example 1:
Three boys (Grade 1, 3, & 4) were playing with bouncers in the large gym. One child tried to lie across three bouncers, which were up against the wall. Then they tried to slide across the bouncers, diving onto the first few, but they fell off.

Example 2:
Three boys were playing 'food hockey' on a blue mat with toy kitchen utensils (e.g. spatulas) and toy waffles. The game appeared to have goalies and the boys were keeping score. They were sitting and kneeling, but moving around the mat.

Example 3:
In a 'Crossover Dodgeball' game, children came up to the centre line to get a ball, but risked being tagged by other players. Kristin (Grade 4) came up to the line to get a ball. She was also able to throw low and fast and had fairly good aim.

Many of the children expressed a strong desire to play and be active. In particular,

desire for play time and physical activity was so strong that many children would do

almost anything to play. This included playing with peers of the other sex, 'trying on'

different gender roles, and leaving less-favoured activities for highly-favoured ones.

Example 1:
A group of girls were playing round robin soccer in the large gym. The Assistant Director said the boys were jealous of the girls, who also wanted to play soccer. Several of the boys peeked into the gym while the girls were playing.

Example 2:
Keeley (Grade 6) complained that they closed the big gym too early (she also had a scowl on her face).

Example 3:
Several boys were excited to go into the big gym (spongee polo was available). They left their play at the tables and waited at the door to the big gym. "Can we wait here?" one of them asked.

The consequences of overscheduling children are implied. These examples suggest that

children are not getting time to play, so it is up to the children themselves to take control

of the time that they do have available.

As well, while children generally played with same-sex peers, without having

restrictions on play partners the boys and girls also played together.

Example 1:
In the afternoon on the playground, a group of boys and girls were seen playing tag on the climber. Six of the children were in Grade 6, one was in Grade 3, and one was in Kindergarten.

Example 2:
During free time in the large gym, three girls (two Grade 6, one Grade 3) and one boy (Grade one) were playing with a long jump rope. They took turns jumping in the middle of the rope and turning the rope. Later, two older boys (Grades 5 & 6) joined in the play.

Example 3:
Over the course of the day, more than 20 boys and girls played together in the 'Café' learning activity in the small gym.

On several occasions, children were observed 'crossing the gender line,' where girls

would join groups of boys playing ringette in the large gym, or boys would put on dress

up clothes and play with girls engaged in restaurant play. Freedom in children's play

provided opportunities to be creative, to express themselves, and to try on different

gender roles.

In sum, this theme extended throughout all three of the major topics in the research,

and clearly supported the third research goal, which was *develop an understanding of*

how social and cultural expectations for children at a centre have implications for child

care practice. This theme also emerged from the concepts of control and respect, but is

ultimately about liberation from sociocultural expectations and gender stereotypes as

related to body image, eating, and activity. In particular, contradictions to the

stereotypical expectations of physical appearance were apparent in the data. As well, knowledge about sociocultural expectations around appearance and acceptance of diversity appeared here. Furthermore, respect for self and others were demonstrated.

Theme 4 – Reaching out

For the final theme, the central idea is 'connection.' Here, the notion of children building connections with others through their behaviour emerged. This involved peer relationships, but some relationship building between adults and children also occurred. As school age children become quite social, especially with peers, it is not surprising that they would use their activities to establish connections with others. However, what is noteworthy is that these connections were established through eating, appearance, and activity, and involved verbal and nonverbal communication. Essentially, the three concepts were used as tools to make connections and build relationships.

The Social Child in a Social World

For school age children, peers become increasingly important. Many children seek out opportunities for social interaction with their peers, especially after spending all day in a classroom, often doing work independently. Therefore, many of the activities provided by the Centre were used so that children could connect with one another. For instance, during an in-service day, staff members offered a pudding eating contest. Here, one child stood behind a second child, who was seated on the floor. The person standing behind had to feed the person in front, but they were not able to see what the person in front was doing. A second food activity involved food challenges with partners. One of the challenges involved throwing mini-marshmallows into the mouth of a partner from a distance, while the other task involved getting popcorn to stick on the honey-smeared

face of a partner. In both types of activities, children worked together to be successful,

they took turns, and spend a lot of the time laughing and smiling.

Snack and lunch times at the Centre were often social occasions with much

conversation among children, where they could spend time with their friends.

Example 1:
>Rory and another Grade 5 boy were matching their orange halves, each pressing their half to the others' orange.

Example 2:
>A Grade 6 girl (Bridget) used her napkin to dab at the corners of Gia's and a staff's mouths.

Indeed, children were quite upset when they could not be with their friends at snack

times. For example, Sterling (Grade 4) expressed disappointment that he would not have

anyone to talk during snack. It is also not surprising that adults would provide

opportunities for peer interaction during free time and routine activities.

Example 1:
>As part of the daily snack routine, two snack helpers were recruited to serve snack to the other children. Part of their duties included walking to each snack table with platters of food and offering food to the children who were seated.

Example 2:
>Several boys were playing with toy food and food items. Seamus (Grade 1) and another boy (Grade 3) were also playing with a toy cash register. They were using knives to open the cash register drawer. This play turned into stabbing and cutting each other with the toy knives.

Example 3:
>Three boys (Grade 1, 3, and 4) were playing 'hockey' on a blue mat with toy kitchen utensils (e.g. spatulas) and toy waffles. The 'food hockey' game appeared to have goalies and the boys were keeping score. The boys were also sitting and kneeling, but moving around the mat.

Ultimately, food was used as a way to connect with others.

Physical activity was another way boys and girls connected with their peers, both

socially and physically. During a game of round robin soccer in the large gym, the girls

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became very excited when they played well. They jumped up and down, patted each other on the back, danced around, and gave one another high-fives. As well, during a game of spongee polo, Angus (Grade 5) put his arm around another boy after their team scored a goal. Bran (boy, Grade 6) also gave Sterling (boy, Grade 4) a high-five. Here, especially for boys, physical affection was acceptable during these activities.

Appearance was also used by the children and the staff as a way to connect and to communicate with others. During several observations, children were observed approaching one another or staff members to display changes to their hair or clothing, something more common among girls. For example, a girl in Grade 6 (Gia) approached a staff member and said, "Guess what? My hair turns colour," and proceeded to talk to the staff about seasonal changes to her hair. Liadan (Grade 1) also approached me about a string of beads that her mother had put in her hair. In fact, the girls spoke more often than the boys about appearance and clothing (and accessories) and talked to other people about their clothing and accessories. In examining the data, 56 incidents occurred where the girls spoke about appearance, clothing, and accessories compared to 13 incidents where the boys spoke about the same. While some of the girls spoke more often about appearance than others (e.g. Maura - Grade 3: nine times; Alison – Grade 1: eight times; Liadan – Grade 1: three times), it was the younger girls who approached me about appearance more often. While the boys were not as direct about bringing attention to their appearances and clothing (i.e. approached staff) they did engage in behaviour that brought attention to their appearance (e.g. Jonathan in Grade 4 dyed his bangs purple) or to what they were wearing and doing (e.g. Rory in Grade 5 was wearing a red cape; he swung his hips and 'flashed' me). In addition, adults at the Centre used appearance as a

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way to connect with the children, such as making comments about hair style and cuts (e.g. Staff to Jonathan in Grade 4: "Hey you got a haircut. It looks good"), to tease (e.g. an adult told Eoman in Grade 6 that he did not need a mask for Halloween, that he could just go as is), or to build self-esteem (e.g. a staff talked about a child's bangs and said that she wanted to see her face because it was such a pretty face). These attempts at connection were also pursued through appearance-related teasing. For example, Maureen (Grade 6) said a boy in her class said she had a "fat butt," to which a staff member replied that boys made comments like that when they were attracted to girls. Overall, using physical appearance for connection and communication with others suggests that it is important and has value in our society.

Both children and staff also used appearance to make a physical connection.

Example 1:
Three boys in Grade 4 were wearing Silly Bands bracelets and traded them back and forth.

Example 2:
A staff member put a ponytail in a girl's hair. A second girl brushed the first girl's hair. The staff member finished and hugged the first child.

Example 3:
Alison (female, Grade 2) showed Liadan (female, Grade 1) her locket.

Example 4:
Bridget (female, Grade 6) was playing with a staff member's ponytail.

This last example needs further exploration. Not only was appearance a way to connect, but it was also a social activity, as evidenced by the participation of one adult and two children. As well, by giving the child a hug at the end of the hair activity, the value of appearance though physical affection was reinforced.

In sum, this theme extended throughout all three of the major topics in the research. It also supported the second goal of this research, which was to *explore the roles of the social and cultural environment of the Centre that influence school age children to enhance the development of healthy eating habits and behaviours, regular physical activity, and healthy body image.* Overall, this theme addressed building connections, where the notion of children building connections with others through eating, appearance, and activity emerged. This involved peer relationships, but some relationship building between adults and children also occurred.

Summary of Results

Children were often found to be knowledgeable about ideas and behaviours that influenced health, both in positive and negative ways, which was due in part to formal and informal teaching about health at the Centre.   The children also exhibited, or were learning to exhibit, healthy behaviours (i.e. those focused on health promotion and health maintenance), which were directly influenced by the child care program philosophy, goals, and children's rights and responsibilities. Children exhibited food preferences, spoke about food rules, and experimented with their food, all of which influenced their food choices. Social activities (e.g. snack times), the eating environment, learning experiences and materials (e.g. toy food, cooking activities), independence and choice (e.g. children playing with their food), and staff modelling of health-related behaviours were all linked to the demonstration of healthy behaviours in the children. These healthy behaviours included a positive sense of self, healthy eating habits and food choices, and regular physical activity. Overall, these behaviours were correlated to Bronfenbrenner's ideas of the microsystem in his ecological systems theory.

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The effects of socialization were also noted in the results. Children's behaviour reflected the influences of sociocultural forces (e.g. peers, parents, media), such that they adopted and/or encouraged assimilation of values or expectations, specifically in regard to physical appearance, physical activity, and competition. Restricting children's access to physical activities was also prominent here: Boys were the gatekeepers of girls' physical activities.

Conversely, the notions of control and respect were also observed. Children accepted one another, even if their behaviour or appearance contradicted the stereotypical expectations of physical appearance. Knowledge of sociocultural expectations about appearance and acceptance of diversity appeared here, and a respect for self and others was demonstrated.

The notion of children building connections with others through their behaviour emerged. This involved peer relationships, but some relationship building between adults and children also occurred.

Patterns of behaviours were also apparent from analysis of observations of children's eating and activity. First, a pattern regarding the overall frequency and type of physical activity for the children was noted. At least one engagement in free play physical activity occurred for all but two of the 62 children. For physical activity choices on the days when the greatest number of children engaged in free play, paired or group activities were the most common. Next, patterns were noted with regards to sex differences in physical activity. Over the four months observing, boys participated more frequently and with more variety than girls (466 times for boys, 215 times for girls). There were also differences in the number of activities selected (22 activities for boys, 17 activities for

girls), with the boys' activities focusing more than the girls' on hitting, kicking, and throwing of objects; on specific skills (e.g. getting a puck into a goal); and in competition. Boys were more likely to involve rules (e.g. penalty kicks in soccer, taking shots from the foul line in basketball) than girls. Gender theories are apparent here in the representation of gender differences.

Two main patterns of eating were observed during morning snack, which were: (1) Frequency of attendance for individual children, and (2) sex differences in attendance. Several individuals came for morning snack on a consistent basis. This meant they were regularly self-selecting snack over other activities, such as going outside to play. Of those children who participated in morning snack, there were consistently more girls than boys in attendance. Girls were also more likely than boys to be frequent attendees at morning snack.

Regarding menu choices during morning snack, children were more likely to have the main menu item (e.g. muffin, croissant) and a beverage rather than fruit. Milk (white and chocolate) was consumed by most of the children at morning snack. No consistent pattern emerged with respect to menu selection and children's snack attendance. However, several of the children attended snack, but did not eat or only had a beverage, which suggests that attendance at morning snack was also a social opportunity. In regard to afternoon snack preferences, children appeared hungry after school, and they typically ate what was served, including vegetables and salad. Most of the 62 children ate vegetables and salad, and many frequently asked for seconds.

Chapter VII: Discussion

The observed behaviours, dialogue, and interaction of school age children related to eating, physical activity, and body image were studied in a school age child care centre for this research. Using ecological systems theory and ethnographic methods, the primary goal was to recognize and understand children's behaviours and social interactions related to these three issues, and their reciprocal influence on child care practice. I documented: (1) The challenges and issues associated with body image, eating, and activity for school age children; (2) the social and cultural influences on children that affected eating habits and behaviours, physical activity, and body image; and (3) the implications of social and cultural expectations for children on child care practice. Four months of observation, guided by ecological systems theory, were analyzed using qualitative and some quantitative methods.

Results showed four main themes that emerged from the data: (1) "How to be a better, healthier person," (2) "Out of their hands," (3) "Puppets cutting their strings," and (4) "Reaching out." It should be noted that these themes are not of equal weight, nor do they appear with equal frequency. A review of each follows.

In Theme 1, children exhibited (or were learning to exhibit) healthy behaviours, that is, those focused on health promotion and health maintenance behaviours, which could foster overall development and well-being. Much health promotion was facilitated by the Centre philosophy, goals, and children's rights and responsibilities, and child and staff behaviours were reflective of these ideals. For instance, one of the Centre goals was to help children to sustain good health, implemented in part through the provision of nutritious snacks. Furthermore, healthy behaviours in children were encouraged through

social activities, by providing experiences and materials for children, by allowing children independence and choice and by giving them time to 'be,' and through staff modelling of health-related behaviours. Healthy behaviours included a positive sense of self, healthy eating habits and food choices, and regular physical activity. As well, the children had established food preferences, spoke about food rules, and experimented with their food. Food intake was also influenced by the eating environment of the Centre, which allowed choice at snack times, self-reflection, and social interaction.

The first theme extended throughout all three of the major topics investigated in the research, and it clearly supported the second research goal, which was to *explore the roles of the social and cultural environment of the Centre that influence school age children to enhance the development of healthy eating habits and behaviours, regular physical activity, and healthy body image.* Results reflected in this theme also showed evidence of learning at the microsystem level. In particular, Bronfenbrenner (1994a, 1994b) suggested that children's behaviour is affected through daily activities and face-to-face interactions with parents, educators, and peers. He also stated that over time, these interactions had a lasting impact on child development (Crockenberg & Leerkes, 2003). In the observed child care facility, formal and informal teaching about health, a positive eating environment, and daily group physical activity all had an influence on children's behaviour. Evidence of the exosystem level of ecological systems theory arose from the data reflected in this theme. The decisions made by the provincial government regarding licensing requirements for child care centres influenced policies at the Centre (e.g. daily physical activity). In addition, sociocultural theory appeared to have been influential on children's behaviour. The interaction with knowledgeable adults, through

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formal and informal teaching about health for example, assists in learning culture (Vygotsky, 1978).

The central idea of Theme 2 ("Out of their hands") was 'influence.' Children's ideas and behaviour appeared to be the result of sociocultural forces. Similar to puppets, children seemed to be controlled and directed. Children's behaviour reflected these sociocultural influences, such that they adopted and/or encouraged assimilation to certain values or expectations, specifically in regard to physical appearance, physical activity, and competition. In particular, adults (parents, ECEs, CCAs) and peers were important influences in the lives of this group of children. While a caregivers' role is to care for children and make choices for them that protect them and foster their growth (e.g. buying nutritious food), this direction and control appeared above and beyond typical caregiving practices. For instance, parental control of children's food intake was noted (e.g. restricting food intake for fear of childhood obesity), as well as adults directing children into specific activities (e.g. hockey versus gymnastics). In addition, the lack of control children had in their lives seemed to restrict their behaviour. For example, children's physical activity was restricted by their peers (e.g. boys acting as gatekeepers of girls' physical activity) and by a series of lessons from adults about how they should act, think, and feel (e.g. parents as coaches in activities).

The second theme extended throughout all three of the major topics in the research and clearly supported the first goal of this research, which was to *describe the challenges and issues associated with body image, eating, and activity for school age children*, the second goal, and the third goal, which was to *develop an understanding of how social and cultural expectations for children at a centre have implications for child care*

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practice. This theme also linked to several theoretical perspectives. First, it demonstrated an environmental influence on children's behaviour, as per ecological systems theory. The macrosystem appeared to have the most influence on children's behaviour. While the child is not directly within this level, it is the values, customs, resources, and so on that influence experiences and interaction in all other systems (Bronfenbrenner, 1994a, 1994b). In particular, the sociocultural value of physical appearance was influential on children's experiences and interactions. Second, another direct influence is apparent from sociocultural theory. While similar to the influence of the macrosystem, it is interaction with knowledgeable peers and adults that assists in learning culture (Vygotsky, 1978). Here, interaction with other children and adults within the Centre assisted in recognition of sociocultural expectations of appearance. Third, this theme was also clearly linked to gender theories, specifically regarding notions of gender differences and power (e.g. boys as gatekeepers of girls' activity).

In Theme 3, "Puppets cutting their strings," the central idea was 'liberation.' While the second theme likened children to puppets, in that their actions were controlled and directed by others, in the third theme the children have 'cut their strings.' They were observed taking initiative, taking control, and moving beyond stereotypes as related to body image, eating, and activity. For instance, several of the children expressed ideas that contradicted the stereotypical expectations of physical appearance, including statements about size not being equal to ability, acceptance of size and self, appearance being a source of pride, and acceptance of diversity and individuality. In addition, while children often had limited control in their lives (e.g. parents decide where to live and where children will go to school), one area where they appeared to take control was

around food and eating; in particular, around creating food 'rules.' Furthermore, the notion of 'kids just want to be kids' emerged here: Children would do almost anything to play, including playing with children of the other sex, playing with children of a different age, and using materials in ways that were not intended. One other important part of this theme was the fact that the Centre staff supported these behaviours. In particular, a sense of respect was demonstrated for children's ideas, for their need to play, and for their burgeoning independence and autonomy. Moreover, the staff encouraged the children to do the same for one another.

The third theme extended throughout all three of the major topics in the research, and clearly supported the third research goal, which was *develop an understanding of how social and cultural expectations for children at a centre have implications for child care practice*. This theme also linked to theoretical perspectives. For example, demonstrations of respect from the children were encouraged on a regular basis by the child care staff, a clear representation of the microsystem influence of ecological systems theory. As well, developmental theories regarding play (Piaget) and self-concept (Erikson) were evident in this theme.

In the fourth and final theme, "Reaching out," the notion of children building connections with others through their behaviour emerged. This involved peer relationships, but some relationship building between adults and children also occurred. As school age children become quite social, especially with peers, it is not surprising that they would use their activities to establish connections with others. However, what is noteworthy is that these connections were established through eating, appearance, and

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activity, and involved verbal and nonverbal communication. Essentially, the three concepts were used as tools to make connections and build relationships.

The fourth theme extended throughout all three of the major topics in the research. It also supported the second goal of this research, which was to *explore the roles of the social and cultural environment of the Centre that influence school age children to enhance the development of healthy eating habits and behaviours, regular physical activity, and healthy body image.* The idea of children building connections was demonstrated in the microsystem, as explained by ecological system theory. This system is where the child lives and 'works' (e.g. home, school, child care centre), and is composed of daily activities, face-to-face interactions, and social roles in the child's immediate settings (Bronfenbrenner, 1994a, 1994b). Parents, siblings, peers, teachers, ECEs, and extended family members are within this level, and it is here that continuous and prolonged interactions between peers at a child care centre can create relationships, which ultimately affect child development.

Connection of Results to the Literature

Consistent with previous research, the present study found familiar ideas and behaviours related to the body image, eating attitudes and behaviours, and physical activity of school age children. However, new findings related to the importance of child care environments on these three issues were also gained from this research, which related to the health of school age children. Therefore, in the section that follows, I describe the results from the analysis and their relationship to the available literature, as well as the novel findings that have implications for the health of Canadian children. It is

important to note that theory is reflected within and supported by each theme. Therefore, a discussion of theory and connection to the themes is embedded throughout this chapter.

The findings in this study (supported by current literature) helped me to develop Theme 1 "How to be a better, healthier person," Theme 2, "Out of their hands," and Theme 3, "Puppets cutting their strings." This section examines each of the themes in detail, within the broader context of the three concepts (body image, eating attitudes and behaviours, and physical activity).

Body Image

The majority of the children at the Centre had a positive body image; that is, they accepted their bodies in their current form. However, a minority of children expressed some type of experimentation with identity or body dissatisfaction, a discovery which arose in Theme 2, "Out of their hands." The findings related to body dissatisfaction in preadolescent children are consistent with the work of several researchers, including Austin, Haines, and Veugelers (2009); Birbeck and Drummond (2006); Lowes and Tiggemann (2003); McCabe, Ricciardelli, Stanford, Holt, Keegan, and Miller (2007); McVey (2004); and Vander Wal and Thelen (2000). However, what needs to be considered here is the age of the child. In particular, the small amount of data which pointed to body image dissatisfaction was primarily expressed by *older* boys and girls (Grades 4-6) at the Centre. Indeed, it appeared that the sociocultural awareness of appearance as important was apparent in younger children, but the anxiety associated with this awareness came later. This is an important consideration for the timing of body image concerns and the sociocultural acceptance of the physical appearance of young school age children. For example, a Grade 4 boy at the Centre spoke openly about being

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a "fat baby," while expressing concerns to his mother about being overweight as an older child. Striegel-Moore and Kearney-Cooke (1994) found that parental evaluations of children's physical appearance became more negative as children grew older. For instance, parental evaluations of the physical appearance of six- to 11-year-old children were more critical than evaluations for two- to five-year-olds (Striegel-Moore & Kearney-Cooke, 1994). Ultimately, what is seen, particularly among girls, is a negative relationship between age and body image satisfaction (Littleton & Ollendick, 2003).

The experimentation with appearance observed by some of the children at the Centre may be connected to dissatisfaction with appearance. Specifically, in order to find an identity that is socially acceptable, an individual may, for example, change hairstyle, clothing style, or add or remove body piercings. With manner of dress, Blackburn stated that "experimenting with clothes is an important way of experimenting with independence" (as cited in Rubinstein, 2000, p. 261). Keeley was one participant who fit this notion of identity experimentation for social acceptance. This child made negative comments about her appearance on more than one occasion.

Example 1:
Keeley (Grade 6) said that she began the morning with pigtails at the sides of her head, but "pigtails look ugly on me." She said she then put her hair back in a clip (which was more comfortable). This same child used the word "ugly" to describe her hair in another observation.

In the above example, the use of the word "ugly" carries a negative connotation. While the word itself may simply be used to describe displeasure with the child's hair, by choosing to use the word "ugly" instead of 'messy' or 'wacky,' there appeared to be some concern or dissatisfaction with her personal appearance. She typically seemed good humoured (i.e. smiled) when she made these comments, but they were ultimately

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self-deprecating. The comments she made also seemed to indicate trying on different roles or different identities, in order to find ones that were more socially acceptable. Freitas and associated argued that "individuals try on diverse and intersecting identities for size as they test, express, construct, interpret, and gauge identities in the context of self/other appraisals/relations and cultural discourses" (Freitas, Kaiser, Chandler, Hall, Kim, & Hammidi, 1997, p. 324).

From my observations, I determined that there were several influences in the children's lives which could have a negative impact on body image. These included adults exhibiting behaviours associated with body dissatisfaction (e.g. a parent commenting that her daughter was "cursed" with her body type), adults and peers expressing expectations about body shape and size (e.g. Grade 4 boys calling each other "chubby"), and appearance-focused interactions (e.g. Alison, who is in Grade 1, approaching Liadan, also in Grade 1, to show her the locket she was wearing). In considering these research findings, context is important. The social or cultural environment in which a child is raised may influence a child's identity, and therefore the association between appearance and self-concept needs to be carefully scrutinized. According to Davison and Birch (2001b),

> an overweight child is embedded in a social context. This context provides clues to the child about the acceptability of his or her weight status. Certain factors within this environment may protect the child from self-deprecating thoughts or may place the child at risk of such thoughts. (p. 47)

Thus, when adults express dissatisfaction with their own weight or appearance, such comments influence a child's perceptions of their own health or appearance. Lowes and Tiggemann (2003) found that for five- to eight-year-old boys and girls in South Australia, body dissatisfaction was positively correlated to perceptions of their mothers' own body

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dissatisfaction. As well, research by Schur, Sanders, and Steiner (2000) suggested that

70% of children learned about dieting from their family, such as having a parent on a diet

or expressing weight concerns. The earlier example involving the staff member being

concerned about having chalk on her pants and the child's quick imitation of this concern

is one example that supports this adult-to-child influence. Essentially, if these adults,

who the children admire, are dissatisfied with their bodies or have body-related concerns,

then it is likely that these ideas and behaviours may be transmitted to the children.

Expectations about body shape and size appeared to be expressed through appearance-

related teasing observed at this Centre, which also helped me to develop the second

theme. Warm (1997) called this *symbolic teasing*, that ranges from "the benign games

associated with development and playfulness through to derisive actions and words

associated with put-downs, rejection, and humiliation" (as cited in Kostanski & Gullone,

2007, p. 308). It most often involves teasing about a person's appearance, and is fairly

common in the middle childhood years (Warm, 1997). It should be noted that while

appearance-related teasing did occur at this Centre, it was quite rare in this study. As

well, almost no family-level data was found related to this. The incidence of appearance-

focused teasing at the Centre supports the work by researchers such as Haines et al.

(2007) and Eisenberg, Neumark-Sztainer, and Story (2003), who suggested that

appearance-related teasing was fairly common among children and adolescents. It may

be that this type of teasing occurs amongst people who already have an established

relationship and is benign in intent (Keltner, Capps, Kring, Young, & Heerey, 2001).

However, it may have an impact on how the targeted person feels about themselves and

the way they look. For example, appearance-related teasing was revealed in self-reports

of body dissatisfaction in preadolescent boys and girls (Kostanski & Gullone, 2007) and in 11 to 15 year old girls (Keery, Boutelle, van den Berg, & Thompson, 2005). Using a meta-analysis of 57 research studies, Menzel and associates found a strong association between body dissatisfaction and weight-related teasing for children and adolescents (Menzel, Schaefer, Burke, Mayhew, Brannick, & Thompson, 2010). Even children's perceptions of appearance-focused teasing have been linked to negative outcomes for children. Phares, Steinberg and Thompson (2004) found that for eight- to 11-year-old boys and girls, perceptions of parental teasing were linked to body dissatisfaction, drive for thinness, and eating disturbances.

In examining the literature, it was apparent that appearance-related teasing was a means of teaching social roles and rules (Keltner et al., 2001). According to Pexman and Glenright (2007), an ironic or sarcastic remark "echoes a violated norm or failed expectation and thus reminds the listener that this violation has occurred" (p. 179). More specifically, appearance-related teasing is a vehicle in the transmission of sociocultural expectations about appearance (i.e. what is 'normal') (Phares et al., 2004). For instance, research by Haines, Neumark-Sztainer, and Thiel (2007) reported that appearance-related teasing at elementary school was about appearance, weight and about "any differences from the norm" (Haines et al., 2007, p. 10). In my research findings, it seemed to take the form of name-calling, jokes, or sarcasm. For example, an adult told Eoman (Grade 6) he did not need a mask for Halloween; he could just go as he was.

The source of the teasing may also be critical in the development of body image concerns. While this form of teasing at the Centre was expressed by peers and adults, peers may be prevalent sources of appearance-related teasing (Hayden-Wade, Stein,

Ghaderi, Saelens, Zabinski, & Wilfley, 2005). Using interviews and questionnaires with

children considered overweight, Hayden-Wade et al. (2005) found that appearance-

related teasing was frequently committed by peers. Other research suggested that

parental teasing was positively correlated to body dissatisfaction and disordered eating

for boys and girls (Phares et al., 2004). Both mothers' and fathers' comments about

children's weight may result in weight loss behaviours and body image dissatisfaction in

sons and daughters (Coughlin, Hemberg, Marinilli, & Guarda, 2003). Keery et al. (2005)

also found that when parents directed appearance-focused teasing at their children, this

increased the likelihood that a sibling would also tease.

   It is important to note that while this form of teasing often begins in childhood few

research studies have examined this phenomenon with young children (for examples see

Haines et al., 2007; Kostanski & Gullone, 2007; Phares et al., 2004). Indeed, according

to Phares et al. (2004) and Haines et al. (2007), teasing about physical appearance and

weight by peers is common in childhood, but few studies have examined the negative

effect on body image in children (Kostanski & Gullone, 2007). In one study, appearance-

related teasing was linked to disordered eating among children (Smolak et al., 1999). In

another study, 72% of college-age women reported being teased about their physical

appearance as children; in fact, facial features and weight were most often focal points of

the teasing (Cash, 1995). Similar results were reported by Rieves and Cash (1996).

   Sociocultural theory is one of several theoretical perspectives which help to

understand Theme 2. According to this theory, dissatisfaction with one's body image and

disordered eating are the result of social pressure to look a certain way (Tsiantas & King,

2001). The focus here is on the thin-ideal (i.e. disparity between the socially idealized

size and 'real' people) for women and girls in Western society (Tsiantas & King, 2001), the likelihood that women and girls invest in a body-as-object orientation (i.e. the female body is ornamental and is shown as parts in the media), and the social rewards associated with attractiveness and social costs associated with being unattractive (Morrison, Kalin, & Morrison, 2004). For men, a thin ideal does exist, but typically the ideal body shape for men and boys is muscular (Morrison, Morrison, Hopkins, & Rowan, 2004). Some research suggests that media is a significant proponent of the thin-ideal (Botta, 2003; Thompson & Stice, 2001), body-as-object orientation (Levine & Smolak, 2002), and social rewards and costs associated with physical appearance (Klein & Shiffman, 2006). My observations at the Centre reflected media influence (e.g. a child's question about Barbie dolls getting "fatter" over time; a negative comment in a movie about the increasing size of a dragon's rear end; a Bratz doll voice recording about having a bad hair day). However, friends and family may also communicate expectations of a thin-ideal, as reflected in appearance-related teasing, through expressions of body dissatisfaction, and through appearance-focused interactions. All three of these were observed at the Centre: Grade four boys called one another "chubby;" Keeley (Grade 6) spoke about her "ugly" hair; Gia (Grade 6) approached a staff member and mentioned how her hair changed colour. Appearance-related teasing and appearance-focused interactions, in particular, transmit cultural values, beliefs, and practices through social interaction, a factor necessary for learning to occur (Vygotsky, 1978).

Also supported by this theme is the work of ecological systems theorists who argue that the home offers an "intersection between the microsystem (e.g. parenting practices) and the macrosystem (e.g. cultural practices)" (Jordan, 2004, p. 197). Specifically, the

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macrosystem value of appearance as important affects parent-child proximal processes in

the microsystem. This was found at the Centre in some observations of parents at drop-

off or pick-up times (e.g. a parent spoke about restricting her son's diet for fear of him

becoming overweight; another parent mentioned that one of her daughter was "cursed"

with her body type). This intersection is also true for the influence of the media on

children's body image ideas. In the microsystem,

> parents provide models for eating and structure children's nutrition. Yet the
> influence of the microsystem may be weakened by a cultural environment that
> pitches fast food, sugared cereals, candy, and soda to children while at the same
> time holding up extremes of body types as models for success (the very thin) or
> ridicule (the overweight). (Jordan, 2004, p. 200)

Jordan (2004) argued that role of the media in shaping children's views of their bodies

was not straightforward. She stated that the cultural context provided "children and

families with a set of expectations about the media, as well as a set of competing,

converging, or complementary messages (e.g. one must be thin to be valued but eat candy

to be happy)" (p. 203). These messages may be especially concerning when physical

appearance is seen as a source of humour (e.g. the children watched, "How to train your

dragon" and "Toy Story 3," movies which used humour related to physical appearance).

The result here is to devalue physical appearance (e.g. body as object) and to trivialize

body image concerns. However, the numerous studies that have found correlations

between media images of thin models and body dissatisfaction (see Durkin & Paxton,

2002; Knauss et al., 2007; Murnen, Smolak, Mills, & Good, 2003) or disordered eating

(see Becker, Burwell, Gilman, Herzog, & Hamburg, 2002; Harrison, 2000) in adolescents

and adults raises concerns for the impact on school age children.

Conversely, it is important to consider that dissatisfaction with one's appearance may also be the result of experimenting with identity. The work of Erikson (1950) is relevant here. For children entering into adolescence, Erikson (1950) suggested that a search for one's identity in the larger world was common. For example, several of the children at the Centre were observed changing their hairstyles. Another example is the increasing popularity of Silly Bands (plastic bracelets that came in different shapes) among all the children at the Centre. This period before adolescence may be a time when children are particularly susceptible to sociocultural influences on body image (Freitas et al., 1997). As mentioned previously, children's self-concept may be influenced by cognition (e.g. self-understanding), culture (e.g. Western society – separateness and self-assertion emphasized), and social factors (e.g. family, peers, school, community) (Harter, 2003, 2006; Mead, 1934).

Feminist social constructionist theorists offer an equally important explanation for body image concerns. According to Lorber (2002), "gender is a society's division of people into differentiated categories of 'women' and 'men'" (p. 4). Classic but currently endorsed (see Fox & Murray, 2000) work by Ferree (1990) discussed that men and women were biologically and socially similar, but because of a patriarchal desire for social power, they have been have been socialized differently and made to seem as opposites. This was demonstrated with the appearance-focused behaviour of the girls at the Centre. The girls spent more time than the boys behaving in ways which promoted being looked at, directly from their own actions and indirectly through clothing and accessories. Essentially, the boys spent more time *doing* while the girls spent more time *being*. It could be argued then that the boys demonstrated more power than the girls

because they spent more time doing and acting on their environment, rather than waiting for the environment to act on them.

Although not a major theoretical perspective in this thesis, the transmission of body image ideas may also be explained from a social learning perspective. According to Bandura (1975), children learn from direct modelling and imitation of significant others. For instance, children may become overly concerned about the caloric or fat content of food if the adults in their lives are concerned (Abramovity & Birch, 2000). For example, while children were present, a staff member criticized another staff member for the calorie content of her large coffee. As well, Keeley and Lochlan were present when a staff member mentioned how four cups of Kraft dinner was "bad for you." Personal appearance has been found to have a significant influence on school age children's self-esteem (Klomsten, Skaalvik, & Espnes, 2004; Shapka & Keating, 2005). As well, Byely et al. (2000) found that families, peers, and other social influences can intensify the sociocultural emphasis on thinness, particularly through the modelling of behaviour. These results should be interpreted cautiously, however, as the latter study focused on the experiences of Caucasian girls from well-educated, middle- to upper-class families.

Self-concept and self-esteem. Overall, the majority of children at the Centre expressed feeling good about themselves and their abilities, especially in sports and extracurricular activities. This finding relates to the third Theme, "Puppets cutting their strings," and to the literature on physical self-esteem and emerging self-concept (for examples see Ata, Ludden, & Lally, 2006; Davison & Birch, 2001b; Davison & Birch, 2002; Ha, Marsh, Martin, & Halse, 2006; Harter, 2006; Klomsten, Skaavik, & Espnes, 2004; Shapka & Keating, 2005). Several examples from the data exhibited statements by

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children about being good at hula hoops, doing handstands, hockey, soccer, dancing, ballet and running. Only one child (Sterling, Grade 4) expressed a talent at other skills, specifically "making people laugh." However, physical appearance was a significant focus for the children's self-concept. For instance, during a learning activity where children were asked to draw what they liked about themselves, children in Grades 1, 3, 4, and 6 spoke about liking such physical features as their ears, hair, eyes, nose, stomach, heart, and spine. What is notable about these admissions is that while self-concept is refined as children get older, changing from concrete observable characteristics (e.g. appearance, possessions) to more abstract competencies and psychological traits (e.g. honest) (Harter, 2006), some of the older children still focused on physical characteristics. Although in this activity the children were told they could draw anything they liked about themselves, physical appearance was still a focus for many of the children regardless of age. This may be representative of the power of the sociocultural value of physical appearance, as highlighted in Theme 2.

While the majority of children indicated feeling good about themselves and their abilities, a small number of children exhibited dissatisfaction with self (e.g. Sterling in Grade 4 asked his mother why he wasn't more like his tall, thin friend) and ability (e.g. Angus in Grade 5 stated an activity was "too hard" for him, Caitlin in Grade 4 stated that she "sucked" at a game). This finding supports Theme 2 and previous research which suggests that self-esteem tends to drop in middle childhood (Baldwin & Hoffman, 2002) due to increased feedback about abilities (e.g. receiving report cards), cognitive ability of social comparison (e.g. compare test marks with that of a peer), and abilities and performances being compared to those of others (e.g. a parent asks why a child can't be

more like his or her sister) (Marsh, Craven, & Debus, 1998). However, it is unclear from the data whether the drop in self-esteem is specifically correlated with body dissatisfaction, as suggested by Kostanski and Gullone (2007), is the result of girls' declining opinions about their sports abilities (Fredricks & Eccles, 2002), or is what Erikson (1950) labelled *Inferiority*, which is a lack of confidence in abilities and a sense of inadequacy.

Observation related to self-concept and self-esteem clearly supports Bronfenbrenner's ideas. In particular, his ideas about children as "developing within a complex system of relationships" that combine to affect development (Berk, 2012, pp. 25-26) support the notion of competing influences on self-esteem, and thus supports Theme 2. I think that certain sociocultural factors (e.g. television advertising, fashion magazines) outside of the Centre influence a decline in self-esteem in the children, but the positive environment created by the Centre seems to counter this decline.

Changing body image was supported by developmental theories, particularly the work of Erikson (1950). School provides opportunities for the development of Industry, such as discovering one's own capacities, learning the value of division of labour, developing a sense of moral responsibility (Erikson, 1950). This Centre used group meeting times to teach children values such as responsibility, leadership, and teamwork and the staff created a culture that fostered children's self-esteem and self-worth; thus, Theme 1 is relevant here. Staff members supported children's efforts and celebrated their accomplishments, and encouraged children to so for one another. These discussions may have been a reason why so few children expressed any type of personal dissatisfaction.

Age. Related to the earlier discussion of body image influence is the idea that children are engaged in adult activities at very early ages. Indeed, some of the children at the Centre exhibited behaviours and knowledge of topics that were beyond their maturity level, indicative of Theme 2. On a few occasions, Grade 2 and 6 girls directly and indirectly mentioned alcohol (e.g. Grade 2 girls' menu indicated serving martinis; a Grade 6 girl was told they were having grape cocktail for snack and she said they could not have cocktails because they were not yet 18). In another example, two girls in Grade 2 were wearing bright pink lipstick. One of the girls indicated that she had taken it from her mother's purse without permission.

Early puberty and advertising related to clothing may be associated with these early maturation behaviours. First, work by Smolucha (2003) suggested that secondary sex characteristics, such as breast development, often began at around 10.5 years for girls in the United States. Second, Levin and Kilbourne (2009) suggested that the media displayed images of children that were age-inappropriate (e.g. children's body language as sexually suggestive) and often unrealistic (e.g. children are always well-dressed and have romantic crushes on older youth). Thus, the role models for children exhibit mature behaviours. Third, Rubinstein (2000) suggested that adult fashion and clothing styles have been converted into children's sizes, which may assist with the transition of child-to-adult behaviours: If a child dresses like an adult, they may be more likely to engage in adult-like behaviours. For instance, on a pyjama day at the Centre, Jane (Grade 6) was observed wearing pyjama bottoms with hundreds of disposable coffee cups. This may influence not only the act of drinking coffee at a young age, which may affect physical growth, but also the acceptance of an on-the-go lifestyle, as implied by the take-out

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containers. As well, Elkind (2001) cited a study by Mann (1985) where early adult

maturity was associated with a hurry to experiment with drugs and alcohol or early sexual

activity.

If children are knowledgeable about more mature topics and exhibit age-inappropriate

behaviour, then they also run the risk of having parents and caregivers expect more from

them than they are developmentally ready to provide. Bronfenbrenner's (1979, 1994a)

ideas about the bi-directional nature of the microsystem apply here, where parents or

caregivers affect children's behaviour, but children's personality, physical attributes, and

characteristics also affect the parents' or caregivers' behaviour. Clearly, expectations for

children who are not cognitively or physically ready for them are detrimental. For

instance, the sexualization of young children through age-inappropriate clothing carries

with it the concern of child sexual abuse. During my observations, a girl in Grade 3 wore

a pair of pants that had the words "East" and "High" written on the seat. While the

wording here is not sexually suggestive, by placing writing on the seat of the pants draws

attention to the buttocks of the wearer; in this case, a nine-year-old girl. Indeed, cultural

values are reflected in clothing (Rubinstein, 2000). Thus, if the culture devalues children,

especially girls, then it allows for the production and sale of sexually-suggestive clothing

(e.g. infant pants with the word 'sexy' on the back), or clothing that restricts behaviour

(e.g. tight fitting, low-rise skinny jeans that discourage physical activity).

Importance of peers. With school age children, peers are important influences on

ideas and behaviour, especially same sex peers (Maccoby, 1990; Maccoby & Jacklin,

1987), further supporting the development of Theme 2 "Out of their hands." During the

present study, older girls tended to spend larger periods of time together in groups than

younger girls. For example, older girls grouped themselves in the morning and during

group games, sat beside each other during group meetings, and tried to sit together at

snack. As well, when given the choice during activities or during unstructured activities,

children at the Centre often chose partners/teams with members of the same sex, acts

which provide support for the work of Maccoby (1990, 2002), Maccoby and Jacklin

(1987), and Thorne (2001). Maccoby (2002) explained that from four to 12 years,

children spend more free time with same-sex peers, and by adolescence, same-sex best

friendships are common. Although mixed-sex groupings are less common among school

age children (Maccoby, 2002), they did occur at the Centre, as seen when boys and girls

played board games, during free play activities (e.g. hockey, spongee polo), dramatic

play (e.g. restaurant), and block play. However, the significant amount of time spent

among same-sex peers suggests that ideas, attitudes and behaviours may be transmitted

between group members. This point is explained by Maccoby (2002) using girl

groupings as an example. Girls' friendships involve sharing of information regarding

personal lives and concerns. They also engage in what Maccoby (2002) called

collaborative discourse, "in which they talk and act reciprocally, each responding to what

the other has just said or done, while at the same time trying to get her own initiatives

across" (p. 56).

Peers are also influential on clothing choices. While it is often assumed that clothing

choices for children are made primarily by parents, some research suggests that children

have a say in their clothing options (Rubinstein, 2000); who suggested that "children who

choose their own clothes are likely to select the clothes that would strengthen friendship

ties" (p. 242). An example of Alison (Grade 1) is evidence of this. During several

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observations, children were observed approaching one another or staff members to display changes to their hair or clothing. These appearance-focused interactions were more common among the girls, and support Maccoby's (2002) claims that girls' share detail about personal lives and concerns. These garments may also help children to feel and demonstrate that they are part of the group (Rubinstein, 2000).

Sociocultural theory is sustained by Theme 2, "Out of their hands." According to Vygotsky (1978) and Lantolf (2000), learning is a socially mediated process. Here, children depend on the support that adults and more expert peers provide as children try new tasks (Vygotsky, 1978). Peer collaboration assists this process, whereby children with different skills and abilities work together in groups to help and teach one another (Vygotsky, 1978), relevant to teaching all aspects of culture, including values, attitudes, behaviours, beliefs, and customs. In addition, sociocultural theory focuses on how culture is passed to the next generation. This includes the values, beliefs, customs, and the skills of a group. In thinking about the influence of peers, societal values, such as the importance of physical appearance, could be transmitted through peer interaction. Here, the argument could be made that more expert peers could teach children 'the ways of the world' (e.g. how to dress to be popular).

Peer influence falls within the realm of gender theories, in particular, the cognitive-motivational processes of gender development (Leaper & Friedman, 2007). Through observation and interactions with others, children learn about the meaning and consequences of gendered behaviour (e.g. ok to be a tomboy but not a sissy). These lessons about gender foster new schemas (organized ways of making sense of the world) (Berk, 2012) or adaptation of old ones, which then influence personal behaviour and

identity as a member of a specific gender group, including in-group biases (e.g. tend to notice materials in environment that fit within their meaning of male or female), and within-group assimilation, such as children reinforcing each other's behaviours based on what is 'normal' in their group (Leaper & Friedman 2007). However, girls depend more than boys on being "popular and attractive rather than competent and talented" (Alpert-Gillis & Conell, 1989, as cited in Garbarino, 2006, p. 153). This implies changing attitudes or behaviours in order to be accepted by peers.

Gender. The focus on girls' and women's appearance as important was noted at the Centre. First, girls' clothing and hair were commented upon by adults and other children more often than boys' clothing and hair. Second, the girls more often than the boys approached staff members about their clothes or their hair. Indeed, it appeared that physical appearance was more of a focus for girls, not only in their own ideas and behaviour, but in the attention paid to it by adults. This behaviour reflects the sociocultural notions of appearance as important, particularly for girls and women, a finding which is supported by the APA Task Force (2007), and it lends support for the second Theme, "Out of their hands." Liadan (Grade 1) was one participant that exemplified this notion. She brought attention to her shoes (e.g. casual versus dressy), clothes (e.g. tutu skirt), and her hair on separate occasions. As well, in a learning activity that involved tracing one's body onto a large sheet of paper, she appeared very concerned that the lines on the paper (representing her limbs and her clothes) were just right.

Furthermore, while many of the children dressed in jeans and t-shirts or sweatshirts, the type, colour, and pattern design of girls and boys clothes were different. In particular, the items found on girls' and boys' clothing (such as animals for girls and sports

equipment for boys) reinforces traditional gender divisions in activities. This idea is

represented by Worth (1981): "Style indicates societal expectations for behaviour.

Repetitive exposure to a particular style can encourage the belief that people share similar

ideas and sentiments and behaviour expectations" (as cited in Rubinstein, 2000, p. 5).

For example, at the Centre, more boys than girls wore hockey, soccer, and football

jerseys with player's names on the back, while more girls than boys wore t-shirts with

slogans (e.g. "One smart cookie"). The notion of 'you are what you wear' is relevant

here. The above example suggests that boys are interested in sports activities, but girls

are not. Instead, the slogans indicate that the girls are self-focused. For example, the

shirt with the words, "You know it's all about me" suggests on one hand that the child is

self-centred and egotistical, and on the other hand suggests a lack of maturity and

difficulty in taking another persons' perspective. Considering this girl was in Grade 6,

wearing this t-shirt might be a way to demonstrate the angst of adolescence (and thus that

she is older and more mature), but the phrase actually resembles the egocentrism of a

child in Piaget's preoperational stage, which he argued was between the ages of two and

seven (Piaget, 1930, 1952). Here, the child fails to distinguish others' views from their

own, and they cannot yet take the perspective of another person (Piaget, 1930, 1952).

Therefore, there is a lack of power expressed by an immature child, while power is

expressed in the speed, strength, and endurance of a child engaged in physical activity (as

implied by sports jerseys).

Eating Attitudes and Behaviours

 Food play. Observations of children playing with toy food items and engaging in

food role play in this research were representative of literature on dramatic play; and they

helped support the development of Theme 1, "How to become a better, healthier person."

Dramatic play involves children practicing their own versions of adult behaviours, such as cooking or fixing items, and typically involves the use of props, such as toy food (Shipley, 2008). This play can be done alone or with other children (called *socio-dramatic play*). It allows children to experiment with roles (e.g. mother, teacher, police officer), which then helps them to understand how someone else might think or behave (Shipley, 2008). Developmentally, it can be physically, socially, emotionally, and cognitively beneficial. For example, imitating someone flipping pancakes in a pan requires hand-eye coordination, as well as being able to recall precisely how the action took place. Being able to play 'restaurant' requires children to cooperate, negotiate, assign and take on roles, take another's perspective, and improvise (Shipley, 2008), a type of dramatic play that can be very powerful for children.

> In dramatic play, children can always have impact that often escapes them in the real world. The child can order events and stack the deck, turn the tables and be the dominant power – the rule setter, the bread winner, the dispenser of rewards. Or the child can return to babyhood, become the family pet, the magical fairy. (Greenman, 1988, p. 169)

While some adults may see dramatic play as frivolous or simple imitation, it is a way that children can feel powerful and in control and still develop physical, cognitive, social, and emotional skills.

The findings related to children 'playing with food' demonstrate the microsystem in action (Bronfenbrenner) and Vygotsky's ideas about make-believe play. For Bronfenbrenner (1979), within the microsystem what children see or what they are told to do by significant adults and peers can influence their ideas and behaviours. Over time, these interactions have a lasting impact on child development (Crockenberg & Leerkes,

2003). In particular, with more exposure to models and a variety of situations, dramatic play becomes increasingly complex. A specific example involves playing 'restaurant.' For young children, this play may include ordering food, eating food, and paying for the meal. Over time, the play may include preparing food, creating menus, wearing costumes, leaving a tip for the server, and using a cash register to pay for the meal. Eventually, these behaviours become internalized: The manner in which they play becomes their script for understanding real life. Vygotsky suggests make-believe play situations help children to "follow internal ideas and social rules," as opposed to acting out impulsively (1978, as cited in Berk, 2008, p. 336). For example, a child preparing 'dinner' follows the rules of dinnertime behaviour, including setting the table, chopping vegetables, and washing dishes. It may also include cultural norms or social conventions, such as chewing with one's mouth closed or keeping one's elbows off the table.

   Food and eating influences. As with body image, parents, caregivers, and peers are important influences on children's eating attitudes and behaviours and food preferences, particularly for promoting healthy (Theme 1) and unhealthy habits (Theme 2). For example, Bandura's (1975) notion of modelling was observed to be effective in teaching the children at the Centre about nutrition, such as increasing the likelihood that they would try a new food if they saw a staff member or friend eating it. Indeed, this adult influence was constant, as the staff regularly ate with children during snack times. The notion of adult influence is supported by the classic research of Harper and Sanders (1975) and Birch (1980), and the more recent work of Branen and Fletcher (1999). As well, the specific influence of Early Childhood Educators on children's eating habits and preferences is supported by the work of Hendy and Raudenbush (2000) and Nicklas et al.

(2001). However, modelling may also be effective in teaching children less healthy

eating behaviours: During a few observations, staff members were seen grazing at snack,

picking things off the snack table rather than sitting to eat with the children, behaviour

that was not the norm.

Peers are a significant influence on the behaviour of school age children. This was

clearly seen in observations of the children during snack and lunch times. During my

observations at afternoon snack times, many of the children attempted to sit with their

friends, although staff members typically moved children around to different locations at

every meal (each child had their own cup, and these were randomly placed on four large

tables). This reflects the important role peers play for both boys and girls in the school

years. Indeed, during one afternoon snack, Sterling (Grade 4) indicated that he was quite

upset because he was not able to talk to anyone, although he was surrounded by children.

During this snack time, he appeared upset at where his cup was placed; specifically, that

it was not placed near his friends' cups. As peers become more important to school age

children, not being with them can be quite upsetting. This is important when considering

the influences of peers on body image, eating, and activity.

Peers are influential on eating habits and preferences. For example, children may see

what their friends bring for lunch and be more likely to try the foods brought by their

peers. As well, children may reject a food based on the negative reaction of a peer to that

same food, action that Hendy (1999) called the "yuck factor" (p. 24). Conversely,

children labelled as picky eaters might adapt their behaviour to that of peers who ate the

undesirable or novel foods (Bandura, 1997; Birch, 1980; Lowe, Dowey, & Horne, 1998).

Positive peer influence was observed when Zeke (boy, Grade 1) ate the Hash Brown

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Surprise being served for afternoon snack after encouragement from Eoman (boy, Grade 6), part of the observations that supported Theme 1.

Ecological systems theory is again relevant. Davison and Birch (2001a) suggested that in the microsystem, parents and caregivers "shape children's dietary patterns as a result of interactions that take place during feeding occasions" (p. 163). The same argument could be made for interactions between the children and their peers and between the children and staff. Snack times at the Centre occurred twice every day, and adult-child and child-child interactions occurred during each snack time, so these proximal processes occurring over time were likely to have had a lasting impact on child development (Bronfenbrenner, 1979, 1994b).

In the microsystem, Bronfenbrenner (1979) suggested that third parties can indirectly influence caregiver-child interaction and ultimately child development. As suggested earlier, provincial licensing regulations govern the operation of all licensed centres (MCCP, 2005), but there is some variation in the ways school age child care programs are run. Thus, the ideas and philosophies of the centre Director and the Parent Board influence centre policies and staff practices around food and meal times. For instance, the delivery of social and reflection snacks at this Centre were not required for licensing. However, as a result of their implementation, a change in staff practice was required (e.g. specific skills and behaviours to foster at the different snack times), which may have produced a change in child behaviour (e.g. enjoyment of food, playing with food).

The macrosystem value of appearance as important may have been influential on children's ideas and behaviours around food. Three examples illustrated this point: The parent who spoke about restricting her son's diet so he would not become "porky," the

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parent who spoke about one daughter being able to eat anything she wanted (while the other child was "cursed" with the mother's body type), and the child who was concerned about putting on weight after eating two Thanksgiving dinners. These were all reflective of the sociocultural value of appearance.

It was apparent that some of the children's eating habits and food preferences were the result of food control and policing. This was demonstrated through children's food rules (e.g. the only vegetable Polly liked to dip in dressing was carrots; Colleen did not like milk except for in her cereal), which suggested a sense of order in the way children ate their food and in which foods they chose to eat. These habits may be the result of certain restrictive food practices by adults, where the value of certain foods may increase due to the fact that there are restrictions placed upon them (see Fisher & Birch, 2000). These behaviours are also reminiscent of Piaget's ideas about cognitive development; specifically, that of concrete operational children and classification hierarchies (Piaget, 1957). Here, children ages seven to 11 have the cognitive ability to sort and resort collections of items, such as stamps or stickers, based on certain characteristics (e.g. size, shape, colour, texture) (Piaget, 1957). With classification hierarchies, there are superordinate and subordinate classes of characteristics (Piaget, 1957). For example, a child may put a group of dog and wolf pictures together according to the superordinate class of canine, but then have a separate subordinate grouping of pictures based on the type of dog, such as Labrador Retriever. In the case of children's food rules, the preferred food items are at the top of the hierarchy and foods may be eaten in order of less to more desirable. One specific example of this involved several children picking the chocolate chips from their trail mix so that the last flavour they tasted was chocolate.

Physical Activity

   Physical activity and play. Free time physical activities were offered every day at the Centre, in both the morning and the afternoon (Theme 1). Many of these were informal sports activities, such as spongee polo, soccer, and ringette. They were available indoors in a large gym space and outdoors on the playground and surrounding field. Rules regarding play were flexible (e.g. number of players) and little equipment was required (e.g. no protective gear). Referees were rarely used; indeed, the children generally monitored themselves in play. Cote (1999) called this informal type of physical activity *deliberate play*. Deliberate play is a sporting activity that involves "early developmental physical activities that are intrinsically motivating, provide immediate gratification, and are specifically designed to maximize enjoyment" (Cote, 1999, as cited in Cote, Baker, & Abernathy, 2007, pp. 185-186). Cote (1999) suggested that deliberate play was also a type of practice for more organized physical activities. Examples include street hockey, basketball in one's driveway, or baseball in the field of a local park. From my observations, I found that deliberate play occurred at the Centre in several forms, including unstructured games of spongee polo (a game similar to hockey), wall ball (an activity similar to racquetball), and 'horse' (a game similar to basketball). Deliberate play has features similar to running, jumping, and rough and tumble play, but is more organized and requires specific behaviours (Cote, 1999). For example, a child may try to imitate a complex play they watched during a televised basketball game. Motor skill development does occur as children attempt more challenging skills, such as a slap shot in hockey or a lay-up in basketball, but the intent of deliberate play is not on improving performance (Cote et al., 2007). Learning occurs as well:

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> Deliberate play situations allow children the freedom to experiment with different movements and tactics and the opportunity to learn to innovate, improvise, and respond strategically. It also allows children to perfect skills that would not be practiced in organized situations where all the players are of similar size and skill level and where the playing surface does not present any natural obstacle. (Cote et al., 2007, p. 186)

Thus, it is the enjoyment of the activity that keeps children playing, which results in learning new skills.

Both the ideas of Piaget and Bronfenbrenner are relevant here. Piaget (1952) believed that children were actively involved in their own learning and constructed their own knowledge; that is, they learned by doing. Observed deliberate play included experimentation with movement and techniques; flexibility in rules; and children monitoring themselves in play. In addition, in the microsystem, children encountered daily activities, face-to-face interactions, and social roles in their immediate settings (Bronfenbrenner, 1994a, 1994b). The daily free time physical activities made available by the Centre could influence children's physical development (e.g. cardiovascular and bone health), their social development (e.g. learning to work as a team), and cognitive development (e.g. memorizing rules, problem solving).

Competition. While most of the free time physical activities at the Centre were informal, and the structured physical activities focused on fun, skill development and teamwork, competition was still present. Although the Centre attempted to address the negative aspects of competition in physical activity (Theme 1) (see Hoffman, 1986; Kohnt, 1986; Murphy, 1999; Robson, 2004), the power of competition was evident in the data (Theme 2). Indeed, many (but not all) of the children were passionate about winning, which supports the work of Martens (1976) and Kohnt (1986) who suggested that competition was a learned behaviour. In the earlier example involving three clubs

(Survivor, Sports Illustrated, Let's Get Moving), all three had some type of physical activity but they all had competitive components as well, such as contests or races. In another example, several children were observed arguing with staff members about the rules in competitive games, typically for a play (e.g. foul ball called) to be turned in their favour (e.g. removal of the foul call). The source of some arguments may have been due to the fact that the winners of certain games had their names posted on a bulletin board. Perhaps highlighting the winner on the bulletin board was a way for children to feel good about themselves and their accomplishments. Therefore, children seemed to try as hard as they could to have that bit of celebrity. However, it does place emphasis on competition and the value of winning, rather than on learning or improving a skill or on having fun.

There was also a gender difference in competition: While both the boys and girls exhibited competitive behaviours, boys were more competitive than the girls on a regular basis, supporting the work of Martens (1976) and Kohnt (1986). Gender differences were evident since boys made competitions out of non-competitive or open-ended activities, such as hula hoops, and in self-competitions, such as timing themselves to see how long they could keep the hula hoop moving around their waist. While some of boys' play was conducted on teams, several of the children appeared to play for themselves, such as not passing to the other players, also shown in research on competition by Martens (1976) and Kohnt (1986). With team activities, the boys at the Centre thought it was important to have a balanced number of players on each team, which was especially true for skilled players. In turn, there was a demand for participation of those children who were seen as good players. This same demand was not as vocalized by girls who

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wanted to play. Boys' activity supports the classic work of Messner (1989), who

suggested that at around nine to 10 years of age, less skilled boys were alienated from

organized sports, and those who were skilled were popular with other male peers. At the

Centre, age may have played slight role in this demand, as there seemed to be more

demand for older boys to be part of the team. However, even younger boys appeared to

be more desired on teams than girls. For example, during one activity in the large gym,

three of the smaller boys had a turn at goal. Perhaps this allows the less-skilled children

to participate equally (i.e. they do not get in the way of the bigger children); on the other

hand, an underlying stereotype that boys are naturally better at sports (and are therefore

more likely to win) is implied here.

From my observations, it appeared that the drive to win actually enticed boys to try

physical activities in which they did not regularly engage or that were seen as specifically

for girls (e.g. hula hoops). Lever (1976) suggested that competition is a big part of boys'

play, which was clear in the physical activities of the boys at the Centre. Gender theories

provide an explanation for this behaviour. Social-structural processes in gender

development suggest that status and power in society shapes personal circumstances,

including how they impinge on behaviour (Leaper & Friedman, 2007).   Therefore, with

the boys engaging in competitive activities more often than the girls, and with their

gatekeeping of girls' physical activities, notions of the masculine drive for power were

reinforced, with the winners being the most powerful, popular, and successful.

Influences on physical activity. Multiple influences on children's physical activity

ideas and behaviours were noted at the Centre during structured and unstructured

physical activities. This includes individual factors, such as the nature of the school age

child to be competitive; social factors, such as adult and peer involvement in activities; and physical factors, such as the physical environment and daily scheduled time for physical activity, which support ecological systems theory (Bronfenbrenner, 1979). Similar to Bandura (1975), Bronfenbrenner said,

> The environmental events that are the most immediate and potent in affecting a person's development are activities that are engaged in by others with that person or in her presence. Active engagement in, or even more exposure to, what others are doing often inspires the person to undertake similar activities on her own. (1979, p. 6)

Thus, by watching significant others and by being and doing activities with these individuals, development is more likely to occur. Indeed, development has taken place when children start to engage in the new behaviour on their own.

Parents, ECEs, CCAs, and peers have an influence on children's behaviour and ideas around physical activity, either to encourage or discourage healthy ideas and habits (Themes 1 and 2). With peers, participation in physical activity and support for physical activity may increase children's participation. This supports the work of Neumark-Sztainer et al. (2003), Salvy et al. (2008), and Springer et al. (2006). Children at the Centre were observed inviting peers into already existing physical activities or to start new ones. With adults, participation in physical activity and support for physical activity probably also increased children's participation, as supported by the research of Brockman et al. (2009), Huettig (2004), Huettig et al. (2006), and, in part, the work of Clark (2008). For example, staff members often participated in physical activities with the children, and Kristin (Grade 4) mentioned playing badminton with her grandfather. In particular, if parents, adult family members, and caregivers are physically active, children may be more likely to get physically active. During one observation, Declan

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(Grade 1) asked me to play soccer with him on the playground. After a few minutes of just the two of us playing, three other children (two girls and one boy) asked if they could participate. In another example, Jane (Grade 6) was playing with a soccer ball in the large gym. A staff member was nearby tossing around a volleyball. Soon after, Jane was also playing with a volleyball. Adult activity may be an important consideration in children's physical activity, not only in getting children to be physically active but also to be active for longer periods of time. Imitation and modelling of significant adults is relevant here. For instance, Jane did not typically engage in free time activities in the big gym, so perhaps seeing the staff member active kept her there for a longer period of time.

   Gender and activity. There were several gender differences in children's play, behaviour, and ideas observed in this study (Theme 2), as expected from results of previous research (for examples see Cameron, Wolfe, & Craig, 2005; Fagot, 1974; Fagot, 1978; Guevremont, Findlay, & Kohen, 2008; Lowes & Tiggemann, 2003; McVey, Tweed, & Blackmore, 2005; Phares, Steinberg, & Thompson, 2004). Girls' play consisted of more social and symbolic elements (i.e. role play), while the boys' play was more independent (e.g. Lego) and was occasionally team-based (e.g. two boys playing hockey on a mat with toy food and utensils). In the morning many of the girls sat with staff members drawing pictures and had social conversations about their personal lives, including school, extracurricular activities, and family, while many of the boys played alone or in small groups at separate tables with manipulative toys, such as Jenga or Lego. If the boys were in groups during this time, much of their conversation focused on the items with which they were engaged (e.g. playing with and talking about Lego). As well, during several observations on the playground, the boys were engaged in more organized

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games, such as soccer or basketball, while the girls did less organized but more social activities, such as climbing on the monkey bars. Moreover, while the boys did not hesitate to engage in dress-up play or role play, the play often turned aggressive. This may be due in part to biology (e.g. androgens – contribute to boy's greater physical activity), and in part to environment (e.g. boys are expected to be more active than girls) (Berk, 2012). Finally, the boys were more physically active overall than girls, such as participating in more free time physical activities than girls. These sex and gender differences in activity are supported by the research of Goran, Gower, Nagy, and Johnson (1998) and Myers, Strikmiller, Webber, and Bereson (1996).

   Gender differential treatment of children by adults has been documented. This differential treatment may be overt (e.g. 'boys don't cry') or subtle (e.g. different cookbooks for boys and for girls). As suggested in the literature review, these sex-typed expectations for boys and girls emerge early in life and are first expressed through differential treatment by mothers and fathers (Fagot 1974, 1978; Fagot & Hagan, 1991). However, the results of this thesis suggested that differential treatment continues with other significant adults, such as child care staff (ECEs and CCAs). For instance, one way that the staff in this study treated the boys and girls differently was through the selection of physical activities during free time; staff provided the boys' preferred activities more often than the girls' preferred activities. However, conscious efforts were clearly made to counter this behaviour with the provision of girls-only activities. Indeed, comments from staff suggested recognition of gender differences in free time physical activities prompting a re-evaluation of program delivery.

From the data collected, it was apparent that boys acted as gatekeepers of girls' physical activity (Theme 2). For example, some of the girls indicated that they did not want to join certain physical activities because the boys were playing aggressively. While gatekeeping of school age children's physical activity is a novel concept, the work of Brown and Gilligan (1992) discussed the origin of the behaviour, what they called the *tyranny of nice and kind*. They argued that girls' true voices are silenced for the sake of being nice, polite, and good, an expectation not extended to boys: "We watched girls who had been outspoken become increasingly reluctant to say what they were feeling and thinking or to speak from their own experience about what they know" (p. 30). Kilbourne (2003) echoed these sentiments, adding that girls "bury alive their real selves" and "repress their power, their anger, their exuberance, and be simply 'nice'" (p. 259).

While gatekeeping behaviour of physical activity was not measured in this research project, one implication is that if girls want to play mixed-sex physical activities, then they will have to be like one of the boys. For example, Patricia (Grade 3) was an active participant in physical activities with groups of boys (i.e. she tried to get the ball/puck/ring from other children and tried to score a goal). Compared with several of the other girls who played sports or were physically active, she did not scream or shriek when she was playing. She also did not back away from a face-off, where two or more children tried to take the ball/puck/ring at the same time. Developmentally, this may be seen as taking initiative, as in Erikson's (1950) stage of Initiative versus Inferiority, but it may also be a way to compensate for being younger or being a girl when most of the players are boys. In essence, it might have been a way to show that she could be one of the boys. The boys at the Centre tended to play sports very aggressively and quickly, and

they did not go easy on one another, as shown when Ronan (Grade 5) was hit in the face with the ball during spongee polo. In particular, during games in the large gym, if the boys were hit with the ball, they groaned loudly and laughed, and sometimes fell down, but the game did not stop. From my observations, this was not something that more than five of the girls wanted to do. Perhaps this type of play is daunting for the girls, not only because they may fear getting hurt, but also because they have different skills than boys (Haywood & Getchell, 2005).

Regardless of the reason, this gatekeeping behaviour is contradictory to the nature of female culture, which is more concerned with inclusion than the male culture (Gilligan, 1993). An observation of girls' activity is illustrative: A group of girls were playing spongee polo in the large gym, and during the game, one of the staff noticed that the girls had stopped playing. When the staff asked why they had stopped, the girls indicated that it was because Patricia (Grade 3) had to tie her shoe. Chodorow (1978) argued that girls had a "basis for 'empathy' built into their primary definition of self in a way that boys do not," and had "a stronger basis for experiencing another's needs or feelings as one's own" (p. 167). This may be one reason why boys play more competitive games than girls (Lever, 1976).

The issue of power is important to understand children's behaviour, specifically concerning gatekeeping of girls' activity. In a classic study, Freedman (1963) suggested that norms of the larger society regulated individuals to conform. Behaviours which benefit others are rewarded, while "detrimental behaviours" are punished (Wu & Baer, 1996, p. 438). According to feminist theory, in order to further individual or group goals, differences are constructed (Ferree, 1990). Therefore, in order to maintain imbalance in

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social power, males and females have been socialized differently. As a result, women

and men experience the world differently. Boys intentionally or unintentionally moving

girls to the sidelines during activities is a clear example: Boys *do* while girls *watch*.

Therefore, if girls need to ask boys permission to engage in certain activities, it takes

girls' power away, thus contributing to the subordination of women and girls. It may also

affect their physical health: If girls have to ask permission from the boys to play during

physical activities, then there may be the chance that they choose not to play, resulting in

lower levels of physical activity. During one observation, the girls, especially the

younger ones, seemed hesitant to play against the boys in a soccer game. However,

during an all-girls' soccer game a few weeks later, there was full participation by the girls

and no display of hesitation. It appeared that if girls had support (physical and

emotional) from one another, they were more likely to engage in physical activity.

The restriction of girls' activity is also a reflection of patriarchy, as described by

feminist theory (Ferree, 1990): Higher value is placed on boys' sports over girls' sports.

One example involved an informal conversation with Jarlath (Grade 3) where I

discovered that she was quite knowledgeable about ringette rules. However, she

downplayed her knowledge (and perhaps her skills) by saying that she was "just a

novice." On a larger scale, this restriction is seen in the amount of television air time

given to men's sports over women's sports. Research by Duncan and Messner (2000)

suggested that over the years of 1989, 1993, and 1999, 88% of airtime for televised sports

was dedicated to men's sports while 9% was dedicated to women's. Similar results were

found by Adams and Tuggle in 2004. This restriction is also seen in the salary

differences between male and female professional athletes, with male athletes receiving

higher wages than female athletes (O'Keefe, 2000). As a result, fundraising efforts often use women's bodies to accumulate donations. In recent years, some female Olympians have opted to pose nude or partially nude in calendars to raise money and awareness of their sport (O'Keefe, 2000). One Australian women's soccer team created a fundraising calendar featuring full frontal nudity (O'Keefe, 2000). Thus, for women and girls to participate equally with boys and men, the underlying message here is that they must sell themselves and give up power. Indeed, Steiner (2000) stated that this was "partly a backlash against women, a way of diminishing their power, trivializing their strength, putting them in their sexual place" (as cited in O'Keefe, 2000, para. 8).

In sum, the findings in this study, supported by current literature, helped me to develop Theme 1, "How to be a better, healthier person," Theme 2, "Out of their hands," and Theme 3, "Puppets cutting their strings." The next section will highlight the new information gained from this research, that which was not supported by the current literature, but which may have implications for children's health and child care practice.

New Information Gained

Based on my experiences working and teaching in the Early Childhood Education field, there were certain results that confirmed what I initially thought I would find in conducting this research. However, there were also findings that I did not know would arise, such as the depth and breadth of the influence of child care practice on school age children. The philosophy and goals of the Centre appeared to have a great deal of influence on the children's behaviour on body image, eating, and activity.

The new information gained in this study helped me to develop all four of the themes, but especially Theme 1, "How to be a better, healthier person" and Theme 3, "Puppets

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cutting their strings." As with the previous section, connection to theory will be imbedded throughout the discussion, and will highlight the relationship of the new findings to body image, eating attitudes and behaviours, and physical activity of school age children.

Setting

Throughout my observations, the Centre philosophy, goals, and children's rights and responsibilities were promoted and encouraged by the staff at the Centre, and the children's dialogue and behaviours were reflective of these practices. For example, the older children seemed to enjoy having responsibilities for running the program, including doing activities with the younger children, snack setup, and keeping attendance. It is apparent that these practices may have a direct and indirect impact on children's health and development (Theme 1): Children's health may be directly affected by nutritious meals and daily physical activity and indirectly affected through ECE practice which encourages respect and self-reflection. The latter may indirectly affect health by fostering self-esteem, positive self-worth, healthy relationships, and a sense of control. While these benefits to children's health and well-being are noted in the literature (see Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Neumark-Sztainer, Story, French, & Resnick, 1997), what is not addressed is the role of the school age child care centre in health promotion. Specifically, there is a lack of information regarding the role of early childhood education programs in fostering healthy ideas and behaviours around body image, eating, and activity in school age children. This is noteworthy, as the developmental health perspective suggests that early experiences and environments are critical to lifelong learning, health, and wellbeing (Jamieson, Bertrand, Elfenbaum, &

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Koshyk, 2012). Therefore, a discussion of the role of the child care centre and the connection to children's health will be addressed here.

As the number of children who expressed any type of body dissatisfaction was low, we could argue that a positive child care environment and caregiving practice helped to counter a drop in self-esteem often seen in other children (Theme 1). To be specific, the Centre philosophy was designed to create a culture and promoted the use of caregiving practice that fostered children's self-esteem. In particular, there were clear expectations for children regarding their behaviour and taking ownership of their behaviour choices, reflective of an authoritative parenting style (Baumrind, 1971). An authoritative parenting style has high expectations and high warmth for children, and as a result, these children tend to have higher self-esteem (Baumrind, 1971). If children have higher self-esteem, they may also have a more positive image of self. Thus, a centre philosophy which promoted diversity, respect, and realistic expectations and responsibilities for children, and which encouraged the use of authoritative caregiving practice (Baumrind, 1971), appeared influential on how children felt about themselves. In a general sense, this supports the claims that culture and child rearing are extremely important for the self-esteem of school age children (Carlson, Uppal, & Prosser, 2000; Dohnt & Tiggemann, 2006; Harter, 2006; Rudy & Grusec, 2006); however, the culture of the school age child care environment as influential is a novel idea, one not expressed in the literature.

As well, the eating environment at this Centre appeared to be a significant influence on the eating attitudes and behaviours of the children (Themes 1 and 3). Observations at the Centre highlighted how children were given ample time to eat, given choices of food items, encouraged but not forced to try new foods, and allowed to spend time with peers

during meals. As a result, almost all of the children ate a variety of nutritious foods willingly. Individual preferences for some foods were clear, but there was no indication that these children should be labelled 'picky eaters.' Most of the 62 children ate vegetables and salad, and many frequently asked for seconds. This is consistent with research by Logue and associates, who suggested that "preference for vegetables increased with age, perhaps as a result of increased exposure" (Logue, Logue, & Uzzo, as cited in Nicklas et al., 2001, p. 225). As well, on several occasions, children were seen laughing and smiling during snack or playing with their food, supporting the idea of a positive eating environment. When children play with their food and have food rules, food is shown as a significant part of their lives, and not just for the effect it can have on their bodies. Evidence for this was found in the amount of time children spent using toy food and materials, playing with food and utensils at snack times, and playing food- and eating-related roles.

Moreover, the social aspect of eating was important for the development of a positive association with food and eating, not only to see what other children eat and how they eat, but also to associate happiness (e.g. laughing and smiling) and relaxation with snack and lunch times. Time to relax and to self-reflect was encouraged at this Centre. During reflection snack, children were taught to listen to their bodies and to take time to pay attention to their body's cues, such as feeling hungry or full. This is contrary to regulating when, how, and how much children eat, which Branen and Fletcher (1994) suggested occurred in many child care environments. Indeed, only one example of this was observed, when a staff member joked about some of the children being slow eaters. Some past research has suggested that when food regulating occurs, children demonstrate

a decreased ability to regulate their food intake and were less responsive to feelings of satiety; that is, they paid more attention to external cues (e.g. cost of food) or unrelated internal cues, such as feeling guilt at wasting food (Birch, McPhee, Shoba, Steinberg, & Krehbeil, 1987; Johnson & Birch, 1993).

It should be noted that the implementation of the social and reflection snacks were quite innovative. From personal experience of working and visiting school age programs in Manitoba, snacks are often optional (i.e. children can continue to play if they do not want to eat); snacks are not served to large groups at one time; staff members serve snack to the children (i.e. the children do not serve themselves and/or each other); and there is little social conversation between children or between children and staff. All four of these common practices in other centres did not occur at the observed Centre.

Furthermore, providing children with food choices at snack times may increase their intake of healthy food options. During salad bar snack in the afternoons, children at the Centre often ate raw vegetables and salad, with several children expressing a love of specific vegetables. This contradicts research by Cooke and Wardle (2005); Perez-Rodrigo, Ribas, Serra-Majem, and Aranceta (2003); Skinner, Caruth, Wendy, and Ziegler (2002); and Ton Nu, MacLeod, and Barhelemy (2003) which suggests that vegetables were one of children's least liked foods. Thus, evidence for the role of the environment on children's eating attitudes and behaviours is clear. Indeed, staff members at the Centre discussed how some parents had attempted to get their children to eat the same foods at home as they ate at the Centre (with staff members providing recipes for these families), but the children did not eat these foods at home or said that they did not taste the same.

In thinking about the Centre's practices associated with respect and control, there appeared to be several benefits for the children. First, staff practices linked to offering respect and providing control may have contributed to children's self-concept. Several of the children exhibited understandings of self-concept, which could contribute to more accurate individual understandings of health factors and detriments to health. For example, I initiated a learning activity called, 'What I like about me' where children drew outlines of their bodies on large pieces of paper, and then drew the things they really liked about themselves (e.g. their hair, being funny, being good at soccer). A large group of children participated, although the group primarily consisted of girls. The children's self-portraits included:

- Jarlath (Grade 3) drew her eyes, eyelashes, nose and skort (a skirt and shorts garment).
- Grainne (Grade 3) drew her ears, earrings, eyes, mouth, and nose.
- Seamus (Grade 1) drew hair, ears, eyes, mouth with teeth, rib cage with his heart, bones in his arms and part of his leg.
- Alison (Grade 2) drew hair with ponytails, eyes, ears, nose, mouth, teeth and blue pony-tail holders and coloured her hair brown.
- Keeley (Grade 6) drew her eyes with eyelashes, nose and mouth. She also drew herself as a dancer.
- Liadan (Grade 1) drew her hair and coloured it brown with the barrettes and the pony-tail that she was wearing.
- Cailtin (Grade 4) drew herself with her eyes, nose and mouth with teeth.
- Jane and Maeve (both Grade 5) had drawn themselves as Halloween characters. The Halloween character was on a yellow or orange t-shirt with 'Happy Halloween' and 'Enjoy candy' written on it. It had shorts, purple hair, and a red mouth.
- Zeke (Grade 1) drew a spine. He also drew a heart that resembled a jelly bean.

There appeared to be several behaviour patterns exhibited in this activity. The younger children seemed to focus on specific physical attributes such as their hair colour, eye colour, facial features, fingers and fingernails. The girls focused on external features, such as ears and eyelashes, while the two boys that participated also included internal

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organs and bones. Some of the drawings were quite intricate, including not only physical features but items that were more personal to each child, such as earrings for Grainne and barrettes for Liadan. The older children were also able to add more abstract elements to their caricatures, such as being dressed up as Halloween characters or being a dancer. However, a few of the children indicated that their body tracings were not accurate or had errors and had to be redrawn. This implies that an importance is placed on appearance, even when it involves representations of appearance.

Another benefit resulting from staff practices involving respect and control may be children feeling pride and confidence in their abilities. For example, Maureen (Grade 6) won a game of silent circle. She smiled, cheered, and jumped up and down with her arms above her head. As well, Liadan (Grade 1) demonstrated how fast she could run. Some of this confidence was also seen in a lack of hesitation to get involved in and during activities. For example, Lisa (girl, Grade 3) was observed taking initiative during a soccer game, including wanting to be the goalie, and going after the ball. Polly (girl, Grade 2) demonstrated similar behaviours by going head-to-head with several boys during a soccer game, trying to take away the ball from other players.

In thinking about the benefits related to respect and control, it is also important to discuss the behaviours I *did not* see the children exhibit. In particular, I did not observe any form of antisocial behaviour or bullying, and very few behaviour challenges. For example, adult intervention of negative behaviours during children's play was not needed. Some of the children did play aggressively, but their play was seen as acceptable under the rules of what they were playing (e.g. hockey). As well, although I did observe some appearance-related teasing, there was no name calling or verbal aggression.

Furthermore, I did not observe any of the children cry or become upset about activities they did not want to do or snacks they did not want to eat. Indeed, when children did exhibit challenging behaviour (e.g. losing a game and taking it poorly), staff members would take the children aside and speak to them about privately about their behaviour. However, for the most part, the children monitored themselves. Therefore, I inferred from these behaviours that the respect modelled by the staff and expected of the children was influential on children's emotional self-regulation (i.e. how we adjust our emotional state to a comfortable level of intensity) and positive peer interactions (Berk, 2012). Specifically, prosocial behaviour was encouraged by the staff members and antisocial behaviour was discouraged and extinguished.

In early learning and child care settings, staff training is an important factor in children's health (Themes 1). In particular, while several of the staff members at the Centre were Early Childhood Educators and others were university students in health-related fields, a thorough understanding of child development is needed by all staff for effectively preventing body image concerns, disordered eating habits, and low physical activity in school age children. For example, during one group meeting, the dimensions of health were discussed with the children. This included physical, mental, and spiritual health. While the intent behind this discussion was on health promotion, it seemed that some of the concepts might not have been developmentally appropriate, as evidenced by the number of children who asked for clarification on various parts of the topic. For example, the words "dimension" and "philosophy" were not explained during the exercise and some of the explanations of the concepts (e.g. spiritual health, occupational health) were somewhat abstract and confusing. Therefore, the value of this type of

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discussion might have been lost due to a lack of developmentally appropriate language. As well, knowledge of child development would assist staff members in fostering healthy and appropriate interactions with the children. For example, while the Centre philosophy, goals and children's rights and responsibilities were promoted throughout my observations, there were a few occasions where staff members used appearance-related teasing with the children. While these instances were infrequent, knowledge of the negative impact of such teasing on children's self-esteem, self-concept, and body image would likely reduce its occurrence further.

Bronfenbrenner's theoretical work continued to be supported through the new information gained. Bronfenbrenner thought that each child was influenced by multiple levels of an environment that combined to affect overall child development (Bronfenbrenner, 1979, 1994, 1994b). Specific to the setting, the microsystem and the exosystem (social settings and institutions that indirectly affect children) appeared to be the most influential on children's ideas and behaviours (Bronfenbrenner, 1979, 1994a). Program-mandated interactions between children and staff (e.g. group meetings), interactions among peers (e.g. social snack, free time physical activities), face-to-face activities (e.g. hockey, making perogies), and expectations for social roles (e.g. Staff Assistant, snack helper) were reflective of the microsystem within the Centre, while staff training and licensing requirements were reflective of the exosystem. It also appeared that the exosystem was influential on the microsystem, and ultimately was an influence on children's ideas and behaviours around body image, eating, and activity. For instance, licensing requirements in Manitoba require a certain number of staff at each centre to be trained (e.g. ECEs have at least two years of formal training while CCAs have only 40

hours of formal training), and this training is accompanied by a thorough understanding of child development, which was apparent in the child care practice of the ECEs at the Centre. This was also apparent in the practice of the staff members who were in enrolled in health-related university programs.

Connections between microsystems (the mesosystem) may have also occurred, which can directly affect child development. Specifically, the Centre might have influenced families by sharing recipes of foods that were served during snack times. The director indicated that some parents had tried to get their children to eat the same foods at home as they ate at the Centre, and as a result adopted meal items and possibly food selection (e.g. low sodium soup used in Hashbrown Surprise recipe) or food preparation practices.

Importance of adults. Language used by adults' at the Centre encouraged or discouraged healthy ideas and behaviour in children (Themes 1 and 2). For example, the word "guys" was used by the staff members to address groups of children. This can be problematic, especially for children's self-esteem and safety. In a hypothetical example, if there is an emergency and a staff member announces, "Ok guys, we need to leave the gym and head outside," there may be a chance that some of the girls may think they are not included in this grouping, thinking, "I'm not a guy. Maybe they are not talking to me." As well, this language could have implication for specific behaviours, such as physical activity participation. During one observation a staff member announced to a group of children, "If you guys want to come outside with me and play soccer-baseball..." This type of exclusionary language could influence girls' participation in physical activity: In this case, the majority of children who went outside to play the game were boys, while five boys and ten girls stayed inside to do an art project. Essentially, the

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word "guys" is a form of exclusionary language, and it is ultimately more respectful to address children by their first names and not as a homogeneous mass.

Body image

There was a general acceptance of one's body image by the majority of the children at the Centre. While a few of the older children did express body dissatisfaction or experimentation with appearance, the small number of children who expressed a concern with personal appearance contradicts the alarming rates of poor body image among school age children reported in the literature (for examples see McVey, Tweed, & Blackmore, 2004; Phares, Steinberg, & Thompson, 2004; Schur, Sanders, & Steiner, 2000). This may have been due in part to a Centre philosophy which supported diversity, and Centre goals which focused on self-worth and health promotion (Themes 1 and 3). Bronfenbrenner's ideas concerning the influence of the microsystem on child development are appropriate here.

As suggested in the previously, appearance-related teasing did occur at the Centre (Theme 2); however, the incidence of it was not substantial. When it did occur it was most commonly directed at boys and exhibited by boys. Preschool and school age boys do exhibit body image concerns (Birbeck & Drummond, 2006; Cohane & Pope, 2001; Hargreaves & Tiggemann, 2006), which suggests that boys are paying attention to and are influenced by the sociocultural expectations of physical appearance. However, my results are partly contradictory to the research findings of Schwartz, Phares, Tantleff-Dunn, and Thompson (1999) and McCabe and Ricciardelli (2001b), where girls were the primary recipients of such teasing. My results are also in part contradictory to the findings of Kostanski and Gullone (2007). Although these researchers reported a higher

percentage of school age boys than girls experiencing weight-related teasing from peers, these experiences for boys were greater if they were assessed as being under- or overweight (Kostanski & Gullone, 2007). The appearance-related teasing that occurred at the Centre was not limited to a specific body size or shape; it was expressed and experienced by individuals of varying shapes and sizes.

Sociocultural theory can be used to explain dissatisfaction with one's body image as the result of social pressure to look a certain way (Tsiantas & King, 2001). However, as this theory primarily focuses on the thin-ideal for women and girls in Western society (Tsiantas & King, 2001), and as girls have been the primary recipients of appearance-related teasing (McCabe and Ricciardelli, 2003b), new aspects of the theory may need to be considered for boys who experience body dissatisfaction and appearance-related teasing. For instance, it may be important to consider how boys learn about the value placed on physical appearance; that is, how the cultural value of physical beauty is transmitted to boys. In particular, exploring the various roles that men play in boys' lives may be critical. Anecdotal evidence suggests that boys have few male role models in their lives, especially those boys who are enrolled in child care programs. For example, in Canada, men comprise approximately 3-4% of the entire early childhood workforce (Men in Childcare, 2011). Therefore, this theory must consider alternative role models (e.g. celebrities, peers, coaches) as significant in the transmission of culture to boys. As well, due to the lack of men in the early childhood workforce, this theory should consider the cultural values that are passed to boys from the women who care for them. As the sociocultural emphasis on physical beauty has predominantly been a female issue, it

should be considered that this value is also being transmitted to boys in female-dominated child care environments.

Eating Attitudes and Behaviours

Food and eating behaviours. One topic that did not find much support in the literature was children playing with food or food items, which ranged from physically playing with food and utensils at mealtimes (e.g. making a volcano out of mashed potatoes) to role play with toy food items (e.g. playing 'restaurant'). While there is often a great deal of support by parents and caregivers for children to engage in pretend play with toy food or food items, it seems that actual manipulation of food at meal times is frequently discouraged. For example, during a cooking learning activity, almost all of the children indicated that they had been told not to play with their food, with the reasons behind this including: (1) Playing with their food was dirty and it gets everything dirty, (2) there were germs, and (3) other people did not want to get dirty. Gralinski and Kopp (1993) suggested that when mothers restricted this type of play, it was due primarily to social norms or social conventions. Although not stated, it could be argued that mothers restricted food play because they were the ones who had to clean up after the meal. Klesges and associates (1983) also considered the time children spent during meals playing with food; however, this research was concerned more so with the link to child weight (Klesges, Coates, Brown, Sturgeon-Tillisch, Moldenhauer-Klesges, Holzer, Woolfrey, & Vollmer, 1983). It is important to note that all aspects of food play were encouraged at the Centre, with one exception where a staff member supported the children in playing with their food, but asked that they continue it at another time. When children are discouraged from playing with food, they may be missing developing

essential skills. For example, restaurant or grocery store role play may teach math skills (e.g. counting, how to determine the amount of a tip) and economics (e.g. value of goods and services), while manipulation of mashed potatoes teaches dexterity, creativity, and an understanding of the physical properties of food.

Language used by adults to describe food items and food habits may be influential in the development of eating behaviours (Themes 1 and 2). For instance, if adults use emotion-laden statements to describe favorite foods or favorite restaurants may transmit this positive experience with food to children. Indeed, the word "love" was used frequently when children discussed their favourite foods. This implies a positive relationship with food, especially their favourite foods. Indeed, even when children were asked general questions about the activities that interested them, the topics of food and eating arose. On the other hand, when adults describe food or food behaviours as 'bad' (e.g. the staff member who said that a large Slurpee and four cups of Kraft dinner were bad for you), it may give children the wrong information about food and how to develop healthy eating habits. Using value statements such as 'good' and 'bad' with respect to food and eating could also lead children to feel badly about themselves. This teaches children to eat to satisfy emotional needs or wants (e.g. If I feel badly, I need a cookie to feel better) and not to listen to their bodies (e.g. continue to eat when feeling full). Instead, the ideas of 'everyday food,' 'sometimes food,' and 'occasional food' may work more effectively. For example, foods such as apples or milk products would be considered everyday foods, while cake and potato chips are occasional foods. Thus, the value of one food over another is minimized.

The inability to listen to one's body may be especially true for children who are overscheduled (Theme 2). For instance, several of the children had multiple extra-curricular activities, such as swimming, gymnastics, hockey, basketball, and soccer. For some of these children, it seemed like these activities were numerous and occurred several times per week. Rushing from one activity to the next with little transition time or time to relax may affect their ability to read their body's cues. Overscheduling may also result in children making less healthy choices. For instance, the Assistant Director mentioned that they had had to change their morning routine around snack. Children were originally given the choice of going outside or having snack, and several children were going outside instead of eating. However, these children were complaining of being hungry later. As well, many of the children at the Centre appeared to take their time and socialize with peers at morning snack. As a result, on a few occasions, staff reminded the children to eat so they could be on time for school. Furthermore, while the staff members mentioned that children were hungry after school, the children still took the time to play with their food. Thus, playing and being with their peers appears to be more important to children than eating, which suggests that they are missing critical time to just be children.

One other finding related to food that was contrary to the literature was that girls were at greater risk of food refusal and dieting than boys. Several studies from the 1990's and late 1980's reported that by eight years of age, girls were at higher risk of food refusal and dieting concerns (Dolan & Gitzinger, 1994; Garner, Garfinkel, Schwartz, & Thompson, 1989; Hsu, 1989; Rolls, Federoff, & Guthrie, 1991; Shapiro, Newcomb, & Loeb, 1997; Thelen, Lawrence, & Powell, 1992). This was not a finding that was apparent from this research study. Indeed, only one Grade 6 girl mentioned being

concerned about overeating during the Thanksgiving weekend, and from my observations, it was boys that had more consistent rates of food refusal than the girls.

Findings concerning food play relate to Piaget's (1952) observations. He suggested that children were actively involved in their own learning, that they constructed their own knowledge. To be precise, children learn by doing. Therefore, when children experiment with their food or engage in food role play, cognitive development takes place.

Sociocultural theory is also relevant here. Specifically, as language is very important to the process of learning the ways of a culture, the language used by adults to describe food items and habits may be influential in the development of children's eating behaviours. Using words such as 'good' or 'bad' (e.g. staff member telling children to eat their "good healthy stuff" first; another staff member saying that too much Kraft dinner was "bad" for you) with regards to food or eating habits teaches children which foods to consume, which to avoid, and specifically how to do both.

Physical Activity

While actual measurements of each child's physical activity was not conducted for this research (e.g. duration, intensity), participation was assessed: Physical activity was observed in all 62 children during my time at the Centre. While some children participated in free time physical activities more than others, as part of the daily program all of the children engaged in physical activity in the form of games or clubs, and as part of morning group meetings (Theme 1). This contradicts research by Brockman et al. (2009), the Government of Manitoba (2004), and Neumark-Sztainer et al. (2003), which states that children are not getting enough daily physical activity. While it is obvious that any school age child care program can include physical activity as part of its daily

routine, not all centres include it as part of their philosophy, nor have staff that get regularly involved in the children's physical activities or have the physical space to accommodate children's physical activity needs. This Centre was able to address each of these concerns successfully, leading to high rates of physical activity participation.

One important consideration in children's physical activity in Manitoba is weather conditions. Considering that much of the school year is spent in winter-like conditions, it would be expected that children would have a lack of opportunity to or be hesitant to engage in outdoor activities during especially frigid temperatures. These are important considerations, as several research studies have found a link between children's physical activity levels and time spent outdoors (see Burdette, Whitaker, & Daniels, 2004; Oja & Jurimae, 2002). In research by Hinkley et al. (2011), focus groups of mothers of preschool children in Australia reported that inclement weather would limit children's opportunities for outdoor physical activity, and research by Belanger Gray-Donald, O'Loughlin, Paradis, and Hanley (2009) in New Brunswick reported a decrease in physical activity for 12 to 13 year olds during days with snowfall. This was not found to be the case at this Centre. While child care licensing regulations stipulate that children should not be taken outside if temperatures are below -25 degrees Celsius (MCCA, 2005), when given the option of participating in outdoor activities during the winter, many children were involved. For example, large numbers of children went outside before school started in the mornings. As well, during one observation, all of the children participated in a cross-country skiing activity during blizzard-like conditions. One older girl was visibly upset when she discovered that she had forgotten ski pants; however, a staff member donated her extra outdoor clothing to this child so she could join the group.

During much of the unstructured and structured physical activities at the Centre,

children were observed cheering, giving high-fives, putting their arms around one

another, or giving hugs, which supported the development of Theme 4, "Reaching out."

As suggested in the literature review, for boys in particular, physical activity may be an

acceptable outlet with which they can express emotions and display physical affection,

which may be part of the reason for why it was encouraged at the Centre (e.g. lose a

game – allowed to express disappointment; win a game – give teammate a hug). Leaper

(2002) stated that stereotypically, physical affection was promoted and accepted among

girls, but the same was not true for boys. According to Carlson (2006) and Perry (2011),

touch is critical to child development. Unfortunately, Perry (2011) suggested that our

culture is starving for touch: "The compartmentalization of our culture has resulted in

material wealth," yet there is poverty of social and emotional opportunity (Perry, 2011).

The importance of touch is highlighted by Carlson (2006), who summarized several

historic studies where children who were deprived of touch failed to thrive and died.

Research has also found that touch has beneficial results for premature infants

(Richardson, 1997, as cited in Carlson, 2006), for children who have suffered burns and

those with cerebral palsy (Hernandez-Reif et al., 2005), for healthy brain development

(Shore, 1997), and in the formation of secure attachments to caregivers (Anisfeld et al.,

1990). Therefore, for some boys, physical activities and sports may provide occasions

for physical contact that they might not otherwise receive: "That children have control

over such a physically active type of play reinforces to them that they can and should

have power over how and when their bodies are touched" (Carlson, 2006, p. 35). Boys

are often socialized to be more independent than girls, but physical activities may be an

acceptable way for boys to be social beings and build relationships with one another. Indeed, for the boys in this research project, physical activities were more of a draw than video games or other activities. They would often stop what they were doing once the gym was opened (for most activities but especially for hockey-type and soccer activities). In particular, the boys seemed to bond through *doing*. They socialized in larger groups through playing with manipulative toys or through sports and physical activities. They talked about what they were doing, about video games, and about sports heroes. Girls seemed to bond by being together (e.g. talking at a table, sitting in small groups).

It is also important to note that all of the individuals involved in playing with or styling one another's hair were female. None of the boys were seen engaging in this activity. Perhaps this physical behaviour implies that touch is important for girls and women, that it is a critical part of gender socialization. However, what needs to be considered is the importance this also plays in the development of boys. Carlson (2006) and Perry (2011) and others have argued that touch is critical to *child* development, not just *girls'* development. Therefore, when touch is not common in boys' everyday lives (outside of sports and competitive activities) the assumption is that it is not taught to be a necessary part of their lives. Thus, we need to consider the implication this has for their immediate and long-term health and development.

Adult and peer participation in physical activity may be effective in getting children more physically active (Themes 1 and 4). Children may feel that their play and interests are important if adults want to engage with them, and thus may increase their participation in physical activity, especially with adults that children respect and admire. For instance, children may be influenced by the behaviour of child care staff, especially

those that are popular or are seen as 'cool.' At the Centre, the children wanted to play with certain staff more than others, especially the younger staff (i.e. interaction was more like that of peers than of adults with children). The Director mentioned that the children really liked one staff member, and another staff observed that this person's manner was friendly but sarcastic (i.e. she often teased the children).

Summary of Discussion

Overall, this study found support for current literature around the ideas and behaviours related to the body image, eating attitudes and behaviours, and physical activity of children. However, new findings related to school age children and the importance of child care environments on these three issues was also gained from this research. Moreover, based on an exploration of Bronfenbrenner's theory, supplemental theoretical perspectives, the current literature, and my experience working and teaching in the early childhood education field, there were certain results that confirmed what I initially thought I would find; specifically, that child care practice can and did seem to influence children's ideas and behaviour around body image, eating, and activity.

Chapter VIII: Limitations, Implications, and Conclusions

From my observations of and discussions with children and adults in an early learning and child care environment, the findings from this study can have important research, theoretical, and practical implications. It is important to also consider the study limitations, which may have an impact on research, theory, and practice. Limitations will be discussed first, followed by future directions and overall conclusions.

Limitations

As with any research project, it is important to identify the limitations which could have affected the findings. Four such limitations are noted, as follows: Sample variation, characteristics of the participant population, demographic information, and inter-observer reliability. In identifying these limitations, it is also important to suggest how these items could be addressed in future research.

First, sample variation is a limitation in this study, as only one school age child care centre was studied. Time and financial constraints inhibited involving other centres. However, a significant number of participants (80% of the children enrolled in this child care program) provided a large number of data points to analyze within the Centre. A future study could use at least two sites, which vary in practice methods. Additionally, research could be conducted at several best practices school age centres in different geographic areas. Community variables such as diversity and accessibility to resources of income and education would be used in selecting these centres. School age centres located in lower and higher income areas, or centres with culturally diverse populations of children (e.g. Aboriginal, new immigrants, refugees) would be used. Additionally, as

child care legislation differs in each jurisdiction, cross-country or international comparisons of best practices school age sites could be conducted.

Second, although the findings provided insight into a homogeneous sample, there was a lack of cultural and geographic diversity in the participant population. Specifically, all of the children attended the elementary school in which the Centre was located and lived in the neighbourhood catchment area. As well, a majority of the children appeared to be Caucasian. In future research, knowledge of more variation within the sample would help to provide more application and testing of ecosystem theory. Collecting information such as culture, ethnicity, family size and type, and number of subsidized child care spaces at each centre would also be useful.

Third, although it was possible to observe the impact of the child care environment on specific aspects of children's health, social and personality characteristics of the individual child participants and their families was not available. No specific demographic information was gathered on the children at the Centre, other than age and sex. Therefore, knowledge of factors such as family income and education, for instance, was beyond the scope of the study. Future research should examine not only individual characteristics, but also cultural and ethnic differences among the three issues, as previous research has found cultural and ethnic differences in body image satisfaction (Adams et al., 2000; Kelly, Wall, Eisenberg, Story, & Neumark-Sztainer, 2005), and because there appears to be a lack of research concerning the physical activity needs and behaviours of Canadian children from diverse cultures. For instance, several reports from Statistics Canada on physical activity trends among children consider demographic variables such as age, sex/gender, socioeconomic status, and geographic region, but do

not include information on culture or ethnicity (for examples see Guevrement et al., 2008; Clark, 2008). I found only one report which focused on participation in sports and other physical activities among Aboriginal children and youth (Smith, Findlay, & Crompton, 2008).

   A fourth limitation of this research may involve reliance on Bronfenbrenner's ecological systems theory. Indeed, there are more recent theoretical perspectives which may have done a comparable job in helping to answer the research questions. For example, feminist post-structuralist theory examines the messages in a society or culture that contribute to the socialization of identity for women; that is, "the messages women read in society about who they are and how they should understand themselves" (Butler, 1990, Gavey, 2010, as cited in Nicholson, Shimpi, & Rabin, 2013, p. 4). As well, post-structuralist theories have been successfully applied to qualitative research in early childhood education. Mukherji and Albon (2010) suggested that post-structuralism was mainly focused on discovering participants' views, ideas, and attitudes. However, for the purposes of this research, I not only wanted to focus on the ideas of girls, but the behaviours of girls, and the ideas and behaviour of boys as well. I thought that a broader picture of body image, eating, and activity could help me understand the issues in order to foster the health and development of school age children. In addition, there appears to be a certain amount of scepticism on the part of the post-structuralist researcher, such that their ability to "'capture' data and arrive at the truth in some way is impossible as ideas are ever changing and knowledge is uncertain" (Mukherji & Albon, 2010, p. 31). These were not concerns that arose in my consideration of Bronfenbrenner's work; therefore I

thought it would be the most useful theory for answering the research questions and understanding multi-level influences on children's ideas and behaviour.

Next, some authors suggest that merging qualitative and quantitative data in the context of a single study can be used to provide a clearer understanding of the research problem or questions (Creswell, 2014). For example, open-ended interview responses can provide support for, and elaborate on, more closed-ended survey responses. In the case of my study, qualitative research methods were primarily utilized to answer the research questions. Future research could utilize quantitative questionnaire methods in order to provide a stronger understanding of the research questions and to validate my findings. For instance, in addition to my observations of body image and eating behaviours, I could collect data mean to assess body image, such as the Body-Image Ideals Questionnaire (Cash & Szymanski, 1995) or the Piers-Harris children's self-concept scale (Piers, 1996).

Finally, while my observations in the Centre lasted four months, a longitudinal study with pre- and post-observations would be helpful in assessing change. There is significant value of longitudinal data in understanding children's health and development. A benefit of a long-term cohort study is that it allows us to see how populations develop over time (Berk, 2012; Jamieson et al., 2013). In particular, a longitudinal study could help answer questions such as: (1) Is there a specific age where positive influences on children's body image ideas have the most impact on long-term health and development? (2) If school age children do have unhealthy eating habits, how long would an intervention need to be conducted (such as modelling healthy eating habits) before there

is a noticeable change in ideas and behaviour? (3) How effective is public policy regarding daily physical activity on children's physical activity ideas and behaviour?

Implications

There are several areas of practice, education, and research to which the results can be applied and in which to assess the significance of this research. The four themes that emerged from this research can be used as a guide to create best practices in early childhood environments.

Implications for Practice

As not all children learn in the same way, and as certain sociocultural influences may hold more power than others, in order for children to adopt healthy behaviours several different methods of teaching about health can be used. As noted earlier in Theme 1 "How to be a better, healthier person," modelling of healthy behaviours by parents and caregivers (e.g. getting physically active with children), talking about health-related ideas and behaviours (e.g. having discussions about media), and providing opportunities to practice healthy behaviours (e.g. encouraging children to help prepare and cook meals) are important for children to acquire healthy ideas and behaviours. In addition, talking honestly with children about negative issues (e.g. dieting, power of marketing) and specific learning activities, such as reading stories like *Shapesville* and engaging in reaffirming activities like *What I like about me*, can help foster healthy ideas and behaviours in children.

Indirect methods of learning also need to be considered for child care practice. While direct teaching about health is important in fostering healthy ideas and habits in children, what ECEs *do not say* about health is also important. When children are not given

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appropriate information about health or appropriate role models, they may look to other sources to gain that information. Children, especially girls, often look to media and peers to be told what to think, feel, and how to look. One of the issues here is that the information from these sources is not always correct or may instead foster unhealthy or even detrimental behaviours, such as pro-anorexia websites or dieting tips (About Kids Health, 2010).

It is also important to consider that when caregivers tolerate or engage in appearance-related teasing directed at children (as noted in Theme 2, "Out of their hands"), such teasing sends the messages that physical appearance is important and meeting sociocultural expectations around appearance is important, and that the target of the teasing is not meeting these expectations. This increases the risk that children will begin to dissociate from their natural body, focusing on the parts they see as undesirable rather than focusing on the body as a whole. It is also important that ECEs are aware of the language they use, of their behaviour in daily interactions with children, and their potential effects on children's ideas and behaviour. For example, the use of the words *good* or *bad* to describe food or grazing during snack times can influence children's eating habits.

In order to make healthy food choices, parents and child care staff can help children to gain knowledge about how food and nutrients affects their bodies. This idea stems from concepts found within Theme 1. However, marketing and food producers often make healthy food choices difficult for children and their parents. In particular, nutrition knowledge may be manipulated to increase the consumption of the product. For example, while not served at this Centre, Sunny D fruit drink is one product which claims

to have Vitamin C, but it also has a lot of added sugar. This product may be confusing to children and to some parents who think it is similar to orange juice. When children receive formal education around health and nutrition, as was the case for the children in this study, this information is translated into healthy food choices: These school age children, who were hungry after school, ate vegetables and rarely left food on their plates. As well, when children are provided with choices during snack or meal times, they are more likely to choose nutritious foods when given the opportunity. This works in concert with the expectation that children will make healthy choices for themselves and helps to discard the stereotype that most school age children are fussy eaters. Therefore, providing choices at snack times and providing healthier foods, such as salad and vegetables, needs to be incorporated into other school age child care programs.

In order to help establish a positive eating environment in school age programs (Theme 1), it is helpful for ECEs and Directors to have a concrete means of providing and assessing this environment. Pimento and Kernested (2010) have developed a checklist for ECEs to use, which is a simple 'yes/no' checklist with specific behaviour goals. Checklist items include the following: "Food served for celebrations and holidays are nutritious and fun," "There are well-maintained chairs, tables, plates, and utensils suited to the children's size and development," and "Children are encouraged to develop their five senses in enjoying a variety of foods" (Pimento & Kernested, 2010, pp. 249-250). This assessment allows ECEs to see which criteria are being met, and provides specific examples to help with the successful implementation of each checklist item.

Creative means of attracting children to engage in physical activity is needed, especially for those children who are not regularly physically active (Themes 1 and 4).

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School age child care programs need to have mixed-sex physical activities as well as same-sex physical activities in order to get children involved. Some girls will not hesitate to play with boys and are able to play more assertively. However, for those girls who are younger or less skilled at certain activities, same-sex teams may be a good option. As well, staff participation in children's physical activities, that is, being a player rather than a referee will bring more children into the activity and for longer periods of time. Furthermore, while several of the older girls in this study were involved in extracurricular activities outside of the Centre, they did not often choose to participate in free time physical activities, except when there was music playing. Using music to get children moving can be an incentive for those children who are less confident about participating in team sports or games with rules, especially if they feel that they are not skilled at these activities. If music allows the children to move their bodies in whatever way they choose, some of the pressure or anxiety around performing in a certain way can be reduced (e.g. scoring on a net).

Promotion of team-building behaviours may also increase participation in physical activities, an idea which stems from Theme 4, "Reaching out." For the girls at the Centre, games (even competitive ones) were social experiences, where they talked, supported and helped each other. For boys, the talk was mostly cheering and encouraging or directing behaviour, such as telling one another to take a turn as goalie. For both boys and girls, these supportive behaviours keep children in the game and encourage them to participate. As well, the nature of the school age child in North America is to be competitive (Martin & Corson, 2007), therefore, it may be more difficult to encourage participation in non-competitive physical activities. However, one option

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for school age child care programs is to have a mix of competitive and non-competitive physical activities. These could be accompanied by discussions with the children about being team players, about fun being more important than winning, and about how to deal with pressure from parents and coaches. An emphasis away from winning at all costs may increase participation in physical activities.

Active engagement of girls in physical activity is critical. As mentioned previously, many school age girls quit activities they previously enjoyed because of body confidence issues (Dove, 2010). Therefore, gender must be considered in the promotion of physical activity (Theme 2). The Canadian Association for the Advancement of Women and Sport and Physical Activity (CAAWS) has developed two resource sheets for parents and caregivers to help address this issue. Some of the recommended actions include:

- Create a positive environment – Safety and inclusion are critical for girls' participation in physical activity. Consider language, visual images, policy, practice, and physical environment.

- Talk about the benefits – Discuss with girls how physical activity can be beneficial for making friends, decreasing stress, skill development, leadership opportunities, travel, and so on.

- Start young – Toys and games provided to girls can send messages regarding activity (i.e. sedentary versus movement oriented). Therefore, it is important to think critically about these materials and the effects on young girls. Also, "encourage and enable girls to move and express themselves physically through active play" (CAAWS, n.d., para. 2), which will help build a foundation for life-long physical activity participation. (CAAWS, n.d.)

- Allow input into program design – Allow girls to plan for and make decisions regarding their physical activity needs and interests.

- Emphasize fun – Celebrate personal bests and accomplishments, and emphasize participation over skill.

What is also needed to broaden girls' range of physical activities is the support of boys (Themes 2 and 4). In this research, support of girls by male peers appeared to keep girls

in physical activities or encourage them to try new activities. Indeed, when children had the support of both male and female peers, they were more engaged in the activity and enjoyed doing so, which was clear during group games at the Centre. Group games, where all of the children participated, were played with the same level of enthusiasm by girls and boys. Everyone wanted to play and seemed to have fun: All had smiles on their faces, and many laughed or shrieked. This is important to note, as some of the children were physically active only during group games.

When we allow children to play however and with whatever they want, they can explore not only who they are but who they want to become. This is a critical piece of ECE practice, especially related to gender (Themes 1 and 2). ECEs ought to encourage gender neutral activities, since children learn something from every play experience they have. When children's behaviour is restricted or redirected based on sex or gender, they may miss some opportunities. For example, a staff member commented that Alma (Grade 6) looked like a princess in one photo. However, making an assumption without asking the child about the costume may express to her that there are limited roles for girls and women to play. Allowing children to experiment with gender roles, for example, helps in finding an identity that fits them, not one into which they are supposed to fit.

Centre philosophy and ECE practice. A centre's philosophy has significant implications for ECE practice (Theme 1). Specifically, the philosophy of each child care centre guides the delivery of the program, including how staff members support, care, and provide play and learning opportunities for the children. For instance, a centre philosophy can be one that provides an emergent curriculum approach or a theme-based curriculum approach. With an emergent approach, the curriculum develops or *emerges*

from the interests of the children; therefore it is often spontaneous and not pre-planned (RRC, 2011; Bright Start, n.d). Through observation and documentation, ECEs learn about *what* topics interest children and also *why* they are interested. If an ECE observes the children have an interest in dinosaurs, he or she provides opportunities to study the topic of dinosaurs in depth (e.g. books, toys, trip to a museum). As the ECE observes, he or she looks for clues as to the underlying interest about dinosaurs: Is it about size? Is it about predatory behaviour? Is it because they are seen as scary monsters? In essence, the curriculum is co-constructed by the children and ECEs: The curriculum is child-directed and ECE facilitated (RRC, 2011; Bright Start, n.d.).

On the other hand, with a theme-based approach, the curriculum starts with a series of adult-initiated themes or lesson plans. The curriculum may be set weeks or months in advance, and play opportunities are focused around particular themes, such as insects, camping, music, dinosaurs, and so on. In fact, centres may have a different theme for each week of the year. These themes are determined by the centre staff, with consideration of available resources and materials (what is available at the centre and in the community) and on staff knowledge and expertise of particular topics. For instance, a 'beach' theme includes a trip to a local pool, a staff member making and initiating several games involving water balloons, and includes adding pails, shovels, and sea shells to the playground sandbox. With this approach, observation and documentation may or may not be conducted, and if performed, the focus may be less about the children's interests and more about the child's development, play skills, or social skills. Overall, it is clear both of these approaches have benefits and drawbacks, but the important consideration here is how each affects ECE practice.

Specific aspects of the centre philosophy may be translated into the overall program delivery, in either of the two curriculum approaches mentioned above, or into smaller pieces of the program, such as during routines and transitions. For instance, supplementary to the Centre observed here was a philosophy reflected in various goals and objectives, such as helping children maintain good health and improve their physical abilities through the provision of nutritious snacks and daily physical activity. These goals and objectives were translated into social and reflection snacks and offering adult- and child-selected physical activities several times a day.

Piaget and developmentally appropriate practice. For ECEs, using developmentally appropriate practice is important for fostering healthy ideas and habits in children (Theme 1). Therefore, consideration of Piaget's cognitive-developmental theory is useful here. For example, children in the preoperational stage (ages 2-7) may need simple explanations of the consequences of unhealthy lifestyle behaviours, such as saying, "Not eating enough fruit and vegetables can hurt your body" (Piaget, 1952). As well, children in the concrete operational stage (ages 7-11) can think most effectively about things that are familiar to them (Piaget, 1952). Therefore, using personal examples, such as what they bring for lunch or discussing their favourite foods, can be used to explain more abstract concepts (e.g. balanced diet, body image). As well, modelling may be effective in transmitting healthy behaviours because the behaviours are concrete (i.e. the child can see what the adult is doing), such as ECEs eating meals with groups of children to get them try new foods. For children in the formal operational stage (ages 11 and up), the discussions of health using hypothetical situations or open-ended questions can be helpful (Piaget, 1952). For example, children can asked, "What do you

think happens to your body when you don't eat enough healthy food and get enough

physical activity?" or "Why do some people believe that in order for a person to be

popular, they need to look a certain way?"

Ecological model of health promotion. Bronfenbrenner's work has been invaluable

for understanding the multi-level influences on children's behaviour. However, a further

step may be to take an ecological approach to health behaviour and promotion.

According to Evans and colleagues, an ecological approach stresses "the importance of

modifying the environment to promote behaviour change" (Evans, Roy, Geiger, Werner,

& Burnett, 2008, p. 360). Evans and associates (2008) used this model to explore

strategies to promote positive body image among young children.

While similar to Bronfenbrenner's idea that an individual in influenced by multiple

levels in an environment, Sallis, Owen, and Fisher (2008) suggest that this approach goes

further than just the understanding of behaviour.

> The ultimate purpose of ecological models of health behaviour is to inform the
> development of comprehensive intervention approaches that can systematically
> target mechanisms of change at several levels of influence. Behaviour change is
> expected to be maximized when environments and policies support healthful
> choices, when social norms and social support for healthful choices are strong,
> and when individuals are motivated and educated to make those choices. (p. 466)

Indeed, ecological models "are believed to provide comprehensive frameworks for

understanding the multiple and interacting determinants of health behaviours" (Sallis,

Owen, & Fisher, 2008, p. 466). Sallis and colleagues (2008) also suggested that an

ecological approach could be utilized for the development of health interventions. This

could include interventions at the individual (e.g. biology, family situation), community

(e.g. bike paths, traffic safety) or societal levels (e.g. public recreation investments).

One theoretical perspective that could be utilized further within an ecological model of health promotion is feminist health sociology. This perspective examines gender as an influence on health and acknowledges "the centrality of gender to social life as well as to inequity in the worlds of and in relations between men and women" (Tepperman & Curtis, 2009, p. 232). It also explores how and why males and females often have different experiences of health and illness. Considering inequality is important in order to understand differences between males and females and in developing solutions (i.e. social change) (Tepperman & Curtis, 2009). This perspective is important in explaining why there are gender differences across the lifespan in experiences of health and wellness.

Implications for Early Childhood Education

We can incorporate the information from this research into the curriculum for Early Childhood Education students (Theme 1). It is important for them to have a thorough understanding of the effect of eating, physical activity, and body image on the health of the children in their care. ECEs may be significant leaders in addressing these issues, as they often have different relationships and interaction with children than parents or public school teachers. ECEs work with children in smaller adult-to-child ratios (1:15), and therefore they may have a better chance than teachers to recognize potential health problems. In addition, trained ECEs have a detailed understanding of child development and health, and as such, may notice areas of development that do not follow clearly established patterns, such as growth disparities among children of the same age and sex. For instance, children in the later school age years may begin to exhibit signs of emerging puberty, such as body hair or changes in voice, but children who are suffering from malnutrition may show delayed physical growth and inattention (Berk, 2012).

In order for children to learn healthy behaviours, knowledge of child development (and developmental appropriateness) is required as well (Theme 1). For example, explaining the importance of a balanced diet to a six-year-old requires using plain language and less technical terminology than explaining the same concept to a 12-year-old. Therefore, further child development training is also needed for Child Care Assistants (CCAs). Currently, all CCAs in Manitoba are required to take a 40 hour online course which includes information about child development, child care practice, diverse family situations, and ethical practice. However, compared to 120 course hours of school age child development and health-related training at Red River College, this one online course may not be sufficient to effectively foster healthy ideas and behaviours in school age children.

For teaching about the three issues in the classroom, there are several techniques that ECE Instructors can use to help establish theoretical and practical knowledge for students. First, videos or visual examples of ECEs in the field demonstrating best practices can be utilized to help explain theoretical concepts. For example, the notion of a positive eating environment may be difficult for inexperienced students to comprehend, but this can be assisted by showing videos of ECEs providing social or reflection snack opportunities. On the other hand, videos of ineffective practice can also be shown to students as a way of explaining what not to do. Second, opportunities to learn how to participate in physical activities may be useful. In particular, not all ECEs will enter the field knowing how to play spongee polo or soccer, or group games such as fruit salad or silent circle. While some instruction on physical activities and movement opportunities is currently provided to ECE students at Red River College, these are often geared

towards preschool children. Therefore, more instruction on physical and movement activities with school age children should be offered. Third, professional development opportunities outside of the classroom should be encouraged for ECE students. These opportunities could be used as course credit and could be mandated as part of the criteria necessary for successful graduation. For example, ECE students could be required to take workshops about body image concerns from organizations in Manitoba such as the Women's Health Clinic or Family Dynamics; workshops on creating nutritious meals on a budget at Wolseley Family Place; or enrolling in the Fitness Leadership Program at the YW/YMCA. These opportunities would help broaden students' knowledge about the three issues, but also help them to be knowledgeable about services for children and families in the community.

For both parents and ECEs, having an understanding of the influences on children's health and development can assist in increasing children's exposure to positive influences and teaching them to be critical of negative influences (Themes1 and 2). For example, for promotion of healthy development in children, workshops for parents and for ECEs can be conducted by Red River College Early Childhood Education faculty at various child care centres and at the Manitoba Child Care Association's annual conference.

One final aspect of ECE practice needs to be addressed here: What is considered a 'good' ECE? Research by Langford (2006) sought to determine what ECE professionals in Ontario considered as part of being a 'good' ECE. Five characteristics were identified, including happiness, inner strength, passion, caring, and alertness to each child's needs and interests. While these characteristics are critical in the ECE field, 'good' early childhood professionals must also consider developing such characteristics as increasing

knowledge of child development and health, especially as related to body image, eating, and activity. ECEs should also keep in mind that they are role models for children, which can help or hinder health-related ideas and behaviours in the children they serve.

Implications for Policy

The observations conducted in this study can be used to influence child care policy. Anecdotal evidence from members of the school age child care community suggested that there has been a lack of research on school age children and child care. Therefore, several areas of child care policy can be explored for future change.

First, the current child care licensing regulations stipulate about meals and food provided in centres and nursery schools. For example, centres must follow that Canada Food Guide to Healthy Eating, must post written menus, and offer foods that are of "low choking potential" (MCCP, 2005, p. 110). However, these do not provide the whole picture of how to create and maintain a positive eating environment. Therefore, several best practices should be adopted into the licensing regulations:

- Mealtimes should be pleasant, culturally-appropriate occasions and provide an environment for social learning and positive interaction.

- Staff members sit with the children during snack and meal times to help create relaxing and enjoyable experiences.

- Staff members encourage conversation about the concepts of colour, quantity and temperature of food, eating behaviour and events of the day.

- Children practice feeding themselves and are actively involved in mealtime activities, such as serving food, cleaning, and setting the table.

- Child-sized utensils and serving dishes are used by children.

- Children are offered choices. (MCCP, 2005, pp. 110-111)

Second, child care licensing also stipulates about daily indoor and outdoor activity for children. In particular, the regulations state that children should be provided with daily large and small muscle activity, and are expected to have outdoor play every day, except under certain weather conditions (MCCP, 2005, pp. 69-70). However, there is no mention in the regulations or in the Best Practices about staff becoming physically active with the children. While it cannot be expected that every staff member will have the same level of physical fitness and knowledge of physical activities, it must be an expectation that staff will get moving with the children. This could include yoga, dancing, running, soccer, and so on, with the emphasis placed more on effective modelling of physical activity and less on skill level.

Third, while ECE training at various post-secondary institutions requires competency in child development and developmentally-appropriate practice, there may be little to no training around body image issues. This also needs to be part of child care licensing. Under Section 11 of the Licensing Manual, various health issues are addressed, including injuries, communicable disease, and first aid (MCCP, 2005). A sub-section on mental or emotional health could also be included, which may involve guidelines for fostering self-esteem, feelings of self-worth and self-confidence, and promotion of healthy body image.

Future Directions for Child Health Research

Further research on body image, eating, and physical activity should be extended to other school age child care programs to provide cross-centre comparisons. Such comparisons can shed light on rural-urban or ethnic group differences.

The present research focussed on child observations in an urban city in Manitoba, and additional research should examine the perspectives of school age children from rural

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communities (including those who are new immigrants), First Nations reserves, and children who are home-schooled. Additionally, comparative studies are needed to examine body image, eating, and activity among children who attend school age child care programs and those who do not, between centres that promote more/less prosocial behaviour and do/do not follow programs such as the Virtues Project, and between centres from communities with different socioeconomic backgrounds. For example, research by Brown, Knol, Prevost-Derbecker, and Andrushko (2007) reported high rates of family poverty and insufficient housing for residents in the downtown core area in Winnipeg, Manitoba. However, Brown et al. (2007) also suggest that this area has a "rich history of community involvement and strong social networks" (p. 57). Therefore, in this community and one without involvement and strong social networks, a comparative study could demonstrate positive effects of the former community.

Furthermore, as early learning and child care contexts are quite different in other jurisdictions, research initiated in school age programs across Canada and in other countries could examine the impact of different ECE programs on children's health. For instance, Manitoba offers a two-year ECE II diploma program. Other Canadian regions, such as Alberta offer a one-year ECE certificate program, while British Columbia offers a four-year degree in Early Childhood Education and Care (CCCF, 2012). Therefore, the impact of differing programs, centre philosophies, and staff training should be examined for its influence on body image, eating, and activity among school age children.

In addition, the population of children studied in the research on body image and dieting should be taken into consideration. Specifically, there appears to be a lack of cultural and ethnic diversity in participant populations. For instance, research by McVey

and colleagues has focused primarily on children who spoke English as their first language and were living with two parents. Few studies included children of Aboriginal descent (for examples see McVey, Davis, Tweed, & Shaw, 2004; McVey & Davis, 2002), but even in these studies, less than 3% of the participant sample identified as "Native Canadian Indian." With research by McCabe and Ricciardelli, there has been a mix of studies involving primarily Caucasian participants and those from a range of socio-economic and cultural backgrounds (for examples see McCabe, Ricciardelli, Stanford, Holt, Keegan, & Miller, 2007; Ricciardelli, McCabe, Lillis, & Thomas, 2006). It should be noted that in the later two studies, there was no information provided about the diversity in children's backgrounds. Within my own research, I expected that I would find a diverse population of children, but this was not the case. Indeed, the majority of children appeared to be Caucasian. Therefore, research which examines body image, eating, and activity among school age children (especially those using before- and after-school care) should strive to recruit participants that more accurately represent the community or societal populations within which the research is conducted.

Finally, research should be conducted with the Early Childhood Educators working with school age children to gain a deeper understanding of their knowledge and perspectives on the three issues. A link between knowledge and best practices is needed. There may be barriers to prohibiting the development of best practices in some child care settings. For instance, ECEs may indicate an attempt to promote a positive eating environment at their centres, but are hindered by structured programs which sets time limits on meal times, or by a lack of support from supervisors or other staff members.

Therefore, comparisons should be made on the health and well-being of children at centres who support a positive eating environment and those who do not.

Summary and Conclusions

The observed behaviours, dialogue, and interaction of school age children related to eating, physical activity, and body image were studied in a school age child care centre for this research. Using an inductive ethnographic approach, the primary goal was to recognize and understand the behaviours and social interactions of school age children related to these three issues, and how child care practices of the Centre influenced child behaviours and interactions. Four months of observation, guided by ecological systems theory, were analyzed with primarily qualitative and some quantitative methods. As a result, four main themes emerged from the data: (1) "How to be a better, healthier person," (2) "Out of their hands," (3) "Puppets cutting their strings," and (4) "Reaching out." These four themes met my research goals, which were to: (1) Describe the challenges and issues associated with body image, eating, and activity for school age children; (2) explore the roles of the social and cultural environment of the Centre that influence school age children to enhance the development of healthy eating habits and behaviours, regular physical activity, and healthy body image; and (3) develop an understanding of how social and cultural expectations for children at a centre have implications for child care practice.

In my findings, I determined that children were knowledgeable about ideas and behaviours that influenced health, which was due in part to formal and informal teaching about health at the Centre. The children also exhibited, or were learning to exhibit, healthy behaviours, which were directly influenced by the philosophy, goals, and

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children's rights and responsibilities of the Centre. These healthy behaviours included a positive sense of self, healthy eating habits and food choices, and regular physical activity. Children also exhibited food preferences, spoke about food rules, and experimented with their food, all of which influenced their food choices. Social activities (e.g. snack times), the eating environment, learning experiences and materials (e.g. toy food, cooking activities), independence and choice (e.g. children playing with their food), and staff modelling of health-related behaviours were all linked to the demonstration of healthy behaviours in the children. Overall, these behaviours were explained by Bronfenbrenner's ideas of the microsystem in his ecological systems theory.

The influence of socialization was also noted. Children's behaviour reflected the influences of sociocultural forces, such that they adopted and/or encouraged assimilation of values or expectations, specifically in regard to physical appearance, physical activity, and competition. Sociocultural theory helped to explain these behaviours (Vygotsky, 1978). Restricting children's access to physical activities was also prominent here: Boys were the gatekeepers of girls' physical activities. Gender theories can help explain the origin and perpetuation of these observed gender differences. Conversely, the notions of control and respect were observed. Children accepted one another, and a respect for self and others was demonstrated. As well, knowledge about sociocultural expectations for appearance appeared here, also explained by sociocultural theory (Vygotsky, 1978).

Children built connections with others through their behaviour. This involved peer relationships, but some relationship building between adults and children also occurred. The effects of sociocultural influences on children's behaviour were inferred.

Patterns of behaviours were also apparent from analysis of observations of children's' eating and activity. This included patterns regarding the frequency and type of physical activity and sex differences in physical activity; and patterns of eating regarding frequency of attendance for individual children and sex differences in attendance. Overall, most of the children were regularly physical active, appeared hungry after school, and they typically ate what was served, including vegetables and salad.

Although not a significant concern for the children at the Centre, body image ideas were present. Indeed, the majority of the children at the Centre appeared to have a positive body image, although they were aware of the sociocultural value on appearance. The few children who expressed some type of experimentation with identity or body dissatisfaction were older boys and girls (Grades 4-6) at the Centre. This is an important consideration for the timing of body image concerns and the sociocultural acceptance of the physical appearance of young school age children.

Furthermore, an understanding of the developmental changes for school age children may provide insight as to the impact of eating, physical activity, and body image on their overall health and development. This includes providing developmentally appropriate practice in child care environments. Thus, the work of Piaget (1930, 1952) and Erikson (1950) provided other viewpoints which were helpful in interpreting the research results.

This research provides an understanding of the observed behaviours and interactions of school age children related to eating, physical activity, and body image. It also demonstrates some of the challenges and issues associated with these issues for school age children; of the social and cultural influences on school age children that affect eating

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habits and behaviours, physical activity, and body image; and how social and cultural expectations for children have implications for child care practice.

This research project has provided support for the impact of early learning and child care environments on the health of school age children. Child care practice does influence children's ideas and behaviour around body image, eating and activity; however, much of the best practices that made a difference were not mandated by provincial licensing. The research done here shows the importance of creating an ecosystem like this Centre to influence the health and development of children using before- and after-school age care.

References

APA Task Force on the Sexualization of Girls (2007). *Report of the APA Task Force on the sexualization of girls: Executive summary*. Retrieved from www.apa.org/pi/wpo/sexualization/html

Abramovity, B. A., & Birch, L. L. (2000). Five-year old girls' ideas about dieting are predicted by their mothers' dieting. *Journal of the American Dietetic Association, 100*, 1157-1163.

About Kids Health. (2010). *Starved for attention: Pro-anorexia websites glorify eating disorders*. Retrieved from http://www.aboutkidshealth.ca/En/News/NewsAndFeatures/Pages/Starved-for-attention-pro-anorexia-websites-glorify-eating-disorders.aspx

Active Healthy Kids Canada. (2011). *Active Healthy Kids Canada report card on physical activity for children and youth*. Retrieved from http://dvqdas9jty7g6.cloudfront.net/reportcard2011/ahkcreportcard20110429final.pdf

Active Healthy Kids Canada. (2014). *Active Healthy Kids Canada report card on physical activity for children and youth*. Retrieved from www.activehealthykids.ca/ReportCard/2014ReportCard.aspx.

Adams, K., Sargent, R. G., Thompson, S. H., Richter, D., Corwin, S. J., & Rogan, T. J. (2000). A study of body weight concerns and weight control practices of 4th and 7th Grade adolescents. *Ethnicity & Health, 5*, 79-94.

Adams, T., & Tuggle, C. A. (2004). ESPN's *Sports Centre* and coverage of women's athletics: "It's a boys' club". *Mass Communication & Society, 7*(2), 237-248.

Ahuva, A. (2001). Traditional, interpretive and reception based content analyses:

Improving the ability of content analysis to address issues of pragmatic and theoretical concern. *Social Indicators Research, 54*, 139-172.

Ainsworth, M. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation.* Hillsdale, NJ: Erlbaum.

Alhassan, S., Sirard, J. R., & Robinson, T. N. (2007). The effects of increasing outdoor play time on physical activity in Latino preschool children. *International Journal of Pediatric Obesity, 2*(3), 153-158.

Alpert-Gillis, L. J., & Conell, J. P. (1989). Gender and sex-role influences on children's self-esteem. *Journal of Personality, 57*, 97-114.

Ambrosi-Randic, N. (2000). Perception of current and ideal body size in preschool age children. *Perceptual and Motor Skills, 90*, 885-889.

Anand, S. S., Yusef, S., Jacobs, R., Davis, A. D., Yi, Q., & Gerstein, H. (2001). Risk factors, arteriosclerosis, and cardiovascular disease among Aboriginal people in Canada: The study of health assessment and risk evaluation in Aboriginal peoples (SHARE-AP). *Lancet, 358*, 1147-1153.

Anderson, A. E., & Di Domenico, L. (1992). Diet vs. shape content of popular male and female magazines: A dose-response relationship to the incidence of eating disorders? *International Journal of Eating Disorders, 11*, 283-287.

Anderson, M. L., & Collins, P. H. (1998). *Race, class, and gender: An anthology* (3rd ed.). Belmont, CA: Wadsworth Publishing Company.

Andrushko, K. (2005). *The gender role socialization attitudes and beliefs of first-time expectant mothers: A qualitative examination.* Unpublished master's thesis, University of Manitoba, Winnipeg, Manitoba, Canada.

Anorexia Nervosa and Related Eating Disorders (ANRED) (2007). *Eating disorders and men.* Retrieved from http://www.anred.com/males.html

Ata, R., Ludden, A. B., & Lally, M. M. (2006). The effects of gender and family, friend, and media influences on eating behaviors and body image during adolescence. *Journal of Youth and Adolescence, 36*(8), 1024-1037.

Austin, S. B., Haines, J., & Veugelers, P. J. (2009). Body satisfaction and body weight: gender differences and socio-demographic determinants. *BMC Public Health, 9*, 313-319.

Baca Zinn, M. (2000). Feminism and family studies for a new century. *American Academy of Political and Social Science, 571*, 42-56.

Baldwin, S. A., & Hoffman, J. P. (2002). The dynamics of self-esteem: A growth-curve analysis. *Journal of Youth and Adolescence, 31*, 101-114.

Ball, G., & McCargar, L. (2003). Childhood obesity in Canada: A review of prevalence estimates and risk factors for cardiovascular diseases and type 2 diabetes. *Canadian Journal of Applied Physiology, 28*, 117-40.

Baker, M. (2007). *Choices and constraints in family life*. Toronto, ON: Oxford University Press.

Bandura, A. (1975). The role of modelling processes in personality development. In D. M. Gelfland (Ed.), *Social learning in childhood: Readings in theory and application* (2nd ed.) (pp. 182-193). Monterey, CA: Brooks/Cole Publishing Company.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Baranowski, T., Thompson, W. O., DuRant, R. H., Baranoswki, J., & Puhl, J. (1993).

Observations on physical activity in physical locations: Age, gender, ethnicity and month effects. *Research Quarterly for Exercise & Sport, 64*, 127–33.

Barlett, C., Harris, R., Smith, S., & Bonds-Raacke, J. (2005). Action figures and men. *Sex Roles*, *53*(11-12), 877-885.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph, 4*, (No. 1, Pt. 2).

Beausoleil, N. (2011). *Health promotion, obesity panic, and body surveillance: Reproducing social inequities in health and education policies and practices*. Presented at the National Eating Disorder Information Centre Conference in Toronto, ON, May 2-3, 2011.

Becker, A. E., Burwell, R. A., Gilman, S. E., Herzog, D. B., & Hamburg, P. (2002). Eating behaviours and attitudes following prolonged television exposure among ethnic Fijian adolescent girls. *British Journal of Psychiatry, 180*, 509-514.

Belanger, M., Gray-Donald, K., O'Loughlin, J., Paradis, G., & Hanley, J. (2009). Influence of weather conditions and season on physical activity in adolescents. *Annals of Epidemiology, 19*(3), 180-186.

Bender, J., Flatter, C. H., & Sorrentino, J. (2005). *Half a childhood: Quality programs for out-of-school hours* (3rd ed.). Nashville, TN: School Age Notes.

Benedikt, R., Wertheim, E. H., & Love, A. (1998). Eating attitudes and weight-loss attempts in female adolescents and their mothers. *Journal of Youth and Adolescence, 27*, 43-57.

Berg, B. L. (2001). *Qualitative research methods for the social sciences* (4th ed.). Boston, MA: Allyn & Bacon.

Berk, L. E. (2008). *Infants and children* (6th ed.). Boston, MA: Allyn & Bacon.

Berk, L. E. (2012). *Infants and children* (7th ed.). Boston, MA: Allyn & Bacon.

Bigler, R. S., Brown, C. S., & Markell, M. (2001). When groups are not created equal: Effects of group status on the formation of intergroup attitudes in children. *Child Development, 7*2, 1151-1162.

Birbeck, D., & Drummond, M. (2006). Understanding boys' bodies and masculinity in early childhood. *International Journal of Men's Health, 5*(3), 238-250.

Birch, L. L. (1980). Effects of peer models' food choices and eating behaviours on preschoolers' food preferences. *Child Development, 51*, 489-496.

Birch, L. L., Fisher, J. O., & Davison, K. K. (2003). Learning to overeat: Maternal use of restrictive feeding practices promotes girls' eating in the absence of hunger. *American Journal of Clinical Nutrition, 78*, 215-220.

Birch, L. L., Johnson, S. L., & Fisher, J. A. (1995, January). Children's eating: The development of food-acceptance patterns. *Young Children, 50*(2), 71-78.

Birch, L. L., McPhee, L., Shoba, B. C., Steinberg, L., & Krehbeil, R. (1987). "Clean up your plate": Effects of child feeding practices on the conditioning of meal size. *Learning and Motivation, 18*, 301-317.

Blatchford, P. (1996). Taking pupils seriously: recent research and initiatives on break time in schools. *Education 3-13, 24*(3), 60-65.

Botta, R. A. (2003). For your health? The relationship between magazine reading and adolescents' body image and eating disturbances. *Sex Roles, 48*(9-10), 389-399.

Boyle, J. S. (1994). Styles of ethnography. In J. M. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 159-185). Thousand Oaks, CA: Sage.

Branen, L., & Fletcher, J. (1999). Comparison of college students current eating habits

    and recollections of their childhood feeding practices. *Journal of Nutrition*

    Education, 31(6), 304-310.

Breakfast skipping common in teenage girls. (2005, November 28). *Macleans*. Retrieved

    from http://www.macleans.ca/shared/print.jsp?content+20051124_122422_45608

Brockman, R., Jago, R., Fox, K. R., Thompson, J. L., Cartwright, K., & Page, A. S.

    (2009). "Get off the sofa and go and play": Family and socioeconomic influences

    on the physical activity of 10-11 year old children. *BMC Public Health, 9,* 253-

    259.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature*

    and design. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development:

    research perspectives. *Developmental Psychology, 22*(6), 723-742.

Bronfenbrenner, U. (1994a). Who cares for the children? In H. Nuba, M. Searson, & D.

    L. Sheiman, (Eds.) *Resources for early childhood: A handbook* (pp. 113-130)*.*

    New York: Garland.

Bronfenbrenner, U. (1994b). Ecological models of human development. *International*

    Encyclopedia of Education, 3(2), 1643-1647.

Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future

    perspective. In P. Moen, G. H. Elder, Jr., & K. Luscher (Eds.), *Examining lives in*

    context: Perspectives on the ecology of human development (pp. 619-647).

    Washington, DC: American Psychological Association.

Bronfenbrenner, U. (Ed.). (2005). *Making human beings human*. Thousand Oaks, CA:
Sage.

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In
W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology, Vol. 1:
Theoretical models of human development* (5th ed.) (pp. 993 – 1023). New York:
Wiley.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human
development. In R. M. Lerner (Ed.), *Handbook of child psychology, Vol. 1:
Theoretical models of human development* (6th ed.) (pp. 793-828). Hoboken, NJ:
Wiley.

Brown, J., Knol, D., Prevost-Derbecker, S., & Andrushko, K. (2007). Housing for
Aboriginal youth in the inner city of Winnipeg. *First Peoples Child & Family
Review, 3*(2), 56-64.

Brown, J., & Ogden, J. (2004). Children's eating attitudes and behaviour: A study of the
modelling and control theories of parental influence. *Health Education Research:
Theory and Practice, 19*, 261-271.

Brown, L. M. (2011). The sexualization of girls in the media: comparing the effects and
SPARKing a response. Presented at the National Eating Disorder Information
Centre Conference in Toronto, ON, May 2-3, 2011.

Brown, L. M., & Gilligan, C. (1992). Meeting at the crossroads: Women's psychology
and girls' development. *Feminism & Psychology, 3*, 11-35.

Buchbinder, M., Longhofer, J., Barrett, T., Lawson, P., & Floersch, J. (2006).
Ethnographic approaches to child care research: A review of the literature.

Journal of Early Childhood Research, 4, 45-63.

Bullough, V. (2003). The contributions of John Money: A personal view. *Journal of Sex Research, 40*(3), 230-238.

Burdette, H. L., Whitaker, R. C., & Daniels, S. R. (2004). Parental report of outdoor playtime as a measure of physical activity in preschool aged children. *Archives of Pediatric & Adolescent Medicine, 158*, 353–357.

Burghardt, G. M. (2005). *The genesis of animal play*. Cambridge, MA: The MIT Press.

Busick, D. B., Brooks, J., Pernecky, S., Dawson, R., & Petzoldt, J. (2008). Parent food purchases as a measure of exposure and preschool aged children's willingness to identify and taste fruit and vegetables. *Appetite, 51*, 468-473.

Butler, R. (1998). Age trends in the use of social and temporal comparison for self-evaluation: Examination of a novel development hypothesis. *Child Development, 69*, 1954-1073.

Butler, R. J. (2001). *The self image profiles.* London: The Psychological Corporation.

Butler, R. J., & Gasson, S. L. (2005). Self-esteem/self-concept scales for children and adolescents: A review. *Child and Adolescent Mental Health, 10*(4), 190-201. doi: 10.1111/j.1475-3588.2005.00368.x

Byely, L., Archibald, A. B., Graber, J., & Brooks-Gunn, J. (2000). A prospective study of familial and social influences on girls' body image and dieting. *International Journal of Eating Disorders, 28*, 155-164.

Byrne, M. (2001, July). Ethnography as a qualitative research method. *Applied Qualitative Research in Nursing Journal, 74*, 82-83.

CBC (2010, July 26). *Energy drinks a sugary drink for kids: MDs.* www.cbc.ca/health/

story/2010/07/26/caffeinated-energy-drinks.html

CBC (2011, February 10). *Scoreless soccer considered for Calgary*. Retrieved from http://www.cbc.ca/news/canada/calgary/story/ 2011/02/10/calgary-soccer-scoreless-children.html

CBC (2012, October 13). *Doc Zone: Hyper parents, coddled kids* [video]. Retrieved from http://www.cbc.ca/player/Shows/Shows/Doc+Zone/ID/1405930535/

Caldera, Y. M., & Lindsay, E. W. (2006). Co-parenting, mother-infant interaction, and infant-parent attachment relationships in two-parent families. *Journal of Family Psychology, 20*, 275-283.

Calle, E. E., Rodriguez, C., Walker-Thurmond, K., & Thun, M. J. (2003). Overweight, obesity, and mortality from cancer in a prospectively studied cohort of U. S. adults. *New England Journal of Medicine, 348*, 1625-1638.

Cameron, C., Wolfe, R., & Craig, C. (2005). *Physical activity and sport: encouraging children to be active*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute. Canadian Association for Health, Physical Education, Recreation and Dance. (2006). *Quality daily physical education: About QDPE*. Retrieved from www.cahperd.ca/eng/physicaleducation/about_qdpe.cfm

Canadian Child Care Federation (CCCF) (2012). *Early childhood education and care (ECEC) training programs in Canada*. Retrieved from http://www.cccf-fcsge.ca/ece/

Canadian Fitness and Lifestyle Research Institute. (2010). *The 2010 Physical Activity Monitor*. Ottawa, ON: Author.

Canadian Institutes of Health Research, Natural Sciences and Engineering Research

Council of Canada, and Social Sciences and Humanities Research Council of

Canada. (December, 2010). *Tri-council policy statement: Ethical conduct for*

research involving humans. Retrieved from http://www.pre.ethics.gc.ca/pdf/

eng/tcps2/TCPS_2_FINAL_Web.pdf

Canadian Society for Exercise Physiology. (2011). *Canadian physical activity guidelines*

for children 5-11 years. Retrieved from www.csep.ca/CMFiles/Guidelines/

CSEP_PAGuidelines_child_en.pdf

Cao, Y.-T., Svensson, V., Marcus, C., Zhang, J., Zhang, J. -D., & Sobko, T. (2012).

Eating behaviour patterns in Chinese children aged 12-18 months and association

with relative weight - factorial validation of the Children's Eating Behaviour

Questionnaire. *International Journal of Behavioral Nutrition and Physical*

Activity, 9, 1-7.

Carlson, C., Uppal, S., & Prosser, E. (2000). Ethnic differences in processes contributing

to the self-esteem of adolescent girls. *Journal of Early Adolescence, 20*, 44-67.

Carlson, F. M. (2006). *Essential touch: Meeting the needs of young children*.

Washington, DC: National Association for the Education of Young Children.

Cash, T. F. (1995). Developmental teasing about physical appearance: Retrospective

descriptions and relationships with body image. *Personality and Social Behavior:*

An International Journal, 23, 123-130.

Cash, T. F., & Szymanski, M. L. (1995). The development and validation of the Body-

Image Ideals Questionnaire. *Journal of Personality Assessment, 64*(3), 466-477.

Child & Family Canada. (2000). *Middle childhood (6-12 years)*. Retrieved from

http://www.voicesforchildren.ca/

Chodorow, N. (1978). *The reproduction of mothering*. Berkeley, CA: University of

    California Press.

Choma, B. L., Visser, B. A., Pozzebon, J. A., Bogaert, A. F., Busseri, M. A., & Sadava,

    S. W. (2010). Self-objectification, self-esteem, and gender: Testing a moderated

    mediation model. *Sex Roles, 63*(9-10), 645-656.

Christian, S., Stachowski, R., Ferden, S., & Walter, S. (2004). United States: Teen girls

    having breast implant surgery. *Off Our Backs, 34*(7/8), 8-8.

Clark, W. (2008, June). *Kids' sports* [Catalogue no. 11-008]. *Statistics Canada:*

    Canadian Social Trends, 85, 54-61.

Clark, L., & Tiggemann, M. (2006). Appearance culture in nine- to 12-year-old girls:

    media and peer influences on body dissatisfaction. *Social Development, 15*(4),

    628-643.

Coakley, J. (2005). The good father: Parental expectations and youth sports. *Leisure*

    Studies, 25(2), 153-163.

Cohane, G. H., & Pope, H. G. Jr. (2001). Body image in boys: A review of the literature.

    International Journal of Eating Disorders, 29, 373-379.

City of Winnipeg (May, 2013). *Population estimate and forecast*. Retrieved from

    http://www.winnipeg.ca/cao/pdfs/population.pdf

Cook, D. T., & Kaiser, S. B. (2004). Betwixt and be Tween: Age ambiguity and the

    sexualization of the female consuming subject. *Journal of Consumer Culture,*

    4(2), 203-227.

Cook, J. A. (2003). Language and socialization: A critical review. *Applied Studies*

    Towards a Sociology of Language, *2*, 255-294.

Cooke, L. J., & Wardle, J. (2005). Age and gender differences in children's food preferences. *British Journal of Nutrition, 93*, 741-746.

Copeland, K. A., Sherman, S. N., Kendeigh, C. A., Kalkwarf, H. J., & Saelens, B. E. (2012). Societal values and policies may curtail preschool children's physical activity in child care centres. *Pediatrics, 129*(2), 1-7. doi: 10.1542/peds.2011-2102

Copeland, K. A., Sherman, S. N., Kendeigh, C. A., Saelens, B. E., & Kalkwarf, H. J. (2009). Flip flops, dress clothes, and no coat: Clothing barriers to children's physical activity in child-care centers identified from a qualitative study. *International Journal of Behavioural Nutrition and Physical Activity, 6,* 74. doi:10.1186/1479-5868-6-74

Cote, J. (1999). The influence of the family in the development of talent for sports. *Sports Psychologist, 13*, 395-417.

Cote, J., Baker, J., & Abernathy, B. (2007). Practice and play in the development of sport expertise. In R. Eklund & G. Tenenbaum (Eds.), *Handbook of sport psychology* (3rd ed.) (pp. 184-202). Hoboken, NJ: Wiley.

Coughlin, J., Hemberg, L. J., Marinilli, A., & Guarda, A. S. (2003, July/August). Body image dissatisfaction in children: Prevalence and parental influence. *Healthy Weight Journal*, 56-59.

Cox, M., Schofield, G., & Colt, G. S. (2010). Responsibility for children's physical activity: Parental, child and teacher perspectives. *Journal of Science and Medicine in Sport, 13*, 46-52. doi: 10.1016/j.jsams.2009.02.006

Crespo, C., Smit, E., Toriano, R., Bartlett, S., Macera, C., & Anderson, R. (2001).

Television watching, energy intake, and obesity in US children: Results from the third national health and nutrition examination survey. *Archives of Pediatric Adolescent Medicine, 155*, 360-365.

Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.

Creswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Crockenberg, S., & Leerkes, E. M. (2003). Infant social and emotional development in the family context. In C. H. Zeahnah, Jr. (Ed.), *Handbook of infant mental health* (2nd ed.) (pp. 60-90). New York: Guilford.

Davies, K. M., Pearson, P. H., Huseman, C. A., Greger, N. G., Kimmel, D. K., & Recker, R. R. (1990). Reduced bone mineral in patients with eating disorders. *Bone, 11*, 143-147.

Davison, K. K., & Birch, L. L. (2001a). Childhood overweight: A contextual model and recommendations for future research. *Obesity Reviews, 2*(3), 159-171.

Davison, K. K., & Birch, L. L. (2001b). Weight status, parent reaction, and self-concept in five-year-old girls. *Pediatrics, 107*(1), 46-53.

Davison, K. K., & Birch, L. L. (2002). Processes linking weight status and self-concept among girls from ages 5 to 7 years. *Developmental Psychology, 38*(5), 735-748.

Deitrick, L., Bokovoy, J., Stern, G., & Panik, A. (2006). Dance of the call bells: Using ethnography to evaluate patient satisfaction with quality of care. *Journal of Nursing Care Quality, 21*(4), 316-324.

Deshmukh-Taskar, P. R., Nicklas, T. A., O'Neil, C. E., Keast, D. R., Radcliffe, J. D., &

Cho, S. (2010). The relationship of breakfast skipping and type of breakfast consumption with nutrient intake and weight status in children and adolescents: The National Health and Nutrition Examination Survey 1999-2006. *Journal of the American Dietetic Association, 110*(6), 869-878.

Dietze, B., & Kashin, D. (2012). *Playing and learning in early childhood education*. Toronto, ON: Pearson Education Canada.

Dixon, R., Maddison, R., Mhurchu, C. N., Jull, A., Meagher-Lundberg, P., & Widdowson, D. (2010). Parents' and children's perceptions of active video games: a focus group study. *Journal of Child Health Care, 14*, 189-199. doi: 10.1177/1367493509359173

Dohnt, H. K., & Tiggemann, M. (2006). The contribution of peer and media influences to the development of body satisfaction and self-esteem in young girls: A prospective study. *Developmental Psychology, 42*, 929-936.

Dohnt, H. K., & Tiggemann, M. (2005). Peer influences on body dissatisfaction and dieting awareness in young girls. *British Journal of Developmental Psychology, 23*, 103–116.

Dolan, B., & Gitzinger, I. (Eds.) (1994). *Why women? Gender issues and eating disorders*. London: Athlone Press.

Dorey, E., Roberts, V., Maddison, R., Meagher-Lundberg, P., Dixon, R., & Ni Mhurchu, C. (2009). Children and television watching: a qualitative study of New Zealand parents' perceptions and views. *Child Care, Health, & Development, 36*(3), 414-420. doi: 10.1111/j.1365-2214.2009.01031.x

Dove. (2010). *New research finds a girl's inner beauty critic moves in by age 14*.

Retrieved from http://www.dove.ca/en/Article/Surprising-Self-Esteem-Statistics.aspx

Duncan, M. C., & Messner, M. A. (2000). *Gender in televised sports: 1989, 1993, and 1999*. Los Angeles, CA: Amateur Athletic Foundation of Los Angeles.

Durand-Bush, N., Salmela, J. H., & Becomeya, M. (2001). World Olympic champion: A process rather than an end result. In A. Papivannou, M. Goudas, and Y. Theodorakis (Eds.), *In the Dawn of the New Millenium: 10th World Congress of Sport Psychology* (pp. 300-302). Skathos, Greece: Christodoulidi.

Durkin, S., & Paxton, S. J. (2002). Predictors of vulnerability to reduced body image satisfaction and psychological well-being in responses to exposure to idealized female media images in adolescent girls. *Journal of Psychosomatic Research, 53*, 995-1005.

Dwyer, G. M., Higgs, J., Hardy, L. L., & Baur, L. A. (2008). What do parents and preschool staff tell us about young children's physical activity: A qualitative study. *International Journal of Behavioural Nutrition and Physical Activity,* 5, 66. doi:10.1186/1479-5868-5-66

Early Childhood Development (2012). *Public investments in early childhood education and care in Canada 2010.* Retrieved from http://www.ecdelcc.ca/eng/ ecd/ececc/page11.shtml

Eccles, J. S., Freedman-Doan, C. R., Arberton, A. J., Yoon, K. S., Harold, R. D., & Wigfield, A. (2002). Parents hold the key to the land of opportunity. Manuscript in preparation.

Edmunds, H., & Hill, A. (1999). Dieting and the family context of eating in young

adolescent children. *International Journal of Eating Disorders, 25*, 435–440.

Eichler, J. B., Evenson, S. L., & Lutz, H. A. (2000). *The visible self* (2nd ed.). New York: Fairchild Publications.

Eisenberg, M. E., Neumark-Sztainer, D., & Story, M. (2003). Association of weight-based teasing and emotional well-being among adolescents. *Archives of Pediatrics and Adolescent Medicine, 157*, 733-738.

Elkind, D. (2001). *The hurried child: Growing up too fast too soon* (3rd ed.). Cambridge, MA: Da Capo books.

Eni, R., Harvey, C. D. H., & Phillips-Beck, W. (December, 2009). Reciprocity in caring family members by grandmothers: Experiences in First Nations communities [electronic version]. *First People Child & Family Review, 5*.

Erikson, E. H. (1950). *Childhood and society*. New York: Norton.

Evans, G. W. (2006). Child development and the physical environment. *Annual Review of Psychology, 57*, 424-451.

Fabes, R. A., Hanish, L. D., & Martin, C. L. (2003). Children at play: The role of peers in understanding the effects of child care. *Child Development, 74*(4), 1039-1043.

Fagot, B. I. (1974). Sex differences in toddlers' behaviour and parental reaction. *Developmental Psychology, 10*(4), 554-558.

Fagot, B. I. (1978). The influence of sex of child on parental reactions to toddler children. *Child Development, 49,* 459-465.

Fagot, B. I., & Hagan, R. (1991). Observations of parent reactions to sex-stereotyped behaviours: Age and sex effects. *Child Development, 62*, 617-628.

Fagot, B. I., & Leinbach, M. D. (1989). The young child's gender schema: Environmental

input, internal organization. *Child Development, 60*, 663-672.

Faith, M. S., Leone, M. A., Ayers, T. S., Heo, M., & Pietrobelli, A. (2002, August). Weight criticism during physical activity, coping skills, and reported physical activity in children. *Pediatrics, 110*(2), 1-8. Retrieved from http://www.pediatrics.org/cgi/content/ full/110/2/e23

Feldman, M. A., Hancock, C. L., Reilly, N., Minnes, P., & Cairns, C. (2000). Behaviour problems in young children with or at risk for developmental delay. *Journal of Child and Family Studies, 9*, 247-261.

Fernald, L. C., & Grantham-McGregor, S. M. (1998). Stress response in school-age children who have been growth-retarded since early childhood. *American Journal of Clinical Nutrition, 68*, 691-698.

Ferree, M. M. (1990). Beyond separate spheres: Feminism and family research. *Journal of Marriage and the Family, 52*(4), 866-884.

Fetterman, D. M. (1989). Ethnography: Step by step. *Applied Social Research Methods Series, 17*. Newbury Park: Sage.

Field, T. (2001). Massage therapy facilitates weight gain in preterm infants. *Current Directions in Psychological Science, 10*, 51-54.

Field, T., Hernandez-Reif, M., & Freedman, J. (2004). Stimulation programs for preterm infants. *Society Report of the Society for Research in Child Development, 18*(1).

Fisher, J. O., & Birch, L. L. (2000). Parent's restrictive feeding practices are associated with young girls' negative self-evaluation of eating. *Journal of the American Dietetic Association, 100*, 1341-1346.

Fisher, J. O., & Birch, L. L. (2002). Eating in the absence of hunger and overweight in

girls from 5 to 7 years of age. *American Journal of Clinical Nutrition, 76*, 226-231.

Fox, G. L., & Murray, V. M. (2000). Gender and families: Feminist perspectives and family research. *Journal of Marriage and the Family, 62*, 1160-1172.

Freedman, R. (1963). Norms for family size in underdeveloped areas. *Proceedings of the Royal Society, 159*, 220-240.

Fredricks, J. A., & Eccles, J. S. (2002). Children's competence and value beliefs from childhood through adolescence: Growth trajectories in two male sex-typed domains. *Developmental Psychology, 38*, 519-533,

Fredricks, J. A., & Eccles, J. S. (2002). Children's competence and value beliefs from childhood through adolescence: growth trajectories in two male-sex-typed domains. *Developmental Psychology, 38*(4), 519.

Freitas, A., Kaiser, S., Chandler, J., Hall, C., Kim, J-W., & Hammidi, T. (1997). Appearance management as border construction: Least favorite clothing, group distancing, and identity . . . not! *Sociological Inquiry, 67*(3), 323-335.

Friedman, S. S. (1997). *When girls feel fat: Helping girls through adolescence*. Toronto, ON: Harper Collins Publishers Ltd.

Friendly, M., & Prentice, S. (2009). *About Canada: Childcare* (Vol. 2). Halifax, NS: Fernwood Publishing Ltd.

Frisén, A., & Holmqvist, K. (2010). What characterizes early adolescents with a positive body image? A qualitative investigation of Swedish girls and boys. *Body image, 7*(3), 205-212.

Frith, H., & Gleeson, K. (2004). Clothing and embodiment: Men managing body image

and appearance. *Psychology of Men & Masculinity, 5*, 40-48.

Foster, J. A., Gore, S. A., & West, D. S. (2006). Altering TV viewing habits: An unexplored strategy for adult obesity intervention. *American Journal of Health Behavior, 30*, 3-14.

Fuller, C., Keller, L., Olson, J., & Plymale, A. (2005). Helping preschoolers become healthy eaters. *Journal of Pediatric Health Care, 19*(3), 178-182.

Galli, N., & Reel, J. J. (2009). Adonis or Hephaestus? Exploring body image in male athletes. *Psychology of Men and Masculinity, 10*(2), 95-108. doi: 10.1037/ a0014005

Galman, S. C. (2007). *Shane the lone ethnographer: A beginner's guide to ethnography*. Lanham, MD: Altamira Press.

Garbarino, J. (1982). *Children and families in the social environment*. New York: Aldine de Gruytr.

Garbarino, J. (2006). *See Jane hit: Why girls are growing more violent and what we can do about it.* New York: The Penguin Press.

Garner, D. M., Garfinkel, P. E., Schwartz, D., & Thompson, M. (1989). Cultural expectations of thinness in women. *Psychological Reports, 47*, 483-491.

Garrguet, D. (2009). *Diet quality in Canada* (Catalogue no. 82-003-X). Retrieved from http://www.statcan.gc.ca/pub/82-003-x/2009003/article/10914-eng.pdf

Gehrman, C. A., Hovell, M. F., Sallis, J. F., & Keating, K. (2006). The effects of a physical activity and nutrition intervention on body dissatisfaction, drive for thinness, and weight concerns in pre-adolescents. *Body Image, 3*, 345-352. doi:10.1016/j.bodyim.2006.07.006

Gilligan, C. (1993). *In a different voice*. Cambridge, MA: Harvard University Press.

Goetz, J. P., & LeCompte, M. D. (1981). Ethnographic research and the problem of data

reduction. *Anthropology & Education Quarterly, 12*, 51-70.

Goffman, E. (1979). *Gender advertisements*. Cambridge, MA: Harvard University Press.

Gold, A. (2004, September). *Quest for thinness: Treating eating disorders naturally*.

Holistic Healing, pp. 62-65.

Golombok, S., & Fivush, R. (Eds.). (1994). *Gender development.* New York: Cambridge

University Press.

Goran, M. I., Gower, B. A., Nagy, T. R., & Johnson, R. K. (1998). Developmental

changes in energy expenditure and physical activity in children: Evidence for a

decline in physical activity in girls before puberty. *Pediatrics, 101*, 887-891.

Government of Manitoba (2004). *Manitoba in Motion*. Retrieved from

http://www.manitobainmotion.ca/

Government of Manitoba (July 11, 1985). *Child and Family Services Act* (C.C.S.M. c.

80). Retrieved from http://web2.gov.mb.ca/laws/statutes/ccsm/

c080e.php?query=disclosure% 20of%20child%20abuse&p=

Grantham-McGregor, S., Walker, S. P., & Chang, S. (2000). Nutritional deficiencies and

later behavioural development. *Proceedings of the Nutrition Society, 59*, 47-54.

Gralinski, J. H., & Kopp, C. B. (1993). Everyday rules for behaviour: Mothers' requests

to young children. *Developmental Psychology, 29*(3), 573-584.

Greenman, J. (1988). *Caring spaces, learning places: Children's environments that work*.

Redmond, W.A.: Exchange Press Inc.

Gross, S. M., Bronner, Y., Welch, C., Dewberry-Moore, N., & Paige, D. M. (2004).

Breakfast and lunch meal skipping patterns among fourth-grade children from selected public schools in urban, suburban, and rural Maryland. *Journal of the American Dietetic Association, 104*(3), 420-423.

Grusec, J. E. (2002). Parental socialization and children's acquisition of values. *Handbook of Parenting*, *5*, 143-167

Grusec, J. E., & Davidov, M. (2010). Socialization in the family: The role of parents. In J. E. Grusec & M. Davidov (Eds.), *Handbook of socialization* (pp. 284-308). New York: The Guilford Press.

Gubbels, J. S., Kremers, S. P., Stafleau, A., Dagnelie, P. C., de Vries, N. K., & Thijs, C. (2009). Child-care environment and dietary intake of 2- and 3-year-old children. *Journal of Human Nutrition and Dietetics, 23*, 97–101.

Guevremont, A., Findlay, L., & Kohen, D. (2008). Organized extracurricular activities of Canadian children and youth (Catalogue no. 82-003-XPE). *Statistics Canada: Health Reports, 19*(3), 65-69.

Gunter, B., Oates, C., & Blades, M. (2005). *Advertising to children on TV: Content, impact, and regulation*. Mahwah, NJ: Lawrence Erlbaum Associates.

Ha, M. T., Marsh, H. W., Martin, A. J., & Halse, C. (2006). *Body image and self-concept in adolescent girls*. In SELF 2006: Self-concept, motivation, social and personal identity for the 21st century. Proceedings of the 4th International Biennial SELF research conference, SELF Research Centre, Sydney, N.S.W., pp. 1-11.

Hahn-Smith, A. M., & Smith, J. E. (2001). The positive influence of maternal identification on body image, eating attitudes, and self-esteem of Hispanic and Anglo girls. *Journal of Eating Disorders, 29*, 429-440.

Haines, J., Neumark-Sztainer, D., & Thiel, L. (2007). Addressing weight-related issues in

    an elementary school: What do students, parents, and school staff recommend?

    Eating Disorders, 15, 5-21.

Halford, J. C., Gillespie, J., Brown, V., Pontin, E. E., & Dovey, T. M. (2004). Effect of

    television advertisements for foods on food consumption in children. *Appetite,*

    42(2), 221-225.

Hammersley, M., & Atkinson, P. (1995). *Ethnography: Principles in practice* (2nd ed.).

    London: Routledge and Kegan Paul.

Hare, S., & Drummond, D. (2002). *Liking the me I see in the mirror: An educational*

    resource manual for teachers on body image and self-esteem. Edmonton, AB:

    Caritas Health Group.

Hargreaves, D. A., & Tiggemann, M. (2006). 'Body image is for girls': A qualitative

    study of boys' body image. *Journal of Health Psychology, 11*(4), 567-576.

Harper, L. V., & Sanders, K. M. (1975). The effect of adults' eating on young children's

    acceptance of unfamiliar foods. *Journal of Experimental Child Psychology, 20*,

    206-214.

Harrison, K. (2000). The body electric: Thin-ideal media and eating disorders in

    adolescents. *Journal of Communication, 50*, 119-159.

Harter, S. (2003). The development of self-representations during childhood and

    adolescence. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and*

    identity (pp. 610-642). New York: Guilford.

Harter, S. (2006). The self. In N. Eisenberg (Ed.), *Handbook of child psychology: Vol. 3.*

Social, emotional, and personality development (6th ed.) (pp. 505-570). Hoboken, NJ: Wiley.

Harvey, C. D. H. (2005). Families in Canada. In B. N. Adams & J. Frost (Eds.), *Handbook of world families* (pp. 539-559). Thousand Oaks, CA: Sage.

Haworth-Hoeppner, S. (2000). The critical shapes of body image: The role of culture and family in the production of eating disorders. *Journal of Marriage and Family, 62*, 212-227.

Hayden-Wade, H. A., Stein, R. I., Ghaderi, A., Saelens, B. E., Zabinski, M. F., & Wilfley, D. E. (2005). Prevalence, characteristics, and correlates of teasing experiences among overweight children vs. non-overweight peers. *Obesity Research, 13*(8), 1381-1392.

Haywood, K. M., & Getchell, N. (2005). *Lifespan motor development* (4th ed.). Champlain, IL: Human Kinetics.

Health Canada (2000). *The vitality approach: A guide for leaders*. Retrieved from http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfbdgpsa/pdf/nutrition/ vitality_approach_approche-eng.pdf

Health Canada. (2007). *Eating well with Canada's Food Guide* (Cat. H164-38/1-2007E). Ottawa, ON: Author.

Health Canada. (2009). *Do Canadian children meet their nutrient requirements through food intake alone* (Cat. H164-112/1-2009E-PDF)? Retrieved from http://www.hc-sc.gc.ca/fn-an/alt_formats/pdf/surveill/nutrition/commun/art-nutr-child-enf-eng.pdf

Heinonen, T., Harvey, C. D. H., & Fox, K. M. (2005). Leisure as part of cultural retention

of Finnish-Canadian immigrants. *Leisure/Loisir, 29*, 275-300.

Hendel, A. (2006, Fall). Restoring self-esteem in adolescent males. *Reclaiming Children and Youth, 15*(3), 175-178.

Hendy, H. M. (1999). Comparison of five teacher actions to encourage children's new food acceptance. *Journal of Behavioural Medicine, 21*, 20-26.

Hendy, H. M. (2002). Effectiveness of trained peer models to encourage food acceptance in preschool children. *Appetite*, *39*(3), 217-225.

Hendy, H. M., & Raudenbush, B. (2000). Effectiveness of teacher modelling to encourage food acceptance in preschool children. *Appetite, 34*, 61-76.

Hendy, H. M., Williams, K. E., & Camise, T. S. (2005). "Kids Choice" school lunch program increases children's fruit and vegetable acceptance. *Appetite, 45*, 250-263. doi: 10.1016/ j.appet.2005.07.006

Herbozo, S., Tantleff-Dunn, S., Gokee-Larose, J., & Thompson, J. K. (2004). Beauty and thinness messages in children's media: A content analysis. *Eating Disorders, 12,* 21-34.

Herbst, C. M., & Tekin, E. (2009). *Child care subsidies and childhood obesity* (IZA Discussion Paper No. 4255). Bonn: Institute for the Study of Labor.

Hernandez-Reif, M., Field, T., Largie, S., Diego, M., Manigat, N., Seoanes, J., & Bornstein, J. (2005). Cerebral palsy symptoms in children decreased following massage therapy. *Early Child Development & Care, 175*(5), 445-456.

Hertzman, C. (2012). [video: DH2_Hertzman1]. In Jamieson, J., Bertrand, J., Elfenbaum, M., & Koshyk, J. (Eds.). (2012). *The science of early child development* (3rd ed.). [Online resource]. Winnipeg, MB: Red River College.

Hesse-Biber, S. N., & Leavy, P. (2006). *Emergent methods in social research*. Thousand Oaks, CA: Sage.

Hinkley, T., Salmon, J., Okely, A. D., Crawford, D., & Hesketh, K. (2011). Influences on preschool children's physical activity: Exploration through focus groups. *Family & Community Health, 34*, 39-50.

Hinkley, T., Crawford, D., Salmon, J., Okely, A. D., & Hesketh, K. (2008). Preschool children and physical activity: A review of correlates. *American Journal of Preventative Medicine, 34*(5), 435-441.

Hoffman, A. J. (1986). Competitive sport and the American athlete: How much is too much? *International Journal of Sport Psychology, 17*, 390-397.

Hoffman, L. W., & Kloska, D. D. (1995). Parents' gender-based attitudes toward marital roles and child rearing: Development and validation of new measures. *Sex Roles, 32*(5/6), 273-295.

Holmqvist, K., & Frisén, A. (2012). "I bet they aren't that perfect in reality": Appearance ideals viewed from the perspective of adolescents with a positive body image. *Body Image, 9*(3), 388-395.

Hsu, L. K. (1989). The gender gap in eating disorders: Why are the eating disorders more common in women? *Clinical Psychology Review, 9*, 393-407.

Huettig, C., Rich, S., Engelbrecht, J., Sanborn, C. B., Essery, E., DiMarco, N., et al. (2006, May). Growing with EASE: Eating, activity and self-esteem. *Young Children*, 26-30.

Hughes, S. O., Patrick, H., Power, T., Fisher, J., Anderson, C. B., & Nicklas, T. A.

(2007). The impact of child care providers' feeding on children's food

consumption. *Journal of Developmental & Behavior Pediatrics, 28*(2), 100-107.

Hymowitz, K. (1999). *Ready or not: Why treating children as small adults endangers*

their future and ours. New York: The Free Press.

Inhelder, B., & Piaget, J. (1958). *The growth of logical thinking from childhood to*

adolescence. New York: Basic Books.

Illingworth, R. S., & Lister, J. (1964). The critical or sensitive period, with special

reference to certain feeding problems in infants and children. *Journal of*

Pediatics, 65(6), 839-848.

Irwin, L. G., Johnson, J. L., Henderson, A., Dahinten, V. S., & Hertzman, C. (2006).

Examining how context shapes young children's perspectives of health. *Child:*

Care, Health, and Development, 33(4), 353-359.

Jacobs, J. E., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Changes in

children's self-competence and values: Gender and domain differences across

Grades one through twelve. *Child Development, 73*, 509-527.

Jamieson, J., Bertrand, J., Elfenbaum, M., & Koshyk, J. (Eds.). (2012). *The science of*

early child development (3rd ed.). [Online resource]. Winnipeg, MB: Red River

College.

Jansen, A., Theunissen, N., Slechten, K., Nederkoorn, C., Boon, B., Mulkens, S., &

Roefs, A. (2003). Overweight children overeat after exposure to food cues. *Eating*

Behaviours, 4, 197-209.

Janz, K. F., Burns, T. L., & Levy, S. M. (2005). Tracking of activity and sedentary

behaviours in childhood: The Iowa Bone Development study. *American Journal of Preventative Medicine, 29*(3), 171-178.

Jarry, J. L., Kossert, A., & Ip, K. (2006). *Do women with low self-esteem use appearance to feel better*? Toronto, ON: National Eating Disorder Information Centre (NEDIC). Retrieved from http://www.nedic.ca/knowthefacts/documents/ Appearanceandselfesteem.pdf

Jingxiong, J., Rosenqvist, U., Huishan, W., Greiner, T., Guangli, L., & Sarkadi, A. (2007). Influence of grandparents on eating behaviors of young children in Chinese three-generation families. *Appetite, 48*, 377-383.

Johnson, S. L., & Birch, L. L. (1993). Parenting style and the regulation of food intake in children. *Abstracts of the Biennial Meeting for the Society for Research in Children's Development* (Vol. 9). Chicago, Il: University of Chicago Press.

Jones, C. J., Leung, N., & Harris, G. (2006). Father-daughter relationship and eating psychopathology: The mediating role of core beliefs. *British Journal of Clinical Psychology, 25*, 319-330.

Jordan, A. (2004). The role of media in children's development: An ecological perspective. *Developmental and Behavioural Pediatrics, 25*(3), 196-206.

Junker, B. H. (1960). *Field work: An introduction to the social sciences*. Chicago: University of Chicago Press.

Kagan, J., & Moss, D. (1962). *Birth to maturity: A study in psychological development*. New York: John Wiley & Sons.

Kaplan, M., Kiernan, N. E., & James, L. (2006). Intergenerational family conversations

and decision making about eating healthfully. *Journal of Nutrition Education and Behaviour, 38*, 298-306. doi: 10.1016/j.jneb.2006.02.010

Keery, H., Boutelle, K., van den Berg, P., & Thompson, J. K. (2005). The impact of appearance-related teasing by family members. *Journal of Adolescent Health, 37*, 120-127.

Kelly, A. M., Wall, M., Eisenberg, M. E., Story, M., & Neumark-Sztainer, D. (2005). Adolescent girls with high body satisfaction: What can they teach us? *Journal of Adolescent Health, 37*, 391-396.

Keltner, D., Capps, L., Kring, A. M., Young, R. C., & Heerey, E. A. (2001). Just teasing: A conceptual analysis and empirical review. *Psychological Bulletin, 127*, 229-248.

Kiecolt, K. J., & Acock, A. C. (1988). The long-term effects of family structure on gender-role attitudes. *Journal of Marriage and the Family, 50*(1), 709-717.

Kilbourne, J. (1999). *Can't buy my love: How advertising changes the way we think and feel.* New York: Touchstone.

Kilbourne, J. (2003). "The more you subtract, the more you add": Cutting girls down to size. In G. Dines & J. M. Humez (Eds.), *Gender, race, and class in media* (2nd ed.) (pp. 258-267). Thousand Oaks, CA: Sage Publications.

Kilbourne, J. (creator), & Jhally, S. (director) (2010). *Killing us softly 4: Advertising's image of women* [motion picture]. Available from Media Education Foundation, 60 Masonic Street, Northampton, MA 01060.

Kim, J. H., & Lennon, S. J. (2007). Mass media and self-esteem, body image, and eating disorder tendencies. *Clothing & Textiles Research Journal, 25*, 3-23.

Kim, J., & Cicchetti, D. (2006). Longitudinal trajectories of self-esteem processes and depressive symptoms among maltreated and non-maltreated children. *Child Development, 77*, 624-639.

Kimball, M. M. (1995). *Feminist visions of gender: Similarities and differences*. New York: Harrington Park Press.

Kirkcaldy, B. D., Shephard, R. J., & Siefen, R. G. (2002). The relationship between physical activity and self-image and problem behaviour among adolescents. *Social Psychiatry & Psychiatric Epidemiology, 37*, 544–550.

Klein, H., & Shiffman, K. S. (2006). Messages about physical attractiveness in animated cartoons. *Body Image, 3*(4), 353-363.

Klesges, R. C., Stein, R. J., Eck, L. H., Isbell, T. R., & Klesges, L. M. (1991). Parental influences on food selection in young children and its relationships to childhood obesity. *American Journal of Clinical Nutrition, 53*, 859-864.

Klesges, R. C., Coates, T. J., Brown, G., Sturgeon-Tillisch, J., Moldenhauer-Klesges, L. M., Holzer, B., Woolfrey, J., & Vollmer, J. (1983). Parental influences on children's eating behaviour and relative weight. *Journal of Applied Behaviour Analysis, 16*, 371-378.

Klomsten, A. T., Skaalvik, E. M., & Espnes, G. A. (2004). Physical self-concept and sports: Do gender differences exist? *Sex Roles, 50*, 119-127.

Klump, K. L., McGue, M., & Iacono, W. G. (2000). Age differences in genetic and environmental influences on eating attitudes and behaviours in preadolescent and adolescent female twins. *Journal of Abnormal Psychology, 109*, 239-251.

Knauss, C., Paxton, S. J., & Alsaker, F. D. (2007). Relationships amongst body

dissatisfaction, internalization of the media body ideal and perceived pressure from media in adolescent girls and boys. *Body Image, 4*, 353-360.

Kohen, D. E., Brooks-Gunn, J., Leventhal, T., & Hertzman, H. (2002). Neighbourhood income and physical and social disorder in Canada: Associations with young children's competencies. *Child Developmental, 73*, 1844-1860.

Kohnt, A. (1986). *No contest: The case against competition*. Boston, MA: Houghton Mifflin.

Kostanski, M., & Gullone, E. (2007). The impact of teasing on children's body image. *Journal of Child and Family Studies, 16*, 307-319.

Kotchick, B. A., & Forehand, R. (2002). Putting parenting in perspective: A discussion of the contextual factors that shape parenting practices. *Journal of Child and Family Studies, 11*, 255-269.

Kotler, L. A., Cohen, P., Davies, M., Pine, D. S., & Walsh, B. T. (2001). Longitudinal relationships between childhood, adolescent, and adult eating disorders. *Journal of the American Academy of Child & Adolescent Psychiatry, 40*(12), 1434-1440.

Krebs, N. F., & Jacobson, M. S. (2003). Prevention of pediatric overweight and obesity. *Pediatrics, 112*, 424-430.

Krippendorff, K. (1980). *Content analysis: An introduction to its method*. Beverley Hills, CA: Sage Publications.

Langford, R. (2006). Discourses of the good Early Childhood Educator in professional training: Reproducing marginality or working toward social change. *International Journal of Educational Policy, Research, & Practice: Reconceptualizing Childhood Studies, 7*, 115-125.

Langlois, J. H., & Downs, A. C. (1980). Mothers, fathers, and peers as socialization

 agents of sex-typed play behaviours in young children. *Child Development, 51*,

 1217-1247.

Lanigan, J. (2010). The substance and sources of young children's healthy eating and

 physical activity knowledge: implications for obesity prevention efforts. *Child:*

 Care, Health, and Development, 37(3), 368-376. doi:10.1111/j.1365-

 2214.2010.01191.x

LaRossa, R., & Reitzes, D. C. (1993). Symbolic interactionism and family studies. In

 P. G. Boss, W. J. Doherty, R. LaRossa, W. R. Schumm, & S. K. Steinmetz (Eds.),

 Sourcebook of family theories and methods (pp. 135-163). New York: Plenum.

Laurenchuk, R., & Harvey, C. D. H. (2001). Cultural adaptations and change: Aboriginal

 peoples in Manitoba maintain their differences. In C. D. H. Harvey (Ed.),

 Maintaining our differences: Minority families in multicultural societies (pp. 71-

 88). Aldershot, UK: Ashgate.

Lawrence, C. M., & Thelen, M. H. (1995). Body image, dieting, and self-concept: Their

 relation in African-American and Caucasian children. *Journal of Clinical Child*

 Psychology, 24, 41-48.

Leaper, C. (2002). Parenting girls and boys. In M. H. Bornstein (Ed.), *Handbook of*

 parenting (Vol. 1): Children and parenting (pp. 189-226). Mahwah, NJ: Taylor &

 Francis.

Leaper, C., & Friedman, C. K. (2007). The socialization of gender. In J. E. Grusec &

 P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 561-

 587). New York: Guilford Press.

Leavitt, R. L. (1996). The emotional culture of infant-toddler day care. In J. A. Hatch (Ed.), *Qualitative research in early childhood settings* (pp. 3-22). Westport, CT: Praeger.

LeCompte, M. D., & Schenshul, J. J. (1999). *The ethnographers' toolkit*. Walnut Creek, CA: AltaMira Press.

Lesnick, A. (2005). 'On the job': Performing gender and inequality at work, home and school. *Journal of Education and Work, 18*(2), 187-200.

Leve, L. D., & Fagot, B. I. (1997). Gender-role socialization and discipline processes in one- and two-parent families. *Sex Roles, 36*(1/2), 1-21.

Lever, J. (1976). Sex differences in the games children play. *Social Problems, 23*, 478-487.

Levin, D. E., & Kilbourne, J. (2009). *So sexy so soon: The new sexualized childhood and what parents can do to protect their kids*. Random House Digital, Inc.

Levine, M. P., & Smolak, L. (2006). Media as a context for the development of disordered eating. In L. Smolak (Ed.), *The developmental psychopathy of eating disorders: Implications for research, prevention, and treatment* (pp. 235-257). Mahwah, NJ: Erlbaum.

Liben, L. S., Bigler, R. S., & Krogh, H. R. (2001). Pink and blue collar jobs: Children's judgements of job status and job aspirations in relation to sex of worker. *Journal of Experimental Child Psychology, 79*, 346-363.

Littleton, H. L., & Ollendick, T. (2003). Negative body image and disordered eating behaviour in children and adolescents: What places youth at risk and how can

these problems be prevented? *Clinical Child & Family Psychology Review, 6*, 51-66.

Liu, J., Raine, A., Venables, P. H., Dalais, C., & Mednick, S. A. (2003). Malnutrition at age 3 years and lower cognitive ability at age 11 years. *Archives of Paediatric and Adolescent Medicine, 157*, 593-600.

Lorber, J., & Moore, L. J. (2002). *Gender and the social construction of illness* (Vol. 4). Rowman Altamira.

Lowe, C. F., Horne, P. J., Tapper, K., Bowdery, M., & Egerton, C. (2004). Effects of a peer modelling and rewards-based intervention to increase fruit and vegetable consumption in children. *European Journal of Clinical Nutrition*, *58*(3), 510-522.

Lowes, J., & Tiggemann, M. (2003). Body dissatisfaction, dieting awareness and the impact of parental influence in young children. *British Journal of Health Psychology, 8*, 135-147.

Lundberg, S. (2005). Sons, daughters, and parental behaviour. *Oxford Review of Economic Policy*, *21*(3), 340-356.

Lynch, M., & Batal, M. (2013). Child care providers' strategies for supporting healthy eating: A qualitative approach. *Journal of Research in Childhood Education, 26*, 107-121. doi:10.1080.02568543.2011.632069

Maccoby, E. E. (1990). Gender as a social category. In S. Chess & M. E. Hertzig (Eds.), *Annual progress in child psychiatry and child development* (pp. 127–150). New York: Brunner/Mazel.

Maccoby, E. E. (2002). Gender and group process: A developmental perspective. *Current Directions in Psychological Science, 11*(2), 54-58.

Maccoby, E. E., & Jacklin, C. N. (1987). Gender segregation in childhood. In H. W. Reese (Ed.), *Advances in child development and behavior, Vol. 20,* (pp. 239–287). Orlando, FL: Academic Press.

Mahoney, J. L., & Cairns, R. B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology, 32*, 241-253.

Maine, M. (2011). *Challenging the BMI: Body mass index or body myth insanity?* Presented at the National Eating Disorder Information Centre Conference in Toronto, ON, May 2-3, 2011.

Manitoba Child Care Program (MCCP). (2005, June). *Best practices licensing manual for early learning and child care centres.* Retrieved from http://www.gov.mb.ca/fs/ elccmanual/pubs/manual_nodiv.pdf

Manitoba Child Care Program. (n.d.). *Early learning and child care services in Manitoba.* Retrieved from http://www.gov.mb.cafs/childcare/elcc_services.html

Manitoba Education (n.d.). *Going to school in Manitoba.* Retrieved from http://www.edu.gov.mb.ca/k12/schools/gts.html

Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology, 35*(2), 63-78.

Marsh, H. W., & Ayotte, V. (2003). Do multiple dimensions of self-concept become more differentiated with age? The differential distinctiveness hypothesis. *Journal of Educational Psychology, 95*, 687-706.

Marsh, H. W., Craven, R., & Debus, R. (1998). Structure, stability and development of young children's self-concept: A multi-cohort, multi-occasion study. *Child Development, 69*, 1030-1053.

Martens, R. (1976). *Social psychology and physical activity*. New York: Harper & Row.

Martin, C. L., & Fabes, R. A. (2001). The stability and consequences of young children's same-sex peer interactions. *Developmental Psychology, 37*, 431–446.

Martin, G. C., Wertheim, E. H., Prior, M., Smart, D., Sanson, A., & Oberklaid, F. (2000). A longitudinal study of the role of childhood temperament in later development of eating concerns. *International Journal of Eating Disorders, 27*, 150-162.

Martin, S., & Corson, P. (2007). *Intentional and relationship-based guidance*. Toronto, ON: Thomson Nelson.

Martins, N., Williams, D. C., Harrison, K., & Ratan, R. R. (2009). A content analysis of female body imagery in video games. *Sex Roles, 61*, 824–836. doi: 10.1007/s11199-009-9682-9

Matheson, D. M., Killen, J. D., Wang, Y., Varady, A., & Robinson, T. N. (2004). Children's food consumption during television viewing. *The American Journal of Clinical Nutrition, 79*(6), 1088-1094.

McCabe, M. P., & Ricciardelli, L. A. (2003a). Sociocultural influences on body image and body change strategies among adolescent boys and girls. *Journal of Social Psychology, 143*, 5-26.

McCabe, M. P., & Ricciardelli, L. A. (2003b). Body image and strategies to lose weight and increase muscle among boys and girls. *Health Psychology, 22*, 39-46. doi:10:1037/0278-6133.22.1.39

McCabe, M. P., & Ricciardelli, L. A. (2004). Body image dissatisfaction among males across the lifespan: A review of past literature. *Journal of Psychosomatic Research, 56*, 675-685.

McCabe, M. P., & Ricciardelli, L. A. (2005). A longitudinal study of body image and strategies to lose weight and increase muscles among children. *Applied Developmental Psychology, 26*, 559-577. doi: 10.1016/j.appdev.2005.06.007

McCabe, M. P., Ricciardelli, L. A., & Holt, K. (2010). Are there different sociocultural influences on body image and body change strategies for overweight adolescent boys and girls? *Eating behaviors, 11*(3), 156-163.

McCabe, M. P., Ricciardelli, L. A., Stanford, J., Holt, K., Keegan, S., & Miller, L. (2007). Where is all the pressure coming from? Messages from mothers and teachers about preschool children's appearance, diet, and exercise. *European Eating Disorders Review, 15*(3), 221-210.

McGee, R., Williams S., & Nada-Raja, S. (2001). Low self-esteem and hopelessness in childhood and suicidal ideation in early adulthood. *Journal of Abnormal Child Psychology, 29*(4), 281-91.

McVey, G., & Davis, R. (2002). A program to promote positive body image: A one-year follow-up evaluation. *Journal of Early Adolescence, 22*, 96-108.

McVey, G., Davis, R., Tweed, S., & Shaw, B. F. (2004). Evaluation of a school-based program designed to improve body image satisfaction, global self-esteem, and eating attitudes and behaviours: A replication study. *International Journal of Eating Disorders, 36,* 1-11.

McVey, G., & Ferrari, M. (2005). Dieting and children. *Pediatrics, 22*(4), 2-4.

McVey, G., Lieberman, M., Voorberg, N., Wardrope, D., & Blackmore, E. (2003). School-based peer support groups: A new approach to the prevention of

disordered eating. *Eating Disorders, 11*, 169-185. doi:10.1080/ 10640260390218297

McVey, G., Pepler, D., Davis, R., Flett, G. L., & Abdolell, M. (2002). Risk and protective factors associated with disordered eating during adolescence. *Journal of Early Adolescence, 22*, 75-95.

McVey, G., Tweed, S., & Blackmore, E. (2004). Research letter: Dieting among preadolescent and young adolescent females. *Canadian Medical Association Journal, 170*(10), 1559-1561.

McVey, G., Tweed, S., & Blackmore, E. (2005). Correlates of weight loss and muscle-gaining behaviour in 10- to 14-year-old males and females. *Preventive Medicine, 40*, 1-9. doi:10.1016/j.ypmed.2004.04.043

McVey, G., Tweed, S., & Blackmore, E. (2007). Health schools – Healthy kids: A controlled evaluation of a comprehensive universal eating disorder prevention program. *Body Image, 2*, 115-136. doi:10.1016/j.bodyim.2007.01.004

Mead, M., & Wolfenstein, J. (1955). *Childhood in contemporary cultures*. Chicago, IL: University of Chicago Press.

Mead, G. H. (1934). *Mind, self, and society*. Chicago, IL: University of Chicago Press.

Mennella, J. A., Jagnow, C. P., & Beauchamp, G. K. (2001) Prenatal and postnatal flavor learning by human infants. *Pediatrics, 107*, E88.

Menzel, J. E., Schaefer, L. M., Burke, N. L., Mayhew, L. L., Brannick, M. T., & Thompson, J. K. (2010). Appearance-related teasing, body dissatisfaction, and disordered eating: A meta-analysis. *Body image, 7*(4), 261-270.

Miller, P. H. (1993). *Theories of developmental psychology* (3rd ed.). New York: W. H. Freeman and Company.

Moffitt, P., & Vollman, A. R. (2004). Photovoice: Picturing the health of Aboriginal women in a remote Northern community. *Canadian Journal of Nursing Research, 36*(4), 189-201.

Momsen, J. (2010). *Gender and development* (2nd ed.). New York: Routledge.

Moore, H., Nelson, P., Marshall, J., Cooper, M., Zambas, H., Brewster, K., & Atkin, K. (2005). Laying foundations for health: Food provision for under fives in day care. *Appetite, 44*(2), 407-413.

Morrison, T. G., Kalin, R., & Morrison, M. A. (2004). Body image evaluation and body image investment among adolescents: A test of sociocultural and social comparison theories. *Adolescence, 39*(155), 571-592.

Morrison, T. G., Morrison, M. A., Hopkins, C., & Rowan, E. T. (2004). Muscle mania: Development of a new scale examining the drive for muscularity in Canadian males. *Psychology of Men & Masculinity, 5*(1), 30.

Morse, J. M., & Richards, L. (2002). *Readme first for a user's guide to qualitative methods*. Thousand Oaks, CA: Sage Publications.

Mrdjenovic, G., & Levitsky, D. A. (2005). Children eat what they are served: The imprecise regulation of energy intake. *Appetite, 44*, 273-282. doi:10.1016/j.appet.2005.01.005

Mukherji, P., & Albon, D. (2010). *Research methods in early childhood: An introductory guide*. London: Sage.

Murphy, S. (1999). *The cheers and the tears*. San Francisco, CA: Jossey-Bass.

Murnen, S. K., Smolak, L., Mills, J. A., & Good, L. (2003). Thin, sexy women and strong, muscular men: Grade-school children's responses to objectified images of women and men. *Sex Roles: A Journal of Research, 49*(9-10), 427-437.

Murray, F. B. (1983). Learning and development through social interaction and conflict: A challenge to social learning theory. In L. Liben (Ed.), *Piaget and the foundations of knowledge* (pp. 231-247). Hillsdale NJ: Erlbaum.

Murray, S. B. (1996). "We all love Charles": Men in child care and the social construction of gender. *Gender and Society, 10*(4), 368-385.

Musher-Eizenmann, D., Holub, S., Edwards-Leeper, L., Persson, A., & Goldstein, S. (2003). The narrow range of acceptable body types of preschool children and their mothers. *Applied Developmental Psychology, 24*, 259-272.

Myers, M. D., Raynor, H. A., & Epstein, L. H. (1998). Predictors of child psychological changes during family-based treatment for obesity. *Archives of Pediatric and Adolescent Medicine, 152*, 855-861.

National Association for Sport and Physical Education (2002). *Active start: A statement of physical activity guidelines for children birth to five years*. Reston, VA: American Alliance for Health, Physical Education, Recreation, and Dance.

National Eating Disorders Association (NEDA) (2006). *What is body image?* Retrieved from http://www.nationaleatingdisorders.org/what-body-image

National Eating Disorder Information Centre (NEDIC) (2003). *Dieting & weight loss: Facts & fiction.* Toronto, ON: NEDIC.

National Eating Disorder Information Centre (NEDIC) (2005a). *Body image and self-esteem*. Retrieved from http://www.nedic.ca/knowthefacts/bodyimage.shtml

National Eating Disorder Information Centre (NEDIC) (2005b). *Food and weight preoccupation*. Retrieved from http://www.nedic.ca/knowthefacts/ foodweight.shtml

National Eating Disorder Information Centre (NEDIC) (2011). *Definitions*. Retrieved from http://nedic.ca/knowthefacts/definitions.shtml

Neumark-Sztainer, D., Eisenberg, M. E., Fulkerson, J. A., Story, M., & Larson, N. I. (2008). Family meals and disordered eating in adolescents: Longitudinal findings from project EAT. *Archives of Pediatrics & Adolescent Medicine, 162*, 17.

Neumark-Sztainer, D., Paxton, S. J., Hannan, P. J., Haines, J., & Story, M. (2006). Does body satisfaction matter? Five year longitudinal associations between body satisfaction and health behaviours in adolescent females and males. *Journal of Adolescent Health, 39*, 244-251.

Neumark-Sztainer, D., Story, M., Hannan, P. J., Tharp, T., & Rex, J. (2003). Factors associated with changes in physical activity: A cohort study of inactive adolescent girls. *Archives of Pediatric Adolescent Medicine, 157*, 803-810.

Neumark-Sztainer, D., Story, M., French, S. A., & Resnick, M. D. (1997). Psychosocial correlates of health compromising behaviors among adolescents. *Health Education Research, 12*, 37–52.

Newson, J., & Newson, E. (1975). Intersubjectivity and the transmission of culture: On the social origins of symbolic functioning. *Bulletin of the British Psychological Society, 28*, 437-446.

Nichols, B. (1990). *Moving and learning: The elementary school physical education experience*. St. Louis, MO: Times Mirror/Mosby College Publishing.

Nicklas, T. A., Baranowski, T., Baranowski, J. C., Cullen, K., Rittenberry, L., & Olvera, N. (2001). Family and child-care provider influences on preschool children's fruit, juice, and vegetable consumption. *Nutrition Reviews, 59*(7), 224-235.

Nicklas, T. A., Reger, C., Myers, L., & O'Neil, C. (2000). Breakfast consumption with and without vitamin-mineral supplement use favorably impacts daily nutrient intake of ninth-grade students. *Journal of Adolescent Health, 27*(5), 314-321.

Nicklas, T. A., Tsuei Goh, E., Goodell, S., Acuff, D. S., Reiher, R., Buday, R., & Ottenbacher, A. (2011). Impact of commercials on food preferences of low-income, minority preschoolers. *Journal of Nutrition Education and Behavior, 43*, 35-41.

O'Dea, J. A. (2003). Why do kids eat healthful food? Perceived benefits of and barriers to healthful eating and physical activity among children and adolescents. *Journal of the American Dietetic Association, 103*, 497-501.

O'Dea, J. A., & Caputi, P. (2001). Association between socioeconomic status, weight, age and gender, and the body image and weight control practices of 6- to 19-year-old children and adolescents. *Health Education Research, 16*(5), 521-532.

O'Keefe, M. (2000). *Sexploitation or pride? Female Olympians' revealing poses stir debate.* Newshouse News Service, http://corinth.sas.upenn.edu/dgr/sitecache/ clips/newhouse.htm

Offord, D. R., Lipman, E. L., & Duka, E .K. (1998). *Sports, the arts, and community programs: Rates and correlates of participation*. Ottawa, ON: Human Resources and Social Development Canada.

Ogden, C. L., Carroll, M. D., Curtin, L. R., Lamb, M. M., & Flegal, K. M. (2010).

Prevalence of high body mass index in U. S. children and adolescents, 2007-2008. *Journal of the American Medical Association, 303*, 242-249.

Ogden, J. (2010). *The psychology of eating* (2nd ed). West Sussex, UK: Wiley-Blackwell.

Oja, L., & Jurimae, T. (2002). Physical activity, motor ability, and school readiness of 6-year-old children. *Perceptual & Motor Skills, 95*, 407–15.

Oliffe, J. (2005). Why not ethnography? *Urological Nursing, 25*(5), 395-399.

Oliver, J. E. (2006). *Fat politics: The real story behind America's obesity epidemic*. New York: Oxford University Press.

Ontario Council of Agencies Serving Immigrants (OCASI). (2011). *What is Canada's political system?* Retrieved from http://www.settlement.org/sys/ faqs_detail.asp?faq_id=4000074

Overlan, L. (1996, July 2). *"Overweight" girls at risk*. Newton Tab, 15.

PBS. (2007). *A place of our own* (Television series). Retrieved from http://aplaceofourown.org/question_detail.php?id=185

Packard, P., & Krogstand, K. S. (2002). Half of rural girls aged 8 to 17 years report weight concerns and dietary changes, with both more prevalent with increased age. *Journal of the American Dietetic Association, 102*(5), 672-677.

Pagnini, D. L., Wilkenfeld, R. L., Ling, L. A., Booth, M. L., & Booth, S. L. (2007). Early childhood sector staff perceptions of child overweight and obesity: The weight of opinion study. *Health Promotion Journal of Australia, 18*(2), 149-154.

Paquette, D. (2004). Theorizing the father-child relationship: Mechanisms and developmental outcomes. *Human Development, 47*, 193-219.

Paradise, A.W., & Kernis, M. H. (2002). Self-esteem and psychological well-being:

Implications of fragile self-esteem. *Journal of Social and Clinical Psychology*, *21*, 345-61.

Paxton, S. J., Neumark-Sztainer, D., Hannan, P. J., & Eisenberg, M. E. (2006). Body dissatisfaction prospectively predicts depressive mood and low self-esteem in adolescent girls and boys. *Journal of Clinical Child & Adolescent Psychology, 35*, 539-549. doi:10.1207/s15374424jccp3504_5.

Paxton, S. J., Schutz, H. K., Wertheim, E. H., & Muir, S. L. (1999). Friendship clique and peer influences on body image concerns, dietary restraint, extreme weight-loss behaviours, and binge eating in adolescent girls. *Journal of Abnormal Psychology, 108*(2), 255-266.

Pellegrini, A. D. (2004). Rough-and-tumble play from childhood through adolescence: Development and possible functions. In P. K. Smith & C. H. Hart (Eds.), *Blackwell handbook of childhood social development* (pp. 438-453). Malden, MA: Blackwell.

Pellegrini, A. D., & Boyd, B. (1993). The role of play in early child development and education: Issues in definition and function. In B. Spodek (Ed.), *Handbook of research on the education of young children* (pp. 105-121). New York: MacMillan.

Pellegrini, A. D., & Smith, P. K. (1998). Physical activity play: The nature and function of a neglected aspect of play. *Child Development, 69*(3), 577-598.

Pellis, S. M., & Pellis, V. C. (2007). Rough and tumble play and the development of the social brain. *Current Directions in Psychological Science, 16*, 95-98.

Perez-Rodrigo, C., Ribas, L., Serra-Majem, L., & Aranceta, J. (2003). Food preferences

of Spanish children and young people: the enKid study. *European Journal of Clinical Nutrition, 57,* (Supp. 1), S45-S48.

Perry, B. (2011). *The child brain and behaviour: Influences of early experiences and trauma.* Presented at the 2011 Prevention Matters Conference: Supporting Children's Well Being, September 21-23, Saskatoon, SK.

Petrie, T. A., Greenleaf, C., & Martin, S. (2010). Biopsychosocial and physical correlates of middle school boys' and girls' body satisfaction. *Sex Roles, 63*(9-10), 631-644.

Pexman, P. M., & Glenwright, M. (2007). How do typically developing children grasp the meaning of verbal irony? *Journal of Neurolinguistics, 20*(2), 178-196.

Phares, V., Steinberg, A. R., & Thompson, J. K. (2004). Gender differences in peer and parental influences: Body image disturbance, self-worth, and psychological functioning in preadolescent children. *Journal of Youth and Adolescence, 33*(5), 421-429.

Piaget, J. (1930). *The child's conception of the world.* New York: Harcourt, Brace & World.

Piaget, J. (1952). *The origins of intelligence in children.* New York: International Universities Press.

Piers, E. V. (1996). *Piers-Harris children's self-concept scale: Revised manual.* Los Angeles, CA: Western Psychological Services.

Pimento, B., & Kernested, D. (2010). *Healthy foundations in early childhood settings* (4th ed.). Toronto: Nelson Education.

Pliner, P., & Stallberg-White, C. (2000). "Pass the ketchup please:" Familiar flavours increase children's willingness to taste novel foods. *Appetite, 34*, 95-103.

Poest, C. A., Williams, J. R., Witt, D. D., & Atwood, M. E. (1989). Physical activity patterns in preschool children. *Early Childhood Research Quarterly, 4*(3), 367-376.

Pole, C. (2007). Researching children and fashion: An embodied ethnography. *Childhood, 14*, 67-84.

Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). Philadelphia, PA: Lippencott Williams & Wilkins.

Pomerleau, A., Bolduc, D., Malcuit, G., & Cossette, L. (1990). Pink or blue: Environmental gender stereotypes in the first two years of life. *Sex Roles, 22*(5/6), 359-367.

Pope, C. (2005). Conducting ethnography in medical settings. *Medical Education, 39*, 1180-1187.

Pope, H. G., Olivardia, R., Gruber, A., & Borowiecki, J. (1999). Evolving ideals of male body image as seen through action toys. *International Journal of Eating Disorders, 26*, 65-72.

Pope, H. G., Phillips, K. A., & Olivardia, R. (2000). *The Adonis complex*. New York: The Free Press.

Power, T. C. (2000). Play and exploration in children and animals. Mahwah, NJ: Erlbaum.

Prentice, S. (2004). Manitoba's child care regime: Social liberalism in flux. *The Canadian Journal of Sociology, 29*(2), 193-207. Retrieved from http://www.jstor.org.proxy2.lib.umanitoba.ca/stable/pdfplus/ 3654693.pdf?acceptTC=true

Prentice, S. (2007). Less access, worse quality: New evidence about poor children and

regulated child care in Canada. *Journal of Children and Poverty, 13*, 57-73.

doi: 10.1080/10796120601171328

Priest, H., Roberts, P., & Woods, L. (2002). An overview of three different approaches to

the interpretation of qualitative data. Part 1: Theoretical issues. *Nurse Researcher,*

10, 30-42.

Proctor, M. H., Moore, L. L., Gao, D., Cupples, L. A., Bradlee, M. L., Hood, M. Y., et al.

(2003). Television viewing and change in body fat from preschool to early

adolescence: The Framingham Children's Study. *International Journal of*

Obesity, 27, 827-833.

Public Health Agency of Canada (PHAC) (2006). *Trends in the health of Canadian*

Youth: Health behaviours in school-aged children. Retrieved from

http://www.phac-aspc.gc.ca/dca-dea/publications/hbsc_05_e.html

Radnitz, C., Byrne, S., Goldman, R., Sparks, M., Gantshar, M., & Tung, K. (2009). Food

cues in children's television programs. *Appetite, 52*, 230-233.

Raley, S., & Bianchi, S. (2006). Sons, daughters, and family processes: Does gender of

children matter? *Annual Review of Sociology*, 401-421.

Red River College (RRC) (2011). *Support infants and school age children (Com Pac*

ECED-3065). Winnipeg, MB: Author.

Reddan, J., Wahlstrom, K., & Reicks, M. (2002). Children's perceived benefits and

barriers in relation to eating breakfast in schools with or without Universal School

Breakfast. *Journal of Nutrition Education and Behavior*, *34*(1), 47-52.

Ricciardelli, L. A., & McCabe, M. P. (2001). Children's body image concerns and eating

disturbance: A review of the literature. *Clinical Psychology Review, 21*, 325-344.

Ricciardelli, L. A., McCabe, M. P., Lillis, J., & Thomas, K. (2006). A longitudinal investigation of the development of weight and muscle concerns among preadolescent boys. *Journal of Youth and Adolescence, 2*, 177-187. doi:10.1007/s10964-005-9004-7

Richardson, H. (1997, Winter). Kangaroo care: Why does it work? *Midwifery Today*, *44*, 50-51. Retrieved from http://www.midwiferytoday.com/articles/kangaroocare.asp

Rideout, V., Foehr, U. G., & Roberts, D. (2010, January). *Generation M2: Media in the lives of 8-18 year olds*. Menlo Park: CA: The Kaiser Family Foundation.

Rieves, L., & Cash, T. F. (1996). Social developmental factors and women's body image attitudes. *Journal of Social Behaviour and Personality, 11*, 63-78.

Robertson, M. H. B., & Boyle, J. S. (1984). Ethnography, contributions to nursing research. *Journal of Advanced Nursing, 9*, 43-49.

Robins, R. W., Tracy, J. L., Trzesniewski, K., Potter, J., & Gosling, S. D. (2001). Personality correlates of self-esteem. *Journal of Research in Personality, 35*, 463-482.

Robinson, T. N. (2001). Television viewing and childhood obesity. *Pediatric Clinics of North America, 48*(4), 1017-1025.

Robinson, T., Callister, M., & Jankoski, T. (2008). Portrayal of body weight on children's television programs: A content analysis. *Body Image, 5*(2), 141-151. doi: 10.1016/j.bodyim.2007.11.004

Robson, E. (2004). Competition in sport, music, and dance. *Medical Problems of Performing Artists, 19*(4), 160-166

Rogers, J. M. (2009). Tobacco and pregnancy. *Reproductive Toxicology, 28*, 152-160.

Rolls, B. J., Federoff, I. C., & Guthrie, J. F. (1991). Gender differences in eating

behaviour and body weight regulation. *Health Psychology, 10*, 133-142.

Roy, F. (2006, June). *From she to she: Changing patterns of women in the Canadian*

labour force (Catalogue no. 11-010-XIB). Retrieved from

http://www.statcan.gc.ca/pub/11-010-x/11-010-x2006006-eng.pdf

Rubinstein, R. P. (2000). *Society's child: Identity, clothing, and style*. Boulder, CO:

Westview Press.

Ruble, D. N. (1988). Sex role development. In M. H. Bornstein, & M. E. Lamb (Eds.),

Developmental psychology: An advanced textbook (2nd ed.), (pp. 411-460)

Hillsdale, NJ: Erlbaum.

Rudy, D., & Grusec, J. E. (2006). Authoritarian parenting in individualistic and

collectivist groups: Associations with maternal emotion and cognition and

children's self-esteem. *Journal of Family Psychology, 20*, 68-78.

Ryan, J. (1995). *Little girls in pretty boxes: The making and breaking of elite gymnasts*

and figure skaters. New York: Warner Books.

Safe Cosmetics. (2011). *Nail salons and nail products*. Retrieved from

http://safecosmetics.org/ article.php?id=224

Salbe, A. D., Weyer, C., Lindsay, R. S., Ravussin, E., & Tataranni, P. A. (2002).

Assessing risk factors for obesity between childhood and adolescence: Birth

weight, childhood adiposity, parental obesity, insulin, and leptin. *Pediatrics, 110*,

299-306.

Sallis, J. F., Owen, N., & Fisher, E. B. (2008). Ecological models of health behaviour. In

K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behaviour and health education: Theory, research, and practice* (4th ed.) (pp. 465-485).

Salvy, S. J., Wojslawowicz Bowker, J., Roemmich, J. N., Romero, N., Kieffer, E., Paluch, R., & Epstein, L. H. (2008). Peer influence on children's physical activity: An experience sampling study. *Journal of Pediatric Psychology 33*, 39–49. doi:10.1093/jpepsy/jsm039

Sands, E. R., & Wardle, J. (2003). Internalization of ideal body shapes in 9-12 year old girls. *International Journal of Eating Disorders, 33*, 193-204.

Sandnabba, N. K., & Ahlberg, C. (1999). Parents' attitudes and expectations about children's cross-gender behaviour. *Sex Roles, 40*(3/4), 249-263.

Schaal, B., Marlier, L., & Soussignan, R. (2000). Human fetuses learn odour from their pregnant mother's diet. *Chemical Senses, 25*, 729-737.

Schlosser, E., & Wilson, C. (2006). *Chew on this: Everything you don't want to know about fast food*. New York: Houghton Mifflin Company.

Schwartz, D. J., Phares, V., Tantleff-Dunn, S., & Thompson, J. K. (1999). Body image, psychological functioning, and parental feedback regarding physical appearance. *International Journal of Eating Disorders, 25*(3), 339-343.

Scott, E., & Panksepp, J. (2003). Rough and tumble play in human children. *Aggressive Behaviour, 29*, 539-551.

Schur, F. A., Sanders, A., & Steiner, H. (2000). Body dissatisfaction and dieting in young children. *International Journal of Eating Disorders, 27,* 74-82.

Schreiber, G. B., Robins, M., Striegel-Moore, R., Obarzanek, E., Morrison, J. A., & Wright, D. J. (1996). Weight modification efforts reported by black and white

preadolescent girls: National Heart, Lung, and Blood Institute Growth and Health

Study. *Pediatrics, 98*, 63-70.

Schwimmer, J. B., Burwinkle, T. M., & Varni, J. W. (2003). Health-related quality of life

of severely obese children and adolescents. *Journal of the American Medical

Association, 289*, 1814-1819.

Selman, R. L. (1976). Social-cognitive understanding: a guide to educational and clinical

practice. In T. Lickona (Ed.), *Moral development and behaviour: Theory,

research and social issues* (pp. 299-316). New York: Holt, Rinehart, & Winston.

Serbin, L. A., Moller, L. C., Gulko, J., Powlishta, K. K., & Colburne, K. A. (1994). The

emergence of gender segregation in toddler playgroups. *New Directions in Child

Development, 65*, 7–17.

Shapiro, S., Newcomb, M., & Loeb, T. B. (1997). Peer models and children's behaviour

change. *Review of Educational Research, 57*, 149-174.

Shapka, J. D., & Keating, D. P. (2005). Structure and change in self-concept during

adolescence. *Canadian Journal of Behavioural Science, 37*, 83-96.

Sharma, A. M., & Kushner, R. F. (2009). A proposed clinical staging system for obesity.

International Journal of Obesity, 33, 289–295. doi:10.1038/ijo.2009.2

Shipley, D. (2008). *Empowering children: Play-based curriculum for lifelong learning*

(4th ed.). Scarborough, ON: Thomson Nelson.

Shore, R. (1997). *Rethinking the brain: New insights into early development*. New York:

Families and Work Institute.

Siervogel, R. M., Maynard, L. M., Wisemandle, W. A., Roche, A. F., Guo, S. S.,

Chumlea, W. C., & Towne, B. (2000). Annual changes in total body fat and fat-

free mass in children from 8 to 18 years in relation to changes in body mass index: The Fels Longitudinal Study. *Annals of the New York Academy of Sciences, 940*, 420-423.

Sinton, M. M., & Birch, L. L. (2006). Individual and sociocultural influences on pre-adolescent girls' appearance schemas and body dissatisfaction. *Journal of Youth and Adolescence, 35*(2), 157-167.

Sithole, F., & Veugelers, P. J. (2008, September). Parent and child reports of children's activity (Catalogue no. 82-003-XPE). *Statistics Canada Health Reports, 19*(3), 1-6.

Skinner, J. D., Caruth, B. R., Wendy, B., & Ziegler, P. J. (2002). Children's food preferences: A longitudinal analysis. *Journal of the American Dietary Association, 102*, 1638-1647.

Sloan, B. (n.d.). *Ohio State University fact sheet: Body image*. Retrieved from http://ohioline.osu.edu/hyg-fact/5000/5238.html

Smith, K., Findlay, L., & Crompton, S. (2011). Participation in sports and cultural activities among Aboriginal children and youth (Catalogue no. 11-008). *Canadian Social Trends*, 49-56.

Smolak, L. (2004). Body image in children and adolescents: Where do we go from here? *Body Image, 1*, 15-28.

Smolak, L., & Levine, M. (1996). Adolescent transitions and eating problems. In L. Smolak, M. Levine, & R. Striegel-Moore (Eds.), *The developmental psychopathology of eating disorders: Implications for research, prevention, and treatment* (pp. 207–233). Mahwah, NJ: Erlbaum.

Smolak, L., & Levine, M. P. (2001). Body image in children. In J. K. Thompson & L.

    Smolak (Eds.), *The developmental psychopathology of eating disorders:*

    Implications for research, prevention, and treatment (pp. 207-233). Mahwah, NJ:

    Erlbaum.

Smolak, L., Levine, M. P., & Schermer, J. (1999). Parental input and weight concerns

    among elementary school children. *International Journal of Eating Disorders, 25*,

    263-271.

Smolucha, F. (2003). The teening of preschool play. In O. N. Saracho & B. Spodek

    (Eds.), *Contemporary perspectives on play in Early Childhood Education* (pp.

    153-170). Greenwich, CT: Information Age Publishing.

Snell, E. K., Adam, E. K., & Duncan, G. J. (2007). Sleep and the body mass index and

    overweight status of children and adolescents. *Child Development, 78*, 309-323.

Snethen, J. A., & Broome, M. E. (2007). Weight, exercise, and health. Children's

    perceptions. *Clinical Nursing Research, 16*(2), 138-152.

Social Planning Council of Winnipeg. (2009, October 22). *Poverty barometer: Child*

    poverty rates of recent immigrants rising. Winnipeg, MB: Author

Speziale, H. J. S., & Carpenter, D. R. (2007). *Qualitative research in Nursing: Advancing*

    the humanistic perspective (4th ed.). Philadelphia, PA: Lippencott Williams &

    Wilkins.

Spradley, J. (1980). *Participant observation*. Orlando, FA: Harcourt Brace Jovanovich.

Springer, A. E., Kelder, S. H., & Hoelscher, D. M. (2006). Social support, physical

    activity and sedentary behavior among 6th-grade girls: A cross-sectional study.

International Journal of Behavioral Nutrition and Physical Activity, *3*(8). doi:10.1186/1479-5868-3-8

Spurlock, M. (2005). *Don't eat this book: Fast food and the supersizing of America*. New York: Berkley.

Stanek, K., Abbott, D., & Cramer, S. (1990). Diet quality and the eating environment of preschool children. *Journal of the American Dietetic Association, 90*(11), 1582-1584.

Statistics Canada (2010a). *Fruit and vegetable consumption, 2010* (Catalogue No. 82-625-x). Retrieved from http://www.statcan.gc.cs/pub/82-625-x/2011001/article/11461-eng.htm

Statistics Canada (2010b). *Perceived health, 2010* (Catalogue no. 82-625-x). Retrieved from http://www.statcan.gc.cs/pub/82-625-x/2011001/article/11465-eng.htm

Statistics Canada (2010c). *Physical activity during leisure time, 2010* (Catalogue no. 82-625-x). Retrieved from http://www.statcan.gc.cs/pub/82-625-x/2011001/article/11467-eng.htm

Statistics Canada (2011). *Canada yearbook 2011* (Catalogue no. 11-402-XPE). Retrieved from http://www.statcan.gc.ca/pub/11-402-x/index-eng.htm

Steckly, J., & Letts, G. K. (2010). *Elements of sociology: A critical Canadian introduction* (2nd ed.). Don Mills, ON: Oxford.

Steiner, J. E., Glaser, D., Hawilo, M. E., & Berridge, D. C. (2001). Comparative expression of hedonic impact: Affective reactions to taste by human infants and other primates. *Neuroscience and Biobehavioural Reviews, 25*, 53-74.

Steyer, J. P. (2002). *The other parent: The inside story of the media's effect on our*

children. New York: Atria Books.

Story, M., Kaphingst, K. M., & French, S. (2010). The role of child care settings in

obesity prevention. *The Future of Children, 16*, 143–168. Retrieved from

http://futureofchildren.org/

Strauss, R. S. (2000). Childhood obesity and self-esteem. *Pediatrics, 105*, e15.

Strauss, R. R., Rodzilsky, D., Burack, G., & Colin, M. (2001). Psychosocial correlates of

physical activity in healthy children. *Archives of Pediatric & Adolescent*

Medicine, 155, 897-902.

Striegel-Moore, R. H., & Kearney-Cooke, A. (1994). Exploring parents' attitudes and

behaviours about their children's physical appearance. *International Journal of*

Eating Disorders, 15, 377-385.

Tannock, M. T. (2007). Rough and tumble play: An investigation of the perceptions of

educators and young children. *Early Childhood Education Journal, 35*, 357-361.

Taylor, J. P., Evers, S., & McKenna, M. (2005). Determinants of healthy eating in

children and youth. *Canadian Journal of Public Health, 96*, S22a-S29a.

Temple, J. L., Giacomelli, A. M., Roemmich, J. N., & Epstein, L. H. (2007). Overweight

children habituate slower than non-overweight children to food. *Physiology and*

Behaviour, 9, 250-254.

Tepperman, L., & Curtis, J. (2009). *Principles of sociology: Canadian perspectives* (2nd

ed.).Don Mills, ON: Oxford.

Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York:

The Falmer Press.

Thelen, M. H., Lawrence, C., & Powell, A. L. (1992). Body image, weight control, and

eating disorders among children. In J. H. Crowther, D. L. Tennenbaum, S. E.

Hobfoll, & M. A. P. Stephens (Eds.), *The etiology of bulimia nervosa: The*

individual and family context (pp. 81-101). Washington, DC: Hemisphere.

Thomas, M. H. (2000). Abstinence-based programs for prevention of adolescent

pregnancies: A review. *Journal of Adolescent Health, 26*, 5-17.

Thompson, J. K. (1996). Assessing body image disturbance: Measures, methodology, and

implementation. In J. K. Thompson (Ed.), *Body image, eating disorders, and*

*obesity: An integrative guide for assessment and treatmen*t (pp. 49-82).

Washington, DC: American Psychological Association.

Thompson, J. K., & Stice, E. (2001). Thin-ideal internalization: Mounting evidence for a

new risk factor for body-image disturbance and eating pathology. *Current*

Directions in Psychological Science, 10, 181-183.

Thompson, L., & Walker, A. J. (1995). The place of feminism in family studies. *Journal*

of Marriage and Family, 57(4), 847-866.

Thompson, S. H., Corwin, S. J., & Sargent, R. G. (1997). Ideal body size beliefs and

weight concerns of fourth-grade children. *International Journal of Eating*

Disorders, 21(3), 279-284.

Thompson, S. H., Corwin, S. J., Rogan, T. J., & Sargent, R. G. (1999). Body size beliefs

and weight concerns among mothers and their adolescent children. *Journal of*

Child and Family Studies, 8, 91-108

Thorne, B. (2001). Girls and boys together but mostly apart: Gender arrangement in

elementary school. In R. Satow (Ed.), *Gender and social life* (pp. 152–166). New

York: Wiley.

Tiggemann, M. (2001). The impact of adolescent girls' life concerns and leisure activities on body dissatisfaction, disordered eating, and self-esteem. *The Journal of Genetic Psychology, 162*(2), 133-142.

Tiggemann, M. (2005). Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image, 2*, 129-135. doi:10.1002/(SICI)1098-108X/(199907) 26:1<103::AIDEAT14>3.0CO;2-0

Timmons, B. W., LeBlanc, A. G., Carson, V., & Tremblay, M. S. (2011, Fall). Physical activity and sedentary behaviour guidelines for preschool-aged children: What we know, what we don't know, and what we're doing about it. *Interaction, 25*(2), 31-34.

Ton Nu, C., MacLeod, P., & Barhelemy, J. (2003). Effects of age and gender on adolescents' food habits and preferences. *Food Quality and Preference, 7*, 251-262.

Tonkiss, F. (2004). Analyzing text and speech: Content and discourse analysis. In C. Seale (Ed.), *Researching society and culture* (pp. 368-380). London: Sage.

Tremblay, M., Katzmarzyk, P., & Willms, J. (2002). Temporal trends in overweight and obesity in Canada, 1981-1996. *International Journal of Obesity, 26*, 538-43.

Tremblay, M., Inman, J. W., & Wilms, J. D. (2000). The relationship between physical activity, self-esteem, and academic achievement in 12-year-old children. *Pediatric Exercise Science, 12*, 312-323.

Tremblay, M., & Willms, J. (2000). Secular trends in the body mass index of Canadian children. *Canadian Medical Association Journal, 163*, 1429-33.

Trost, S. G., Fees, B., & Dzewaltowski, D. (2008). Feasibility and efficacy of a "move

and learn" physical activity curriculum in preschool children. *Journal of Physical Activity & Health, 5*(1), 88.

Trost, S. G., Pate, R. R., Sallis, J. F., Freedson, P. S., Taylor, W. C., Dowda, M., & Sirard, J. (2002). Age and gender differences in objectively measured physical activity in youth. *Medicine & Science in Sports & Exercise, 34*(2), 350-355.

Trost, S. G., Ward, D. S., & Senso, M. (2010). Effects of child care policy and environment on physical activity. *Medicine & Science in Sports & Exercise, 42*(3), 520-525. doi:10.1249/ MSS.0b013e3181cea3ef

Tsiantas, G., & King, R. M. (2001). Similarities in body image in sisters: The role of sociocultural internalization and social comparison. *Eating Disorders, 9,* 141-158.

Vander Wal, J. S., & Thelen, M. H. (2000). Eating and body image concerns among obese and non-obese children. *Addictive Behaviours, 25*, 775-778.

The Virtues Project. (n.d.) Retrieved from http://www.virtuesproject.com/homepage.html

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Walsh, D. (2004). Doing ethnography. In C. Seale (Ed.), *Researching society and culture*. (pp 226-237). London: Sage.

Wang, F., Wild, T. C., Kipp, W., Kuhle, S., & Veugelers, P. J. (2009, June). The influence of childhood obesity on the development of self-esteem (Catalogue no. 82-003-XPE). *Statistics Canada Health Reports*, *20*(2), 21-27.

Wardle J., & Cooke, L. (2005). The impact of obesity on psychological well-being. *Best Practice and Research Clinical Endocrinology and Metabolism, 19*(3), 421-40.

Wardle, J., & Watters, R. (2004). Sociocultural influences on attitudes to weight and

eating: Results of a natural experiment. *International Journal of Eating Disorders, 35*(4), 589-596.

Warm, T. R. (1997). The role of teasing in development and vice versa. *Journal of Developmental and Behavioural Pediatrics, 18*, 97-101.

Watanabe, E., Lee, J. S., & Kawakubo, K. (2011). Associations of maternal employment and three-generation families with pre-school children's overweight and obesity in Japan. International Journal of Obesity, 35, 945-952.

Welsh, J. A., & Bierman, K. L. (2001, April 6). Social competence. *Encyclopedia of Childhood and Adolescence* [Electronic version]. Retrieved from http://findarticles.com/ p/articles/mi_g2602/is_0004/ai_2602000487/

West, C., & Zimmerman, D. (1987). Doing gender. *Gender and Society, 1*, 125-151.

Whiting, B. (1963). *Six cultures: Studies of child rearing*. New York: Wiley.

Wild, L. G., Flisher, A. J., Bhana A., & Lombard, C. (2004). Associations among adolescent risk behaviours and self-esteem in six domains. *Journal of Child Psychology and Psychiatry, 45*(8), 1454-67.

Wilhite, K. (2005, Spring). *Giving breast implants as birthday gifts make 16 less sweet*. National NOW Times, http://www.now.org/nnt/Spring-2005/BreastImplants-Gifts.html

Wood, K. C., Becker, J. A., & Thompson, J. K. (1996). Body image dissatisfaction in preadolescent children. *Journal of Applied Developmental Psychology, 17*, 85-100.

Woodgate, R. (2000). An introduction to conducting qualitative research in children with cancer. *Journal of Pediatric Oncology Nursing, 17*(4), 192-206.

Woodgate, R., & Leach, J. (2010). Youth's perspectives on the determinants of health. *Qualitative Health Research, XX* (X) 1-10. doi: 10.1177/1049732310370213.

World Health Organization (2011, March). *Fact sheet No. 311: Obesity and overweight*. Retrieved from http://www.who.int/mediacentre/factsheets/fs311/en/

Wylie, S. (2009). *Observing young children: A guide for Early Childhood Educators in Canada* (3rd ed.). Toronto, ON: Nelson Education.

Zabinski, M. F., Calfas, K. J., Gehrman, C. A., Wilfley, D. E., & Sallis, J. F. (2001). Effects of a physical activity intervention on body image in university seniors: Project GRAD. *Annals of Behavioural Medicine, 23*, 247-252.

Zaff, J. S., Moore, K. A., Papilo, A. R., & Williams, S. (2003). Implications of extracurricular activity participation during adolescence on positive outcomes. *Journal of Adolescent Research, 18*, 599-630.

Zeller, M. H., Reiter-Purtill, J., & Ramey, C. (2008). Negative peer perceptions of obese children in the classroom environment. *Obesity*, *16*(4), 755-762.

Appendix A: Sample – Live Anecdotal Record

Name/s of child/children: Rosa

Date of birth: August 3, 2003

Age: 6 years **Date:** August 30, 2009

Time: 2:30 p.m. - 2:37 p.m.

Observer Name: Susan Doe

Description of setting: Rosa plays alone in the water table under the tree in the playground during outdoor free play at ABC Day Care. One ECE is nearby in the sand area. Rosa is playing with a toy boat.

Rosa is playing with a boat at the water table under the shade tree. She slowly pushes the boat down and looks as the drops of water gradually fill it. She watches it sink, whispering, "Come up now." She lifts it up. She collects small rocks and bark chips from the base of the tree and fills the boat with six large bark chips. "Here you go – Toot! Toot!" She adds three rocks and the boat slowly begins to take on water. Quickly, she piles on two more rocks and the boat sinks. The rocks go down with the ship, but the bark chips come floating to the top. "Pop! Pop!" Rosa pushes one of the chips down again and watches as it pops up as soon as she lets it go. (Van Hoorn, Monighan Nourot, Scales, & Rodriguez Alward, 2007, p. 237)

Appendix B: Sample – Remembered Anecdotal Record

Name/s of child/children: Rosa

Date of birth: August 3, 2003

Age: 6 years **Date:** August 30, 2009

Time: Afternoon

Observer Name: Susan Doe

Description of setting: Rosa played alone in the water table under the tree in the playground during outdoor free play at ABC Day Care. One ECE was nearby in the sand area. Rosa was playing with a toy boat.

Rosa was playing with a boat at the water table under the shade tree. She slowly pushed the boat down and looked at it. She watched it sink whispering that it had come up. She lifted it up. She collected small rocks and bark chips from the base of the tree and filled the boat with bark chips. She made a tooting sound as she did this. She added some rocks and the boat slowly began to take on water. Quickly, she piled on more rocks and the boat sank. The rocks went down with the ship, but the bark chips came floating to the top. She made a popping sound as this happened.

Appendix C: Child Participation Chart – Activity Areas

Name: _____ **DOB:** _____ **Age:** _____
Observer: _____ **Date(s):** _____ **Time:** _____

Setting:
_____
_____
_____

Activity	Frequency	Duration	Other's involvement	Interactions	Comments
Daily Living (household, dolls, dress-up, puppets)					
Active Role Play (large muscle, music & movement)					
Quiet Thinking (book nook, language arts)					
Technology (computer, listening, viewing)					
Physical Activities (gym, outdoor play)					
Snack & Meals (assist in prep, eating meals)					

(Red River College, 2009)

Appendix D - Observation Schedule

Week 1	Field notes	Anecdotal - Live	Anecdotal - Remembered	Participation Chart	Behaviour Tally
Observation 1	Daily	*3:30-3:45pm (snack) *4:15-4:30pm (gym or outside activity) *5:00-5:15pm (free play)	After 9:00am and/or after 6:00pm	*Morning and/or afternoon snack *Free play (pm) *Gym or outside activity	Daily as needed
Observation 2	Daily	*3:30-3:45pm (snack) *4:15-4:30pm (gym or outside activity) *5:00-5:15pm (free play)	After 9:00am and/or after 6:00pm	*Morning and/or afternoon snack *Free play (pm) *Gym or outside activity	Daily as needed
Observation 3	Daily	*3:30-3:45pm (snack) *4:15-4:30pm (gym or outside activity) *5:00-5:15pm (free play)	After 9:00am and/or after 6:00pm	*Morning and/or afternoon snack *Free play (pm) *Gym or outside activity	Daily as needed

Weeks 2-12	Field notes	Learning activity	Anecdotal – Live	Anecdotal - Remembered	Participa-tion Chart	Behaviour Tally
Observation 1	Daily	3:45-4:15pm **or** 4:30-5:00pm	*3:30-3:40pm (snack) *4:20-4:30pm (gym or outside activity) *5:00-5:10pm (free play)	After 9:00am and/or after 6:00pm	*Morning and/or afternoon snack *Free play (pm) *Gym or outside activity	Daily as needed
Observation 2	Daily	3:45-4:15pm **or** 4:30-5:00pm	*3:30-3:40pm (snack) *4:20-4:30pm (gym or outside activity) *5:00-5:10pm (free play)	After 9:00am and/or after 6:00pm	*Morning and/or afternoon snack *Free play (pm) *Gym or outside activity	Daily as needed
Observation 3	Daily	3:45-4:15pm **or** 4:30-5:00pm	*3:30-3:40pm (snack) *4:20-4:30pm (gym or outside activity) *5:00-5:10pm (free play)	After 9:00am and/or after 6:00pm	*Morning and/or afternoon snack *Free play (pm) *Gym or outside activity	Daily as needed

Appendix E – Learning Activities

Learning Activity 1

Activity title: 'Wrap it up' Cooking Activity

Purpose: To gain an understanding of children's food preferences, involvement in food preparation and selection (e.g. food choices), social and cultural expectations and practices in families around food and eating, and family influences on children's eating attitudes and behaviours.

Materials: dried cranberries (or dried raisins), 6 x 250g spreadable cream cheese, 1 cup crumbled feta cheese, ¼ cup chopped green onions, 3 pkg. each plain/spinach/cheese tortillas, plastic tablecloth, 8 spatulas, wooden spoon, large mixing bowl, paper towels, plastic wrap, platter, table with bench seating.

Method: Prepare all of the materials in the kitchen area before children arrive in the morning. Set up the activity on one of the tables and invite the children individually to the activity. Tell the participating children to wash their hands before the activity and to meet at the table with the materials (Note: Girls with long hair will be asked to put their hair back). Once they are seated, inform the children about the nature of the activity and what they will be doing. Tell the children they will be making snack for that afternoon. Ask if they would like to sample each of the ingredients before they are combined in the large bowl. Ask them about the differences in the tastes (e.g. sweet cranberries, salty feta) and ask if they have ever had these ingredients before. Inquire about the types of dishes were they in.

   Have children take turns adding the ingredients into the mixing bowl and mixing them with the spoon. Once the ingredients are mixed, give each child a flour tortilla and a spatula, and tell them they can take some of the mixture from the large bowl and use their spatulas to spread the mix evenly over their tortilla. Demonstrate and describe how to roll up the tortilla, but have the children individually roll their own. Tell the children that the rolls need to go into the fridge for one hour, but that they will be eating the rolls for afternoon snack. Have the children wrap each of their rolls in plastic wrap and put them on the platter. Have the children help clean up the area and wash their hands.

Note 1: As there will be insufficient time to have the children cut the wraps into pieces for snack, myself or a staff member will do it.

Note 2: As there may be some children who are allergic to certain ingredients, rolls will be adapted to suit their needs.

Additional Questions:
- "Have you ever helped cook dinner for your family?
    - If yes: "What do you like to cook? What things do you do when you help make dinner?"
    - If no: "What would you like to cook? What would you like to help with when your family makes dinner"?
- "When you go grocery shopping, do you get to help choose the foods your family buys?"
- "Do you help plan out what your family eats for dinner?"

- "What other kinds of wraps could we make? What else could we put in them"?
- "Is this something you would like to make at home?"
  - If yes: "What would you put in your wrap?"
  - If no, ask why they wouldn't make these again.

Focus of observations:
- Children's behaviour
  - Verbal responses to questions
  - Reactions to activity (e.g. sustained interest)
  - Amount and type of involvement (e.g. demonstrates experience with food preparation, offers to help serve snack to other children)

Learning Activity 2

Activity title: 'What I like about me' art activity

Purpose: (a) To gain an understanding of children's emotional development, in particular their self-concept (which is linked to self-esteem); (b) to look for examples of industry (Erikson), and thus high self-worth and self-esteem, including taking pride in what one does, recognizing one's own success, and accepting one's own strengths and weaknesses; and (c) to gain an understanding of children's body image ideas.

Materials: Markers, pencil crayons, crayons, large roll of paper, scissors.

Method: Before the children arrive, cut the paper into sheets, long enough for the children to have their entire body traced. At the top of each sheet of paper, use a marker to write, "What I like about me." During free play, set up the materials on the floor of the small gym. Invite the children to participate in the activity. Tell the children that each of them will have the outline of their body traced on the paper, and that I can trace them or the children can trace one another. Tell the children that once they trace themselves on the paper, that I would like them to draw the things they really like about themselves. I will give them the examples of being good at soccer, liking their hair or feet, or that they are funny. Once I have described the activity, ask them to take a piece of paper and use the markers, crayons, and pencil crayons to complete their tracing and drawing. Ask each child to talk about what they have drawn. Listen for any comments children make about their characteristics or behaviours, or examples of industry. Make notes about each picture and let the children take their pictures home.

Additional Questions:
- "Tell me about your drawing"
- "What are the things that you do that make you feel proud of yourself"?

Focus of observations:
- Children's drawings
- Verbal responses to questions about what they have drawn

Learning Activity 3

Activity title: Shapesville CROC talk

Rationale: To gain an understanding of why individuality is not consistently accepted among school age children, and to understand the rationalization behind western ideals of beauty from the child's perspective.

Materials: Shapesville book

Method: Approach one of the staff members to implement a team CROC talk. Advise the staff that I will be reading the story to the group of children and that their role is to ask open-ended questions while I document the answers. Indicate to the staff that I will have the questions prepared and written out ahead of time, so their role is to read the questions to the children. Also mention to the staff that it is important that they do not indicate agreement with any one answer; this is an opportunity to find out what the children think without influencing their answers.

Additional Questions:
- What do you think this story is about/What is the moral of the story?
- What can you do that you are really happy or proud about? (e.g. soccer, dance, stand on your head)
    - Acknowledge that some of the children may have the same or different ideas.
- Why do you think some people are teasing for being different in the way they look or in the things they like to do?
    - How do you think that makes them feel?
- Do you think that everyone should like the same things or look the same way? If yes/no, then why?

Learning Activity 4

Activity title: Centre ABC Cafe

Rationale: Based on observations of several children during free play time, it was noted that both girls and boys engaged in 'restaurant' play, where children played the roles of chef/cook, server, and customer. Each observation of this play lasted several minutes, indicating a sustained interest in the activity.

Purpose: To gain an understanding of children's ideas around food preparation, their food preferences, their ability to display cultural or social practices around food preparation or eating habits, and social and cultural expectations around food and eating. Gender differences in children's play will also be noted.

Materials: Large cardboard box, restaurant sign, cash register, play food and empty food boxes, menus, aprons, toy utensils and dishes, toy kitchen with oven, toy stove range, pads of paper, pens, clipboards, small table and chairs, dress up clothes and hats.

Method:
On the morning of an in-service day, an area of the gym will be set up as the Centre ABC Cafe. A large cardboard box will be set up as the frame of the cafe (in an 'L' shape), with a square cut out of the box for a window and a sign at the top of the box. A small table and chairs will be placed outside of the 'cafe' (but children may move them to the 'inside' of the cafe), and the kitchen, play food, and toy dishes will be placed behind the box frame. Miscellaneous items, including dress up clothes, will be stored in Rubbermaid containers, and the wooden bench in the gym may also serve as a shelf for play items. Children will have access to pads of paper, pencils, and Menu sheets. The Menu sheets will have the word 'Menu' printed at the top and will be attached to the clipboards (i.e. the children may design their own menus).

Depending on availability of the small gym, this play space may be available for the entire day. However, it will be set up and taken down on the same day.

Please note: Some items are already available at the Centre, but other items (e.g. table and chairs, toy stove) will be borrowed.

Learning Activity 5

Activity title: The perogy factory

Purpose: To gain an understanding of cultural practices pertaining to food and eating. Also, to gain further understanding of children's involvement in food preparation, and social and cultural expectations and practices in families around food and eating.

Materials: Flour, one egg, potatoes, cheddar cheese, oil, milk, water, sour cream, onions, baking powder, salt, butter/margarine, rolling pin, tablecloth, cookie cutters, large trays, large sheet of paper, markers, paper towel.

Method: (The dough and potato/cheese filling will be prepared the night before the activity.) The activity will be set up on one of the large tables in the mini-gym. During free play in the morning, the children will be invited to participate in the activity. They will gather as a group on the floor beside the table. A large piece of paper will be poster on the wall in front of them. The children will be told that they will be making perogies, which will be eaten snack for that afternoon. I will explain that in my culture, the Ukrainian culture, perogies were eaten at every family meal that my Baba prepared. I will ask them about their own cultures, and what foods they eat which are specific to their culture. I will write down their answers on the paper. Once the children have finished the discussion, I will explain that the perogies will be made in three stations (cut out dough, fill pocket with potato/cheese filling, pinch pocket closed and put on tray). I will demonstrate how to complete each of the stations. The children will be told that they can work at just one station or at all three. I will set up both sides of the table with the stations so that children can move around easily.

Note: Tell the participating children to wash their hands before the activity and to meet at the table with the materials (note: children with long hair will be asked to put their hair back). Once they are finished, they will wash their hands again before starting a new activity.

Learning Activity 6

Activity title: Uncooked playdoh activity

Purpose: To gain an understanding of children's perspectives on food, specifically, the social and cultural expectations around food habits. Also, to explore children's understanding of the purpose of food (e.g. nourishment, creative expression).

Materials: 2 cups of plain flour, 4 tablespoons of cream of tartar, 2 tablespoons of cooking oil, 1 cup of salt, 2 cups of boiling water, kettle, food colouring, Jello, large Ziplock bag, rolling pin, mixing bowl, wooden spoon, cookie cutters and other playdoh toys.

Method: The activity will be set up on one of the large tables in the mini-gym. During free play in the morning, the children will be invited to participate in the activity. They will gather as a group at the table, with the materials set in front of them. The group will be asked about 'food and play' (see questions below). Once they have discussed the questions, I will describe how food can be used as a play material. I will then describe the activity and have the children take turns adding the dry items to the mixing bowl, including the Jello (depending on level of interest, I may also let the children sample a small amount of the dry Jello powder). I will then have a few more children take turns stirring the dry mixture. I myself will add the hot water and oil to the dry items and stir the mixture (Note: if the colour of the stirred mixture is dull, I will add the food colouring). Once the dry materials are moist, I will let the children take turns kneading the mixture on the bench. Once completed, the children may stay and play with the playdoh and playdoh toys. When the activity is finished, the playdoh will be kept in the ziplock bag.

Additional Questions:
- Have any of you ever been told not to play with your food? What were you doing with your food?
- Why do you think people are told not to play with their food?
- Other than eating, what else can we do with food?

Note: Tell the participating children to wash their hands before the activity and to meet at the table with the materials (note: children with long hair will be asked to put their hair back). Once they are finished, they will wash their hands again before starting a new activity.

(Recipe from http://www.k-3teacherresources.com/play-dough-recipe.html)

Learning Activity 7

Activity title: Fingerprint Reindeer Family Holiday Card
(Retrieved from http://crafts.kaboose.com/scrapbooking/xmas-kids-fingerprint.html)

Rationale: To gain an understanding of why individuality is not consistently accepted among school age children.

Purpose: (a) To gain an understanding of children's emotional development, in particular their self-concept (which is linked to self-esteem); (b) to look for examples of industry (Erikson), and thus high self-worth and self-esteem, including accepting one's own strengths and weaknesses; and (c) to gain an understanding of children's body image ideas.

Materials: 2 brown and 2 red stamp pads, red and brown markers, "Season's Greetings" stamp, white card stock or thick white construction paper (5 ½ x 8 ½ inches).

Method: The activity will be set up on one of the mats on the floor in the mini-gym. During free play in the morning, the children will be invited to participate in the activity. They will gather as a group on the mat, with the materials set out in front of them. Each child will receive a piece of the cardstock or heavy construction paper. I will instruct each child to place his or her thumb on an inkpad and make a thumb print on the paper. I will remind the children about previous conversations with the staff about how fingerprints are unique and how there may be similar patterns, but that there are no two alike. I will discuss the fact that each fingerprint is special because it is totally unique. I will ask the children to talk about other aspects of themselves that are unique, such as their eye colour, playing soccer, or having freckles. I will then tell them that we are making thumbprint holiday cards that they could give to family or friends...which will each be as unique as themselves because no two cards will be alike. I will tell them to fold the paper in half, with the thumbprint art on the front of the card, and tell them that they can create a animal, person, snowperson, or other holiday creature (e.g. elf) using the markers and their thumbprints as the head and/or the body. They may add more thumbprints or fingerprints as needed.

Additional questions:
- What is it about you that is different or unique from anyone else?
- Everyone is different because of their fingerprints, but why do you think some people are teased because they are different in other ways?
- Why do you think that some people try to look or act like their friends or like people who are famous?

Appendix F – Organization of Field Notes

Types of notes	Location of notes	Format	Data	Analysis
Anecdotal Observations	Coil bound notebook	-Time (duration) -Name of child -Date -Description of setting	Narrative	Inferences
Participation chart	Prepared, typed	-Time (duration) -Name of child -Date -Description of setting	Pattern of activity, description of behaviour of concern	Inferences
Informal Interviews	Coil bound notebook	-Time -Name of child -Date -Description of setting	What child or ECE said	Inferences
Research Journal	Coil bound notebook	- Time -Name of child -Date -Description of setting	Subjective assumptions, reactions	Inferences
Notes, ideas, reflections, and general comments	Blank loose leaf paper	- Date - Individuals involved (if any)	Comments/Ideas, point form notes	Inferences and decisions

Appendix G1. Director Consent Form for the Proposed Study

UNIVERSITY
OF MANITOBA

Applied Health Sciences Ph.D.

Program

HLHP Research
Institute
307 Max Bell
Winnipeg, MB
Canada R3T 2N2
Phone: (204) 474-7493
Fax: (204) 261-4802

Research Project Title - Body image, eating attitudes and behaviours, and physical
activity: A multi-method study of school age children.

Principal Researcher - Kelly Andrushko (PhD Candidate)
Faculty Advisor – Dr. Carol Hussa Harvey

DIRECTOR CONSENT FORM FOR RESEARCH STUDY – PART A

Dear Bev:

Body image, eating attitudes and behaviours, and physical activity are interrelated. I
would like to investigate this interrelationship by observing at your centre. For 15-20
hours per week over a three month-period, I would like to make observations and plan
activities with the children at your centre. I may also ask the children questions about
eating, physical activity, or body image.

This consent form, a copy of which will be left with you for your records and reference,
is only part of the process of informed consent. It gives you the basic idea of what the
research is about and what your participation will involve. If you would like more detail
about something mentioned here, or information not included here, you should feel free
to ask. Please take the time to read this carefully and to understand any accompanying
information.

If I get permission from you, the staff and children at your centre would be asked to
participate in this study. Please take your time to review this participant information and
consent form, and discuss any questions you may have with me the researcher, Kelly
Andrushko. Please ask me to explain information that you do not clearly understand.

While I am a graduate student at the University of Manitoba, I am also an ECE III and an
Instructor in the Early Childhood Education program at Red River College. My
experience as an ECE and as an Instructor has allowed me to develop the skills to be an
effective observer, one that can be unobtrusive in a child care environment. My
observations are not meant to be disruptive to the daily routine of your centre, to the
responsibilities of your staff, or to the play and activities of the children. In addition, my
experience working with children provided me with the skills necessary to offer
developmentally appropriate activities, and helped me to be aware of the types of
activities that are common in school age child care facilities.

Please note, the intent of this research is not to evaluate your centre. I will not be observing the program itself, the curriculum, or your staff. I may be able to offer ideas for ways of addressing body image, eating, or physical activity concerns, but my intent is not to change your program. And while I am an ECE III, my role in this study is that of a researcher. I will be able to supplement your ratios, but I am not able to fill the role of an Early Childhood Educator. For example, while I will assist with set up of activities or cleaning while the children are at school, I am not available to work as a substitute ECE when the children are present.

Your decision to allow your centre to participate is completely voluntary. The children and staff at your centre may refuse to participate or to withdraw from this study at any time. The children and staff will not have to answer any questions that they prefer not to answer. Confidentiality of the children's and the staff's information will be maintained. Information gathered in this research study may be published. However, children's or staff's names or any other identifying information will not be used or revealed.

The children's and staff's participation in this research project will not involve any potential risk, whether it is physical or psychological. At no time will deception or harm be used in this project to gain access to information.

The results of this study will be used as part of the requirements for a doctoral degree in Applied Health Sciences, and for further research publications. Any results published from this research will only identify groups, not individual participants and neither you nor the centre will be named. A summary of the results can be made available to all of the participants upon request.

To show my appreciation, I will provide a lunch for you and your staff at the end of the research. I will also give each of your staff a $20 gift card. If you are interested after the research is complete, I am willing to conduct a workshop with staff and parents about the findings of my research and their implications.

Your signature on this form indicates that you have understood to your satisfaction the information regarding your centre's participation in the research project and agree for me to approach staff and parents to ask permission for children and staff to participate. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. The children and staff are free to withdraw from the study at any time, and/or they may refrain from answering any questions they prefer to omit, without prejudice or consequence. The children's and staff's continued participation should be as informed as their initial consent, so they are free to ask for clarification of new information throughout their participation.

UNIVERSITY
OF MANITOBA

Principal Researcher
Kelly Andrushko, Ph.D. (cand.)
Applied Health Sciences
University of Manitoba
Winnipeg, Manitoba R3T 2N2
Phone: (204) XXX-XXXX

Thesis Advisor
Carol Hussa Harvey, Ph.D.
Professor and Senior Scholar
 Department of Family Social Sciences
Faculty of Human Ecology
University of Manitoba
Winnipeg, Manitoba R3T 2N2
Phone: (204) XXX-XXXX

Applied Health Sciences Ph.D.

Program

DIRECTOR CONSENT FORM FOR RESEARCH STUDY – PART B

I have read this consent form. I understand that Kelly Andrushko, as a graduate student, is conducting a study that will add to our knowledge about eating attitudes and behaviours, physical activity, and body image among school age children. Miss Andrushko or her research advisor, Dr. Carol Hussa Harvey, can be contacted if there are questions or concerns at any time during this study.

I have had the opportunity to discuss this research study with Kelly Andrushko. I have had my questions answered by them in language I understand. The risks and benefits of having my centre participate have been explained to me. I understand that I will be given a copy of this consent form after signing it. I understand that the children's and the staff's participation in this study is voluntary and that they have the right to participate in their study to the extent that they feel comfortable to do so. They may choose to withdraw at any time

I understand that information regarding the identity of the centre children and staff will be kept confidential. Miss Andrushko will remove all identifying information about the children and staff from her final research reports. I understand that everything the children or staff says or does will remain confidential. I understand the only people having access to this information is Kelly Andrushko and Dr. Carol Hussa Harvey. Once this information is analyzed, all identifying information will be destroyed.

My signature on this form indicates that I have understood to my satisfaction the information regarding my centre's participation in the research project and agree for Kelly Andrushko to approach the parents, children, and staff for permission to participate. In no way does this waive my legal rights nor release the researchers or involved institutions from their legal and professional responsibilities. The children and staff are free to withdraw from the study at any time, and/or they may refrain from answering any questions they prefer to omit, without prejudice or consequence. The children's and staff's continued participation should be as informed as their initial consent, so they are free to ask for clarification of new information throughout their participation.

Principal Researcher   **Thesis Advisor**
Kelly Andrushko, Ph.D. (cand.)   Carol Hussa Harvey, Ph.D.
Applied Health Sciences   Professor and Senior Scholar
University of Manitoba   Department of Family Social Sciences
Winnipeg, Manitoba R3T 2N2   Faculty of Human Ecology
Phone: (204) XXX-XXXX   University of Manitoba
                                   Winnipeg, Manitoba R3T 2N2
                                   Phone: (204) XXX-XXXX

This research has been approved by the Joint-Faculty Research Ethics Board of the University of Manitoba. If you have any concerns or complaints about this project, you may contact either of the above-named persons or the Human Ethics Secretariat at 474-7122. A copy of this consent form is given to you to keep for your records and reference.

_____
Director's Signature (in ink)   Date

_____
Researcher's Signature (in ink)   Date

Appendix G2. Parental Consent Form for the Proposed Study

UNIVERSITY
OF MANITOBA

Applied Health Sciences Ph.D.
Program

HLHP Research
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Phone: (204) 474-7493
Fax: (204) 261-4802

Research Project Title - Body image, eating attitudes and behaviours, and physical
activity: A multi-method study of school age children.

Principal Researcher - Kelly Andrushko (PhD Candidate)
Faculty Advisor – Dr. Carol Hussa Harvey

CONSENT FORM FOR RESEARCH STUDY – PART A

Dear Parent and/or Legal Guardian:

A research project will examine body image, eating attitudes and behaviours, and
physical activity among school age children from observations of children enrolled in
Small Scholars child care centre. For 15-20 hours per week over a three month-period, I
will make observations and plan activities with the children. I may also ask the children
questions about eating, physical activity, or body image.

This consent form, a copy of which will be left with you for your records and reference,
is only part of the process of informed consent. It gives you the basic idea of what the
research is about and what your participation will involve. If you would like more detail
about something mentioned here, or information not included here, you should feel free
to ask. Please take the time to read this carefully and to understand any accompanying
information.

I would like for your child to participate in this study, and if you give permission your
child can be part of this study. Please take your time to review this participant
information and consent form, and discuss any questions you may have with the
researcher, Kelly Andrushko. You may discuss this study with friends or family before
you make a decision. Please ask me to explain information that you do not clearly
understand.

Your decision to allow your child to participate is completely voluntary. Your child may
refuse to participate or to withdraw from this study at any time. Please advise your child
that he/she does not have to answer any questions that he or she prefers not to answer.
Confidentiality of your child's information will be maintained. Information gathered in
this research study may be published. However, your child's name or any other

Page 1 of 4

identifying information will not be used or revealed. Consent forms and field notes will be locked in a filing cabinet, in XXXX-2055 Notre Dame Avenue, Red River College, Winnipeg, MB for the duration of this study, after which time the information will be destroyed.

Your child's participation in this research project will not involve any potential risk, whether it is physical or psychological. At no time will deception or harm be used in this project to gain access to information.

As a parent, you may want to know if your child is upset or is experiencing difficulties at school or at daycare. Although you are concerned about the well-being of your child, information provided by participants, regardless of age or ability, cannot be shared with anyone but the researcher. However, one exception will be made in cases where a child speaks of abuse. According to the Government of Manitoba *Child and Family Services Act* (1985), I am required by law to report disclosures or suspicions of child abuse, even though confidentiality has been established.

The results of this study will be used as part of the requirements of a doctorate in Applied Health Sciences, and for further research publications. Any results published from this research will only identify groups, not individual participants. A summary of the results will be made available to all of the participants upon request.

Your signature on this form indicates that you have understood to your satisfaction the information regarding your child's participation in the research project and agree to his or her participation. In no way does this waive your legal rights as the parent/legal guardian nor release the researchers, or involved institutions from their legal and professional responsibilities. Your child is free to withdraw from the study at any time, and/or he or she may refrain from answering any questions, without prejudice or consequence. Your child's continued participation should be as informed as their initial consent, so he or she is free to ask for clarification of new information throughout the research.

Principal Researcher
Kelly Andrushko, Ph.D. (cand.)
Applied Health Sciences
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Phone: (204) XXX-XXXX

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Applied Health Sciences Ph.D.

Program

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CONSENT FORM FOR RESEARCH STUDY – PART B

I have read this consent form. I understand that Kelly Andrushko, as a graduate student, is conducting a study that will add to our knowledge about eating attitudes and behaviours, physical activity, and body image among school age children. Miss Andrushko or her research advisor, Dr. Carol Hussa Harvey, can be contacted if there are questions or concerns at any time during this study.

I have had the opportunity to discuss this research study with Kelly Andrushko. I have had my questions answered by her in language I understand. The risks and benefits of having my child participate have been explained to me. I understand that I will be given a copy of this consent form after signing it. I understand that my child's participation in this study is voluntary and that my child has the right to participate in their study to the extent that he/she feels comfortable to do so. He/she may choose to withdraw at any time.

I understand that information regarding the identity of my child will be kept confidential. Miss Andrushko will remove all identifying information about my child from her final research reports. I understand that everything my child says or does will remain confidential. I understand the only people having access to this information are Kelly Andrushko and Carol Hussa Harvey. Once this information is analyzed, all identifying notes will be destroyed.

By signing this consent form, I have not waived any of the legal rights that I have as the parent/ legal guardian of allowing my child to participate in a research study. I freely agree to allow my child to participate in this research study.

My signature on this form indicates that I have understood to my satisfaction the information regarding my child's participation in the research project and agree to his or her participation as a subject. In no way does this waive my legal rights as the parent/legal guardian nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. My child is free to withdraw from the study at any time, and/or he/she may refrain from answering any questions he or she prefers to omit, without prejudice or consequence. My child's continued participation should be as informed as their initial consent, so he or she is free to ask for clarification of new information throughout the study.

Page 3 of 4

Principal Researcher   **Thesis Advisor**
Kelly Andrushko, Ph.D. (cand.)   Carol Hussa Harvey, Ph.D.
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Winnipeg, Manitoba R3T 2N2   Faculty of Human Ecology
Phone: (204) XXX-XXXX   University of Manitoba
                                       Winnipeg, Manitoba R3T 2N2
                                       Phone: (204) XXX-XXXX

This research has been approved by the Joint-Faculty Research Ethics Board of the University of Manitoba. If you have any concerns or complaints about this project, you may contact either of the above-named persons or the Human Ethics Secretariat at 474-7122. A copy of this consent form is given to you to keep for your records and reference.

_____
Parent's Signature (in ink)   Date

_____
Researcher's Signature (in ink)   Date

Page 4 of 4

Appendix G3. Children's Consent Form for the Proposed Study

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Applied Health Sciences Ph.D.

Program

UNIVERSITY

OF MANITOBA

Research Project Title - Body image, eating attitudes and behaviours, and physical activity: A multi-method study of school age children.

Principal Researcher - Kelly Andrushko (PhD Candidate)
Faculty Advisor – Dr. Carol Hussa Harvey

CONSENT FOR CHILDREN IN RESEARCH STUDY

This is a consent form, which means that it will tell me what the research is about and how I can be a part of it. I will get a copy of this form, which I can keep. If I want to know more about something on this consent form, it is ok to ask. If I think there is something missing here, it is ok for me to say so. I will read this form with my parents/guardians and ask questions if there are things I don't understand.

Kelly Andrushko has explained to me that she is a doctoral student at the University of Manitoba and is doing a research study. This study is being done to find out about kid's ideas and habits around food and physical activity (exercise), and how they feel about the way they look. I can call her or email her if I have any questions during or after the study.

Any information I give to Kelly will be kept private (or *secret*). She will make sure my personal information is safe. My name will never appear in any paper (other than this form, and the one that my parent/legal guardian has to sign). She won't ever use my first name in the results. Only Kelly will know it was me in this study. But, if I talk about being hurt or abused, Kelly can't keep it a secret. She will have to talk to the authorities to make sure that I am safe.

If I choose to be in the study, I understand there is no danger to my body or to my mind. No one will lie to me or hurt me in any way. No one will trick me into saying or doing anything.

At the end of the study, there will be a party for everyone at my daycare. Even if I agree at first and then change my mind about being in the study, I will still be invited to the party.

Page 1 of 2

When I sign my name on this form, it means that I understand that Kelly Andrushko will watch the things that happen at daycare. She will also makes notes about what she sees. When I sign my name, it also means that I understand that sometimes Kelly will ask me questions about things that I am doing. She will only ask me questions if I agree to participate and if my parents agree that I can participate.

I do not have to be in this study. No one will be mad at me if I do not want to do this. If I do not want to be in this study, I will just say so. Kelly will also ask my parents/legal guardians if they would like me to be in this study. Even if my parents/legal guardians want me to be in this study, I can still say no. Even if I say yes now, I can always change my mind later. It is up to me.

Principal Researcher
Kelly Andrushko, Ph.D. (cand.)
Applied Health Sciences
University of Manitoba
Winnipeg, Manitoba R3T 2N2
Phone: (204) XXX-XXXX

Thesis Advisor
Carol Hussa Harvey, Ph.D.
Professor and Senior Scholar
Department of Family Social Sciences
Faculty of Human Ecology
University of Manitoba
Winnipeg, Manitoba R3T 2N2
Phone: (204) XXX-XXXX

This research has been approved by the Joint-Faculty Research Ethics Board of the University of Manitoba. If I have any concerns or complaints about this project, I may contact Kelly or her Advisor, Dr. Harvey, or the Human Ethics Secretariat at 474-7122.

_____
Child's Signature (in ink)   Date

_____
Researcher's Signature (in ink)   Date

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Appendix G4. Staff Consent Form for the Proposed Study

UNIVERSITY
OF MANITOBA

Applied Health Sciences Ph.D.

Program

Research Project Title - Body image, eating attitudes and behaviours, and physical
activity: A multi-method study of school age children.

Principal Researcher - Kelly Andrushko (PhD Candidate)
Faculty Advisor – Dr. Carol Hussa Harvey

STAFF CONSENT FORM FOR RESEARCH STUDY – PART A

Body image, eating attitudes and behaviours, and physical activity are interrelated. In
order to study these concepts, in this research I will make observations and plan activities
with the children at Small Scholars child care centre. I am also interested in your
perspective on how children learn about body image, eating attitudes and behaviours, and
physical activity.

This consent form, a copy of which will be left with you for your records and reference,
is only part of the process of informed consent. It gives you the basic idea of what the
research is about and what your participation will involve. If you would like more detail
about something mentioned here, or information not included here, you should feel free
to ask. Please take the time to read this carefully and to understand any accompanying
information.

Please take your time to review this participant information and consent form, and
discuss any questions you may have with me the researcher, Kelly Andrushko. Please ask
me to explain information that you do not clearly understand.

While I am a graduate student at the University of Manitoba, I am also an ECE III and an
Instructor in the Early Childhood Education program at Red River College. My
experience as an ECE and as an Instructor has allowed me to develop the skills to be an
effective observer, one that can be unobtrusive in a child care environment. My
observations are not meant to be disruptive to the daily routine of your centre, to your
responsibilities as a staff member, or to the play and activities of the children.

Please take note, the intent of this research is not to evaluate your centre or you as a staff
member. After the research is complete, I may be able to offer ideas for ways of
addressing body image, eating, or physical activity concerns, but my intent is not to
change your program. And while I am an ECE III, my role in this study is that of a

researcher. I will be able to supplement your ratios, but I am not able to fill the role of an Early Childhood Educator. For example, while I will assist with set up of activities or cleaning while the children are at school, I am not available to work as a substitute ECE when the children are present.

Your decision to participate is completely voluntary. You may refuse to participate or to withdraw from this study at any time. You will not have to answer any questions that you prefer not to answer. Confidentiality of your information will be maintained. Information gathered in this research study may be published. However, your name or any other identifying information will not be used or revealed. Consent forms will be locked in a filing cabinet, in XXXX-2055 Notre Dame Avenue, Red River College, Winnipeg, MB until the research is complete, after which time the information will be destroyed.

Your participation in this research project will not involve any potential risk, whether it is physical or psychological. At no time will deception or harm be used in this project to gain access to information.

The results of this study will be used as part of the requirements for a doctoral degree in Applied Health Sciences, and for further research publications. Any results published from this research will only identify groups, not individual participants. A summary of the results can be made available to all of the participants upon request.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate. In no way does this waive your legal rights nor release the researchers, or involved institutions from their legal and professional responsibilities. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification of new information throughout your participation.

Principal Researcher
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Applied Health Sciences Ph.D.

Program

HLHP Research
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STAFF CONSENT FORM FOR RESEARCH STUDY – PART B

I have read this consent form. I understand that Kelly Andrushko, as a graduate student, is conducting a study that will add to our knowledge about eating attitudes and behaviours, physical activity, and body image among school age children. Miss Andrushko or her research advisor, Dr. Carol Hussa Harvey, can be contacted if there are questions or concerns at any time during this study.

I have had the opportunity to discuss this research study with Kelly Andrushko. I have had my questions answered by her in language I understand. The risks and benefits of being a participant have been explained to me. I understand that I will be given a copy of this consent form after signing it. I understand that my participation in this study is voluntary and that I may choose to withdraw at any time.

I understand that information regarding my identity will be kept confidential. Miss Andrushko will remove all of my identifying information from her final research reports. I understand that everything I say will remain confidential. I understand the only people having access to this information are Kelly Andrushko and Carol Hussa Harvey. Once this information is analyzed, all identifying notes will be destroyed.

My signature on this form indicates that I have understood to my satisfaction the information regarding my participation in the research project. In no way does this waive my legal rights nor release the researchers or involved institutions from their legal and professional responsibilities. My continued participation should be as informed as my initial consent, so I am free to ask for clarification of new information throughout my participation.

Principal Researcher
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This research has been approved by the Joint-Faculty Research Ethics Board of the University of Manitoba. If you have any concerns or complaints about this project, you may contact either of the above-named persons or the Human Ethics Secretariat at 474-7122. A copy of this consent form has been given to you to keep for your records and reference.

_____

Participant's Signature (in ink)   Date

_____

Researcher's Signature (in ink)   Date

Appendix G5. Assistant Director Consent Form for the Proposed Study

Applied Health Sciences Ph.D.

Program

Research Project Title - Body image, eating attitudes and behaviours, and physical
activity: A multi-method study of school age children.

Principal Researcher - Kelly Andrushko (PhD Candidate)
Faculty Advisor – Dr. Carol Hussa Harvey

ASSISTANT DIRECTOR CONSENT FORM FOR RESEARCH STUDY - PART A

Dear Sue:

Body image, eating attitudes and behaviours, and physical activity are interrelated. I
would like to investigate this interrelationship by observing at your centre. For 15-20
hours per week over a three month-period, I would like to make observations and plan
activities with the children at your centre. I may also ask the children questions about
eating, physical activity, or body image.

This consent form, a copy of which will be left with you for your records and reference,
is only part of the process of informed consent. It gives you the basic idea of what the
research is about and what your participation will involve. If you would like more detail
about something mentioned here, or information not included here, you should feel free
to ask. Please take the time to read this carefully and to understand any accompanying
information.

If I get permission from you, the staff and children at your centre would be asked to
participate in this study. Please take your time to review this participant information and
consent form, and discuss any questions you may have with me the researcher, Kelly
Andrushko. Please ask me to explain information that you do not clearly understand.

While I am a graduate student at the University of Manitoba, I am also an ECE III and an
Instructor in the Early Childhood Education program at Red River College. My
experience as an ECE and as an Instructor has allowed me to develop the skills to be an
effective observer, one that can be unobtrusive in a child care environment. My
observations are not meant to be disruptive to the daily routine of your centre, to the
responsibilities of your staff, or to the play and activities of the children. In addition, my
experience working with children provided me with the skills necessary to offer
developmentally appropriate activities, and helped me to be aware of the types of
activities that are common in school age child care facilities.

Please note, the intent of this research is not to evaluate your centre. I will not be observing the program itself, the curriculum, or your staff. I may be able to offer ideas for ways of addressing body image, eating, or physical activity concerns, but my intent is not to change your program. And while I am an ECE III, my role in this study is that of a researcher. I will be able to supplement your ratios, but I am not able to fill the role of an Early Childhood Educator. For example, while I will assist with set up of activities or cleaning while the children are at school, I am not available to work as a substitute ECE when the children are present.

Your decision to allow your centre to participate is completely voluntary. The children and staff at your centre may refuse to participate or to withdraw from this study at any time. The children and staff will not have to answer any questions that they prefer not to answer. Confidentiality of the children's and the staff's information will be maintained. Information gathered in this research study may be published. However, children's or staff's names or any other identifying information will not be used or revealed.

The children's and staff's participation in this research project will not involve any potential risk, whether it is physical or psychological. At no time will deception or harm be used in this project to gain access to information.

The results of this study will be used as part of the requirements for a doctoral degree in Applied Health Sciences, and for further research publications. Any results published from this research will only identify groups, not individual participants and neither you nor the centre will be named. A summary of the results can be made available to all of the participants upon request. To show my appreciation, I will provide a lunch for you and your staff at the end of the research. I will also give each of your staff a $20 gift card. If you are interested after the research is complete, I am willing to conduct a workshop with staff and parents about the findings of my research and their implications.

Your signature on this form indicates that you have understood to your satisfaction the information regarding your centre's participation in the research project and agree for me to approach staff and parents to ask permission for children and staff to participate. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. The children and staff are free to withdraw from the study at any time, and/or they may refrain from answering any questions they prefer to omit, without prejudice or consequence. The children's and staff's continued participation should be as informed as their initial consent, so they are free to ask for clarification of new information throughout their participation.

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UNIVERSITY
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Program

ASSISTANT DIRECTOR CONSENT FORM FOR RESEARCH STUDY - PART B

I have read this consent form. I understand that Kelly Andrushko, as a graduate student, is conducting a study that will add to our knowledge about eating attitudes and behaviours, physical activity, and body image among school age children. Miss Andrushko or her research advisor, Dr. Carol Hussa Harvey, can be contacted if there are questions or concerns at any time during this study.

I have had the opportunity to discuss this research study with Kelly Andrushko. I have had my questions answered by them in language I understand. The risks and benefits of having my centre participate have been explained to me. I understand that I will be given a copy of this consent form after signing it. I understand that the children's and the staff's participation in this study is voluntary and that they have the right to participate in their study to the extent that they feel comfortable to do so. They may choose to withdraw at any time

I understand that information regarding the identity of the centre children and staff will be kept confidential. Miss Andrushko will remove all identifying information about the children and staff from her final research reports. I understand that everything the children or staff says or does will remain confidential. I understand the only people having access to this information is Kelly Andrushko and Dr. Carol Hussa Harvey. Once this information is analyzed, all identifying information will be destroyed.

My signature on this form indicates that I have understood to my satisfaction the information regarding my centre's participation in the research project and agree for Kelly Andrushko to approach the parents, children, and staff for permission to participate. In no way does this waive my legal rights nor release the researchers or involved institutions from their legal and professional responsibilities. The children and staff are free to withdraw from the study at any time, and/or they may refrain from answering any questions they prefer to omit, without prejudice or consequence. The children's and staff's continued participation should be as informed as their initial consent, so they are free to ask for clarification of new information throughout their participation.

Page 4 of 5

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This research has been approved by the Joint-Faculty Research Ethics Board of the University of Manitoba. If you have any concerns or complaints about this project, you may contact either of the above-named persons or the Human Ethics Secretariat at 474-7122. A copy of this consent form is given to you to keep for your records and reference.

_____
Director's Signature (in ink)   Date

_____
Researcher's Signature (in ink)   Date

Appendix H – Visual Presentation of Content and General Inductive Analysis

Fig. 1 Theme 1 - How to be a better, healthier person

Major category	Subcategories	Examples of codes
Teaching	a. Teaching values b. Teaching about health	a. 'Food as a privilege;' practice = success; physical activity as a right; winning not important; prosocial behaviours; 'don't waste food'. b. Health education; nutrition education; food education; teaching eating habits/food behaviours (healthy/unhealthy).
Health	a. Detriments to health b. Health perceptions c. Health knowledge d. Health promotion e. 'Mikey doesn't like it:' Detriments to health	a. Stress in children; overscheduled children; dieting behaviour; 'forced' feeding; conflicting messages for children; food as a reward. b. Thin does not equal healthy; perceptions of how dieting works; 'veggies don't fill you up;' too much food = bad; food is good/bad; healthy eating and physical activity linked to healthy weight. c. Knowledge of health and nutrition; knowledge of healthy lifestyles; knowledge of food ingredients; health benefits (of snack structure). d. Relaxation important; health and safety requirements; health education. e. Policing food behaviours; good eaters/picky eaters; unhealthy food behaviours/eating habits.
Food is an experience	a. Food behaviours b. The cognitive/physical eater c. 'Eating' environment d. Getting children in the kitchen	a. Playing with food; food preferences; enjoyment of food; food reflections; pretend food play; roles associated with food play; playing with food items. b. Behaviour influenced by body's messages; connection between physical state and eating behaviour. c. Social aspect of eating important; positive eating environment; food for celebrations; props and clothing associated with roles in food play. d. Children want to 'cook'; children help with meal times; enjoyment of food and food prep; previous experience with cooking; knowledge of ingredients.
Getting in the game	a. Physical activity 'equipment' b. Play 'ball'	a. Opportunities for physical activity; flexibility; balance; hand-eye coordination; getting in position; skilled at activity music=movement; previous experience with activity; control of body movements. b. Roles in physical activity; age/sex does not equal ability; enjoyment of physical activity; clothing for specific physical activity; school age children are rule bound; physical connection in physical activity.

Fig. 1 Theme 2 – Out of their hands

Major categories	Subcategories	Examples of codes
Restricting behaviours/lack of control	a. Taking down the person b. Keeping children out of the game c. My body is not my own d. (I'm not) ok just the way I am e. Stereotypes f. Gender Differences g. External food control h. Pressure to succeed – taking the fun out of the game	a. Self-deprecating comments. b. Girls on the sidelines; lack of access; adult preference for boys' physical activity; aggressive play; boys as gatekeepers; self-conscious of abilities (and lack of confidence); parents not active with children. c. Weight-related teasing; appearance-related teasing; appearance important; recognition of appearance as important; (sociocultural) expectations for appearance. d. Fat is 'bad;' weight concerns; growing up too fast; dissatisfaction with body parts; appearance as a source of humour; experimenting with identity;' different is not ok; different = being left out. e. Gender stereotypes in physical activity; gender stereotypical reactions to appearance; gender stereotypical expectations for behaviour f. Gender differences are accepted; gender differences in activity choices; ok to be a tomboy, not ok to be a sissy. g. 'Policing' food behaviours; parental control of children's food intake h. Winning is important; competition = stress; competition important and encouraged; poor sportsmanship; pressure to succeed/fear of failure.
Socialization	a. Social/socialization b. Microsystem influences on physical activity c. Microsystem influences on appearance d. The eating environment	a. Modelling: social learning; social comparison; girls socialized to be shoppers; appearance=identity. b. Children directed into activities; peer influence on physical activity; support & encouragement in physical activity important; environment and materials important for physical activity; adult participation influences child participation.

Socialization (cont')		c. Sociocultural influences on appearance; parents & family as influence on body image; adult influences on body image concerns; media as influence on appearance, weight concerns, and body image; peers important influence on body image.
		d. Social aspect of eating important; environment influences eating habits; family & food; adult support of children's food preferences; peer influence on food behaviour.

Fig . 1 Theme 3 – Puppets cutting their strings

Major categories	Subcategories	Examples of codes
Getting respect and taking control	a. Building up the person b. Acceptance c. We just want to play d. Being a 'team' player e. Internal food control	a. Choice (respect); self-reflection; respect and consideration of self and others; children allowed to listen to body's messages; individuality important; diversity important; acceptance (of individuality & diversity); reflecting on body's messages (listening/not listening); proud of abilities; confidence at ability; respect and consideration for others; teaching values; self-concept. b. size does not equal ability; acceptance of size and self; appearance as source of pride. c. Trying on different gender roles; crossing over the gender line; mixed-sex play; physical activity chosen/preferred over other activities; using materials in different ways; taking risks; trying something new; rough and tumble play; children just want to move; physical activity is an individual or group activity. d. Fairness in physical activity important; peer support for physical activity skills; social aspect of physical activity important; support during physical activity; winning not important; being a team player: cooperation; support during physical activity: children are mentors. e. Children have control over food behaviours; children eat veggies willingly.

Fig 1. Theme 4 – Reaching out

Major category	Subcategories	Examples of codes
The social child in a social world	a. Building connections	a. Food is a way to connect; physical activity is a way to connect; appearance is a way to connect; children feeding children; physical affection ok in physical activity; appearance as a way to communicate; children want an audience; appearance = communication.

Appendix I – Developmental Milestones
(According to Berk, 2008, 2012)

Physical Milestones (ages 6 – 8)

- Writing becomes smaller and more legible; cursive writing is mastered.
- Letter reversals decline (e.g. M and W)
- Drawings become more organized and detailed and start to include some depth cues
- Organized games with rules and rough-and-tumble play become common
- Activity becomes very active – in constant motion
- Dominance hierarchies become more stable, especially among boys.

Physical Milestones (ages 9 – 11)

- Gross motor skills of running, jumping, throwing, catching, kicking, batting, and dribbling are executed more quickly, and with better coordination.
- Reaction time improves, contributing to motor skill development.
- Depth cues evident in drawings through overlapping objects, diagonal placement, and converging lines.
- Energy levels begin to calm

Cognitive Milestones (ages 6 – 8)

- Thought becomes more logical, as shown by the ability to pass Piagetian conservation, class inclusion, and seriation tasks.
- Spatial reasoning improves; can give clear, well-organized directions and draw cognitive maps
- Attention becomes more selective and adaptable.
- Improved awareness of memory strategies and the impact of psychological factors (e.g. focused attention) on task performance
- Uses memory strategies of rehearsal and then organization.
- Is making the transition from learning to read, to reading to learn.
- Uses informal knowledge of number concepts and counting to master more complex mathematical skills.
- Vocabulary increases rapidly
- Word definitions are concrete, referring to functions and appearance
- Metalinguistic awareness improves
- Sees the mind as an active, constructive agent, capable of transforming information.

Cognitive Milestones (ages 9 – 11)

- Spatial reasoning improves further; can give directions and draw maps.
- Further improvements to elective attention and planning
- Memory strategy of elaboration appears
- Applies several memory strategies at once
- Long-term knowledge base grows larger and becomes better organized
- Grasps double meanings of words (e.g., metaphors and humor)
- Conversational strategies become more refined
- Adapts messages to the needs of the listener
- Narratives increase in organization, detail, and espressiveness
- Better judgment is used and cognitive self-regulation improves

Affective Milestones (ages 6 – 8)

- Self-concept begins to include personality traits and social comparisons.
- Self-esteem differentiates, becomes hierarchically organized and declines to a more realistic level.
- Self-conscious emotions of pride and guilt are governed by personal responsibility
- Recognizes that more than one emotion can be experienced simultaneously
- Attends to more cues – facial, situational, and past experiences – to interpret another's feelings.
- Comprehends that people may have different perspectives because they have access to different information
- Becomes more responsible and independent
- Peer interaction becomes more prosocial and physical aggression declines.

Affective Milestones (ages 9 – 11)

- Self-esteem tends to rise
- Distinguishes ability, effort, and luck in attributions of success and failure
- Can "step into another's shoes" and view the self from that person's perspective
- Empathy extends to general life conditions
- Clarifies and links moral rules and social conventions
- Comprehension of individual rights expands
- Appreciates the links between moral rules and social conventions
- Peer groups emerge
- Friendships are more selective and based on mutual trust
- Sibling rivalry tends to increase
- Takes responsibility for things
- More aware of gender stereotypes, but has a flexible appreciation of what females and males can do
- Gender identity expands to include self-evaluations of typicality, contentedness, and pressure to conform.