

# An Investigation of Adolescent Girls' Critical Media Health Literacy in a Body-Positive Program

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## Abstract

This Master's thesis describes a research study that examines media artifacts created by 26 adolescent girls participating in a four-week body-positive program. Employing a qualitative case study method, this study explores how girls respond to a program which promotes health, body image, self-esteem, physical activity, and critical awareness. Research questions explore girls' understandings and potential responses to critical health media discussions. The participants deconstructed and reconstructed digital media. Data include interviews about creating the digital artifacts and analysis of the artifacts using a critical health media literacy framework developed for this study. Findings indicate that most artifacts were "approaching critical health media literacy" showing that girls recognize how media commodify health and this requires awareness and social action responses. The participants' discourse revealed similar findings. More research is needed in this area in order to measure the resilience and empowerment outcomes from critical health media literacy programs for adolescents.

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# 1 Introduction

This thesis examines levels of critical health media literacy in artifacts produced by adolescent girls participating in a four-week program where they are encouraged to think critically about their health and body image. The participants in this study are 26 girls enrolled in a four-week program designed to promote body-positive thinking. It was anticipated that the focus on body-positive health and critical media literacy would be reflected in the girls' designs of body-positive digital artifacts at the conclusion of the program. Within this study, critical health literacy and critical media literacy are viewed as combined into critical media health literacy (CMHL). As part of this study, the girls' digital artifacts are examined for their levels of CMHL.

Adolescent girls' health is a fairly complex picture which includes considerations of all aspects of their health, including physical, social, and emotional. One critical health component for girls is body image. Canadian adolescents live in a culture where acceptance is often connected to appearance, and adolescents may harm their health because of their body image concerns (House of Commons, 2014). While school could be seen as the most opportune site for the education and intervention needed to build a positive body image, there are indications that the Canadian school curricula for health education is overly-focused on pressuring students to make good food choices (Robertson & Scheidler-Benns, 2015), that it has for the most part ignored body-positive health education (Robertson & Thomson, 2012), as well as more critical approaches to physical activity (Thomson & Robertson, 2014). Some researchers find that this focus on food and exercise is not helpful, that it is insufficient, and also too narrow to support a whole-girl approach to health (House of Commons, 2014).

The simplistic approach that *individual choice determines health* is problematic in a society where these issues are complex, not only because appearance is socially-normed (Robertson & Thomson, 2012), but in Canada there are indications that the social determinants of health, outside of individual choice, impact the health of adolescents and families (Lindelof, 2010; Raphael, 2009). This study encourages broad and deep understandings of health that go beyond simply being more active and eating “right” (Raphael, 2009).

There is also evidence that if the societal and policy focuses remain on a misdirected lens of an obsession with the “obesity” crisis and a “moral” panic over becoming fat, health education may continue to fail in meeting the needs of adolescents (House of Commons, 2014). There is growing evidence of multiple factors impacting adolescents’ health, such as a growing economic divide, poor neighbourhood construction, and inequity of access to healthy foods (Glanz, 2008). The health and physical education curriculum (HPE) in Ontario has gaps with respect to the recognition of the complexity of the food and activity environments (Robertson & Scheidler-Benns, 2015; Thomson & Robertson, 2014).

Multiple scholars have documented issues regarding adolescent health such as a decline in physical activity (Hobin, Leatherdale, Manske, Burkhalter, & Woodruff, 2010; Janssen, 2007; Ntoumanis, Pensgaard, Martin, & Pipe, 2004; Sallis, Prochaska, & Taylor, 2000); a rise in mental health (Rawana & Morgan, 2014); and body image issues (Hausenblas & Fallon, 2006; Higgins, Gaul, Gibbons, & Van Gyn, 2003; Slater & Tiggemann, 2010a). It is possible that by building protective factors, such as greater critical health literacy and body-positive messages, that adolescents can build resiliency (Gartland, Bond, Olsson, Buzwell, & Sawyer, 2011; Kickbusch, 2001; O’Dea, 2005; Sawyer et al., 2012) to resist unhealthy messages (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

This study begins with a broad lens on the literature on adolescent girls' health. The review of the literature explores the following areas: holistic health, current mental and the general health status of adolescents, health education curriculum in Ontario (HPE), body image issues, dieting, and the role for schools and teachers in supporting body-positive outcomes. This research also explores protective factors for girls including health promotion interventions, and health and media literacy frameworks. Next this research study outlines a program designed to build critical health literacy and critical media literacy skills. In the methodology section, the participants, methods of data collection, and the data analysis are reported. Following that, the findings are reported based on the data collection. In the discussion, the findings of this research study are analyzed relative to the review of the literature. In the final section, conclusions are drawn and recommendations are proposed.

## 2 Review of the Literature

### 2.1 Holistic Health

#### 2.1.1 Definition of Holistic Health

This section of the review of the literature examines health definitions. Being healthy and enjoying health should be the right of every child (Bradley & Greene, 2013). But how is health defined? How do you measure it? According to O’Dea (2000), the overall measure of health includes social, physical, mental, and spiritual health. Your health status influences your lifestyle choices (Smith, Tang & Nutbeam, 2006) and is determined by various environmental, economic, and social situations that people face, but these factors are often less understood and more difficult to act upon (O’Dea, 2005). A holistic and comprehensive approach to health embraces these realities (Nutbeam, 2000; Smith et al., 2006).

The holistic definition of health that is offered by the World Health Organization (WHO) extends the idea that health is a democratic right of every person (Larson, 1999). The *social component* of health is the least researched, but is the largest influence according to Larson (1999). The conceptual framework of holistic health (WHO, 1948) forced the focus to shift to the social determinants of health (SDoH) (Jadad, 2008).

#### 2.1.2 Evolution of the Definition of Health

Historically, the focus of global health was on pathology, and this didn’t change in large part until the early 1970’s when some of the focus shifted to health outcomes (Breslow, 1972). At the same time, the WHO suggested that the definition of health include mental and social well-being, in addition to the physical aspects (Breslow, 1972). This required a shift in thinking towards health education for well-being, not just a focus on eliminating disease (Jadad, 2008).

Breslow (1972) asserts that this visionary shift moved toward preventing and controlling health outcomes rather than treating disease.

Although the holistic model of health is currently the most popular around the world (Larson, 1999), there are strongly ingrained influences underlying health definitions. Larson (1999) explains that the medical model of health, in which bodies are seen as a type of machine, originated in the 16<sup>th</sup> century. This view persists today and carries with it the neo-liberal idea of individual responsibility for health (Larson, 1999). The tension between those who consider that health is socially determined versus an individual responsibility for health makes the definition of health highly contested and complex (Jadad, 2008; Larson, 1999). Hayes et al. (2007) find that the SDoH are largely absent in mainstream media in Canada and health interventions which include communities rarely make the news. While there have been calls for communities, educational professionals, and the health professionals to work together (Skykes, Wills, Rowlands, & Popple, 2013) many issues of adolescent health are troubling. The next section reviews some of the research in this area.

## 2.2 Health Concerns for Adolescents

Youth mental health concerns are being reported raising awareness of their significance (O’Dea, 2000; Rawana & Morgan, 2014; Sawyer et al., 2012; Smith et al., 2006). Globally, the WHO (2014) reported that health concerns for adolescents impact the rest of their lives. Depression has become the largest cause of disability. Illness and suicide are two of the top three causes of adolescent deaths. Half of all mental health challenges begin by age 14 and are largely untreated and unrecognized (WHO, 2014).

According to Rawana and Morgan (2014), there is a reported rise in mental health concerns with 20 percent of Canada’s young people, ages 15-24, having been diagnosed with some form

of mental illness and mid-adolescents (14-17 years) are seen as the most vulnerable to depression. Depressive symptoms tend to increase between the ages of 14-17 in girls and boys, but in general girls' depressive symptoms are more severe and may start as early as age 12 (Rawana & Morgan, 2014). One issue that has been raised is that adolescents are also exposed to an increasing amount of harmful media (O'Dea & Abraham, 2000; Sawyer et al., 2012; Smith et al., 2006).

In addition to rising mental health concerns, this next section examines the Canadian picture on adolescent health including growing concerns with sedentary behaviour and how social institutions such as schools can be responding. A decline in physical activity for adolescents in the western world has been reported (Hobin et al., 2010; Hobin et al., 2012; Janssen, 2007; Ntoumanis et al., 2004). In Canada, 51% of 12-19 year olds are considered physically inactive (Hobin et al., 2010). In a study conducted on Canadian adolescents by Janssen, Katzmarzyk, Boyce, King, and Pickett (2004), fifteen percent of youth ages 11-16 are overweight (pre-obese) compared to 4.6% in 2002. While no associations were made with diet, Janssen et al. (2004) find links between lower physical activity levels and more time watching television. In the recent *Healthy Active Kids Report*, Tremblay, Gonzalez, Katzmarzyk, Onywera, Reilly, and Tomkinson (2015) find that adolescents in Canada, ages 12-17, spend 9.3 hours per day engaged in sedentary activities and issued a grade of "D-" in this area. The results suggest that sedentary behaviours and physical inactivity, not the monitoring of dietary habits, are emerging as the key links to obesity in Canadian adolescents (Janssen et al., 2004; Penedo & Dahn, 2005).

Adolescent physical activity predicts adult activity levels and generally does not reverse itself (Hobin et al., 2014; Kwan, Cairney, Faulkner, & Pullenayegum, 2012). Female health

status is poorer than males beginning between the ages of 13-20 (Higgins et al., 2003). Physical activity continues to decline by as much as 85% by age 15 in Canada (Hobin et al., 2014) and 85% of adults are physically inactive based on the recommended 150 minutes of physical activity per week (Kwan et al., 2012). The risks associated with worsening health for adolescents should impact policies and pedagogy (Petherick, 2013). Hobin et al. (2014) estimate that the economic costs of sedentary-related health issues are \$4 billion per year in Canada. However, in an interview with *The Canadian Press* in 2012 on his current research findings, Janssen estimates that this cost is closer to \$6.8 billion in Canada. Direct costs of a sedentary lifestyle include about \$2.4 billion, in addition to treatment, indirect costs, such as a reduction in productivity which had financial and personal losses due to deteriorating health, equal slightly more than \$4.3 billion.

### 2.2.1 Benefits of Promoting Physical Activity

While rising rates of inactivity were reported in the previous section, this section reviews the benefits of physical activity. Physical activity has a positive correlation with academic performance (Biddle & Asare, 2013) and cognition (Biddle & Asare, 2013; O’Dea, 2003). Physical activity also decreases anxiety (Biddle & Asare, 2013; Fox, 1999; Higgins et al., 2003; Penedo & Dahn, 2005), depression, and stress (Higgins et al., 2003). Students report positive psychological, cognitive, emotional, and social benefits from physical activity, but need support and encouragement to enable them to stay focused on their health (O’Dea, 2003).

Aerobic exercise can be as effective for treating depression, one of the most common mental illnesses in adolescents (Wit, Karioja, Rye, & Shain, 2011) as an intervention based on psychotherapy (Biddle, 2011; Fox, 1999; Hausenblaus & Fallon, 2006; O’Dea, 2003; Penedo & Dahn, 2005; Rawana & Morgan, 2014). Adolescents who engage regularly in physical activity

are less likely to be diagnosed with clinical depression (Fox, 1999), are less fatigued (O’Dea, 2003; Penedo & Dahn, 2005), and they have an elevated mood (Penedo & Dahn, 2005).

Obviously, physical activity increases physical health (O’Dea, 2003; Penedo & Dahn, 2005) and girls especially are often responsive to physical activities that occur naturally and are not as formally structured (Penedo & Dahn, 2005). There are indications, however, that women’s sport participation is dropping (Heritage, 2013).

Physical and Health Education Canada (PHE) (2015) and The Healthy Active Kids Report by Tremblay et al. (2015) recommend 60 minutes per day of moderate to vigorous physical activity for youth and adolescents to prevent sedentary-related diseases. With no policy requirements of physical education beyond one credit in Ontario high schools (Lodewyck & Pybus, 2013; Petherick, 2013; Shea & Beausoeil, 2012), the decline in physical activity in general is a concern without policy support (Janssen, 2007). While 95% of adolescents take HPE in Grade 9 in Ontario (Lodewyck & Pybus, 2013) with each successive grade, enrollment declines for both boys and girls. The decline is much steeper for girls, however, (Hobin et al., 2012) and they drop HPE earlier (Slater & Tiggemann, 2010a). For this reason, finding ways for adolescents to be physically active becomes increasingly important (Lodewyck & Pybus, 2013; Tassitano et al., 2010).

Physical activity can be used as a protective factor that can increase self-esteem and improve body image (Biddle, 2011; Fox, 1999; Hausenblas & Fallon, 2006; Higgins et al., 2003), emotional well-being (Penedo & Dahn, 2005) and psychological well-being (Hausenblas & Fallon, 2006). Regular physical activity is also a protective factor against obesity risks regardless of body weight (Penedo & Dahn, 2005).

Higgins et al. (2003) suggest that the type of HPE classes may be a concern as the existing, established, and common forms of physical activity are only appropriate for 25% of the population due to social, psychological, and personal determinants. Young women, especially, report the need for a social element to be included in the physical activity (Higgins et al., 2003). In general, adolescent girls often have a more tentative approach to physical activity, voice a lack of trust in their body, are more uncertain about their physical performance, and question their ability much more often than male adolescents (Petherick, 2013). When students stop physical education enrollment, they also stop receiving the important health education components of the curriculum in Ontario and this is a detriment to both academic achievement and student health (Bradley & Greene, 2013).

Moral undertones and obesity-informed health and physical education curricula create some of the messages that adolescents receive about their bodies (Petherick, 2013). Ideally, health messaging should be geared toward emphasizing the idea of enjoyable, lifelong physical activity as a means of producing positive health outcomes (Petherick, 2013). During the 1980's, health education shifted to a focus on helping students to develop the social and personal skills needed to make better health and behaviour choices; the focus was largely on substance abuse and sexual behaviour (Nutbeam, 2000). Currently many school health strategies still focus on preventing drinking and smoking, behaviours which students tend to mature out of, rather than on promoting physical activity and other positive behaviours (Kwan et al., 2012). Students are taught that living an active lifestyle and not being fat is the way to be a good citizen (Petherick, 2013). Although the 2015 Ontario Health Curriculum (Ontario Ministry of Health, 2015) does not overtly state this, it is implied through the neo-liberal focus on individual and lifestyle

choices. Additionally, social and cultural issues underpinning the HPE curriculum continue to marginalize students who fall outside of this messaging (Varpalotai, 2006).

For K-12 students to become healthy, productive adults, as adolescents, they deserve to benefit from the various health programs and services that they need (Bradley & Greene, 2013). Health education has continued to be downplayed, underestimated, and oversimplified as a role in public health (Nutbeam, 2000) and used as an opportunity to promote healthy lifestyles (Smith et al., 2006). Health curriculum is also not being treated seriously and it should be moving toward a more comprehensive school health approach (Varpalotai, 2006). Health education should aim at changing beliefs and attitudes at the cognitive level (O’Dea & Abraham, 2000). However, education alone is insufficient to achieve health goals and adolescents need opportunities to raise their own voices about their health (Nutbeam, 2000).

The rate of adolescent girls’ participation in physical activity continues to drop, except when their motivation is focused on a way to improve body image (Butt, Weinberg, Breckon, & Claytor, 2011). Physical education often endorses the idea of evaluating the body, its size, shape, and performance, and often leaves students feeling disconnected from their body and objectified (Petherick, 2013). In the section which follows, the links between body image and physical activity are explored, shedding more light on the complexity of the illusive “healthy, active body” for adolescent girls.

## 2.3 Body Image

Body image concerns affect self-esteem which is at the core of mental health; it is a marker for recovery and an indicator of well-being (Fox, 1999; Jones, Bennett, Olmsted, Lawson, & Rodin, 2001; Russell-Mayhew, McVey, Bardick, & Ireland, 2012). Negative body image is prevalent, expensive for the health care system, and linked to psychological illness

(Fox, 1999; Hausenblas & Fallon, 2006; Horn, Newton & Evers, 2011; Slater & Tiggemann, 2010a) including depression and anxiety (Hughes & Gullone, 2011; Russell-Mayhew et al., 2012), and other risky behaviours (Cook et al., 2007). In addition, negative body image is a predictor for additional health problems such as obesity and eating disorders (Cook et al., 2007; Hausenblas & Fallon, 2006; Hughes & Gullone, 2011; O'Dea, 2005; Russell-Mayhew et al., 2012; Slater & Tiggemann, 2010a). Body image issues become more pronounced in adolescence as students compare their bodies with each other (Lodewyck et al., 2013; Slater & Tiggemann, 2010b), and with the ideal image that is pervasive in the culture (Fox, 1999; Lodewyck et al., 2013).

According to Fox (1999), poor body image influences adolescents' choice of food, clothing, and daily habits, and patterns around food, as well as their confidence level, and triggers their negative emotions. Body image concerns disturb feelings of confidence and social significance, and if body image is not positive, it can even lead to feelings of social apathy (Fox, 1999).

Overweight adolescents are found to have greater emotional distress, lower self-expectations, low self-esteem (O'Dea, 2005) and body-based, low self-esteem issues are associated with suicide attempts, social isolation, loneliness, and deep feelings of shame (Russell-Mayhew et al., 2012). According to O'Dea (2005), these issues persist into adult life in exponential ways.

Even the perception of adolescents that they are overweight, rather than actually being overweight, reduces self-esteem (Russell-Mayhew et al., 2012; Schiefelbein, Mirchandani, George, Becker, Castrucci, Hoelscher, 2012). Therefore, mental health is also affected by body image concerns including guilt, futility about achieving the ideal body type, and low self-

efficacy (Fox, 1999; Rawana & Morgan, 2014). Overweight people are often seen by society as failures, deviants, or moral outcasts which creates further feelings of failure, defeat, and humiliation (O’Dea, 2005).

Body dissatisfaction for boys is beginning to rise as well (Slater & Tiggemann, 2010a, 2010b). Although girls tend to have more body shame, conduct more body surveillance, and objectify themselves more, research now indicates that boys are also affected by these factors (Slater & Tiggemann, 2010a).

### 2.3.1 Body Image and Physical Activity

Body image and low self-esteem issues impact an adolescent’s choice to enroll in physical education or participate in physical activity (Fox, 1999; Lodewyck & Pybus, 2013; Rawana & Morgan, 2014; Russell-Mayhew et al., 2012). Body image and self-esteem issues can diminish motor ability and physical literacy, which also affects physical activity (Slater & Tiggemann, 2010b). Because of this, programs which focus on body competency, rather than body appearance, are recommended so that adolescents are not further marginalized (Russell-Mayhew et al., 2012).

The social construction of the obesity epidemic implies that a deviant body is linked to poor physical health instead of seeing that bodies of every shape and size have the potential to be healthy (Dean & Elliott, 2011). In light of this, Russell-Mayhew et al. (2012) recommend that the focus on weight and normative body size should be dropped and reframed to the position of health for every size. Penedo and Dahn (2005) similarly call for a no-diet position.

### 2.3.2 Body Image Issues Specific to Girls

There are other indicators linking SDoH and body image. One of these is gender. Body-based teasing limits girls’ participation and enjoyment in physical activity as they are very self-

conscious of being watched and evaluated (Petherick, 2013; Slater & Tiggemann, 2010a, 2010b) which increases body shame (Slater & Tiggemann, 2010a). Girls are often objectified and socialized to view their bodies as the definition of themselves, which teaches girls to monitor and focus on their outer appearance, creating additional negative mental health outcomes (Slater & Tiggemann, 2010a). Constant body surveillance during adolescence can cause disordered eating, body shame, and appearance anxiety (Slater & Tiggemann, 2010a). According to Rawana and Morgan (2014), the effects of body image on mental health are much more notable in girls than boys; girls are 2-3 times more likely to suffer from body-based depression.

### 2.3.3 Effects of Dieting on Adolescents

One of the connections between body image and health is the restriction of calories through dieting which may be prompted by body image concerns. Indications are that girls during adolescence turn to dieting to address weight gain that is actually natural and expected (O'Dea & Abraham, 2000). Slater and Tiggemann (2011) find that adolescent girls are very likely to diet and this increases with age. Additionally, Jones et al. (2001) find that obesity is also associated with disordered eating.

More research is indicating that girls turn to dieting to reach certain sizes. Dieting is associated with disordered eating such as bingeing and purging and false self-perceptions about body size (Jones et al., 2001). Despite many claims in the media in favour of diets, risks from diets have been reported as it is difficult to change one's body and diets are not usually successful in the long term (Hausenblas & Fallon, 2006; O'Dea, 2005).

The link between a mediated ideal (but perhaps not realistic) body size and girls' health is becoming clearer. In a study by Cook et al. (2007) of adolescent girls in Nova Scotia in grades 10-12 some disturbing things were discovered. Of the participants with normal BMI, 82% of the

girls were attempting to change something regarding their current weight, and half of the girls felt they were not at their ideal weight, and this misperception increased with age.

Jones et al. (2001) find similarly in a study from Canada on girls ages 15-18 that 60% of the girls were attempting to lose weight; 16% admitted to some type of disordered eating in the last month; and 27% had attitudes that supported the idea of disordered eating. They also find that by age 18, 80% of women with normal BMI wish they weighed less. The girls with normal BMI reported false self-perceptions about their bodies; 44% of these girls called themselves overweight and 52% were unhappy with their current weight (Jones et al., 2001).

An Australian researcher, O'Dea (2005) finds that as high as 85% of teachers recommend dieting to children who are overweight and she recommends that teachers need to examine their own biases toward overweight students and stop recommending dieting as a solution during this period of natural growth (O'Dea, 2005). According to O'Dea (2005), many teachers, especially younger women, report that they have little nutritional knowledge, high levels of their own disordered eating, and dissatisfaction with their own bodies. The attitude of the teacher, including their focus, and biases, has an impact on the students' enjoyment of physical education and their own attitudes toward physical activity (Haerens, Kirk, Cardon, De Bourdeaudhuij, 2011; Lodewyk & Pybus, 2013; Ntoumanis et al., 2004; Russell-Mayhew et al., 2012) and may even harm them (O'Dea, 2005; Russell-Mayhew et al., 2012).

## 2.4 Media and Body Image

Increasing pressure to look a certain way, exacerbated by media, can trigger self-esteem issues and increase the likelihood of mental health challenges, disordered eating, and poor self-concept based on a body image ideal that may be unrealistic or impossible for most adolescent females (Robertson & Thomson, 2012). O'Dea (2005) finds that many adolescent girls

misunderstand body-based media messages and see the messaging as an encouragement to be thinner, which can entice them to practice disordered eating, use laxatives, purge, take pills, starve themselves, or even smoke rather than eat. Hausenblas and Fallom (2006) find that the media, friends, and family are the main reasons that adolescent girls become motivated to change and modify their bodies.

According to Tiggemann and Slater (2013), internet exposure and social media are also associated with the internalization of the thin ideal, body surveillance, and drive for thinness even more so than watching television or looking at fashion magazines. Facebook is also associated with having a negative body image; Facebook users scored much higher on every indicator of body image concerns (Tiggemann & Slater, 2013).

Although this section of the review of the literature indicates links between media and an unrealistic body image, there is another side to media. There is a significant opportunity for adolescents to gain a strong and meaningful voice through the use of social media (Sawyer et al., 2012) and technological tools that is largely unexplored.

The literature review at this juncture has outlined that there is some basis in the literature for rising concerns about adolescent girls' health, particularly mental health. There are concerns with declining rates of physical activity for girls though physical activity has been shown to be beneficial to their health. The media and society have been implicated in increasing adolescent girls' concerns with their body image which, in turn, has had detrimental effects on the health of girls who acted on this concern. Body image is associated with unhealthy eating and is a factor affecting the decline in girls' participation in physical activity.

In the next section of this review of the literature, I examine theoretical constructions of health literacy which are designed to help adolescents become more aware of issues and

encourage their advocacy and involvement in health solutions. In doing so, I build toward a model of critical health literacy which includes media literacy.

A survey of more than 12,000 Canadian adolescents indicates that students need more than a teacher “telling” them to exercise (Higgins et al., 2003). Although education has long promoted the idea that youth should be taught to change their lifestyle and behaviours, it has largely been ineffective in fostering long-lasting, lifestyle changes (Higgins et al., 2003).

Nutbeam (2000) theorizes that there are ways to teach students about health. At lower levels of health literacy, students are *told* how to be healthy. At higher levels, students consider the evidence and think and act for themselves. Programs geared toward health education and communications have largely failed and are not adequate, especially within various social and economic groups within society (Nutbeam, 2000). Many interventions blame the individual and further marginalize people as determined by socioeconomic status factors (O’Dea, 2005) which measure a family’s social and economic position in comparison to others, based on education, occupation, and income levels (O’Dea & Abraham, 2000; O’Dea, 2005).

When physical education teachers are supportive of students’ desires for physical competence, encourage cooperation with others, and offer a choice of activities, rather than a focus on competition (Hobin et al., 2010), students are often more likely to enroll in physical education and extra physical activity at school (Ntoumanis et al., 2004). An emphasis from the teacher on improving personal physical literacy and reducing peer-peer comparisons increases student desire for physical activity (Lodewyck & Pybus, 2013). Humbert, Chad, Spink, Muhajarine, Anderson, Bruner, and Gryba (2006) stress that it is important that educators listen to what their students want out of a HPE program. Petherick (2013) adds that their input and views should be considered when designing activities from the curriculum. Humbert et al. (2006)

find that high school students place value on a teacher that respects them, expresses interest or concern in them, and is encouraging and approachable. The focus of the teaching should not be on the shape and weight of the student, but rather on promoting a model of wellness, health, and resilience with weight neutral goals (Russell-Mayhew et al., 2012). In summary then, the research says that programs to promote physical activity for girls should:

- A. Encourage cooperation and offer a choice of activities (Hobin et al., 2010).
- B. Reduce peer-peer comparisons and offer opportunities to improve physical literacy (Lodewyck & Pybus, 2013).
- C. Listen to what the students want out of their physical activity (Humbert et al., 2006; Petherick, 2013).
- D. Focus on health with weight neutral goals (Russell-Mayhew et al., 2012).

Promoting a healthy lifestyle through physical activity in schools is supported (Harris, Kuramoto, Shulzer & Retallack, 2009; Tremblay et al., 2015), including the benefits of positive psychosocial and behavioural results from daily physical activity (Weiss, 2011). When the activities in physical education or physical activity emphasize the health aspects of physical activity (Weiss, 2011), then students learn about the cognitive benefits of having an active life and receive the fundamental movement skills and competencies required to enjoy lifelong physical activity (Haerens et al., 2011). Students respond positively in this environment when they feel more in control of the physical activity, have a choice of activities that feel good in their bodies, trust their physical literacy, and set their own goals for accomplishment (Higgins et al., 2003). The Ontario Ministry of Education (2005) has recommendations for students of daily physical activity lasting 20 minutes per day but only up to grade 8.

## 2.5 Interventions for Adolescents

There are several gaps in the research on how girls respond to a body-positive, empowerment program that includes health, physical activity, media literacy, and media production components, especially with respect to adolescents; this makes it challenging to measure outcomes for physical activity and mental health (Biddle & Asare, 2011).

The House of Commons Report (2014) also states that there are no health and body image prevention programs geared toward Canadian adolescents; this gap, they assert, occurs during the riskiest period of development.

The majority of interventions reviewed in this research are structured to promote health ideas in an instructional and telling way, rather than including the participants for the purpose of empowerment (Nutbeam, 2000). Further, the focus needs to be on health prevention while providing opportunities for adolescents to contribute to their class, school, and community (Durlak et al., 2011; O'Dea, 2005). When health information becomes interactive and engaging (O'Dea & Abraham, 2000) and when adolescents are given the opportunity to contribute and feel a sense of belonging, motivation is enhanced (Petherick, 2013). Adolescents who feel like they belong and are connected and involved in their community are more likely to make positive choices about their own health (Higgins et al., 2003). An intervention used to affirm their self-esteem must be powerful enough to influence positive self-image as this is a relatively fixed-construct and challenging to change (Fox, 1999; Gartland et al., 2011).

During a period from 1990 to 2006, Bergsma and Carney (2008) found 28 interventions that included media literacy and a health component. They found that these studies were not explicit about the core concepts of the media literacy skills, including the setting, the length, and were not clear about who delivered the program. They add that this area of research is in its

infancy and more studies are needed to gauge the effectiveness of combining health and media literacies (Bergsma & Carney, 2008). This study will attempt to be very clear about the design, setting, delivery methods, and study details.

## 2.6 Critical Health Literacy as a Tool to Address Body Image and Health Issues

According to Anderson and Booth (2006), students need the opportunity to critically challenge societal messages about body image. Critical health literacy is one way to become critically aware of the various ways that our world is constructed around health and begin to challenge normative messages. Health literacy at a critical level is seen as a form of heuristic inquiry in that the students learn about their world, themselves, and their own experience through their own personal lens. Gaining this practice in approaching information gives the students the power of mindfulness and feelings of competence and can be seen as a form of conscience and consciousness (Anderson & Booth, 2006). Further, Kickbusch (2001) sees critical health literacy skills as a key factor in improving societal health and as a preventive measure of the more serious outcomes for adolescents (O'Dea, 2005).

Chinn (2011) also agrees that critical health literacy may be protective through an understanding of the social determinants of health and an appreciation of structural factors that impact health. This may protect against feelings of shame and blame by adding a wider lens than merely an interaction that is individually-focused. She also says that this approach to health could incite engagement and promote psychological empowerment. Psychological empowerment can be described as uniting the ideas of a proactive lifestyle with thoughts about personal control. By understanding the sociopolitical environmental factors, psychological empowerment can promote engagement in physical activity, and contributes to positive self-esteem (Chinn, 2011).

Nutbeam (2000) says that critical health literacy should be the goal for health. He doesn't see the benefit of merely communicating health information; rather it should include the development of personal and social skills and the building of capacity to act on issues of health with the potential to change policy. In this way, critical health literacy can mobilize marginalized segments of society by giving them the opportunity for emancipation through critical consciousness, in a Freirian-type of education. Combining action with the teachings creates "buy in" by allowing people to be participants in their own health messaging (Nutbeam, 2000; Smith et al., 2006).

In addition, Manganello (2008) says that there have been very few studies on adolescents and their connection to health literacy teachings. Traditionally, adolescents cost less for the health systems, but due to their vast connection to media and technology, it is more important to teach health literacy at younger ages. Teaching them how to interpret messages about their health at this important developmental stage will give them skills that they can use as adults. Developing ways to give adolescents literacy skills can help grow the literature about outcomes and health behaviours (Manganello, 2008).

### 2.6.1 Challenges in Actualizing Critical Health Literacy

Despite the benefits, there are several challenges in actualizing the concept of critical health literacy. According to Chinn (2011), although an overlap exists when considering health issues between disciplines, such as medical, education, sociology, psychology, and health promotions, much of the important work has been overlooked in various fields. Many disciplines still don't see critical health literacy as an asset that will positively affect health outcomes and this approach needs to be more clearly demonstrated (Chinn, 2011).

Sykes et al.(2013) take this issue further and claim that critical health literacy can be viewed as the neglected area of health literacy, and that it is rarely focused on in interventions, even the ones that claim to be focused on this outcome. They explain that critical health literacy has been used to gain higher orders of cognitive skills rather than as a means to effect social and political change (which, for example, Nutbeam (2000) originally envisioned). Sykes et al. (2013) argue for the retention of the usefulness and uniqueness of this original concept and urge for efforts to be increased so that the meaning is not diluted.

In this section, links between critical health literacy and media are discussed. As mentioned previously in this paper, media, friends, and family give us messages to improve or change our bodies (Hausenblas & Fallon, 2006). Sawyer et al. (2012) suggest that the negative impact of media on adolescents is greater than the influence of their peers and parents. Tiggemann and Slater (2013) see that social media has a negative impact on adolescents; increasing the importance of teaching critical media literacy tools as a protective factor (Tiggemann & Slater, 2013). Mass media projects the ideal body image that a girl should have and discourages girls from gaining muscles (Slater & Tiggemann, 2010a). There is also evidence that media use contributes to obesity (Jordan, Kramer-Golinkoff, & Strasburger, 2008), although possible causal explanations—such as the sedentary nature of the activity, marketing of unhealthy food, and disturbed sense of body image that may result from media use—have not been well established (Wharf Higgins & Begoray, 2012; Jordan et al, 2008; Strasburger, Jordan, & Donnerstein, 2010). Sawyer et al. (2012) find that exposure to social media can be damaging in additional ways, such as contributing to the prolonged inactivity of users and even unrelated bullying behaviours. It is important to build critical media skills as a protective factor, but Wharf Higgins et al. (2012) find that there is little support for this in schools.

In a media-saturated world, it becomes very important to include a critical media literacy component to any health education curriculum (Kellner & Share, 2007). In this way, girls can find their own voices and fight back with their own messages in a critical stance (Freire, 2000; Kincheloe, 2008). It is possible that by building these protective factors, one can build resiliency (Gartland et al., 2011; Kickbusch, 2001; O’Dea, 2005; Sawyer et al., 2012) to resist unhealthy messages (Durlak et al., 2011).

Bergsma (2008) reviews the literature and finds only 28 health intervention studies done between 1990 and 2006 that included a media literacy and health promoting component with measurable outcomes. She sees media literacy as an opportunity to achieve social and behavioural changes in health outcomes for people by using this design to improve critical thinking skills (Bergsma, 2004).

Recommendation #1 from the House of Commons report on eating disorders (2014) suggests that more research should be conducted on the impact of marketing and media on adolescents, including the consequences of targeting this group. Further, the report suggests that prevention strategies for programs should include a focus on self-confidence, mental health, and self-esteem.

## **2.7 Critical Media Health Literacy (CMHL) as a Tool to Address Body Image and Health Issues**

Critical media health literacy (CMHL) is a relatively new idea that attempts to combine the ideas of critical health literacy and critical media literacy. Wharf Higgins and Begoray (2012) find that:

Critical media health literacy (CMHL) is a right of citizenship and empowers individuals and groups, in a risky consumer society, to critically interpret and use media as a means to engage in decision-making processes and dialogues; exert

control over their health and everyday events; and make healthy changes for themselves and their communities (p. 142).

Kickbusch (2001) proposes this concept also and sees that media is becoming the main way that people are accessing health information, reshaping and influencing cultures all over the world. It is still unclear, however, how and whether adolescents engage critically with these mixed-messages from media about their health on their own (Higgins et al., 2012). Sawyer et al. (2012) further this idea by supporting the potential for adolescents to gain a strong and meaningful voice through the use of social media and technological tools and finds that this area is largely unexplored.

According to Sawyer et al. (2012), by identifying their own problems, adolescents can come up with solutions, and use media to share their voice. Sawyer et al. view social media as a positive means of student voice as technology provides a catalytic platform for their message and a means to expand their peer group (Sawyer et al., 2012). Penedo and Dahn (2005) also view this as a potential to create self-efficacy and receive social support.

When Wharf Higgins and Begoray (2012) used the four descriptors: media, critical, literacy, and health to search for articles between 1995 and 2010 nothing was found! Developing ways to bridge these terms together is both a challenge and an opportunity for researchers and one which this thesis attempts. Recommendation #5 from the House of Commons report on eating disorders (2014) supports these suggestions and also stresses the importance of creating health and well-being programs both in school and out of school that include media literacy and media content because of the impact of society's expectations to look a certain way.

## 2.8 Health Literacy Framework

There are several theoretical frameworks which are helpful in conceptualizing critical media health literacy. Nutbeam (2000) examines approaches to health literacy and health promotion. The first level of health literacy is basic, functional health literacy. At this “telling” stage the focus is on personal health and basic understandings, such as, “Don’t smoke.” The next stage of health literacy is interactive health literacy which includes the elements of communicating understandings to others and from others. The third stage encourages the pursuit of critical health literacy. At this level, people are capable of critically analyzing health issues, and are compelled to take action in order to benefit themselves, their communities, and society. In this way people understand that their health is a democratic right and they can exercise the opportunity to participate in their own health (Nutbeam, 2000). This framework is presented in Table 1 (below).

**Table 1. Levels of Health Literacy**

Levels of Health Literacy	
Basic, functional health literacy	Focus on personal health, basic understandings
Interactive health literacy	Communicating understandings about health to others and from others
Critical health literacy	Critically analyze health issues, social and political action to benefit society.

(Nutbeam, 2000)

## 2.9 Media Literacy Framework

Kellner and Share (2007) theorize the various approaches to media literacy education in the United States. There are four levels of media literacy: protectionist, media arts, media literacy and critical media literacy.

The *protectionist* view is that children should be protected from the media and includes a fear of media which is seen as addictive and manipulative. The second approach is *media arts* which includes the ideas of teaching about the aesthetics of media and the use of creativity. The third approach is *media literacy* which expands on the competency of aesthetics and includes the ideas of analyzing, evaluating, communicating, and accessing media and audience. This approach also includes additional types of media including the internet, films, music, and videos beyond the tradition of print media literacy. The fourth approach, *critical media literacy* includes an analysis of the social and political representations in the texts. This level of media helps to guide students and teachers into examining how media, power, and information are linked. This framework is presented in Table 2 (below).

**Table 2. Levels of Media Literacy**

<b>Levels of Media Literacy</b>	<b>Description</b>
1. Protectionist	Children need to be protected from media
2. Media arts	Aesthetics
3. Media literacy	Presently the dominant approach: analyze media and determine audience, and types of communication
4. Critical media literacy	Politics of representation and power, empowerment and change through reconstruction

(Kellner & Share, 2007)

## 2.10 Measuring Students' Understandings of Critical Media Literacy

Robertson and Hughes (2012) adapt the media literacy framework developed by Kellner and Share (2007) to examine lessons created by teacher candidates. Each lesson was examined for its level of critical messaging. They also add a fifth tier of “approaching critical” to Kellner and Share’s (2007) model. The “approaching critical” tier acknowledges that the students

understand some of the social or political constructions in their topics of social justice, but have not, as yet, built a deeper understanding. In their findings they indicate that only half of the teacher candidates approached the teaching of media literacy in a critical way, indicating that the topic of critical understandings was not readily or easily grasped by them (Robertson & Hughes, 2012).

## 2.11 Critical Media Health Literacy (CMHL)

In the study described in this thesis, adolescent girls create media representations in a body-positive program. The framework that was developed in this study to measure the girls' media artifacts incorporates the theoretical frameworks of Kellner and Share (2007), Robertson and Hughes (2012), and Nutbeam (2000). It involves six tiers of levels and descriptions. As Wharf Higgins and Begoray (2012) suggest previously, it makes sense to combine the ideas of critical health literacy and critical media literacy because of the amount of health messaging, media, and the implications of misinterpreted messaging that people are receiving about their health. The framework used to evaluate the artifacts designed by the girls in this study is presented in Table 3 (below).

**Table 3. Health Literacy/Media Literacy Framework (HL/ML) for Artifact Evaluation**

<b>Levels</b>	<b>Description</b>
Basic media health literacy	Media that articulates basic understandings about health.
Media health arts	Aesthetically pleasing media about a health issue that demonstrates basic understandings of health.
Media health literacy	Media uses media conventions to create a health artifact that demonstrates the ability to question basic understandings of personal health.
Interactive media health literacy	Media questions basic understandings of personal and social health in way that communicates more than telling.
Approaching critical media health literacy	Media questions health information from a political or social or consumer lens, then reconstruct and share the health message as a way of taking social or political action.
Critical media health literacy	Media questions health information deeply from a political, social and consumer lens, then reconstruct and share the

	health message as a way of taking social and political action.
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(Scheidler-Benns, 2015)

## 2.12 Summary

This review of the literature finds that adolescents need to increase their physical activity. Physical activity can improve body image and self-esteem, but those who have body image concerns may reduce their physical activity levels for many reasons. With the majority of students dropping out of physical education in secondary schools, adolescents lose the important health curriculum components as well. When adolescents in Ontario schools take HPE, it is limited to one course per year and two to three prescribed health units which limits the opportunity for teachers to pursue more CMHL approaches in their teaching.

The teaching of health is often at a “telling” and informational level and often educational settings miss the opportunity to offer a critical and preventative element to health teaching. In addition, teaching approaches to health literacy often miss the opportunity to give the students the opportunity to create and share media messages based on health topics (Thomson & Robertson, 2012).

There are also gaps with respect to research which demonstrate how adolescent girls would respond to a program that encourages inclusive physical education and activity approaches and critical media teachings. Adolescents’ risks are increasing through an environment characterized by high amounts of body image messaging and media which negatively impact both self-esteem and the desire to participate in physical activity. Without addressing these concerns, adolescents’ health continues to be at risk.

Several theoretical frameworks inform this study, namely Nutbeam (2000), Kellner and Share (2007), and Robertson and Hughes (2012). A new theoretical framework for examining

body image media artifacts created by adolescent girls was proposed to analyze the level of CHML present in media artifacts.

As an outcome of this review of the literature, the following research questions emerged:

## 2.13 Research Questions

1. What happens when adolescent girls are encouraged to think critically about their health and body image?
2. How does the discourse of adolescent girls reflect understandings about health?
3. When adolescent girls are encouraged to think critically about their health, how is this reflected in their media productions?
4. What can be learned through the observation of adolescents engaged in a course on self-esteem and body image?

In order to answer these research questions, a research study was designed to capture the digital artifacts created by adolescent girls engaging in a four-week body-positive program. The researcher attended the sessions to make general observations about the girls' participation and recorded the girls' thoughts about their digital artifact creation. In the next section, the design of inquiry for this research is explained in more detail. It includes the role of the researcher, an overview of the research design, the recruitment of the participants, the data collection procedures, the data analysis, and the risks to participants anticipated for in this research.

### 3 Method

The overall research methodology was qualitative (Creswell, 2012), because this research explores a specific problem in some depth in order to develop a detailed understanding. As such, the research questions are broad, exploratory, and open-ended; the data are collected from a small number of participants (26) and analyzed for emergent themes which are then attached to larger, significant issues and meanings (Creswell, 2012). This type of research is central to the field of education (Given, 2008). Qualitative research seeks to understand how individuals experience and see the world by capturing their feelings, interpretations, and thoughts on a particular topic (Creswell, 2012; Given, 2008; Glesne, 2006).

A case study was developed as the design of inquiry following Given's (2008) considerations. Although Given (2008) says there is no clear definition of the characteristics of a case study, she emphasizes that it is characterized by its depth of a topic, not the breadth. She notes that increasingly, qualitative case studies are used to link various interdisciplinary fields of study. It was thought that the case study would meet the needs of research which attempts to link adolescent health issues with critical media literacy issues (Given, 2008).

A feminist perspective is taken for this research. According to Given (2008) feminist praxis is built on the foundation of understanding differences between people and focuses on the issues related to authority, ethics, power, and reflexivity in social research. Reflexivity is partly reflection, but it incorporates and examines the researcher's social background and assumptions that affect their research. Reflexivity forces the researchers to pay attention to their own biases and agendas during the entire process, from the construction of the topic and questions to the analyzing of the findings and interpretations (Given, 2008).

Data for this study include observations in the form of hand-written field notes, the digital artifacts created by the participants, and participant interviews. The observational field notes include a diagram of the room layout (see Appendix A) and all the first-hand observations of what occurred so that the events can be further analyzed (Given, 2008). The interviews about the artifacts were open-ended in nature, asking the girls to explain what they had done and why. According to Given (2008), the data say something through the questions asked and the answers given. The artifact becomes a story to interpret. It tells us more about the person who made it and the values and beliefs related to it (Given, 2008).

### 3.1 Role of the Researcher

Feminist research often includes the researcher and my role as a graduate researcher was as a “participant observer” (Glesne, 2006, p. 39). I was involved in some of the planning for the program related to the production of the artifacts, and I attended all four sessions. This allowed me to build rapport with the participants (Glesne, 2006). I watched the girls for four sessions within the four-week program and I took detailed field notes (Glesne, 2006) of the sessions. Another researcher, a volunteer, and I recorded the interviews about the artifacts with the girls. Each interview was transcribed.

The observed sessions were 2 ½ hours long for a total of 10 hours of observations. As the researcher, I observed and made personal notes about the girls’ group interactions. The adolescent girls worked together to use various forms of technology to summarize their views. At the culmination of their four-week program, the participants created digital media artifacts which will eventually be shared online on the website: [teachbodyimage.org](http://teachbodyimage.org).

## 3.2 Overview of the Research Design

This research took place within the design of a larger study, “The Body-Positive Project,” which was a four-week program for adolescent girls (ages 12-17). The larger program included a physical activity component, critical health and critical media components, and the invitation to adolescent girls to create digital artifacts using their own voices to speak out about media messages about weight, size and health choices. The study took place in 2015, within a regularly-offered program, GIRLSZONE, for adolescent girls at a Girls Inc. office in Ontario, Canada. The weekly topics for the program included guest presenters for physical activities, and discussions about online media messages related to body image and self-esteem. Reflective components were led by the program leaders at Girls Inc.

The schedule from the sessions is posted in the table below (Table 4).

**Table 4 - Sessions**

Week One	Week Two	Week Three	Week Four
Physical Activity	Physical Activity	Physical Activity	Physical Activity
Activity-How has your day been?--- Weather	Debrief	Debrief	Debrief
Pre-Survey	Girls’ Sharing Time	Special K Commercial	Celebrities
“I am _____” Activity	Nutrition Break	Sports Chek Commercial	Nutrition Break
Ball Passing Game	Activity- Messages about Body Image	Barbie Commercial	Post-Survey
Nutrition Break	Activity- Body Image Inside and Outside Influences	Nutrition Break	Girls Work on Artifacts
Body-Positive Reading Activity	Activity- Media Evaluation –posters, videos, and Pinterest	Reflection on Body Image Graffiti	Girls are Interviewed for Artifacts
Closing Circle	Closing Circle	Closing Circle	Closing Circle

### 3.3 Recruitment of Respondents

The girls were recruited through the Girls Inc. organization through their contacts in area secondary schools. Girls Inc. regularly offers information and empowerment sessions for adolescents called GIRLZONE every other month. Following approval from the Research Ethics Board at the University of Ontario Institute of Technology (UOIT) REB # 14-139, the research team visited one GIRLZONE session running earlier in the year and introduced the research to the girls and their parents. The research team introduced themselves, provided an outline of the proposed program, and distributed both the consent and assent forms. Additional recruitment was done by Girls Inc. through their normal channels of communication which included emails, posters in community settings and schools that they already have workshops at, and other organizational programs through Girls Inc. The researchers had no relationships with any of the participants prior to the session, but the Executive Director of Girls Inc. was previously on the advisory board for the [www.teachbodyimage.org](http://www.teachbodyimage.org) website design for UOIT where the girls will be invited to post their artifacts anonymously.

### 3.4 Description of the Research Participants

This case study involved 26 adolescent girls (ages 12-17) from mostly urban areas in the region known as the Greater Toronto Area (GTA). Seven of the girls were new to the GIRLZONE program at Girls Inc. This study included the following variations in age: five 12-year olds, three 13-year olds, eleven 14-year olds, one 15-year old, three 16-year olds, and three 17-year olds. According to the Girls Inc. regular program leaders, the participants in the program could be characterized as a mix of members of different socio-economic groups with the ethnic and cultural diversity representative of this region. All of the girls received a T-shirt and certificate for completing the program at a celebration follow-up program in 2016. There were

no other rewards or compensation to the adolescents or the Girls Inc. staff for their participation in the research.

The two representatives who assisted with the “Body-Positive Program” from Girls Inc. were Program Facilitators for Girls Inc. One representative has her degree in Sociology and is currently studying Social Work to receive her graduate diploma. The second representative is a teacher (B.Ed.) and is currently studying to receive her MA in Education. There were also three female volunteers who often help Girls Inc. with other programs.

In addition, there were also four guest presenters from the community for the physical activity component. They were deliberately-selected in order to present contrasting types of physical activity, including Afro dance, yoga, groove, and individual styles of dancing. The researchers included the principle investigator (PI) and the graduate student researcher who attended all four sessions and a second UOIT researcher who organized the physical activity sessions and attended one of the evenings.

### **3.5 Data Collection**

“The Body-Positive Program” ran for four evenings from 6:00 pm to 8:30 pm in 2015 at the Girls Inc. facility. During the first evening, all of the parents signed a consent form (see Appendix B), and the girls signed an assent form. In the fourth week, artifacts were created by the girls who voluntarily wanted to create one, and then a digital copy was given to the graduate student researcher.

### **3.6 Procedure**

Participation in the program and in the research study was voluntary. Participants were gathered by a convenience sample. Written consent was obtained from the parents and written assent was obtained from the participants in accordance with the approvals of REB # 14-139.

Any adolescent girl who wanted to participate in the study was included, and there were no criteria for exclusion.

This study took place over four weeks with a total of four sessions and ten hours. The students conducted various deconstruction and reconstruction activities involving media which were related to the health components of body image and self-esteem. Students were then asked to create a digital artifact to be shared with the class and on a website with their consent. The students chose to work in small groups or individually on their artifact.

### 3.7 Risk Assessment

Potential risks to the participants included the consideration of psychological and social risks. As noted in the review of the literature, a sensitive topic such as body image can cause health issues, including depression, anxiety, and disordered eating. Sensitive topics including personal thoughts and experiences related to the activities were discussed. The researchers collaborated with Girls Inc. to provide the parents and the girls with a handout that included resources to help them should they need it. The researchers are also experts in the areas of physical activity, body image, girls' empowerment, resilience, and mental health. The graduate student researcher also has her Mental Health First Aid Certification.

All of the posting of the artifacts will be done anonymously by the researchers. This should reduce or eliminate any social risks involved in the global nature of being publically available on a website. The girls' consent form also states that they can change their minds about their posted artifact and it can be withdrawn upon request.

This research was approved through the Research Ethics Board at UOIT as the potential benefits were viewed as outweighing the risks. The intention of the program was to help the girls learn how to talk about their bodies in healthy ways by deconstructing and reconstructing media

messages, and then use their voices in the creation of their own artifacts, something which is tied to engagement and empowerment, and by participating in approximately 45 minutes of physical activity during each session.

### 3.8 Guiding Questions

The following questions guided the organic observations of the researcher during this time period: What messages were most meaningful to the adolescents and inspired them to change their opinions about health? What are the ways that they learned/taught about health and body image as shown in the artifacts? (Table 5)

**Table 5. Guiding Questions**

<b>Specific Research Questions</b>	<b>Related Data</b>	<b>Data Analysis to be Conducted</b>
What happens when adolescent girls are encouraged to think critically about their health and body image?	Field journal observations audio taping and transcriptions of the interviews about the artifacts	The interview scripts will be analyzed for common themes.
How does the discourse of adolescent girls reflect understandings about health?	Field journal observations audio taping and transcriptions of the interviews about the artifacts	The interview scripts will be analyzed for common themes.
When adolescent girls are encouraged to think critically about their health, how is this reflected in their media productions?	Field journal observations audio taping and transcriptions of the interviews about the artifacts	Artifacts will be analyzed by the CMHL framework (2015) which was designed for this study.
What can be learned through the observation of adolescents engaged in a course on self-esteem and body image?	Field journal observations audio taping and transcriptions of the interviews about the artifacts	The interview scripts will be analyzed for common themes. Artifacts will be analyzed by the CMHL framework (2015) which was designed for this study.

### 3.9 Data Analysis

The three data sets were compiled: the observation notes, the digital artifacts, and the transcriptions of the interviews with the girls as they were creating their digital artifacts. First, all of the data were read to determine overall findings in the data – with particular attention on the themes that were evident from all three data sources (Creswell, 2012). Coding involved reviewing the data several times and making notes, known as memoing, until key themes emerged with consistency (Given, 2008). The research was designed in this way to increase the study's credibility and dependability.

Themes were placed into categories that emerged organically; there was no preset list (Given, 2008). As patterns emerged across the categories, the messages were then placed into key themes (Given, 2008). The key themes were then analyzed to make sure they resembled the richness of the data (Given, 2008). The themes were coherent, distinct from each other, and tested in all three data sources (Given, 2008). These were the steps that were taken in order to identify the main concepts creating the first three key themes (Given, 2008). The fourth key theme was found in the observations of four consecutive sessions with similar results each session.

The digital artifacts received another layer of analysis to examine their levels of critical media literacy and critical health literacy. This process was guided by the critical media health literacy framework (CMHL) created for this study (Table 6).

**Table 6. Health Literacy/Media Literacy Framework (HL/ML) for Artifact Evaluation**

<b>Levels</b>	<b>Description</b>
Basic media health literacy	Media that articulates basic understandings about health.
Media health arts	Aesthetically pleasing media about a health issue that demonstrates basic understandings of health.
Media health literacy	Media uses media conventions to create a health artifact that demonstrates the ability to question basic understandings of personal health.
Interactive media health literacy	Media questions basic understandings of personal and social health in way that communicates more than telling.
Approaching critical media health literacy	Media questions health information from a political or social or consumer lens, then reconstruct and share the health message as a way of taking social or political action.
Critical media health literacy	Media questions health information deeply from a political, social and consumer lens, then reconstruct and share the health message as a way of taking social and political action.

(Scheidler-Benns, 2015)

## 4 Findings

### 4.1 Overview of the Sessions

The four weeks of sessions were held in a large, but crowded space at Girls Inc. The participants included 26 girls, ages 12-17 of whom seven girls were new to Girls Inc. The sessions also included the UOIT researchers, the representatives from Girls Inc., and three volunteers. Each session began with a different form of physical activity which lasted up to 45 minutes of the two-and-a-half hour class. All activities were voluntary and the girls could choose to opt out at any time. Each week all the girls chose to participate in the physical activity. On the first week, one of the girls left the main room during the physical activity, but returned near the end and participated in the next three sessions fully. Even though the sessions were held during a cold weather period, the door was always open during the physical activity as the room quickly became hot with the tight space and the vigorous participation. Two of the older girls did not get on their knees for part of the yoga session during the fourth week, but overall the girls fully engaged in the physical activity. This was an unexpected outcome based on the review of the literature and will be discussed further in “Key Theme Four” and the “Discussion” section.

Each week during the program activities, time was spent participating in the activity, and then reflecting on the activity. A typical reflection time would have the girls sitting quietly occasionally talking with their peers in an oval formation and responding to prompts from the moderators or responding to each other’s comments. The girls were not forced to participate, respond, or share reflections in any way. On the first night there was a brief pause when one of the girls realized they were being recorded. The girls talked about it and the moderator acknowledged that they were being recorded and the discussion resumed. The idea of being recorded was not brought up again.

Each night included additional health media and media literacy activities culminating in the making of a media artifact by the girls. The girls were eager to share their thoughts, listened attentively to each other, took the topics seriously, and often had to be interrupted in order to move to the next activity. The discussions often became lively and many times several girls were raising their hands at once to share their ideas. They appeared to feel safe and secure despite the research team being present, taking notes, observing, and recording.

Every session included a break with a variety of food choices including fresh fruit, vegetables, chips and salsa, popcorn, veggie chips, and a variety of dips. The girls were also offered fruit juices and water. They could choose as much as they wanted of whatever they wanted. All the girls ate food of their own choice and no one appeared to be dieting, concerned about eating, or concerned with what the other girls were eating. The conversations during the break time continued with whatever they had been discussing after the activity. On one night, the moderator continued sharing media in the form of commercials while they ate and shared. The girls appeared very comfortable and relaxed during this as well.

By the end of the sessions, three girls were openly and safely breaking into song and three other girls were creating a dance. They performed the dance itself at the end of the last session in front of the whole group and it was recorded on an iPad. They entered the room with great confidence and began with their choreography. As the song continued, they began dancing freely and in their own style. They quickly pulled the rest of the girls sitting in chairs up to dance with them until everyone was dancing, including the moderators and researchers. Many of the girls were also singing the song, *Fight Song*, openly and confidently while dancing and making gestures.

## 4.2 Descriptions of the Artifacts

The girls created six artifacts during the fourth and final session in a time period of about one hour. Although all girls were involved in creating the artifacts, 17 out of the 26 produced artifacts to share on [www.teachbodyimage.org](http://www.teachbodyimage.org) by the end of the final evening. One artifact involved the sharing of an image, one group sang a chorus from a favourite song Acapella and recorded it, two groups created PowerPoints, one group created a video with words and background music, and a final group choreographed a dance to a favourite song. The choice of media was left up to the girls and they were free to present their voices in whatever medium they chose. None of the girls were forced to create an artifact or told what to say. The research team simply asked them to create something for the website to share.

- The first artifact submitted by one girl was an image of Soundwave, a toy geared toward boys found at [www.joyreactor.com/post/745542](http://www.joyreactor.com/post/745542). The toy looks like a robot and contains many accessories including a photographic memory from data storage capabilities, shoulder-mounted rockets, radio wave sensors, and a tape deck.
- The second artifact was of two girls singing the chorus of the song *Try* by Colbie Caillat. The girls recorded the song Acappella into their own device in the form of an audio clip for the research team.
- The third artifact was a six-page PowerPoint created by five girls entitled *Positive Body Image*.
- The fourth artifact was a ten-page PowerPoint created by three girls entitled *Love Yourself, Accept Yourself*.
- The fifth artifact was a video that three girls created using the song for the background, *Words* by Hawk Williams and the poem *Special Lady* by AnitaPoems.

- The sixth artifact was a dance video that three girls created to the song, *Fight Song* by Rachel Platten, and was recorded on an iPad.

All six artifacts were collected by the research team by the next morning.

## 4.3 Themes that Emerged

Four key themes emerged from the field notes, the interviews with the girls about their artifacts, and the artifacts themselves. In the first session, the girls in this study articulated that they feel a lot of pressure to be the perfect girl. They were also focused on the idea that everyone is different or unique, and that it is a good thing. They also demonstrated and expressed that they were engaged in the program and wanted to encourage others. Through their repeated, voluntary participation in the physical activity each evening and the culmination of the sessions in dance, they demonstrated that they enjoyed a variety of physical activities. In the next section the themes will each be discussed in depth. First the observations from each theme will be explored, the artifacts and the interviews about the artifacts will be shared, and then the artifacts will be examined for their critical media literacy levels following the framework from page 32 of this thesis.

### 4.3.1 Pressures to be the Perfect Girl

The girls openly discussed the ideas around feeling pressured to be the perfect girl, starting in the first session as based on my field notes. All of the girls gave a “thumbs up” in response to feeling this kind of pressure. Very early on, one girl said that she feels a need to compete from other girls. Another girl added that she felt as though other girls were out to get each other rather than be there for each other. A third girl felt that girls were judged more by other girls than by anyone else. As the discourse on this topic continued, another girl indicated that she often felt that she was the only one that can’t be everything. The idea of being

everything seemed to include ideas of being attractive, thin, smart, successful, and caring. (At this point, the girls noticed they were being recorded and there was a slight interruption.)

Girls began talking about other pressures, including the idea that they didn't feel safe about saying good things about themselves to others. They said they felt pressured not to say positive things because it could sound like they were bragging. Others felt that if they said nice things, then they could fail to live up to their own standard and be wrong. Still more felt that they often competed for guys and tried to prove that they were thinner or smarter than someone else.

Over the four weeks the discussion continued and deepened on this topic. Several girls thought that media portrays the perfect girls and this influences them. Some of the girls began talking about the media being fake, focused on making money, and not benefitting them.

#### 4.3.2 Pressures Revealed in the Artifacts

Many of the above ideas were continued in the six artifacts that the girls created and their explanations of them. The first artifact was a picture of *Soundwave*, which is a toy that is typically geared toward boys. The girl submitting the artifact explained the toy this way:

*It is a comparison between Transformer Soundwave and an average man. Soundwave would be 13'5" and an average guy is only 5'10. His top speed is Mach 4.1, and an average guy is only 14mph. And, of course, Soundwave is a giant robot so he's really strong.*

When asked to explain why she chose this artifact, she acknowledges the pressure from the media by stating,

*To me this just cements the main guy stereotype I've always known; you have to be tall and strong. So this (toy) says: if you want to be like Soundwave, you have to be*

*tall and strong! I always thought that just girl's toys were being like the stereotypical, but I didn't realize how stereotypical boys' toys are as well.*

The second artifact acknowledged the pressure that the girls felt by singing and recording an Acappella version of the chorus of the song *Try* by Colbie Caillat. The group of girls stated, "Our message for women is that they don't have to try so hard. We only sang the chorus and it's just saying that we don't have to try so hard. So that is the message of the song."

Chorus of the song, *Try* by Colbie Caillat:

*You don't have to try so hard  
You don't have to give it all away  
You just have to get up, get up, get up, get up  
You don't have to change a single thing.*

The third group artifact was a PowerPoint entitled *Positive Body Image* and was motivated by a:

*"Real" girl who has had a lot of surgery done to her body to make her look like that (Barbie) and then um so this is kinda what we wanted to say. So there is a guy who started this foundation and he started making that kind of Barbie doll like more natural looking and more realistic like you could see it Barbie. Like the original Barbie, her waist is the same size as her neck and that's not natural.*

Another girl expanded on this idea by pointing to her PowerPoint slide and explained, "This slide shows a bunch of different figures and body shapes and sizes and it's about them like comparing themselves saying they wish they had this they wish they were like that and they don't accept themselves."

The fourth group created a PowerPoint entitled, *Love Yourself, Accept Yourself*. The girls shared their thoughts about their project by saying, "Your opinion matters the most. Don't let others influence you." On this slide they had also placed a picture that said, "Be proud of who

you are and not ashamed of how someone else sees you.” The girls explained in their dialogue that, “So like your opinion matters the most. It doesn’t matter what anybody else says.”

The fifth group created a video using the song lyrics and music *Words* by Hawk Williams. The words from the song explained the pressure in this way:

*They've made me feel like a prisoner  
They've made me feel set free  
They've made me feel like a criminal  
Made me feel like a king*

The girls explained that they chose this song because, “We’re too hard on ourselves and it's very hard to draw confidence and you have to do that from the people around you.”

The sixth group chose to make a video of dancing to *Fight Song* by Rachel Platten. The pressures this older group felt is explained in the lyrics from the song itself:

*This is my fight song  
Take back my life song  
Prove I'm alright song  
My power's turned on  
Starting right now I'll be strong  
I'll play my fight song  
And I don't really care if nobody else believes  
'Cause I've still got a lot of fight left in me*

### 4.3.3 Girls Connected to the Ideas of Diversity

In response to the pressures that the girls discussed, two ideas that emerged through discourse after some of the activities were that everyone is different and unique. The conversations continued along these lines beginning with the first week. One activity for the first week was to read a book about diversity to others in their groups. Some of the girls took time to study the pictures and the messages. Some of the girls appeared to feel foolish and had difficulty staying on task. The girls were given several minutes for the activity, and then they were asked to come back to the main circle and share with the larger group some of their ideas.

As the girls moved back into the circle their attitude became more serious and focused. They became quiet and settled and began sharing their thoughts. Several of the girls thought that the meaning of the book was that everyone is beautiful. A couple of the girls noted that there is diversity in the world just like them. One girl noted that trees and flowers aren't the same in nature, but they are all beautiful. Several of the other girls thought there shouldn't be *an ideal* for girls. The discussion was lively and the girls remained interested in what the other girls had to say. Time started to run out, so they were given notice that they would need to wrap up their thoughts.

The girls quickly added ideas suggesting that no one is perfect. One girl quoted a poster that her teacher had on the wall at school about being you because everyone else is taken. Their ideas ended with thoughts about everyone being different and unique and that everyone is beautiful. These ideas continued to be shared during the next three weeks and also showed up in their artifacts at the final session.

#### 4.3.4 Girls Connected to the Ideas of Diversity Revealed in the Artifacts

All six of the artifacts or the participants' interviews about their artifacts revealed an aspect of this theme that had emerged organically. The first artifact was a picture of a Soundwave character which is a toy geared toward boys submitted by one girl. The girl's interview revealed that she had chosen this character because she was concerned that boys were worried about body image too. She chose it because she saw this character as a means to pressure boys to be a certain size and strength, rather than embracing uniqueness. Her message to boys and girls alike from her interview of the artifact was: "Don't let toys become the 'guideline' for what size you have to be, because there is not a single toy in the world that matches your uniqueness!" She was very passionate about the topic.

The second artifact was the audio of the two girls singing *Try*. When asked why they chose the song, they explained that the song was about “accepting your flaws, because everyone’s like you know has flaws.” Words from the song itself state, “You don’t have to change a single thing.” The recording of their song was done publically in the main room at Girls Inc. in an impassioned and powerful way. They were proud to sing openly in front of the other girls and this acknowledges their feelings of acceptance.

The third artifact, a PowerPoint on positive body image, revealed a few examples of the theme that everyone is different. The PowerPoint starts with an image of a distorted and thin Barbie, a regular Barbie, and the new Barbie, which is not as tall and thin. The girls explain the ideas of uniqueness and differences in the following way during their interview about the artifact.

*So um we have like um it's like everyone needs...when people hear body image most people think that it's negative like 'oh here we go, body image' like I don't feel confident in myself. But really it's like everyone should just feel like oh body image like body image could be a positive thing and it's like everyone needs to accept each other 'cause everyone's different in their own ways and stuff.*

On slide #5 of their PowerPoint they write, “Body image doesn’t have to be a negative thing. Stay positive and be yourself.”

The fourth artifact and the interview regarding it revealed more of this theme. The girls explained that they wanted to send the following message to other girls. “Stop the negative talk about your body. Our differences make us beautiful. Embrace your unique bodies and love who you are.” They went on to point out additional pictures from their slides while explaining, “It doesn’t matter. We’re all beautiful and it's a bunch of different body shapes. And then it (the

picture on the slide) says, ‘what's your body shape?’ and it's crossed out because there is no perfect body shape.”

On slide #4 of their PowerPoint, they wrote, “Stop the negative talk about your body. Our differences make us beautiful. Embrace your unique qualities and love who you are.” On slide #8 they wrote “Everyone has a Perfect Body” as the headline of a picture with women of many shapes, sizes and ethnicities. On slide #9 the girls wrote, “It doesn’t matter; we are all beautiful.”

The fifth artifact was a video made by three girls. The girls said that their video expresses the following thoughts:

*It says that it doesn't matter what size you are, or your height, or really anything about you as long as you be yourself and you can just get out there and do what you want to do with your life.*

In the video they used the words for a poem called *Special Lady* by AnitaPoems. These following words from the poem continue this theme:

*You're a lady with a lot more than fashion,  
Understands others and shows lots of compassion.  
I hope you always continue to dream,  
You are fantastic, you are supreme.  
There's absolutely nothing, you can't achieve,  
That's what I honestly and sincerely believe.*

The final and sixth artifact was a dance by three girls based on the song, *Fight Song*. The three girls were among the oldest and offered a lot of information about diversity in their interview about their dance video. When asked, “What message do you want to give women?”, all three girls responded eagerly. One girl explained,

*That kind of like all bodies are beautiful and like treat yourself and just be kind to yourself and love your body.” Another girl added, “well just kind of that everyone’s beautiful and*

*that everyone kind of has a different perspective on what beauty is but the (...) one perspective that like everyone is beautiful.*

Another girl added similar thoughts saying, “Everyone’s different like no one is built the same. It doesn’t matter if you're bigger or skinnier ‘cause that’s just the way...” The final girl stated, “Size doesn’t matter.” The first girl added with exclamation, “There we go!”

One of the girls in this group went on to tell a story of a video that she had seen that related to this key theme:

*True beauty is on the inside. Oh I saw this thing about ah it was like some kind of video and it's like explaining body curves... and it's like no it was like explaining curves then it like was showing body example and it's like and then after it was showing world so it was like a winding road saying this road is curvy. This “whatever” is curvy. This tree is curvy. And then it's like a curvy body just means there is like a rounding or something in the body. And then it was like some people have one curve some people have many curves so like yeah.*

All six of the artifacts, interviews, and observations supported this theme strongly and many of the girls had a lot to contribute to this theme.

#### 4.3.5 Girls were Eager to Encourage Other Girls

From the first session through to the last session involving the creation of artifacts, the girls were engaged in the entire program. In the first session, there were a couple of minutes pause when the girls realized they were being recorded for the larger study during the community circle time period. The researchers quickly explained that none of their identities would be revealed and that the purpose was to hear what they had to say and share it with other girls. The girls’ discourse returned and didn’t waver again during the rest of the program. Once

the girls began discussing and reflecting on the various activities in the program, then many openly expressed a desire to create artifacts, use their voice, and help others girls.

Surprisingly, the girls said that they liked taking the survey on the first night that was a part of the larger study. Several girls said that they liked the questions and they liked that their voice was being heard. The survey contained a Likert scale and space for the girls to write their comments about each question. They also liked the fact that the survey was taken anonymously through the use of a symbol or name that was personal to them and did not identify them in any way.

Several girls expressed that they loved the discussion part of the program from the first night to the last. They said that it was a way to share what they were going through and that they felt happier when they were able to discuss. One girl said that she felt calmer and more peaceful through having someone to talk to about these things. Throughout the program, the discussion had to be interrupted several times in order to move onto the next activity. Some girls expressed some frustration with this and asked for more time for their discussions and with the activities. It was clear from the observations though that the girls openly wanted to share and felt good about being there, participating and supporting each other. This theme continued with the examination of the artifacts and their messages about their artifacts.

#### **4.3.6 Girls Were Eager to Encourage Other Girls Revealed In Artifacts**

All of the girls worked on creating artifacts in the last week which shows their engagement overall. The girls had a clear understanding that the artifacts were going to be placed on the website [www.teachbodyimage.org](http://www.teachbodyimage.org) and therefore visible to anyone who accessed the website. Although nine of the girls did not complete their artifacts in the final session, they will be allowed to submit their artifacts to be posted at a follow up session if they choose. The

artifacts that were submitted and the interviews about them showed that the participants had a strong desire to use their voices to encourage other girls and they were clearly engaged in the program.

Artifact #1 is the picture of Soundwave, a robot. Although the girl was particularly interested in the effect of this toy on boys, she had the following message for the girls that will visit the website. “And my message for all my girls out there is that don't let toys become the ‘guideline’ for what size you have to be, because there is not a single toy in the world that matches your uniqueness!”

She went on to explain,

*I want to give the message that all these toys are unrealistic and don't follow their guidelines. They're not guidelines for you, because you are you, and you shouldn't be like a toy. Or even worry about looking like a toy.*

She clearly knew that her message was for other girls visiting the website and felt very motivated to share a message with them.

Artifact #2 was an A cappella singing of two girls of the chorus of the song, *Try*. Although they only recorded the chorus, the rest of the song they chose for their messages implies their motivation to encourage other girls:

*Wait a second,  
Why should you care, what they think of you  
When you're all alone, by yourself  
Do you like you? Do you like you?  
You don't have to try so hard  
You don't have to bend until you break  
You just have to get up, get up, get up, get up  
You don't have to change a single thing  
Take your make up off  
Let your hair down  
Take a breath  
Look into the mirror, at yourself*

*Don't you like you?  
Cause I like you*

Artifact #3 is a PowerPoint entitled, *Positive Body Image*. When asked to explain their PowerPoint presentation, the girls said they included “body-positive images to like make you (the readers of the website) feel like confident.” Another girl added that it’s about “loving yourself and accepting yourself and everyone around you.” On slide #5 they wrote in their own words, “Stay positive and don’t give up on your dreams because your opinion counts.” On the same slide they also added, “Everyone can make a change. Just look at the new Barbies for example. That could be you making new things and bright ideas.” This clearly shows that they felt they had a right to an opinion and were encouraging other girls to share their opinion. These statements show that they felt empowered to do something, say something, and share their own ideas.

Artifact #4 was a PowerPoint presentation entitled *Love Yourself, Accept Yourself*. When commenting on their artifact the girls said, “We hope this is far as you spread the works of others. Thank you.” This researcher inferred this to mean that they wanted to spread the word with their PowerPoint presentation and that they hoped their messages would be heard by a lot of other girls.

On the PowerPoint presentation itself, they clearly had something to share with other girls. On slide #3 they wrote, “When did we start comparing ourselves to objects?” On this slide was a picture of women depicted in the common shapes of apples, pears, hourglasses, and rectangles that are used in retail to show how women of these shapes should dress. Clearly they wanted other girls to stop seeing themselves as objects.

On slide #6 they encourage other girls to “Say this to yourself every day and your perspective will change!” Beneath these words is a picture that says, “I pledge to love myself no

matter what shape I am.” On the picture is a representation of differently-shaped bodies with the use of lines.

On slide #7 they wrote, “A cup of confidence a day will keep the doctor away!” Below this message is a picture that says, “Confidence will make you (the readers of the website) happier than any diet ever will, so embrace your body!” While encouraging other girls, this part of this particular artifact is one of the few that alludes to the health aspect of our program. Although restrictive eating or dieting was not a topic in the body-positive program, the topic did come up in general discourse and in this artifact that they chose.

On slide # 10 the girls wrote, “Love yourself and accept yourself. We hope this inspired you to spread the word to others!” Clearly the girls are aware that this message is being shared on the website for other girls. It also shows how their own inspiration is something that they were eager to share with others.

Artifact #5 was a video. The girls stated, “The poem really reminds us how important we are.” Clearly the girls wanted their message to other girls to be inspiring and they felt inclusive in their message to extend to all the girls who would see their message on the website.

Artifact #6 was a dance video to the song, *Fight Song*. During the last session, this group of three girls choreographed and recorded a dance for the group and the website. When asked why they chose to do this for their artifact, they stated, “We’re trying to portray that no matter what size you are you can still get up and dance and feel good.” Another girl explained, “So we have like three different people in our group. Each of us is different sizes and different heights.”

They felt safe enough and empowered to share their message openly at the end of the session. They entered the oval of girls with confidence and began with their choreographed steps. About midway through the song, they started encouraging the other girls, including the staff and

researchers, to stand up and dance with them in any way they wanted to dance. By the end of the song, everyone was up and dancing happily, thereby ending the final session in the same way we started --- with dancing, music, and celebration.

#### 4.4 Girls Enjoyed a Variety of Physical Activities

During the four sessions, the girls were exposed to four different types of physical activity geared toward girls which often included music that they were familiar with. Each of the physical activity sessions lasted about 45 minutes and was the way each session started. In all cases, the physical education instructor participated in the activity. Moderators from Girls Inc., volunteers, and often the researchers themselves participated as well.

Week one was individual dance in eight steps to the tune on Lady Gaga's, *Born This Way*. The girls entered the first session to this music playing. They appeared curious and unsure about what they were supposed to do at first. The moderators stopped the music and had them sit around the oval perimeter in folding chairs. The researchers went around the room shaking each girl's hand and introducing themselves. The girls were reminded that they had the choice whether they wanted to participate and that the researchers would be taking notes and observing them. The physical activity was announced and the girls were invited to join in if they wanted to.

The instructor showed the girls the eight steps and several times they practiced the moves. The instructor added the music and all the girls chose to participate in the dance. One girl left the dance shortly after it started and chose not to participate the first evening. She chose to fully participate in the following three weeks. The rest of the girls were smiling and seemed to enjoy learning the new dance. After about five minutes the moderators opened the back door to let the cool air in. It had grown hot in the small and active space.

The second week's physical activity was Groove Education. The instructor presented the idea that they would do several dances in a united but unique way. For example she would have them stomp or turn, but they could do it however they wanted to from several types of music that included pop, hip hop, impersonations of robots, to country. Once again, the back door was opened; this time the girls themselves opened the door when they had gotten hot. The girls clearly enjoyed this session and commented several times about it during their reflection and discussion times. Some of their comments revealed that they liked the foundation of a specific step or activity, but they also enjoyed being able to add their own unique interpretation of the movement. Some of the girls commented that they enjoyed it more than their formal dance classes.

The third week's physical activity was Afro Dancing. The instructor explained to the girls that traditionally, dance involving culture was a social thing. This style of dance was more difficult and coordinated than the previous week. Overall though, the girls thoroughly enjoyed the activity shown by the smiles on their faces and outbursts of laughter. Once again the back door was opened by the girls to cool the room off.

The fourth week's physical activity was a Moksha yoga and breathing session. The instructor asked the girls to consider how their bodies feel as they move. The space was a bit crowded for some of the activities, but the girls seemed to adjust and a couple of them moved near the washroom so they could continue to participate. A couple of the older girls chose not to get on their knees for a portion of the activity. Although the girls seemed to be concentrating, there were several bursts of laughter as girls swayed out of their yoga poses. The girls did not seem to be embarrassed about this as they continued to try the moves and the balancing.

Although the pace was slower for this type of activity, the girls opened the back door again due to the effort of the moves.

The participation of the girls in this study revealed that the girls enjoyed the various types of physical activity very much. Except for the one girl leaving on the first night, all the girls displayed concerted effort at completing, mastering, and enjoying the physical activity. The girls had the most comments about the activity in week two that incorporated a specific move with the freedom of the delivery of the move.

#### 4.4.1 CMHL Levels in the Artifacts and Interviews about the Artifacts

Based on the CMHL framework from page 32 in the thesis, the artifacts are examined in this section. As the framework shows, if the girls produced artifacts that reflected an understanding that media can affect their health and that it is potentially harmful, then they are at a CMHL level. Also, obtaining the highest level means they are able to produce an artifact that takes social or political action.

The first artifact was a picture of *Soundwave*, the robot with special powers and abilities. The girl included this link: [joyreactor.com/post/745542](http://joyreactor.com/post/745542) with her submission, not just a general image of the toy. The title of the webpage reads, Are Boys' Toys Fostering Harmful and Unrealistic Ideals in our Kids? The webpage shows two pictures that examine the differences between *Soundwave* and an average man. The webpage acknowledges that there is a link between body image and self-esteem being affected by the mediated ideal for girls already. When she explained her artifact, she said, "I want to give the message that all these toys are unrealistic and don't follow their guidelines."

This artifact reaches the CMHL level by displaying a deep questioning of health messaging. Her empathy level led her to be concerned about boys and the effects the mediated

ideal has on them, just the same as girls. She referred to “unrealistic guidelines” in her statement showing that she recognized the social constructions. The artifact that she chose even had “harmful” in its title. She also managed to reconstruct the messaging in a way that was encouraging, although at a “telling” level. She saw clearly that she was taking social action in the way she stated “...for all my girls out there.”

Artifact two was an A cappella singing of the chorus of the song, *Try*. The full song by Colbie Caillat includes the ideas of consumerism, social construction, and the mediated ideal in the following words:

*Put your make up on  
Get your nails done  
Curl your hair  
Run the extra mile  
Keep it slim  
So they like you. Do they like you?”*

The following words from the song include the ideas of objectification that girls often feel in addition to the previous words:

*Get your sexy on  
Don't be shy, girl  
Take it off  
This is what you want, to belong  
So they like you. Do you like you?*

The next words show the push of consumerism in more detail, although it doesn't specifically relate this as pressure from the media:

*Get your shopping on,  
At the mall,  
Max your credit cards  
You don't have to choose,  
Buy it all  
So they like you. Do they like you?*

The next words reveal the importance of self-esteem and having a positive body image:

*Wait a second,  
Why should you care, what they think of you  
When you're all alone, by yourself  
Do you like you? Do you like you?*

The chorus and the final verse continue to emphasize this as well:

*Take your make up off  
Let your hair down  
Take a breath  
Look into the mirror, at yourself  
Don't you like you?  
Cause I like you.*

This artifact reaches the fifth level of approaching CMHL level from the choice of the song that they chose. The song questions the consumer and social lens deeply. They chose to sing just the chorus, which states that “they don’t have to change a single thing,” which acknowledges the societal pressures fueled by the commodified society. It was unclear to this researcher whether they fully questioned the broader meanings of the entire song or whether it was implied. More data is needed in order to place this artifact fully in the CMHL category.

Artifact three was a PowerPoint presentation called *Positive Body Image*. The participants said that the purpose of their artifact was to compile “body-positive images to like make you (the reader of the website) feel confident.” On the final slide they added the words, “Everyone can make a change. Just look at the new Barbies for example. That could be you making new things and bright ideas.” One girl added, while pointing to a picture of a woman that tried to modify her own body in order to look like Barbie, “This is an example of how the media and society affect girls.” Their final comment was, “One thing we are saying is that you can buy Barbies, but you can’t actually buy us.”

This group of girls clearly met the level of CMHL. Their understanding of the consumer lens in their words about not being able to be bought was not anticipated. It reflected a deep

understanding of consumerism and societal structures. They recognized the physical and mental harm that can come from misinterpreting media messaging. In their reconstruction of the health information understanding, they demonstrated that they felt powerful enough in themselves that they even wanted to encourage other girls to take social action and make change happen.

The fourth artifact was a PowerPoint called, *Love Yourself, Accept Yourself*. The girls stated that they wanted the girls reading their artifact to know, “Your opinion matters the most. Don’t let others influence you.” They chose body-positive pictures and memes to try to boost the readers’ confidence. On their last slide, they wrote “Love yourself and accept yourself. We hope this inspired you to spread the word to others!”

This artifact is classified at the approaching CMHL level. The girls recognize that there is social pressure and possible influences resulting from the pressure. They also recognize that others, including society, may try to dictate that the mediated body-size is what is acceptable. They also encourage the girls who view their artifact to take action by spreading the word. They don’t quite get to the point of recognizing the harm that media and society can create for girls through messaging.

Artifact five is a video titled Special Lady based on a poem by AnitaPoems. The girls explain that their main message is,

*It says that it doesn’t matter what size you are, or your height, or really anything about you as long as you be yourself and you can just get out there and do what you want to do with your life.*

This video represents the interactive media health literacy level. They had a basic understanding of the health messages about size and height. A lot of their messages were more personally related, rather than recognizing the larger societal and mediated constructions. Their

message was encouraging for other girls and communicates at a level of empathy and compassion. The song they chose for the background music, called *Words* by Hawk Williams talked about the harm or help that words can do to someone else. This recognition was also at a more personal level rather than the impact of media and the broader societal context. Their focus on encouragement did not appear to recognize the potential harm from society and media that can occur.

Artifact six was the dance to the song, *Fight Song*. As in the video artifact, the girls chose a song that used lyrics that were more on a more personal level, rather than a societal level:

*Losing friends and I'm chasing sleep  
Everybody's worried about me  
In too deep  
Say I'm in too deep (in too deep)  
And it's been two years  
I miss my home  
But there's a fire burning in my bones  
Still believe  
Yeah, I still believe*

The song choice also reflected the power that they felt to take action through their own words. They recognized that their voices and actions mattered in a positive way:

*Like a small boat  
On the ocean  
Sending big waves  
Into motion  
Like how a single word  
Can make a heart open  
I might only have one match  
But I can make an explosion*

In their interview about their artifact, they mainly shared messages around the theme of being unique and different and how that was okay. They wanted the viewers of their video to care about their bodies and be kind to themselves.

This final artifact is an example of interactive media health literacy. They clearly had a basic understanding of personal and social health. This may be at the approaching CMHL level if their comments about treating yourself kindly are interpreted as starting to understand that media and social messages can be harmful. This study did not make this connection, although perhaps information from the larger study will make this clearer.

The table below gives an overview of the assessment of each artifact (Table 7)

**Table 7 – Assessment of Artifacts**

1	Soundwave Artifact	CMHL Level
2	Acapella Recording of <i>Try</i>	Approaching CMHL Level
3	<i>Positive Body Image</i> PowerPoint Presentation	CMHL Level
4	<i>Love Yourself, Accept Yourself</i> PowerPoint Presentation	Approaching CMHL Level
5	<i>Special Lady</i> Video	Interactive Media Health Literacy Level
6	<i>Fight Song</i> Dance	Interactive Media Health Literacy Level

## 4.5 Summary of Findings

There were four themes that emerged from the observations, artifacts, and interviews about the artifacts:

1. Girls felt pressured to be the perfect girl.
2. Girls connected to the ideas about diversity.
3. Girls were eager to share their voices.
4. Girls enjoyed a variety of physical activity.

Starting on the first night, the girls acknowledged the pressures that they were feeling. From the pressure, the ideas of being unique and the importance of that became a large focus for the girls for the next three weeks. The girls felt compelled to share their voices with each other during the discussion and with other girls on the website through the creation of media artifacts.

The girls also showed that they enjoyed and wanted to engage in long periods of physical activity. From their choices of pictures, songs, poems, and the creation of their own messages, they were clearly capable of creating an artifact in a relatively short amount of time. Their creations were completely their own as they chose what they would say and their own medium of delivery. They were able to produce the artifacts unassisted and the researchers' and staffs' role during this time was to capture their interviews about what they had chosen on a recording device.

Although the topics from the program about health and physical activity didn't appear in the artifacts or the interviews about the artifacts, except for one, the girls were clearly engaged in these areas during the program. Indirectly, the focus on encouraging the positive mental health of other girls and the use of the dance at the end was inspiring and it reinforced the health and physical activity component of the program overall.

The examination of the media artifacts for media health literacy levels found that two artifacts reached CMHL level, two of the artifacts reached the approaching CMHL level, and two of the artifacts reached the interactive media health literacy level.

## 5 Discussion

This study has been designed to analyze the outputs (digital artifacts) created by adolescent girls' participation in a four-week, body-positive program in which the participants produced artifacts to be posted on the website [www.teachbodyimage.org](http://www.teachbodyimage.org). The participants were interviewed about their artifacts and observations were made during each session. This study is situated within the context of a larger study which included recordings of the girls during community circle, a pre and post survey, and additional observations and transcription from the other researcher. Research was conducted through weekly observations and recorded in field notes; the collection of the artifacts at the final session; and the recordings of the girls' interviews discussing their artifacts. Key findings were identified through the analysis of the data in this study. These findings are:

1. Girls felt pressured to be the perfect girl.
2. Girls connected to the ideas about diversity.
3. Girls were eager to share their voices.
4. Girls enjoyed a variety of physical activity.

The discussion presented here analyzes the existing research based on the four key findings described in the findings and will determine if this study strengthens, expands, contrasts, or doesn't exist in the current literature.

Four fundamental questions framed this research:

### 5.1 Research Questions

1. What happens when adolescent girls are encouraged to think critically about their health and body image?

2. How does the discourse of adolescent girls reflect understandings about health?
3. When adolescent girls are encouraged to think critically about their health, how is this reflected in their media productions?
4. What can be learned through the observation of adolescents engaged in a course on self-esteem and body image?

These research questions were answered by four key findings which emerged from observations, the interviews about the artifacts, and the artifacts themselves and were reported in the findings.

## 5.2 Theme 1: Girls Felt Pressured to be the Perfect Girl

The review of the literature indicates that adolescents, especially girls are feeling pressure in several ways and that the media exacerbates this. Canadian adolescents feel pressure to look a certain way and may harm themselves by making changes to their bodies for reasons outside themselves (House of Commons, 2014). Poor self-esteem issues, which increase the likelihood of disordered eating, mental health issues, and decreased physical activity can lead to poor health outcomes (Fox, 1999) Media exacerbates these issues by portraying ideal images that may be impossible for most adolescent females (Robertson & Thomson, 2012).

This present study strengthens and expands the existing research by adding the girls' voices and feelings about the ideal or perfect girl. The participants in this study unanimously indicated that they felt pressured to be the perfect girl who they defined as being thin, attractive, smart, successful, fit, and caring. They participated in deconstruction activities with media and spoke of many ways that media pressures and influences them. Some of the girls talked about the commercialism in media and that it can harm them if they believe they need to be the perfect girl.

One group used images of Barbie and a picture of a woman who had tried to make herself look like Barbie. One girl was also concerned with boys being harmed by media and used the character, *Soundwave* as her artifact. One group indicated that they couldn't be bought, except through respect, indicating that they understood that they were part of a commercialized society. All the girls agreed that they felt this pressure.

The existing literature acknowledges that girls tend to compare themselves to each other and feel more shame about their bodies (Lodewyck & Pybus, 2013; Slater & Tiggemann, 2010b). When students translate health messaging they often equate a certain body size and shape as the indicator of being healthy and fit (Petherick, 2013)

This research strengthens and expands on the existing literature by adding the connection of competition to the comparison of each other and with the mediated ideal. In the first session, the girls talked about feeling in competition with other girls. They felt that comparing themselves to other girls made them feel worse about themselves. Further, they added that they feel pressured to not say positive things about themselves as they could appear to be bragging or they could be wrong. In the girls' own words in the artifacts, they expressed in many ways that they didn't want to be compared to each other, or with the mediated ideal. They wanted to be acknowledged for their diversity and share this knowledge with other girls.

This study also found that the girls wanted to fight the message that you have to be a certain shape or size to be healthy. The dance group made a point of stating that all three of them were different shapes and sizes and they could all enjoy dancing. This idea was shown in many of the artifacts through various memes and statements about shape and size and health. The girls acknowledged that health, not size, was the most important thing.

Mental health is also affected with the guilt and futility that adolescents often feel about their body type (Fox, 1999; Rawana & Morgan, 2014). Additionally Rawana and Morgan (2014) find that girls suffer more mental health issues than boys, specifically regarding body-based depression and disordered eating which is significantly associated with depressive symptoms.

This research strengthens and expands our understanding of this area. Clearly, the girls in this study acknowledged the potential to feel badly about themselves or their bodies in their discourse and in the artifacts. In various ways, they shared that girls were too hard on themselves and they needed to lift up and support each other instead of competing with each other. The song, *Fight Song*, for example, was used because the pressure made them feel like they had to fight to be alright. When they created messages for other girls, they emphasized this as not having to try so hard, reminding girls that words can build you up or tear you down, and in general reminding all of us that we are too hard on ourselves. This indicates that they wanted to encourage other girls to escape this pressure through positive means.

### 5.3 Theme 2: Girls Connected to the Ideas about Diversity

There was very little in the literature about this finding, but it was apparent that the focus on diversity and acceptance of differences was meaningful for the girls. This suggests that the topic resonates with these girls. This approach was noted in Robertson and Thomson's (2012) research, but it is promoted for much younger ages in some of the provinces. At the high school level, some courses may include this teaching, but it would depend on the adolescent's choice of classes.

This research fills a gap by showing that these girls enjoyed relearning about the idea of diversity. After reading a book on diversity together, the girls turned their feelings of pressure into re-messaging on the first night and the discourse continued through the final week and

showed in their artifacts. The girls were quick to conclude that the diversity in nature could relate to themselves and their own appearance. The anxiety that they noted during the discourse about pressures became more hopeful. Several of the girls acknowledged that there shouldn't be an ideal girl anyway and that the perfect girl didn't exist. Their excitement about this idea was displayed by their open and active participation and by the fact that the discourse had to be interrupted in order to move to the next activity.

All six of the artifacts and the interviews about their artifacts revealed this message as well, albeit in unique ways. The girls used the opportunity to create artifacts as ways to communicate this message to other girls. Artifact #1 shared this message as "don't let toys become the 'guideline' for what size you have to be, because there is not a single toy in the world that matches your uniqueness!" Artifact #2 was explained as a song about "accepting your flaws, because everyone's like you know has flaws." Artifact #3 was explained in the following way: "...Body image could be a positive thing and it's like everyone needs to accept each other 'cause everyone's different in their own ways and stuff." On slide #5 of their PowerPoint they also wrote, "Body image doesn't have to be a negative thing. Stay positive and be yourself."

Artifact #4 was explained as communicating the message, "Stop the negative talk about your body. Our differences make us beautiful. Embrace your unique bodies and love who you are." "Everyone Has a Perfect Body" was written as the headline on another slide of a picture with women of many shapes, sizes, and ethnicities. On an additional slide, the girls wrote, "It doesn't matter; we are all beautiful"

Artifact #5 expressed the ideas that the main things that matters are that everyone is who they are and are not worried about what shape or size one is. They felt it was important to be kind to each other and support the diversity. Artifact #6 expressed similar ideas and felt that it

was important for girls with all body types to feel beautiful. They also expressed that true beauty was on the inside.

All six of the artifacts, interviews, and observations supported this theme strongly and many of the girls had a lot to contribute to this theme.

## 5.4 Theme 3: Girls Were Eager to Share Their Voices

The existing research suggests that more of this type of research should be done with adolescents, incorporating the use of media to create media and critically analyze media to build protective factors (Durlak et al., 2011; Higgins et al., 2012; Gartland et al., 2011; House of Commons, 2014; Kickbusch, 2001; O’Dea, 2005; Penedo & Dahn, 2005; Sawyer et al., 2012; Wharf Higgins & Begoray, 2012). Anderson and Booth (2006) assert that identifying and understanding factors that build resiliency and self-esteem and allow students to critically challenge societal messages about body image is increasingly important. Further, the focus for adolescents needs to be on prevention while giving adolescents an opportunity to contribute (Durlak et al., 2011; O’Dea, 2005; Petherick, 2013) and feel a sense of belonging (Petherick, 2013). Giving them a stronger voice (O’Dea, 2005; Nutbeam, 2000; Sawyer et al., 2012) helps to empower them (Kickbusch, 2001; Sawyer et al., 2012) by creating a “buy in” (Nutbeam, 2000; Smith et al., 2006).

It is important that the girls use their voices to fight back with their own messages (Freire, 2000; Kincheloe, 2008). Sawyer et al. (2012) point out that using media to fight back is an area that is largely unexplored. Although very little research has been done in this area, many researchers believe that this could be a protective factor which can enhance resiliency (Gartland et al., 2011; Kickbusch, 2001; O’Dea, 2005; Sawyer et al., 2012) against unhealthy media and societal messages (Durlak et al., 2011).

This study reveals evidences that critical media and critical health teachings are meaningful for the girls and helps to fill a gap in the existing literature. These girls showed their enthusiasm by participating in the physical activity, the other activities, the discussions, the creation of artifacts, by completing the surveys, and through discussions during the nutrition breaks. They expressed a lot of excitement around creating artifacts for the website and using their voices to help other girls.

This research reveals that these girls needed very little support to define their pressures, deconstruct messaging, reconstruct messaging, and then create an artifact. They also did not need any assistance with the technology or any guidelines as to which form of media to use. In a very short amount of the time, 17 out of the 26 girls were able produce a media artifact to share on the website. Although some girls chose to watch other girls create an artifact, all of the girls participated in the creation of an artifact during the final evening. Some of the girls even encouraged the other girls who would read their messages on the website to raise their voices. These girls felt empowered to share their opinions and wanted other girls to do the same.

## 5.5 Theme 4: Girls Enjoyed a Variety of Physical Activities

The existing literature emphasizes the importance of increasing physical activity levels of adolescents (Hobin et al., 2010; Janssen, 2007; Ntoumanis et al., 2004; Sallis et al., 2000); reveals that girls prefer less structured forms of exercise with a social element (Penedo & Dahn, 2005); and asserts that teaching of physical activity should be focused on health, not weight (Biddle & Asare, 2011; Fox, 1999; Hausenblaus & Fallon, 2006; Higgins et al., 2003). With the general decline in physical activity (Hobin et al., 2010; Janssen, 2007; Ntoumanis et al., 2004; Sallis et al., 2000) there is a growing concern for health outcomes for adolescents (Hobin et al., 2014; Lodewyck & Pybus, 2013; Petherick, 2013; Shea & Beausoleil, 2012).

Schools are often viewed as the ideal place for health and physical education to occur. The evidence, however, indicates that the social determinants of health such as income level, and level of parental education, have more of an impact on the health of adolescents and their families (Lindelof, 2010; Raphael, 2009). Studies on the social determinants of health indicate that social and political structures impact health because they affect income levels, parental education level, and cultural variances as examples (Raphael, 2009). A Canadian school curriculum for HPE does not focus on social determinants and focuses on individual responsibility to make the correct food choices (Robertson & Scheidler-Benns, 2015). Critical approaches to physical activity, such as examining the availability of safe recreation areas, are largely ignored (Thomson & Robertson, 2014), and body-positive health education is rarely emphasized (Robertson & Thomson, 2012). The emphasis on food and exercise as a means of being responsible for your own health ignores other factors that are increasingly contributing to poor health outcomes and does not support more holistic approaches to health (House of Commons, 2014).

Factors such as a widening income gap in Canada, poorly designed neighborhoods, and in some cases, an inability to access healthy foods are factors which impact adolescent health (Glanz, 2008). Increasingly environmental, economic, and social determinants are affecting health outcomes, yet these are not introduced or explained through the teaching of health (O’Dea, 2005). Understanding these factors, necessitates more holistic approaches to health and acknowledges realities beyond individual choice (Nutbeam, 2000; Smith et al., 2006).

Positive self- esteem and positive body image can be increased through physical activity which can be used as a protective factor (Biddle & Asare, 2013; Fox, 1999; Hausenblaus & Fallon, 2006; Higgins et al., 2003). Physical activity also improves health holistically by

benefitting emotional well-being (Penedo & Dahn, 2005) and psychological well-being (Hausenblas & Fallon, 2006). Regardless of body weight, regular amounts of physical activity are a protective factor against obesity (Penedo & Dahn, 2005).

This research confirms what was found in the literature and expands on it through the girls' own voices. Although one girl left on the first night part way through the physical activity, she fully participated in the last three sessions of physical activity. The rest of the girls, Girls Inc. staff, volunteers, and often the researchers participated in the full four weeks. Although this research didn't measure physical activity as a protective factor, self-esteem, body image, emotional and psychological well-being were evident in the discussions and in the artifacts that they produced.

Artifact #6 included a physical activity in the form of a dance. They voiced that they chose dancing as their artifact in this way: "We're trying to portray that no matter what size you are you can still get up and dance and feel good."

The present study mirrors findings from previous research that shows girls respond best to naturally occurring physical activity (Penedo & Dahn, 2005) that is not sport-based for 75% of the adolescent girls' population (Higgins et al., 2003). Recent research shows that the percentage could be as high as 84% in a recent report from Canadian Heritage (2013). Young women also report that they prefer a social element as part of their physical activity (Petherick, 2013).

This research supports the existing literature. The girls in this study responded most enthusiastically to the Groove Education activity in which they were given a prompt, such as "two stomps, one clap," then they could do the movement however they wanted. They expressed in several ways how much they like the combination of the structure and the freedom of delivery.

The girls appeared to enjoy all of the physical activities and smiled often at each other in support. The space was small and cramped, but the girls didn't seem to have any issues with the close proximity. The discussions after the physical activity were lively and they were eager to share with each other.

The existing literature suggests that the focus of HPE should be on health, not size, as the focus on size can harm them (Russell-Mayhew et al., 2012). When the focus is on cooperation and choice of activities, then adolescent girls are more likely to participate (Hobin et al., 2010; Ntoumanis et al., 2004). Reducing peer-peer comparisons increases their desire for physical activity (Lodewyck & Pybus, 2013).

The high participation rate of the girls, staff, volunteers, and researchers was an unexpected finding. Each session offered a different activity for them to experience a variety of choices. It is possible that the introduction of four different types of girls-focused physical activity helped to increase participation. All four of the instructors participated in the physical activity themselves which could also be a factor. The instructors all created an activity that anyone could do and there was no competition created between the girls. The ages of all participants ranged from age 12 to mid-60s.

Hills (2007) finds that creating inclusive spaces for girls' physical activity is important and that girls may need to discuss these ideas. Adding time for girls to critically reflect and discuss their experiences and feelings could be a valuable way to increase motivation and participation (Hills, 2007).

Although this researcher did not originally try to confirm these ideas, this research did expand and confirm these ideas. After the physical activity, the girls had an opportunity to debrief. They were often breathing deeply from the exertion, but smiling. They discussed each

topic with enthusiasm and many took the opportunity to express how much they liked the physical activity.

## 6 Conclusions

In response to my four initial research questions, I draw the following conclusions. The previous research suggests that more research need to be done in this area of CMHL teaching. Hopefully, this present research helps to fill a gap in this area as this researcher is not aware of any previous program that has incorporated health and media literacy teaching with a physical activity component and creation of artifacts. More research will need to be done including these contexts in order to measure the resilience and empowerment outcomes of participants. In the section which follows, each research question and its resolutions are discussed:

The first research question asked, “What happens when adolescent girls are encouraged to think critically about their health and body image?” The findings with respect to this question indicate that, from the first session, the girls were very interested in sharing their ideas and listening to the other girls. They talked a lot about the pressure that they felt from other girls, society and media. They even felt pressure to not say positive things about themselves. From the first session the ideas that media is consumer driven, fake and presents the mediated ideal body type emerged also. The participants began talking with each other, and they appeared to be excited about creating and sharing media artifacts. They were able, enthusiastic and open to participating in all aspects of the Body Positive Program. They were clearly empowered with the idea of using technology to express their voices digitally. This indicates that the elements combined in this program created a model that can be used as a model for future interventions. The second research question asked, “How does the discourse of adolescent girls reflect understandings about health?” Within the context of this program, when the girls talked about health, it was very different from the way that health is taught in schools. Much of their concern in the discourse was mental health --- which they clearly tied to body image. They were very

interested in sharing in a safe social setting and had to be interrupted many times in order to move to the next activity. Even during the physical activity, they often laughed, smiled, and sang along when they knew the songs. They participated fully in non-traditional exercise when it was non-judgmental and inclusive. The discourse of these adolescent girls reflects profound understandings about health, and the influences and pressures upon them by the media, so they appeared to be eager to engage and take charge of their own health.

On the first night they were willing to talk about the pressures that they were feeling as girls. They talked about wanting to help other girls and were open to sharing their ideas with each other. This discourse continued throughout the four weeks. When given the opportunity to look at media messages, they were eager to deconstruct and reconstruct them. They enjoyed talking about the social messages from the media messages that pressured them to look a certain way or to buy a product. Through the discourse, they expressed understanding of concepts such as consumerism and the role of celebrities. They often had to be interrupted to move to the next activity during the discourse as they all wanted to share their thoughts.

The girls saw health through a social lens which included the ideas of being happy and feeling good. These girls were powerful encouragers of each other and of other girls they had never met through their voices in the artifacts. The girls resisted size comparisons and sought to be comfortable in their own skins. They were very concerned with mental health, being supported socially, being active and feeling good in general. Although a variety of food was offered and eaten at each session, the food itself was not discussed.

The third question asked, “When adolescent girls are encouraged to think critically about their health, how is this reflected in their media productions?” The participants were encouraged to think critically and their media was socially focused for the most part. The girls indicated that

they wanted to use their voices to encourage other girls to not worry about how they look, to love themselves, to focus on health not their size, and to continue to share these messages.

The participants' media productions revealed strong messages of encouragement for the girls who would see their artifacts on the website. Through their choices of songs, poems, memes, and images they acknowledged the pressures and they encouraged other girls to continue sharing positive messages.

The participants appeared to need the discourse in order to make sense of their understandings. Peer learning and sharing was very important for them. Throughout the process, the participants were able to recognize the potential harm in media messages.

With respect to technology, the girls were able to use any device, unassisted to create their message with no issues at all. One group used their phone, one group used the iPad, and the others used laptops or desk computers, seamlessly moving from discourse to artifact creation.

The fourth question asked, "What can be learned through the observation of adolescents engaged in a course on self-esteem and body image? The findings in this regard indicate that the girls were very supportive of each other, but needed modelling, guidance, and a safe space to share their ideas. They often built on and expanded each other's ideas which helped them to better understand and recognize media and social pressures to be perfect which according to them was thin, attractive, smart, and caring. The girls used strong media models to create their artifacts and to incorporate their own voices.

The girls worked on building community which may be challenging to do in a typical school setting, because the girls had much to say but indicated that they needed safe spaces to do this. The participants indicated that they sense what is happening in the media but they needed support with the words and concepts to help them explain what they were experiencing. They

were able to redirect media messages and often relied on strong role models from media to voice their messages.

The observation of these adolescents engaged in a course on self-esteem and body image provides support for combining health and media literacy teaching. Their enjoyment of the physical activity and the possible benefits that can be derived from it during these sessions invites the continuation of research which combines, rather than separates them (as is the case presently in many Ontario schools). These students were engaged and motivated to participate in every activity and to produce their artifacts.

## 6.1 Final Summary

The review of the literature examined the importance of approaching health in a more holistic way as the rise in sedentary and mental issues is continuing. Adolescence is an important time of development as decisions made about their health during this time often have life-long significance. Public schools, policy-makers, administrators and teachers in Ontario need to support adolescents with relevant HPE that is required beyond the one mandated credit. The critical value of health education needs to be taken more seriously and adolescents should be encouraged to take a much more active role in their health. Physical activity is a protective factor for self-esteem and body image issues, therefore various types of physical activities should be supported more actively in the schools. Critical media literacy and critical health literacy teachings have the opportunity to create a protective factor for adolescents that can increase empowerment and encourage resilient outcomes.

The findings from this research study show that adolescents feel the pressures, as explained in the literature review, of influences which can affect their mental health. When encouraged to think about diversity, the participants easily adopted the ideas of being unique and

appreciating differences. When asked to share their ideas, they were very responsive and excited. The majority of the girls, 17 out of 26, were able to create six media artifacts in very little time and in different mediums of their choice on the final night. Two of the artifacts reached the highest level, CMHL, two of the artifacts reached the next level of approaching CMHL, and two of the artifacts reached the level of interactive media health literacy. Given the opportunity, they used computers, their own phones, and an iPod with no technical issues.

Their voices added depth to the existing literature in that they expressed themselves in a way that showed understanding of the social construction of beauty and its consumer links. They felt compelled to share their message with other girls.

## 6.2 Educational Implications

The educational implications of this study are promising. This research shows that adolescent girls want to participate in their own health. They want to use their voices to inspire and empower other girls, especially for their mental health. Knowing that they could use their own voices created enthusiasm.

This research shows that girls can enjoy physical activity regardless of size or weight as the girls from the dance artifact articulated. The girls enjoyed the physical activities, the discussions about it, and the social elements. The girls enjoyed learning about critical media and critical health literacy. They were excited to deconstruct and reconstruct media messaging and were able to be taught this in a very short amount of time. Using technology to create media artifacts took about one hour of time. They easily chose their own medium using their own voices with no assistance.

### 6.3 Limitations of Research

There are some limitations to this research. It may not be transferable to a school setting as health and physical education are typically taught separately and often by different teachers in Ontario. The curriculum that was designed for this study is far different than the existing HPE curriculum that exists in schools in Ontario. Girls Inc. is an organization that inspires girls to be strong, smart, and bold. Nineteen of the girls had attended GIRLZONE before. Participation at prior sessions at Girls Inc. may have allowed them to respond faster and easier than girls who hadn't received prior self-esteem and mental health teaching. Also, this study is limited to four weeks and ten hours of observations and was not measured over time to seeing lasting results. Follow up sessions with the girls could measure these benefits more clearly.

### 6.4 Future Research

More research is needed to support the findings of this research in the areas of combining health and media education which has a critical component. More research should be done with combining these teachings as a way to give the adolescents a voice and use media as a way of engagement.

Combining physical activity with critical media and health literacy was shown to be beneficial and more research is needed in this area as well. Separating physical health from other health aspects may not allow for ideas of holistic health to emerge. Further research that works to measure the positive associations with combining these elements could be beneficial.

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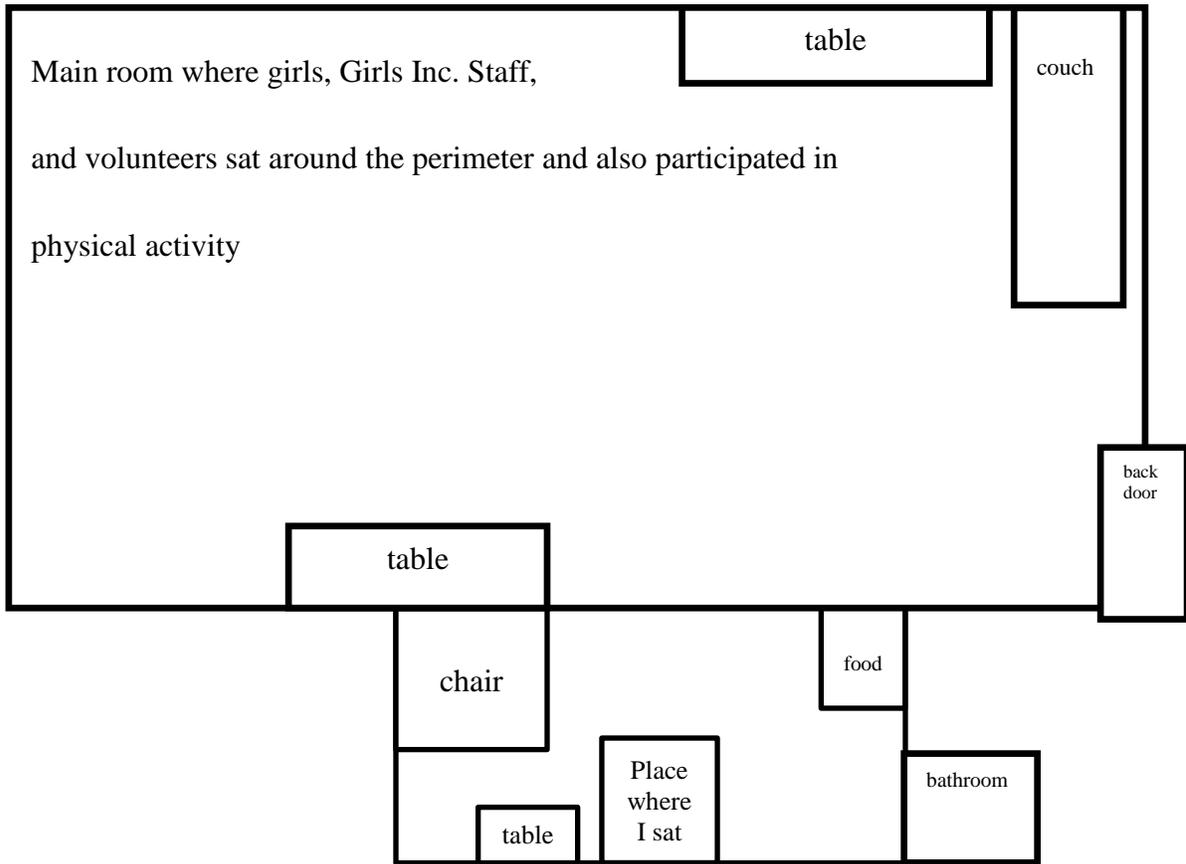
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# Appendix A – Layout of Girls Inc. Room



## Appendix B – Consent Letter



RESEARCH ETHICS BOARD  
OFFICE OF RESEARCH SERVICES

Parent Consent Letter

**Dear Parent or Guardian:**                      **September 29, 2015**

Your daughter is invited to participate in a research study entitled The Body Positive Project which is taking place during the Body Positive program offered in November 2015 by Girls Inc and UOIT. This study (# REB 14-139) has been reviewed by the UOIT Research Ethics Board and was originally approved on Sept 18, 2015. Please read this form carefully, and feel free to ask any questions you might have of the Researchers or the Ethics and Compliance Officer. If you have any questions about your daughter's rights as a participant in this study, please contact the Ethics and Compliance Officer at 905 721 8668 ext. 3693 or [compliance.uoit.ca](http://compliance.uoit.ca).

**Researchers:** Dr. Lorayne Robertson, Principal investigator, UOIT, email: [lorayne.robertson@uoit.ca](mailto:lorayne.robertson@uoit.ca)

Dr. Wendy Barber: Faculty of Education UOIT, email: [wendy.barber@uoit.ca](mailto:wendy.barber@uoit.ca)

**Graduate student:** Ms Joli Scheidler-Benns, UOIT, email: [joli.scheidler-benns@uoit.ca](mailto:joli.scheidler-benns@uoit.ca)

***Purpose:*** *Your daughter will be participating in a GirlsZONE (Girls Inc) program at the Girls Inc xxxxx office for 4 Wednesday evenings in November. The program is designed to talk about media literacy, help her feel more confident about her body image and physical activity, and help her to identify ways to be healthy. Girls can participate fully whether or not they want to be part of the research. We will be asking each girl to complete an anonymous survey before and after the program. During each of the four sessions your daughter will be asked to participate in short group discussions (community circles) with Girls Inc program leaders which will be recorded on a digital tape recorder. During the program, she and her team members will be researching body-positive sites on the internet (such as [www.teachbodyimage.org](http://www.teachbodyimage.org)) under the supervision of the researchers and gathering key body-positive*

messages. As part of Joli Scheidler-Benns' graduate research, the girls will be asked if they want to produce an image or slogan (media creation) to post anonymously on the [teachbodyimage.org](http://teachbodyimage.org) website.

**Potential Benefits:** We believe that the girls will benefit from participating in the four weeks because research tells us that girls can gain skills to be healthier mentally, physically, socially, and emotionally through participation in programs that engage them in thinking about a healthy body.

**Potential Risk or Discomforts:** Over the four nights of the program, your daughter may have questions about body image and the research team and Girls Inc are prepared to answer her questions or concerns. If anyone on the supervising team has any concerns about your daughter, this will be handled with the utmost professionalism. Girls Inc has a list of community resources for parents that is included in this handout. Participation in this research portion of the program is **COMPLETELY** voluntary, and your daughter may participate fully in the 4-week program without participating in the research. You or she may choose to have her withdraw and **NOT** participate in the research. This can be done simply by notifying one of the research team and this will **NOT** affect her participation in the 4-week body-positive program.

**Data:** The recordings of the group discussions will be written out in word format and the actual recordings will be destroyed by Dec. 31, 2015 by erasing the digital recording. If the girls mention anyone's name in the recording other than the researcher, the names will be removed and no identifying data will be collected or recorded in the written recording of the session. These written recordings will be stored on a jump drive and secured by the principal investigator, Dr. Lorayne Robertson and kept for 2 years.

**Confidentiality:** Girls Inc will know the names of the girls who participated in the 4 program sessions but they will not know the names of the girls whose parents consent to the research. Only the research team will know these names because they will collect the consent forms. All of the girls will be asked to participate in the survey and the focus groups, but data will be kept only for those participants with consent.

**Privacy:** Your daughter's privacy shall be respected. No information about her identity will be shared or published unless required by law. The research team will not use any girl's name or identifying details in reporting their research. Confidentiality will be provided to the fullest extent possible by law, professional practice, and ethical codes of conduct. UOIT has a code of conduct which is located @ <https://shared.uoit.ca/shared/department/opp/Governance/Office-of-the-Provost/Administrative-Code-1/Section-6/STUDENT%20CONDUCT%20POLICY.pdf>

*Joli Scheidler-Benns is UOIT student and registered with the Ontario College of Teachers (registration number is OCT#643557). Girls Inc has a code of conduct @ <http://www.girlsinc.org/about/code-conduct.html>*

***Right to Withdraw:*** *Your daughter's participation is voluntary and on the survey, she will be reminded to answer only the questions she is comfortable answering. As stated above, your daughter may withdraw from the study at any point during the program without any consequences. If you choose to withdraw her answers to the survey, please do this by December 31, 2015 before any reports on the findings are written. Parents may see a copy of the program survey questions by asking a member of the research team. The responses to the survey information will be held in strict confidence and discussed only with the research team. As a parent you should receive all of the information you need to make a decision about your daughter's participation.*

***Compensation:*** *Your daughter will receive a certificate for participating in this program whether she participates in the research portion or not.*

**Participant Concerns and Reporting:** *This research project has been approved by the UOIT Research Ethics Board on Sept. 18, 2015. If you have any questions concerning the research study, or experience any discomfort related to the study please contact the principal investigator by email: [Lorayne.robertson@uoit.ca](mailto:Lorayne.robertson@uoit.ca). Any questions regarding your rights as the parent of a participant, complaints or adverse events may be addressed to Research Ethics Board through the Compliance Office (905 721 8668 ext 3693). Note: By consenting, you do not waive any rights to legal recourse in the event of research-related harm.*

***Debriefing and Dissemination of Results:*** *Some of the findings of this study, such as the analysis of the artifacts created by the participants will appear in the thesis of the graduate student, and some of the*

*research will be written into academic papers. If parents of the participants are interested in learning of the results, please contact [Lorayne.robertson@uoit.ca](mailto:Lorayne.robertson@uoit.ca).*

Consent to Participate: Parent of Participant

- I have read the consent form and understand the Body-Positive study being described. I have had an opportunity to ask questions and my questions have been answered. I know that I am free to ask questions about the study in the future.
- I freely consent to my daughter's participation in the research study, understanding that I may discontinue participation at any time without penalty. A copy of this Consent Form can be made available to me from [Lorayne.robertson@uoit.ca](mailto:Lorayne.robertson@uoit.ca)
- I understand that my daughter may choose to create a digital artifact which will be shared with me before it is posted anonymously on the [www.teachbodyimage.org](http://www.teachbodyimage.org) website.

\_\_\_\_\_

(Daughter's name)

\_\_\_\_\_

(Parent's name)

\_\_\_\_\_

(Date)

\_\_\_\_\_

(Parent's Signature)

\_\_\_\_\_

(Signature of Researcher)

Parent's email (to send you the digital creation)

\_\_\_\_\_