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Graduate Studies

THE DEVELOPMENT, IMPLEMENTATION, AND EVALUATION OF *LOGAN STRIDES*, AN EIGHTH-GRADE AFTER-SCHOOL PROGRAM AT LOGAN MIDDLE SCHOOL, LA CROSSE, WI

A Graduate Project Report Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Public Health

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College of Science and Health
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THE DEVELOPMENT, IMPLEMENTATION, AND EVALUATION OF *LOGAN STRIDES*, AN EIGHTH-GRADE AFTER-SCHOOL PROGRAM AT LOGAN MIDDLE SCHOOL, LA CROSSE, WI.

By Kjirsten L. Anderson

We recommend acceptance of this Graduate Project in partial fulfillment of the candidate's requirements for the degree of Master of Public Health – Community Health Education

The candidate has completed the oral defense of the Graduate Project.

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ABSTRACT

Anderson, K.L. The development, implementation, and evaluation of the *Logan Strides*, an eighth-grade after-school program at Logan Middle School, La Crosse, WI. MPH-Community Health Education, August 2017, 189pp. (G.D. Gilmore)

This graduate project details the development, implementation, and evaluation of a six-week *Logan Strides* program, for the Logan Middle School in La Crosse, WI. The program was borne out of adolescent and community need. The creation of the five different weekly lesson plans was guided by the Purdue Extension-*Healthy Body Image: A Lesson Plan for Middle School Students*, the project author's research on related literature, along with her professional and personal experience, and a Logan Middle Teacher. The program experience, targeted vulnerabilities for that age group, along with promoting physical activity and healthful nutrition choices. At the end of the *Logan Strides* program was the opportunity for the students to participate in a local 5K. The program was assessed weekly with process evaluations, as well as a matched pre- and post-assessment, and lastly with a post-program questionnaire. The findings from the evaluations revealed participants' positive behavior change, healthful habits, and improved body image. Recommendations were drawn from the program findings and conclusions. The project author intended to have the health promotion program continue at Logan Middle School in the following school years, with volunteer help, and to provide an available guide for the development of similar programs in the future.

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INTRODUCTION

Overview

Statement of Purpose

The purpose of this project was to develop, evaluate, and implement *Logan Strides*, an eighth-grade girls' after-school program in La Crosse, WI, in which participants could increase their weekly physical activity levels, and fruit and/or vegetable consumption, capped with completing a 5k race at the end of the program. Participants were trained and educated by the project author using participant developed Specific, Measurable, Attainable, Realistic, Time-bound (S.M.A.R.T.) goals (Issel, 2014). This approach enabled the participants to develop appropriate individual S.M.A.R.T. goals borne out of their specific capacity levels for the physical activities during and after the program. Inherent in the program were ongoing opportunities for the participants to develop healthier body images.

Rationale for Conducting the Project

With the well-established knowledge of the physical, social, cognitive, and psychological benefits of physical activity, young people currently are failing to meet the public health guidelines for physical activity to be able to see any appreciable benefits from physical activity. Physical activity participation declines in the transition from childhood to adolescence years (Centers for Disease Control and Prevention (CDC), 2011; Cohen, Morgan, Plotnikoff, Barnett, & Lubans, 2015; Pearson, Braithwaite,

Biddle, Van, & Atkin, 2014). The most recently reported prevalence of obesity among American school-aged children (6-11 years) was 17.5% and adolescents (12-19 years) at 20.5% (Ogden, Carroll, Fryar, & Flegal, 2015). The high percentages of obesity are demonstrating the need for adolescent programs encouraging an active lifestyle.

Practical approaches are needed to increase the physical activity levels in La Crosse's adolescent population (CDC, 2017). A program that targets not only individual modification but also a social and environmental change in physical activity, would be very advantageous (Cohen et al., 2015). The school setting is an ideal location and environment for a physical activity promotion program because adolescents spend most of their time in school with their peers (Cohen et al., 2015; CDC, 2015). Physical activity has also been proven to positively affect academic achievement, regarding academic performance, educational behavior, and students' cognitive skills and attitudes (CDC, 2014).

Logan Strides was an after-school program developed by the author which engaged participants in physical activity once per week during the six-week program, coupled with the encouragement of further individual activity throughout each week. The program targeted the participants' individual lifestyle change while providing social and environmental support in the after-school setting. The program created a safe and healthy space for the participants not to be judged while experiencing positive reinforcement for healthful choices, which they may not have gotten in their home or social settings. Logan Middle School had established programs after-school such as track and field, but no non-competitive physical activity programs, further demonstrating the

rationale for having *Logan Strides* in that school and area. Overall, *Logan Strides* was a comprehensive educational and non-competitive fitness program.

Self-esteem and body image are a concern for many adolescent girls. Globally, 30–60% of adolescent girls perceive themselves to be too fat or overweight (Kaltiala-Heino, Lankinen, Marttunen, Lindberg, & Fröjd, 2016). This perception is inflated, compared to the obesity statistics of 17.5% and 20.5% for school-aged children and adolescents respectively (CDC, 2017; Ogden et al., 2015). Various sources routinely send media messages about the value of being thin, coupled with negative messages about being overweight (Paraskeva, Lewis-Smith, & Diedrichs, 2017). *Logan Strides* was a program designed to address adolescent self-esteem and body image perceptions.

The author has a background in health and fitness which drove the interest in developing *Logan Strides.* She was involved in the professional coaching and fitness area for three years prior to the development and implementation of *Logan Strides.* Positive nutrition and fitness influence is a passion for her. *Logan Strides* was an opportunity to create a program borne out of the community need, Logan Middle School need, and the author's passion.

Review of the literature

Introduction

Overweight and obesity are two separate health issues. Technically, overweight is defined as a "BMI (Body Mass Index) at or above the 85th percentile and below the 95th percentile for children and teens of the same age and sex. Obesity is defined as BMI at or above the 95th percentile for children and teens of the same sex" (CDC, 2016). More descriptively, "Overweight is defined as having excess body weight for a particular

height from fat, muscle, bone, water, or a combination of these factors. Obesity is defined as having excess body fat" (CDC, 2017).

Obesity is a leading public health issue across all ages in the United States and globally. Adolescent obesity is a concern because of the health implications caused by obesity throughout one's life (AHA, 2014; CDC, 2015; Golden et al., 2016; John Hopkins Medicine, 2017; Ogden et al., 2015). Although the prevalence rate of obesity has not increased recently, it remains consistent, affecting 12.7 million children and adolescents, or one in five school-aged children (ages 6-19) in the United States (CDC, 2015; Ogden et al., 2015). It also remains the number one health issue concerning parents in the United States (American Heart Association, 2014). The purpose of this literature review is to examine adolescent obesity in detail, identifying different causes and effects of adolescent obesity. The findings from this literature review were used by the author to encourage the development of the adolescent physical activity programs in communities, specifically at Logan Middle School in La Crosse, WI in the development of *Logan Strides.*

Problem Statement

According to the Centers for Disease Control and Prevention, currently, about one in five school-aged children (ages 6-19) are obese, a statistic that has more than tripled since the 1970s (2017). Research suggests overweight or obese children are more likely to remain overweight or obese into their later years in life (Golden et al, 2016; World Cancer Research Fund International [WCRFI], 2017). Adolescent obesity has immediate and long-term impacts on physical, social, emotional health (CDC, 2017). The public health crisis of adolescent obesity is a preventable issue. Obesity is the result of a

chronic caloric imbalance, an excess of calories consumed versus expended over an extended period. Many different factors can play a role in obesity: genetics, environmental factors, metabolism (how your body changes food and oxygen into energy), lifestyle related to eating and physical activity behaviors, social and individual psychology, culture, and socioeconomic status (CDC, 2017; Pulgarón, 2013). Lifestyle is a modifiable risk factor that can be addressed in every community in order to decrease obesity prevalence rates. A Pediatric Nurse Practitioner, Karen Rude, at Gundersen Health System that has been practicing for 32 years in La Crosse, WI, recognizes the trend of increased BMI and growth charts over the last 20 years. Rude sees about 14 patients every day she works, and the majority of the patients are overweight or obese (K. Rude, Personal Communication, 2017) (see Appendix A). A majority of obesity adolescents most likely could be prevented through environmental and lifestyle influences (ACS, 2017; AHA, 2014; CDC, 2015; Crawford et al., 2013).

Modifiable Causes of Adolescent Obesity

Environment. Where an adolescent grows up and spends their time (home, schools, and communities), can affect their ability to make healthful choices through the food and beverage options and affect the opportunities for physical activity that are available in those settings. The adolescents' access to healthful food choices is a contributing environmental factor that needs consideration. Unsupportive environments, such as a food desert, can make it difficult for healthful habits to prevail. "Other community environmental factors that affect diet and physical activity include the affordability of healthful food options, peer and social supports, marketing and promotion, and policies that determine how a community is designed" (CDC, 2016).

Major barriers to an individual that can influence obesity include: limited access to affordable, healthful foods; increased portion sizes, marketing and advertising of unhealthful food choices targeting adolescents, schools not conducive to good health; and community design promoting sedentary behavior (ACS, 2017). Communities are at the core of the obesity-related environmental factors for adolescents.

Lifestyle. The World Cancer Research Fund estimates that about 20% of US cancers are a product of poor lifestyle choices (2017). Poor lifestyle choices, such as, poor nutrition and physical inactivity, are behavioral tendencies that can lead to excessive weight gain, consuming high-calorie, low-nutrient foods and beverages, not being active and choosing sedentary activities such as electronic screen activities (CDC, 2016). According to the 2015 Youth Risk Behavior Surveillance Survey—United States, 2015, physical inactivity is the sixth leading cause of mortality, morbidity, and social problems among youth and adults. In 2015, only 27.1% of US high school students met the physical activity recommendations (i.e., physically active at least 60 minutes per day on all seven days of the week) (Kann et al., 2016).

There is conclusive evidence that a healthful diet is correlated with a healthy weight (ACS, 2017). Evidence shows that processed and red meat, potatoes, refined grains, and sugar-sweetened beverages and foods place an individual at higher risk for cancer and other health complications (ACS, 2017). Easily accessible healthful food options are important for adolescents developing their own positive lifestyle behaviors.

Effects of Adolescent Obesity

Health Effects. The 12.7 million children and adolescents in the United States are at an increased risk for many different chronic conditions that consequently can have lifelong negative implications. Some research states that longstanding increases in life

expectancy in the United States may level off or begin to decline in the first half of this century because of the obesity epidemic (American Cancer Society [ACS], 2017, p.46). Medical comorbidities associated with adolescent obesity include, but are limited to the following: asthma, metabolic risk factors (a large waistline, high triglyceride level, low HDL cholesterol level, high blood pressure, and high fasting blood sugar), gastroesophageal reflux, nonalcoholic fatty liver disease, gallstones, polycystic ovary syndrome, obstructive sleep apnea, bone and joint problems, and dental health (American Heart Association [AHA], 2014; Golden et al., 2016; Pulgarón, 2013). An obese adolescent is at increased risk for adult diabetes three times more than a non-obese adolescent, and five times more likely for cardiovascular disease (Golden et al., 2016). A sixth of all school-aged obese children are already experiencing heart disease risk factors, such as high blood pressure and lipid disorders (Crawford et al., 2013). Hypertension and prehypertension have been on the rise with adolescents since the 1990s (George, Tong, Wigington, Gillespie, & Hong, 2014). It has been predicted that one-third of the children born during this decade will develop type 2 diabetes, as well as have a shorter lifespan than their parents (Crawford et al., 2013). These chronic conditions will have a devastating drain on the United States economy and medical care system. According to the American Heart Association, the projected excess costs related to the current adolescent overweight and obesity prevalence is estimated to be $254 billion (2014). If obesity trends continue with their current levels, health care cost attributable to obesity could reach $861 to $957 billion by 2030, accounting for 16% to 18% of the US health expenditures (AHA, 2014).

As stated earlier, an individual is more likely to remain overweight or obese as an adult if overweight or obese as a child (ACS, 2017, p.46; Golden et al., 2016). The World Cancer Research Fund International's Continuous Update Project- an ongoing program to analyze global research on how diet, weight, and exercise affect cancer risk- indicates being overweight or obese as an adult increase the risk of cancer for a minimum of 13 different types of cancer (ACS, 2017, p.46). The cancers that the overweight or obese population are at increased risks for are as follows: breast (in women past menopause), colorectal, endometrial (lining of the uterus), esophageal, kidney, and pancreatic cancers. All the previous cancers are directly linked to obesity (ACS, 2016). In addition, according to the American Cancer Society, people who are overweight or obese may also be at an increased risk of other cancers, such as gallbladder, liver, Non-Hodgkin lymphoma, multiple myeloma, cervix, ovarian, thyroid, and aggressive forms of prostate cancer (ACS, 2016; Golden et al., 2016). There are varying degrees of risk related to different types of cancers. "Obese and overweight women are two to about four times as likely as normal-weight women to develop endometrial cancer (cancer of the lining of the uterus), and extremely obese women are about seven times as likely to develop the more common of the two main types of this cancer...Higher BMI (specifically, a 5-unit increase in BMI) is associated with a slight (10%) increase in the risk of thyroid cancer" (National Cancer Institute (NCI), 2017). Accumulating evidence shows obesity is also a risk factor for cancer recurrence and lowers the survival rate for many cancers (ACS, 2017).

Links between cancer and body weight are a complex issue and not yet fully understood. For example, the reason for being overweight or obese before menopause is

not associated with an increase in breast cancer (ACS, 2016). The timing of weight gain may also influence cancer risk, being overweight or obese as adolescent or child may cause an increased risk for cancer more than being overweight or obese later in life (ACS, 2016). The American Cancer Society states, "excess weight may affect cancer risk through many mechanisms, such as: immune system function and inflammation, levels of certain hormones, such as insulin and estrogen, factors that regulate cell growth, such as insulin-like growth factor-1, and proteins that influence how the body uses certain hormones, such as sex hormone-binding globulin" (2016).

Psychosocial Effects. In addition to poor health conditions, adolescent obesity is also associated with psychosocial morbidities: low self-esteem, depression, anxiety, poor social relationships, and poor quality of life (CDC, 2015; Golden et al., 2016; Nobles, Radley, Dimitri, & Sharman, 2016). These factors are not only a consequence of obesity but can also be precursors to obesity. Low self-esteem or depression, for example, can lead to overeating and sedentary behavior (American Psychological Association Help Center [APAHC], 2017). Obese adolescents are faced with a substantial amount of stress and prejudice in many different domains, such as relationships and school (CDC, 2015; Hagman, Danielsson, Brandt, Svensson, Ekbom, & Marcus, 2017). Adolescent obesity is a risk factor for bullying. Compared to their peers with normal weight children, obese adolescents are bullied and teased more often (CDC, 2015; Kaltiala-Heino, Lankinen, Marttunen, Lindberg, & Frojd, 2016). Adolescent obesity also has long-term social consequences such as lower-income and lower marriage frequency (Hagman et al., 2017). Psychosocial effects of adolescent obesity are serious issues for the individual and society.

Body image. Adolescents are exposed every day to unrealistic media images everywhere. Negative body image is now considered a public health issue, across all societal sectors (Paraskeva, Lewis-Smith, & Diedrichs, 2017). According to the National Eating Disorders Association, negative body image is defined as: "A distorted perception of your shape--you perceive parts of your body unlike they really are. You are convinced that only other people are attractive and that your body size or shape is a sign of personal failure. You feel ashamed, self-conscious, and anxious about your body. You feel uncomfortable and awkward in your body" (2016). Children start to demonstrate body dissatisfaction as young as age 6 (Tatangelo & Ricciardelli, 2017). In 1995 there was a study done on the Barbie and Ken doll distortion, the authors discovered unrealistic portions for both dolls if they were to be the human size (Brownell & Napolitano). Children are introduced to unrealistic body expectations at a very young age leading to the widespread concern with weight and shape in adolescent years. Roughly half of teenage girls and one-quarter of teenage boys are not happy with their bodies; the percentages are higher for overweight teenagers (Golden et al., 2016). It was found that airbrushed media images have a negative impact on one's self-body image (Paraskeva, Lewis-Smith, & Diedrichs, 2017). Adolescents with a more positive body image are more likely to have parental and peer attitudes that encourage healthful eating and exercising to be fit, rather than dieting (Golden et al., 2016).

Academic Effects. The CDC and numerous educators have been studying the link between academic performance and adolescent obesity (Bezold C., Konty K., Day S., Berger M., Harr L., Larkin M., Napier M., Nonas C., Saha S., Harris T., & Stark J., 2014; CDC, 2011; Hagman et al., 2017). According to a longitudinal study in New York

City, when adolescent physical fitness participation increased by greater than or equal to 20% there was a positive effect on student's academics performance. Conversely, a decline in physical fitness participation by greater than or equal to 20% has a negative impact on student academic performance (Bezold et al., 2014). Bezold et al. also found that changes in academic performances due to fitness levels were stronger in high-poverty students when compared to low-poverty students (2014). Hagman et al. (2017) did a study "to investigate whether the achievement of 12 or more years of schooling in young adults differs between subjects who have undergone childhood obesity treatment compared with a population-based matched comparison group." The researchers found the obese adolescents that had a decrease in BMI (Body Mass Index) demonstrated a higher achieved educational level compared to the adolescents who had ineffective obesity treatment. The study also correlated the timing of the treatment at an earlier age to be beneficial to the education level achieved (Hagman et al., 2017). Obesity can make it more difficult for an adolescent to keep up in school, whether due to illness or to avoid weight-based bullying (CDC, 2015). The ongoing research is showing a common theme of academic performance negatively correlated to adolescent obesity.

Obesity Prevention

As stated by the World Cancer Research Fund International, preventing child overweight or obesity is of paramount importance (2017). The right prevention approach needs to be taken with adolescent obesity prevention because of the sensitivity of the issue (Golden et al., 2016). Adolescent obesity is a complex issue; therefore, a multifaceted approach needs consideration when implementing prevention strategies (CDC, 2015).

Government & Community. Influence of community and government can typically be out the individual's direct control. The medical approach to fighting obesity is at an individual prevention level; population wide prevention should be a focus because of the epidemic level of this severe situation, it may also be more effective and economical (Crawford et al., 2013). The American Cancer Society called out to public, private, and community organizations to provide social and physical environments that support the adaptation and maintenance of a healthful lifestyle (2017, p.47). Community and school health promotion programs should be in place to affect policies, including but not limited to: community planning, school-based physical activity, and food services, that encourage smart food and physical activity choices (ACS, 2017, p.47). Many resources are available to help different sectors implement obesity prevention recommendations and evidence-based practices (CDC, 2015).

Prevention Strategies. Research shows that including family in prevention efforts is a positive influence when compared to adolescent-only approaches. The focus should be on healthful family-based lifestyle changes that can be sustained (AHA, 2014; Golden et al., 2016). Adolescent dieting (restricting calories with a goal of weight loss) has proven not to help the person in the long-term and is counterproductive to weight-management efforts. Dieting is also linked to eating disorders. Pediatricians and physicians should be persuading caregivers to create easily accessible healthful food and beverage options, increasing physical activity and limiting the amount of total entertainment screen time to less than 2 hours per day (Golden et al., 2016).

Caregivers should avoid comments about body weight and stay away from dieting efforts, both can cause body dissatisfaction. Parents are the role models for their

children, encouraging them to stay healthy and lead a healthy lifestyle for their adolescents is critical. Family members that "weight tease," are more likely to cause the development of overweight status, binge eating, and extreme weight control behaviors in girls and overweight status in boys (Golden et al., 2016). American Academy of Pediatrics states, "Adolescent girls who are teased about their weight at baseline were at approximately twice the risk of being overweight 5 years later" (2016).

The research to date on using Motivational Interviewing (MI) for addressing obesity and weight related issues have been positive (Golden et al., 2016). Miller and Rollnick define MI as "a collaborative conversation style for strengthening a person's own motivation and commitment to change" (2013, p. 12). The American Academy of Pediatrics (AAP) studied the effect of MI delivered by pediatricians. AAP found that pediatricians and dietitians who used MI to counsel families with overweight children were successful in reducing children's BMI by more than three percentile points compared to a control group not using MI (Golden et al., 2016).

Professional Organization Recommendations. "Adolescents should participate in at least 1 hour of moderate- or vigorous-intensity activity each day, with vigorous-intensity activity at least three days each week" (ACS, 2017, p.46). It is suggested to limit screen-based sedentary-behavior entertainment. Participating in abnormal physical activities could have many health benefits. The American Cancer Society recommends two and a half cups of vegetables and fruits each day, choosing whole grains over refined grain products, limiting consumption of red and processed meat, and choosing the healthiest options available to maintain a healthy weight (2017, p.46-47).

Summary

Chronic diseases are responsible for 7 of 10 deaths every year (CDC, 2017). Adolescent obesity increases adult diabetes and cardiovascular disease risk by nearly three and five times, respectively (Golden et al., 2016). Healthcare professionals are seeing children more often with obesity-related health and social implications (John Hopkins Medicine, 2017). The serious health implication, social repercussions, psychological and academic effects are all cause for the unwavering devotion to obesity prevention. The urgency for strategic policies, planning, programs, and action to prevent adolescent obesity is imperative (ACS, 2016; AHA, 2014; CDC, 2017; Crawford et al., 2013; Golden et al, 2016; Hagman et al., 2017).

Experts, due to evidence-based research, believe the school setting is a key for obesity prevention efforts (CDC, 2017; Crawford et al., 2013; Hagman et al., 2017). A comprehensive approach, including caregivers, schools, and community members, has shown to be effective in preventing adolescent obesity (CDC, 2017; Crawford et al., 2013; Golden et al, 2016; Hagman et al., 2017). Therefore, the value of after-school obesity prevention programs is significant for the adolescents today, leading into the workforce tomorrow, and the aging population thereafter.

Definition of Key Terms

Body Image – How one sees one's self when they look in the mirror or when they picture themselves in their mind. It encompasses: What a person believes about their appearance. How a person feels about their body, including height, shape, and weight. How a person senses and controls their body as they move. How a person feels in their body, not just about their body (National Eating Disorders Association, 2016).

Body Mass Index (BMI) – "is a person's weight in kilograms divided by the square of height in meters. For children and teens, BMI is age- and sex-specific and is often referred to as BMI-for-age. In children, a high amount of body fat can lead to weight-related diseases and other health issues and being underweight can also put one at risk for health issues" (CDC, 2015).

Chronic disease – Diseases that tend to be of long duration and are the result of a combination of genetic, physiological, environmental, and behavioral factors, also known as noncommunicable diseases (WHO, 2017).

Consistent *Logan Strides'* participant – A participant that was present at a minimum of four of the five lessons and present at the Three Rivers 5K.

Food Desert – A low-income census tract where either a substantial number or share of residents has low access to a supermarket or large grocery store. "Low income" tracts are defined as those where at least 20 percent of the people have income at or below the federal poverty levels for family size, or where median family income for the tract is at or below 80 percent of the surrounding area's median family income. Tracts qualify as "low access" tracts if at least 500 persons or 33 percent of their population live more than a mile from a supermarket or large grocery store (for rural census tracts, the distance is more than 10 miles) (United States Department of Agriculture, 2017).

Hypertension Stage 1 – Blood pressure is consistently ranging from 140-159/90-99 mm Hg. There are five different blood pressure categories: normal, prehypertension, high blood pressure (hypertension) stage one, high blood pressure (hypertension) stage two, and hypertensive crisis (emergency care needed) (American Heart Association, 2017).

Logan Strides – A Logan Middle School eighth-grade girls' after-school 6-week program in partnership with the Logan Middle School Homework Club. The program consisted of two volunteers, one health educator, and one Logan Middle School teacher. There were five weeks of lessons along with physical activity and an optional 5k walk/run.

Marketing – In this project, reference is made to social marketing in which there is assurance that a given product or program meets the needs of the members of a target audience, offering a benefit they value (McKenzie, Neiger, & Thackeray, 2009). The most important preliminary process in this type of marketing is segmentation in which sub-groups of the overall target population are identified. This phase of the marketing process involves assessments of needs, assets, and capacity of specified sub-groups of the target population (as detailed in Gilmore, 2012), followed by program-related methods addressing those specified sub-group distinctions. An additional component of the marketing process for *Logan Strides* addressed the various formats for announcing the program's availability.

Morbidity and Mortality Weekly Report (MMWR), Youth Risk Behavior Surveillance Survey – Ongoing source of high-quality data at the national, state, and large urban school district levels for monitoring health behaviors that contribute to the leading causes of mortality and morbidity among youth and adults in the United States. In 2015, in addition to the national data, 37 states and 19 large urban school districts obtained data representative of their high school students. YRBSS data are valuable for planning, implementing, and evaluating public health policies, programs, and practices in each of these jurisdictions (Kann et al., 2017).

Motivational Interviewing – "a collaborative, goal-oriented style of communication with particular attention to the language of change. MI is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion" (Miller & Rollnick, 2013).

Physical Activity – Any bodily movement produced by skeletal muscles that require energy expenditure, in a duration of 30 minutes or longer (World Health Organization, 2017).

Prehypertension – A state when blood pressure is consistently ranging from 120-139/80/89 mm Hg. People with high blood pressure are likely to develop high blood pressure unless steps are taken to control it (American Heart Association, 2017).

Screen-based time – Time spent in front of an electronic screen (e.g. television, computer, iPad, cellular phone, gaming devices) for entertainment, or educational purposes at school or at home for homework (CDC, 2016).

High-quality Foods Diet – A diet composed of high-quality foods that are unrefined, minimally processed foods such as vegetables and fruits, whole grains, healthy fats, and healthy sources of protein (The Nutrition Source, 2017).

SECTION II

METHODS

Introduction

Logan Strides was a six-week after-school program targeted for eighth-grade Logan Middle School girls. The author developed the program to positively enhance the participants' activity levels and healthful foods consumption leading up to completing a 5K walk/run. In Section II, the author presents an overview of the need, learning, and behavioral objectives for *Logan Strides*, aligned *Logan Strides* activities and procedures, and implementation date. The *Logan Strides* activities and procedures are in detail week-by-week, ending with the evaluation procedures and project timeline.

Summary of the Need

According to the CDC, obesity affects 12.7 million children and adolescents. For children 12-19-year-olds the obesity prevalence rate is 20.5%, highest of all the childhood age groups (2015). With the prevalence remaining stable, programs and policies need to be brought to the forefront to address this critical health crisis.

After-school programs are not a new concept. After-school programs are an important addition to school, especially for lower socioeconomic areas where the adolescents' time spent outside of school may not have positive lifestyle impactors (CDC, 2014; Crawford et al., 2013).

Learning and Behavioral Objectives

The learning and behavioral objectives were developed for *Logan Strides* borne out of the author's education and experience, as well as using the Purdue Extension – Consumer & Family Sciences *Healthy Body Image- A Lesson Plan for Middle School Students* developed by McKenzie, (available online https://www.extension.purdue.edu/extmedia/cfs/cfs-736-w.pdf), and guidance of an eighth-grade Logan Middle School teacher, Ms. Danielle Hartman.

Learning Objectives

- 100% of *Logan Strides'* week 1 participants will develop personal Specific, Measurable, Attainable, Realistic, and Time-bound (S.M.A.R.T.) goals for the *Logan Strides'* program.
- 100% of *Logan Strides'* week 2 participants will be able to list three reasons why physical differences in people are critical and should be recognized.
- 100% of *Logan Strides'* week 2 participants will be able to list two things that people can do to promote healthy growth and maturation.
- 100% of *Logan Strides'* week 3 participants will be able to describe how media images may be altered or enhanced.
- 100% of *Logan Strides'* week 3 participants will be able to describe the media's ideal body image.
- 100% of *Logan Strides'* week 3 participants will be able to list implied messages sent by the media when advertising.
- 100% of *Logan Strides'* week 4 participants will be able to list three characteristics of a healthful diet.
- 100% of *Logan Strides'* week 4 participants will be able to list two eating behaviors to avoid.

- 100% of *Logan Strides'* week 4 participants will be able to list a credible nutrition resource.

- 100% of *Logan Strides'* week 5 participants will be able to describe three benefits of living a healthful lifestyle.

- 100% of *Logan Strides'* week 5 participants will be able to describe three characteristics of a healthful lifestyle.

- 100% of *Logan Strides'* week 5 participants will be able to list the three components of a balanced exercise program.

Behavioral Objectives

- At the end of the *Logan Strides*' 6-week program, 90% of the participants will be able to walk and/or run a 5k.

- At the end of *Logan Strides*' 6-week program, 75% of the participants will be including physical activity at least three times into their weekly routines.

- At the end of *Logan Strides*' 6-week program, 75% of the participants will have increased their fruit and/or vegetable intake by at least two servings each week.

  Note: Criteria for the three behavioral objectives were set by consideration of the following criteria: to increase the participants' physical activity, to encourage a 5K, and to increase the participants' fruit and/or vegetable consumption through *Logan Strides* education, activities, and procedures.

Table 2.1. Methods: Logan Strides Pilot Program Objectives, Activities and Procedures, and Implementation Timeline (2017)

Objectives	Activities and Procedures	Implementation/Timeline
Learning Objectives		
100% of *Logan Strides'* week 1 participants will develop personal S.M.A.R.T. goals for the *Logan Strides'* program.	Educated the participants on what a goal is, goal setting, and S.M.A.R.T. goals.	April 4, 2017

Table 2.1.
Continued

Objectives	Activities and Procedures	Implementation/Timeline
	All participants wrote down a personal goal on the handout. Asked if any participants would like to share their personal goal. Handed out a S.M.A.R.T goal worksheet. Assisted the participants when needed. Take-home message. Handed out the Process Evaluation.	
100% of *Logan Strides'* week 2 participants will be able to list three reasons why physical differences in people are critical and should be recognized.	Guided by Activity 1: *Differences Are OK* from Purdue University. Discussion on regarding how people are different, explaining what we can change and what we cannot change. Explained ways people are different, explained some things you can't change some things you can change. Discussion on differences and why they are of value in our lives.	April 11, 2017
100% of *Logan Strides'* week 2 participants will be able to list two things that people can do to promote healthy growth and maturation.	Discussion on how diet, sleep, and physical activity can affect growth and maturation.	April 11, 2017

Table 2.1.
Continued

Objectives	Activities and Procedures	Implementation/Timeline
100% of *Logan Strides'* week 3 participants will be able to describe how media images may be altered or enhanced.	Played YouTube videos that detailed the digital alterations that are used with media images. Played a YouTube video that detailed individual's perception of "Average" vs. "Beautiful". Discussed the videos after they were shown.	April 18, 2017
100% of *Logan Strides'* week 3 participants will be able to describe the media's ideal body image.	Discussed, "What kind of messages the media is sending to girls, women, and the public?" Discussion on the "ideal body" type that is illustrated in media: For women: Tall and thin, like a fashion model. For men: Lean, muscular, athletic.	April 18, 2017
100% of *Logan Strides'* week 3 participants will be able to list implied messages sent by the media when advertising.	Discussed messages the media sends to the public.	April 18, 2017
100% of *Logan Strides'* week 4 participants will be able to list three characteristics of a healthy diet.	Reviewed the main food groups. Handed out, displayed, and discussed the *Harvard Healthy Eating Plate.*	April 25, 2017

Table 2.1.
Continued

Objectives	Activities and Procedures	Implementation/Timeline
100% of *Logan Strides'* week 4 participants will be able to list two eating behaviors to avoid.	Discussed, "What are eating habits to stay away from for a healthy diet?"	April 25, 2017
100% of *Logan Strides'* week 4 participants will be able to list a credible nutrition resource.	Reviewed the *Harvard Healthy Eating Plate* & the *Dietary Guidelines* website and why they are reliable sources.	May 2, 2017
100% of *Logan Strides'* week 5 participants will be able to describe three characteristics of a healthy lifestyle.	Discussed characteristics of a healthy way of life from the author's vantage point (serving as a role model). -a healthy diet, exercise routine, & sleep routine	May 2, 2017
100% of *Logan Strides'* week 5 participants will be able to list the three components of a balanced exercise program.	Discussed three components of an exercise program -Aerobic exercise, resistance training, & flexibility exercise. Provided an example of a weekly exercise/training program. Distributed blank weekly planners, allowing participants to create a weekly exercise-routine. Assisted participants in the creation of their personal routine, if needed.	May 2, 2017

Table 2.1.
Continued

Objectives	Activities and Procedures	Implementation/Timeline
Behavioral Objectives		
At the end of *Logan Strides*' 6-week program, 90% of the participants will be able to walk and/or run a 5k	*Logan Strides'* participants, participated in walking/running during *Logan Strides.* Encouraged to incorporate physical activity throughout the week. Participants were handed a handout of weekly exercise (in distance/minutes) for a suggested training program to follow until the Three Rivers 5K. Registered all the *Logan Strides'* participants for the Three Rivers 5k run/walk.	May 6, 2017
At the end of *Logan Strides*' 6-week program, 75% of the participants will be including physical activity at least three times into their weekly routines.	*Logan Strides'* participants, participated in walking/running during *Logan Strides.* Encouraged to incorporate physical activity throughout the week. Distributed handout of weekly exercise (in distance/minutes) for a suggested training program. Lesson 5 discussion of the different types of physical activity and the importance to the participants.	May 9, 2017

Table 1 is aligned with the methods section, depicting the *Logan Strides* learning and behavior objectives with the *Logan Strides* activities and procedures completed to

achieve each objective set; the table also shows the implementation date for each weekly lesson objective and events aligned with the objective.

Activities and Procedures

Logan Strides Planning & Preparation

The author had an ongoing professional interactivity with an eighth-grade Logan Middle School teacher, Ms. Hartman, who was the classroom host as well as the main volunteer in *Logan Strides.* Ms. Hartman and the project author exchanged communication regarding the need for an after-school girls program at Logan Middle School (see Appendix B). That was the starting point of development for *Logan Strides*. A *Logan Strides* program proposal (see Appendix C) was developed by the author February 1, 2017, and sent for approval to Ms. Hartman, as well as, the Logan Middle School principal, Mr. Jay Pica. The program proposal was approved by Logan Middle School February 9, 2017.

Five separate lesson plans were prepared for *Logan Strides.* The different weekly topics were S.M.A.R.T. goals, body image, media impacts on body image, nutrition, and physical activity. The lessons were intended to last 15-20 minutes, because of the need to split time between the lesson and the exercise. Immediately after the lesson, the participants were to be handed a lesson evaluation. After the evaluation, the participants were to go outside for the community walk/run. A project timeline/task outline was developed by the project author as a guide for her to follow throughout the program, and adjust when and where need be (see Appendix D).

A meeting with Logan Middle School's Homework Club Coordinator, Mr. Nickolas Brandt, and Ms. Hartman was March 7, 2017. The meeting covered a tour of Logan

Middle School, the *Logan Strides'* timeline, and marketing for *Logan Strides.* The Institutional Review Board (IRB) protocol was developed and submitted to the University of Wisconsin – La Crosse IRB Committee (see Appendix E) on February 20, 2017. The IRB proposal was approved February 22, 2017 (see Appendix F).

Marketing. The project author used different social marketing procedures. The social marketing for the *Logan Strides* program was completed to meet the needs of the Logan Middle School eighth-grade girls, demonstrating benefits they would value (McKenzie, Neiger, & Thackeray, 2009). Segmentation is a type of marketing in which sub-groups of the overall target population are identified. This part of the marketing process includes assessment of the needs, assets, and capacity of specified sub-groups of the target population (as detailed in Gilmore, 2012), the process is followed with program procedures addressing the specific sub-group identified. Essentially demographic information was assessed to identify sub-groups within the target population. The *Logan Strides* program target audience were eighth-grade girls who were not participating in after-school activities at that time. The marketing encouraged the non-active students from all social networks to join the after-school health promotion program.

The project author had various announcement procedures. A *Logan Strides* flyer was distributed to Logan Middle School teachers, along with a Teacher Announcement via Email, and a PA (Public Address) announcement was provided over the loudspeaker on March 15, 2017 (see Appendices G, H, & I, for the marketing communication). All marketing communication for *Logan Strides* between Logan Middle School and the author was done via email. A parental consent form was sent out to all of the participants' caregivers (see Appendix E). All liability issues for the program were

covered by the Logan Middle School Homework Club. There were 15 participants signed up for *Logan Strides* on April 3, 2017, to start Tuesday, April 4, 2017. Ms. Hartman and the project author decided on 15 participants to be the program participant capacity due to the responsibility of being outside with the participants for the exercise portion of the program and only having two program volunteers overseeing the participants.

***Logan Strides'* Week 1**

The first meeting of *Logan Strides* began with an introduction from the author to the group of nine present participants describing the author's background and the purpose of *Logan Strides*. Then, all participants introduced themselves to the author stating their name. Following the introductions, the participants completed two different pre-evaluations. The first evaluation was the *Student Nutrition Assessment* (see Appendix E for the full assessment), adapted from the *Detroit Healthy Youth Initiative*. The *Logan Strides* project author eliminated "PART A" of the original survey because of the non-relevance to *Logan Strides'* with approval from authors Mariane Fahlman and Nate McCaughtry. The first assessment collected the student's demographic information and assessed their nutrition knowledge. The second evaluation was *The Healthy Body Survey* (see Appendix E for the full assessment), authored by Abigail H. Natenshon, assessing their perceived body image; the assessment can be found on her recently updated website http://treatingeatingdisorders.com/healthybodysurvey.aspx (2017). Ms. Natenshon developed the survey based off her forty-eight years of experience as a psychotherapist and eating disorder expertise. Both pre-assessments were completed to gather baseline data regarding the participants' nutrition knowledge, self-efficacy, and body image. The

purpose of gathering the data was to track any changes that occurred over the period of the program.

After the assessments were collected, the lesson on S.M.A.R.T. goals began (see Appendix J for the full lesson plan outline). The goal of the lesson was to educate the *Logan Strides'* participants on what a S.M.A.R.T. goal is and how to create a personal S.M.A.R.T. goal (see Appendix K for the handouts). The learning objectives of the first lesson were for 100% of *Logan Strides'* participants would be able to describe what a S.M.A.R.T goal is and 100% of *Logan Strides'* participants will be able to create a personal S.M.A.R.T goal.

The author used the Lesson 1 – S.M.A.R.T goals plan. The lesson began with the discussion of "What is a goal, Setting goals, Benefits of goals, Personal vs. Professional goals." Then the participants were asked to write down a personal goal, (see Appendix K), and they retained that handout, rather than being collected by the project author. In addition to respecting the personalized nature of the goals, it also was considered important by the author that the participants would have their own individualized goals to refer to throughout the program. After the personal goal had been written, the definition of a S.M.A.R.T. goal was presented to the participants.

- S-Specific: What exactly will you accomplish? Answer the five "W's," Who, What, When, Where, and Why: I will finish the Three Rivers 5k, on May 6th, in under 35 minutes by preparing with the *Logan Strides'* program walk/run recommendations.
- M-Measurable: How will you know when you have reached this goal?

- A-Attainable: Is achieving this goal realistic with effort and commitment? Do you have the resources to achieve this goal? If not, how will you get them?
- R-Realistic: Do you have the resources to achieve this goal? If not, how will you get them?
- T-Time-bound: When will you achieve this goal? Set a date or time you will reach the goal by (see Appendix J).

A S.M.A.R.T. goal worksheet (see Appendix K), was handed out to the participants in order to aid them in creating their own S.M.A.R.T. goal. Ms. Hartman and the project author were there to assist the participants in the creation of their S.M.A.R.T. goals. The participants' goals were read through by the project author and a take-home message on the lesson was given by the project author.

After the lesson, the participants were handed a 5K training guide, (see Appendix L), created by the project author for the *Logan Strides'* participants. The guide was to intended serve as a suggestion for the participants' weekly physical activity to complete training for the 5K, given the allotted time for *Logan Strides.* The author used Hal Higdon's *5-K Training*: *Novice* found at http://www.halhigdon.com/training/50933/Novice-Training-for-your-first-5K , combined with the author's personal and professional past experiences to create the guide for *Logan Strides'* participants. The *Logan Strides'* participants, Mrs. Hartman, and the project author then went outside for a 2-mile community walk/run. Following the exercise, the participants were led in stretching outside by the project author. After the outside activities, the participants met back in the classroom to fill out an evaluation on the day's lesson and experience (see Appendix M). All the evaluations were collected, and

participants were encouraged to follow the 5K training guide until their next meeting April 11, 2017. Each week the author reviewed the aggregated comments and recommendations from the evaluations. The separate weekly evaluations were used for guiding the author to adjust the program appropriately as the program went along. For example, in the first week, the participants wrote and commented on their foot pain and discomfort. The author followed-up with recommending that they wear more athletic style shoes for the next meeting.

***Logan Strides'* Week 2**

The second meeting, Tuesday April 11, 2017, there were two participants that were not present at the first meeting that took the *Student Nutrition Assessment* and *The Healthy Body* assessment. In total eleven participants took the pre-assessments.

The lesson topic the second meeting was on body image (see Appendix N for the full lesson plan outline). The goal of the lesson was to increase awareness that everyone is different, everyone has different strengths and weaknesses, and that differences are to be embraced. The first objective of the lesson was that, 100% of *Logan Strides'* participants would to be able to list three reasons why differences in people are important and should be recognized. The second objective was, 100% of *Logan Strides'* participants would be able to list two things that people can do to promote healthy growth and maturation.

The lesson started with a brief recapitulation of S.M.A.R.T. goals, then went into a discussion about the various ways people are different from each other. The project author wrote the responses on the whiteboard as the participants answered. Then, the discussion brought to the participants' attention that everyone has different strengths and

weaknesses, and made up of different qualities. It was emphasized that everyone has different physical growth and maturation rates. The participants also were then asked if they had ever been picked on or teased about personal qualities or traits. The project author asked participants to think about how they felt after that action, reflect on how others could change their approach making the situation better, and what someone could do to cope with their feelings about that situation. Lastly, participants were asked if they had ever picked on someone else. The participants were invited to reflect on how the other person responded, and if they could replay the situation what they would do differently. The take-home message from lesson two was, "All of us are different in many ways, including physically, and some of these differences are within our power to influence, while others are out of our control. Each of us should focus on being the best we can be while showing respect toward others" (McKenzie, n.d.). The participants were then handed a lesson evaluation (see Appendix O), to be completed before going outside with Ms. Hartman, another Logan Middle School teacher (who wanted to participate the physical activity portion for that week), and the project author.

***Logan Strides'* Week 3**

For the third meeting of *Logan Strides',* April 18, 2017, the lesson topic was Media Impacts on body image (see Appendix P for the full lesson plan outline). The goal of the lesson was to increase awareness of the media's altered perception of normal, and deflate the myth of the ideal body type presented. The objectives for the lesson were by the end of the lesson the *Logan Strides'* participants would be able to: describe how media images may be altered or enhanced, describe the media's ideal body image, and list implied messages sent by the media when advertising.

The third week started with a YouTube video (https://youtu.be/zRlpIkH3b5I). The 2-minute, 39-second, video was about four women who were given their own impromptu photo shoots. After the photo shoot, a Photoshop expert retouched the photos to make the women in the pictures look like "cover models," changing their physical appearance. The women's reaction to seeing the pictures after the Photoshop touch-up was completed, was the point of the video. "I feel like it doesn't even look like me." Another woman asked, "Why would you want to make someone look so different?" demonstrating how using Photoshop can change perspective of what is normal and natural. After the YouTube video, participants were asked about their thoughts on the video. The *Logan Strides'* participants collectively agreed it was good to see how the industry changes perceptions.

The next 1-minute 14-second video shown titled "Dove Evolution," (https://www.youtube.com/watch?v=iYhCn0jf46U) was created by Dove Real Beauty Workshop for Girls. The fast-paced clip showed a woman sitting down, getting her makeup and hair done by professionals, then being Photo-shopped with the altered version of herself, changing her face shape to look thinner, blending her skin, lengthening her neck, and altering her eyebrows to put on a billboard. The video ended with the captions "No wonder our perception of beauty is distorted." After the second video, the participants were asked to discuss the ways the images were altered in the video. Followed by the question, "What kind of messages is the media sending to the girls and women, and the public?" The point that media messages could be reinforced by peers, friends, parents, family members, teachers, or coaches was made to the participants. The participants were then asked, "Do you believe there is an ideal body image?" The

responses from the girls that spoke were "Yes," they did believe there was an ideal body image. The following discussion question was, "Is it realistic to have the model image as a goal body type?"

The *Logan Strides* participants really enjoyed the videos and asked to watch another after the planned two YouTube videos were completed. The author reviewed many other video clips before deciding on the two selected for the lesson, so she went to a third YouTube video she had considered, which was from the Dove Campaign. The 3-minute 40-second video was titled, "Dove Choose Beautiful | Women all over the world make a choice" (https://www.youtube.com/watch?v=7DdM-4siaQw), was about women all over the world entering through a door with a large label of either "Beautiful" or "Average" right next to each other. The women had to decide if they fit in the "Beautiful" or "Average" category. The video showed the reaction of the women from the signs, comparing how they perceive themselves to how they think the world perceives them, or how they should perceive them, and their feelings after walking under the labeled door. The video ended with "#ChooseBeautiful" and asking the viewers, "What would you choose?" The project author then asked the *Logan Strides'* participants to reflect on the video and to themselves, think about what sign they would choose and why.

After the videos, the project author asked the participants to get up and move to a table with people they did not normally sit next to. The participants were then told to offer everyone at the table a compliment. After they had provided a compliment to others, they were given a piece of paper to write down a compliment to themselves. After the compliments, the participants were told the take-home message, "The media alters the "normal body type" perception. Most images show in mass media are heavily

altered with technology. These images cause dissatisfaction with our current body types, trying to reach the media ideal image/body. There is no ideal body type. The goal for everyone should be to maintain our health while staying active." The participants were then handed the lesson evaluation (see Appendix Q) before they went outside for a community walk/run of 2.5 miles.

***Logan Strides'* Week 4**

The lesson topic for the fourth meeting of *Logan Strides*, April 25, 2017, was Nutrition (see Appendix R for the full lesson plan outline). The goal of the lesson was to create awareness about healthy food choices and give resources on where to get accurate nutrition information. The objectives for the lesson were the *Logan Strides* participants would be able to: list three characteristics of a healthy diet and two eating behaviors to stay away from, and list a credible nutrition resource by the end of the lesson.

The fourth meeting started with a discussion facilitated by the project author. The project author wrote responses to the questions on the whiteboard as participants responded to the discussion questions. The discussion started with asking the participants, "What are the main factors in maintaining a healthy body weight?" and "What is a healthy diet composed of?" The participants were then given a handout of the *Harvard Healthy Eating Plate* (See Appendix S). The project author also had the *Harvard Healthy Eating Plate* on the projection screen. The project author walked the participants through the *Harvard Healthy Eating Plate*. She pointed out some of the differences that are between this food guide and other published food guides (e.g., *Choose My Plate*, found online at https://www.choosemyplate.gov/), such as no dairy

products on the depiction, no calorie recommendation, and the "Stay Active" reminder on the guide.

After the *Harvard Healthy Eating Plate*, the project author discussed with participants, ultra-processed food, portion control sizes, and eating habits to stay away from. Following the discussion, the project author briefly showed the participants the Dietary Guidelines website (https://www.choosemyplate.gov/dietary-guidelines). The project author suggested to the participants that they should stay away from non-credible nutrition sources because the internet has a lot of unreliable sources claiming they have a "healthy recipe" or "fast way to lose weight."

The original lesson plan had not had the nutrition label in the outline. From comments, the project author had heard from the participants and Ms. Hartman, she decided to add an additional handout and discussion on the nutrition label (see Appendix S). The project author came to the assumption, the participants were not getting informed of this information in school classes. The handout was a "side-by-side comparison" of the previous nutrition label compared to the new nutrition label (At that time the new label was not yet required to be on the packaging of food. The U.S. Food and Drug Administration required large manufactures to have the new label by July 26, 2017, allowing small businesses an additional year (2017). The author asked the participants what they noticed was different between the two labels, and followed with pointing out any missed changes in the two different labels. Participants were encouraged to ask questions throughout the lesson.

The take-home message for the fourth lesson was, "Healthy habits are essential to maintaining a healthy weight. Dieting to lose weight is not the key to maintaining a

healthy weight. Focusing on high-quality food in one's diet is the best. Don't believe everything you read on the internet about diet." The lesson evaluation was then handed out to all participants for week 4. Following completion of the lesson evaluation, the participants, Mrs. Hartman, a Logan Middle School teacher (who wanted to participate in the physical activity portion of that week), and the project author walked/ran 2.75 miles in the community.

***Logan Strides'* Week 5**

The last lesson and last meeting before the Three Rivers 5K walk/run on Saturday, May 6th, was on May 2, 2017, the lesson topic for that week was a healthy lifestyle, with a physical activity emphasis (see Appendix T for the full lesson plan outline). The goal of the lesson was to educate the participants on characteristics of a healthy lifestyle and the benefits of a healthy lifestyle. The objectives for Lesson 5 were, by the end of the lesson participants would be able to: describe three benefits of living a healthy lifestyle, describe three characteristics of a healthy lifestyle, and list the three components of a balanced exercise program.

The last lesson started with the question, "What makes up a healthy lifestyle?" The project author acknowledged the healthful diet and exercise routine as two main components; she added to the comments that a healthy sleep routine was another key component. The participants were then asked the long-term and short-term benefits of maintaining a healthy lifestyle. The project author wrote all responses on the whiteboard and filled in any unmentioned on the list from: Long-term: Reduce risk of chronic diseases, Heart healthy, Prevent, reverse, or control diabetes, Obesity, Save money, Less medical issues, and doctor visits. Short-term: More energy, Reduce Stress, Improve

memory, Improved self-esteem, Improved self-confidence, and Improved mood. Another benefit of maintaining a healthy lifestyle mentioned was interacting with others who care about healthy living. The project author then led the discussion to the physical activity qualifications and guidelines. At the end of the lesson she described what should be included in an exercise program: aerobic exercise, resistance exercise, and flexibility. The participants were then handed a blank weekly calendar (see Appendix U) for them to create their own exercise routine for the summer. The project author encouraged them to include activities that they enjoyed, so that the routine was more likely to be completed. As the participants were filling out the routines, the project author was there for assistance if needed by the participants.

The take-home message for the last lesson was, "Maintaining a healthy lifestyle will help with less medical issues in life. Diet, Exercise, and Sleep are main components to maintaining a healthy lifestyle. A balanced exercise program should include cardio, resistance training, and stretching." The last lesson evaluations were handed out the participants. Following the evaluation collection by the project author, the race-day logistics were discussed. Then *Logan Strides* participants, Mrs. Hartman, and the project author went outside for their last community walk/run together before the Three Rivers 5K. The intended distance for that day was 3 miles, because of time constraints the participants only made it 2.5-2.75 miles. The project author encouraged the participants to add in a 3-mile walk before the coming Friday, as the participants departed.

Logan Strides' Three Rivers 5K Walk/Run

Logan Middle School Homework Club funds covered the Three Rivers 5K sign-up and participation fees for *Logan Strides* participants, Mr. Hartman, and the project author. This was an unexpected contribution and greatly appreciated by everyone.

The Three Rivers 5K was set to start at 8:30 a.m. at Riverside Park, La Crosse, Wisconsin. The *Logan Strides* participants met prior to the 5K start at Riverside Park at 7:45 a.m. to receive their packets and gather as a group. One signed-up *Logan Strides* participant did not show up so, a mother of another participant took her place in the walk/run with the group. The six *Logan Strides* participants were all present and participated in the Three Rivers 5K. During the 5K event the project author ran with lead participant, Ms. Hartman walked with the participants in the middle, and the participant's mother walked in the back with the remaining participants. Following the first participant crossing the finish line, the project author went back to finish with participants yet to cross the finish line until all the participants crossed the finish line. One participant said with a huge smile on her face, "I've never felt anything like that before!" commenting on the feeling of crossing the finish line and completing the race. The participants posed for a group photo after the completion of the 5K. The project author congratulated participants on the achievement of the 5K completion. They parted ways after the project author told them the next meeting agenda of post-evaluations, healthful snack options, and recognition.

Logan Strides' Week 6

For the final meeting of *Logan Strides,* May 9, 2017, the plan was to go through the post-assessment, hand out completion certificates, go for a community walk/run, and

enjoy nutrition snack options. Three participants attended the final meeting. All three participants completed the same nutrition and body image assessments taken at the beginning of the program. Extra assessments were left with Ms. Hartman to give to participants to complete not present at the last meeting. The author collected the assessments from Ms. Hartman the following week. For the final meeting, the participants went outside for a 1.5-mile community walk with the project author. After the walk, the participants had the option to eat healthful snacks (a variety of different fruits and vegetables, hummus, guacamole, and a yogurt dip), brought by the project author. The idea was to show the participants different foods they might not have been exposed to previously. The participants were then presented with a certificate of completion (see Appendix V) for the *Logan Strides* program. The participants not present received their certificate of completion from Ms. Hartman along with the assessment forms to complete.

Changes or Additions in *Logan Strides*

Due to the time constraint with combining the weekly lesson along with the physical activity portion of the program, the author decided the warm-up portion was better left out of the weekly schedule. The participants were not performing strenuous exercise. The participants were walking about 40-90% of the time and running or jogging 10-60% of the time, based on her observations. The author thought the use of time was better spent on the distance portion, rather than stretching before the walk/run. The author informed the participants the benefits of stretching, encouraged stretching, and offered to stretch with participants after the completed exercise portion of the lesson. The project author made additions to the weekly lessons from participants' feedback on the process

evaluation, along with a conversation with Ms. Hartman (e.g. The nutrition label discussion and handout in Week 4).

Evaluation. The first meeting the participants completed two different assessments, a nutrition assessment, and a body image assessment. Both assessments located by the author had been developed and used for prior research. When choosing the assessments for *Logan Strides* the literacy level of the participants was considered. The author did not alter either assessment in order to retain the validity of both instruments. The validity of the *Student Nutrition Assessment* was validated on the professional recommendation that they calculate Spearman's rank correlation coefficients and kappa values. Both the Spearman's correlation coefficients and kappa values were considered acceptable, at above 0.5 and 0.4 respectively (Fahlman, M., McCaughtry, N., Martin, J., Garn, A., & Shen, B., 2012). The project author was given written approval to use both surveys from the original authors of the instruments (see Appendices W & X). The first evaluation was the *Student Nutrition Assessment* authored by Mariane Fahlman, and Nate McCaughtry (Appendix E), adapted from the *Detroit Healthy Youth Initiative,* "PART A" of the original survey was eliminated for the *Logan Strides'* assessment because of the non-relevance to *Logan Strides* (2012). The original "PART B" and "PART C" became "PART A" and "PART B" in the *Logan Strides'* assessment. The beginning of the *Student Nutrition Assessment* had demographic questions (See Table 3.1.). "PART A" went on to ask seven nominal data questions, assessing their nutrition knowledge and "PART B" was four interval questions assessing the participants' level of confidence in choosing healthy options in their diet. A sample question would be, "How confident are you that you could eat more fruits and vegetables?" The second evaluation

was *The Healthy Body Survey* (Appendix E), authored by Abigail H. Natenshon, involving ten true/false questions assessing their body image; the survey can be found on her website http://treatingeatingdisorders.com/healthybodysurvey.aspx (2017).

The first meeting of *Logan Strides,* nine girls attended and completed both assessments. In the second meeting, two new participants had not attended the first meeting; both participants completed the assessments prior to the start of their first *Logan Strides* meeting. Throughout the six weeks, five *Logan Strides'* lessons, and seven *Logan Strides* meetings, five to six girls participated consistently throughout the program. Six participants completed the post-assessments and were analyzed comparing the pre- to post- assessments.

After each weekly meeting, there was a process evaluation, developed by the author, about the lesson recently covered (see Appendix M, O, & Q) with the last meeting having an overall program evaluation (see Appendix Y). The process evaluations started with two Likert-scale questions and ended with three to four descriptive questions.

Intended Data Analysis Procedures

The project author projected to use the Kolmogorov-Smirnov Normality test for the analysis of the two Likert-scaled assessments. This non-parametric test was the chosen statistical analysis with each item, to signify if there was normal distribution or not within the five responses. The Kolmogorov-Smirnov Normality test was used in part because of the ordinal level of data; additionally, because the test would inform the author about the significance of the data per item tested. If there had been a larger sample size, with at least five responses per cell, the McNemar's test would have been selected for the data analysis for "PART A" and the *Healthy Body Survey.* The reason

for non-parametric McNemar's test selection would be because of the nominal data and to determine if there were differences on a dichotomous dependent variable between two dependent variables (pre/post). This statistical test is commonly used for pre-test/post-test analysis. Due to the *Logan Strides'* sample size, the project author could not use the McNemar's test. A descriptive statistical analysis was used in place of the McNemar's test for "PART A," and *Healthy Body Survey* data analysis, comparing and contrasting the participants' percentage correct on the pre-assessment versus post-assessment. Had the sample size been larger in the post-assessment, the statistical test used for "PART B" would have been the non-parametric Wilcoxon Signed Rank Test. This statistical test would be the best fit for "PART B" because of the ordinal level of data, the matched groups, and the distribution of the differences between the pre- and post-assessment. In place of the Wilcoxon Signed Rank Test, the project author used descriptive statistics. Descriptive statistics were also used to analyze the post-program questionnaire. The descriptive analysis describes the features of the data results and providing summaries of the samples.

Project Timeline

Table 2.2. Methods: Logan Strides' Detailed Timeline of Events and Tasks

Before the start of the program (By April 4th)		**Completed (2017)**
	Research, Proposal, and Protocol creation	January 14
	UWL IRB Protocol Submission	February 20
	UWL IRB Approval	February 22
	Parental Consent Forms sent to parents	March 15
	List of Participants	April 3
	All materials printed for program	April 3

Table 2.2
Continued

	Have Lessons Plans for week 1-5, including learning and behavior objective	March 17
Week 1 - April 4th		
3:45p	Introductions	April 4
3:47p	Pre-assessments (Nutrition and Body Image)	April 4
4:00p	Lesson 1-SMART goals	April 4
4:15p	Community Walk/Run: 2mi	April 4
4:35p	Cool Down, Stretch	April 4
4:40p	Week 1 Process Evaluation	April 4
4:45p	Depart	April 4
Week 2 – April 11th		
3:45p	Review SMART goals	April 11
3:50p	Lesson 2-Body Image	April 11
4:15p	Week 2 Process Evaluation	April 11
4:20p	Community Walk/Run: 2.25mi	April 11
4:45p	Depart	April 11
Week 3 – April 18th		
3:45p	Review Lesson 1 & 2	April 18
3:50p	Lesson 3-Media Impacts	April 18
4:12p	Week 3-Process Evaluation	April 18
4:15p	Community Walk/Run: 2.5	April 18
4:45p	Depart	April 18
Week 4 – April 25th		
3:45p	Review Lesson 1, 2, & 3	April 25
3:50p	Lesson 4-Nutrition	April 25
4:10p	Week 4-Process Evaluation	April 25
4:15p	Community Walk/Run: 2.75mi	April 25
4:45p	Depart	April 25
5K Registration	All Participants were registered for the Three Rivers 5K	May 1
Week 5 – May 2nd		
3:45p	Review Lesson 1, 2, 3, & 4	May 2
3:50p	Lesson 5-Physical Activity	May 2
4:10p	Week 5-Process Evaluation	May 2
4:15p	Race Day Preparation and Expectations	May 2
4:20p	Community Walk/Run: 2.5miles (intended on 3miles but time ran out)	May 2
4:45p	Depart	May 2

Table 2.2.
Continued

Race Preparation- May 5th		
12-8p	Packet Pick-Up @ La Crosse YMCA	May 5
May 6th - Race Day!		
7:45a	Meet at Riverside Park near the fountain	May 6
8:30a	Three Rivers 5k Walk/Run Start	May 6
9:30a	Group photo and congratulations	May 6
Week 6 – May 9th		
3:45	Post-surveys (Nutrition and Body Image)	May 9
4:00	Certificate of completion every participant in program	May 9
4:05	Community Walk: 1.5 miles	May 9
4:25	Healthful Snack Options	May 9
4:45	Program Closing Thoughts	May 9
After the Program		
	Ms. Hartman hands out the post-assessment to students that missed the last day	May 10-12
	Project author pickups up rest of post-assessments	May 16
	Dissemination of program findings	August 7

Table 2 depicts the series activities and events for *Logan Strides,* starting March 15, 2017 through August 7, 2017, which demonstrate the time commitment made by the author for the program. It is important to note that the development of this protocol was made through personal correspondence (see Appendix A), research, review of current literature, and it was not modeled off a specific program. *Logan Strides* was created to meet its own goals and objectives for Logan Middle School, in La Crosse, Wisconsin.

Summary

Logan Strides was a six-week program that took place after-school at Logan Middle School. The program began April 4, 2017 and went until May 9, 2017, with a local 5K as the program goal for participants. The program was designed to address the participants' vulnerabilities for that age and in today's society. There were five different weekly lessons incorporated into the program, coupled with exercise in the community.

The participants completed program and personal evaluations to assess program impact. Section III discusses the findings of the different evaluations.

SECTION III

FINDINGS

Introduction

The author developed, a six-week after-school program for eighth-grade girls titled, *Logan Strides* to positively impact the participants' activity levels, healthful foods consumption, and by completing a local 5K. Evaluations completed throughout *Logan Strides* were used to assess program effect and success with the participants. Section III addresses the findings and their alignment to the purpose statement. The findings are discussed in relation to the Pre- and Post- Assessment used in Appendix E, as well as the process evaluations found in Appendices M, O, & Q.

The findings from *Logan Strides* are divided into five different categories. The first set of findings depict the demographic data (market segmentation related, Gilmore, 2012; McKenzie, et al., 2009) collected from the *Logan Strides* pre- and post-assessments. The questions for the demographic data collected are found in Appendix E. The attendance for each *Logan Strides* meeting follows the demographic data. Following the participants' attendance are findings from the *Logan Strides* weekly process evaluations. The third set of data are representing the *Student Nutrition Assessment* "PART A" findings from Appendix E, followed by *Student Nutrition Assessment* "PART B" findings. The fourth set of data are the findings from *The Healthy Body Survey.* Finally, the fifth set of data represents the findings from the post-program evaluation.

Description of Findings from *Logan Strides*: Demographics and Attendance

Demographics

Logan Strides was comprised of 8th grade females the aged 13 and 14, with the majority being 14. Of the participants who took part in the pre-assessments the majority were Caucasian. The pre-assessment had a small percentage of an African American and an Asian present. The African American did not participate in the post-assessment. Of the participants who took part in the pre-assessments just under half of them identified as Not Hispanic or Latino, and just under half of the participants also identified as "Other". Of the participants who took part in the pre-assessments 45% (5 of 11) responded that they were "Other" for their ethnicity. Of the participants who took part in the pre-assessments, a small percentage identified being as Hispanic or Latino. Slightly over half of the post-assessment participants identified as Not Hispanic or Latino, as well as slightly over half identified with "Other".

Table 3.1. Findings: Logan Strides' Participants Demographics

Group		Pre-Assessment Participants (N=11)		Post-Assessment Participants (N=7)	
		n	%	n	%
Age	13	3	27	3	43
	14	8	73	4	57
Gender	Female	11	100	7	100
Race	Black or African American	1	9	0	0
	White	9	82	6	86
	Asian	1	9	1	14

Ethnicity	Hispanic or Latino	1	9	0	0
	Not Hispanic or Latino	5	45	4	57
	Other	5	45	3	43

Attendance

Logan Strides was a pilot program. The program attendance varied throughout the six-week duration (see Appendix Z). The first meeting, April 3, 2017 there were 8 participants. The second week, April 11, 2017, there were 9 participants. The third meeting, April 18, 2017, there were 8 participants. The fourth meeting, April 25, 2017, there were 5 participants. The fifth meeting of *Logan Strides*, May 2, 2017, there were 6 participants. The Three Rivers 5k, May 6, 2017, there were 6 participants. For the final meeting, May 9, 2017, there were 3 participants present. There were 7 participants who took both pre-assessment and post assessment. Of the seven who completed pre- and post-assessments, only six were analyzed. The reason for using six of the seven complete post-assessments in analysis was due to the participant not included only present at one of the sessions, she missed four of the five lessons for *Logan Strides*. The six analyzed pre- and post-assessments were of participants that were present at the majority of the meetings and participants who attended the Three Rivers 5K.

Description of Findings from *Logan Strides:* Lesson Evaluations

Lesson 1 - S.M.A.R.T. Goals: Quality

The first question on the process weekly evaluation used a Likert scale (1-poor, 2-fair, 3-good, 4-very good, and 5-excellent) to assess the quality of the session. The project author used a Kolmogorov-Smirnov Normality Test to signify if there was normal

distribution or not. The four following lesson questionnaires were analyzed using the Kolmogorov-Smirnov Normality Test for the first question in the process evaluation similar to Lesson 1, which assessed the lesson quality.

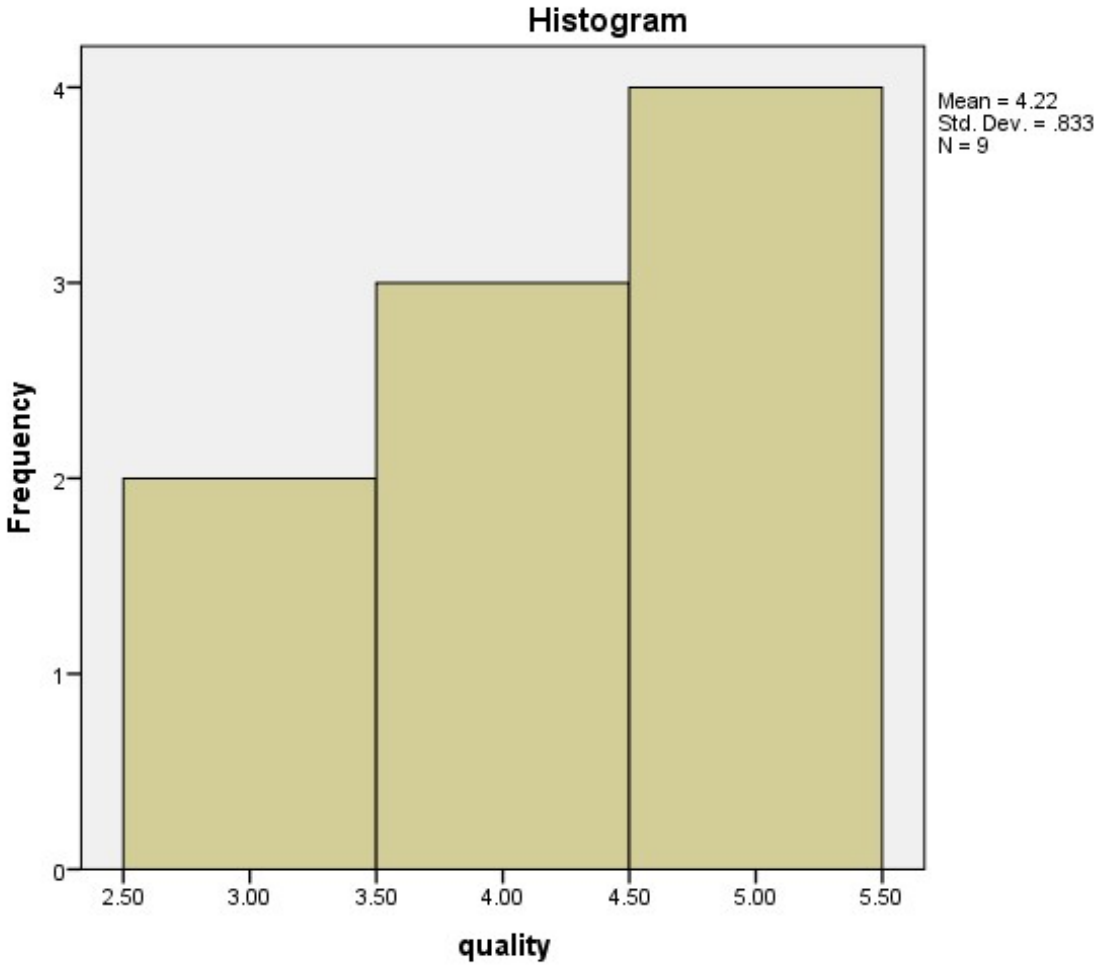

Figure 3.1. Findings: *Logan Strides* Process Evaluation Lesson 1-Quality.

Logan Strides Process Evaluation Lesson 1-Quality data were found non-significant ($p > 0.05$) using the Kolmogorov-Smirnov Normality Test ($SD = .833$, $p = .059$), and does not significantly deviate from normality. The mean value for the level of session quality was 4.22, meaning slightly higher than very good.

Lesson 1 - S.M.A.R.T. Goals: Influence

The second process evaluation question was another Likert scale style question (1-not at all influential, 2-slightly influential, 3-somewhat influential, 4-very influential, 5-extremly influential) which assessed the level of influence the session had on the participant. The project author used a Kolmogorov-Smirnov Normality Test again, for the second question in Lesson 1 and the follow four other lessons in the *Logan Strides* program.

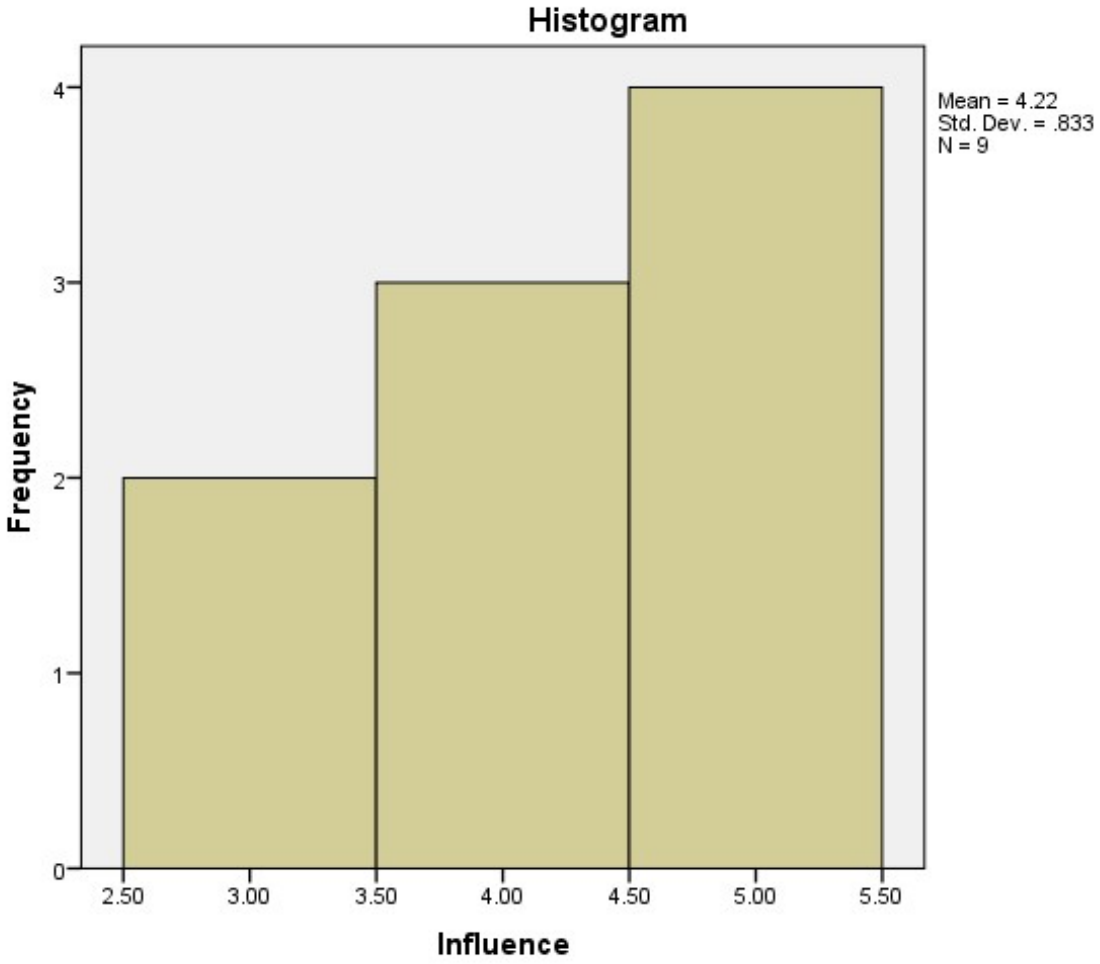

Figure 3.2. Findings: *Logan Strides* Process Evaluation Lesson 1- Influence.

Logan Strides Process Evaluation Lesson 1-Influence data were found non-significant ($p > 0.05$), using the Kolmogorov-Smirnov Normality Test ($SD = .833$, $p =$

.059), and does not significantly deviate from normality. The mean value for the influence level of Lesson 1-S.MA.R.T. goals was 4.22, meaning the influence was between "Very Influential" and "Extremely Influential" on average for the participants.

Lesson 1 - S.M.A.R.T. Goals: Descriptive

The first meeting and only meeting had the process evaluation at the end of the meeting, after the physical activity portion of the meeting. The reason for the change was the project author received responses on the first process evaluation regarding the walk/run portion of the meeting rather than the educational message. She then decided to move the process evaluation to the end of the educational portion of the meeting, before going outside for the physical activity portion. Additional reasoning for the change was the consideration of time; ensuring the evaluation was completed by the participants in the event the walk/run portion went up to the end of the session time. One theme from Lesson 1-S.M.A.R.T. (Specific, Measurable, Attainable, Realistic, and Time-bound) goals, was regarding the opportunity to go outside and participate in walking and/or running with friends. Regarding what could be improved, some of the participants responded that they wanted to be able to a run longer duration. Additional participants responded that they were experiencing some physical discomfort from the physical activity. The participants enjoyed the way the first lesson was set up. The project author suggested to the participants with physical discomfort to wear proper athletic footwear to the following meetings, and she gave examples of recommended stretches to do.

The final question for the participants the project author asked if they were planning to make changes in their lifestyle after the Lesson 1-S.M.A.R.T. goals discussion. The overwhelming majority responded yes, they were planning to make a

change(s). The follow-up question after asked, what specific changes did the participants plan to make. An example, was the participant wanted to make healthier choices regarding their diet and include more physical activity into their routines.

Lesson 2 - Body Image: Quality

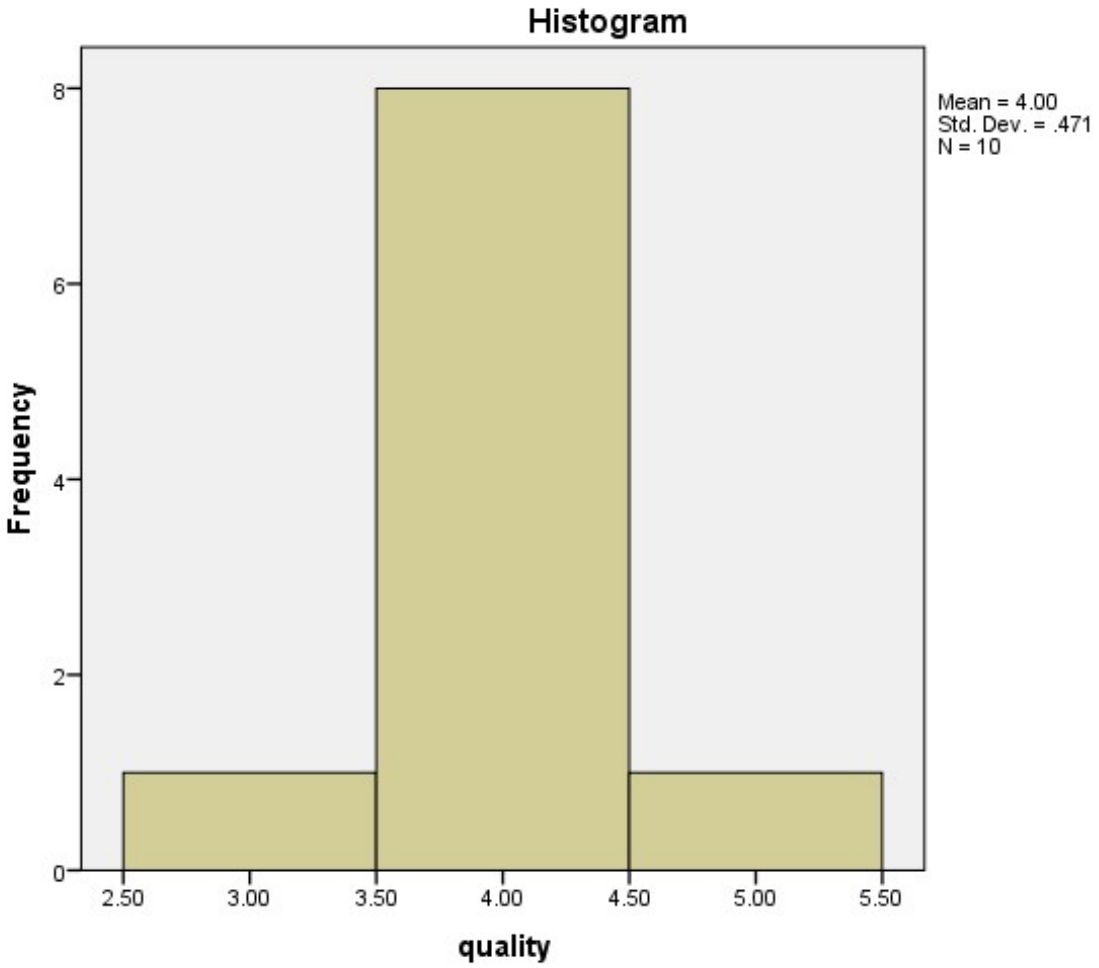

Figure 3.3. Findings: *Logan Strides* Process Evaluation Lesson 2-Quality.

Logan Strides Process Evaluation Lesson 2-Quality data proved to significantly deviate from normality ($p \leq 0.05$), using the Kolmogorov-Smirnov Normality Test (SD = .471, p = .000). The mean for the data was 4 meaning the participants on average thought the session was of "Very Good" quality.

Lesson 2 - Body Image: Influence

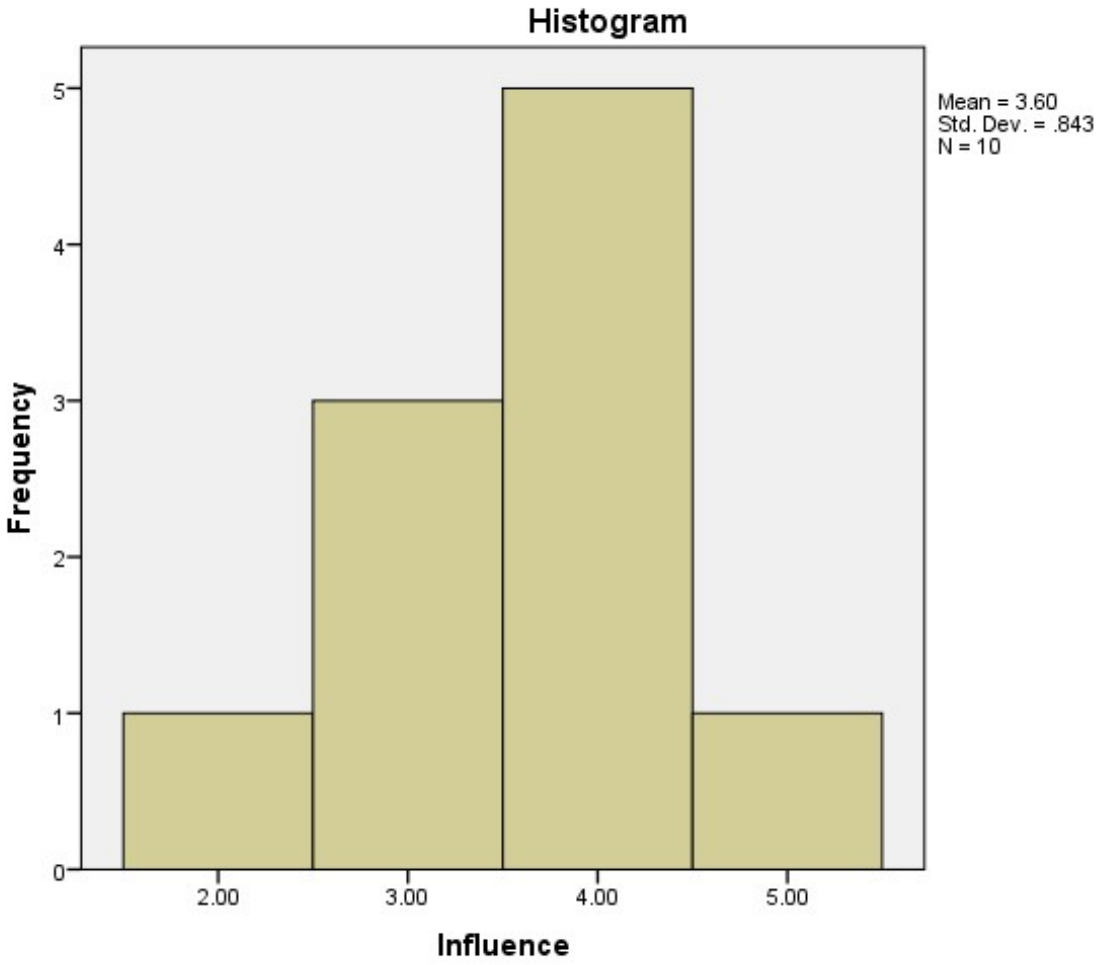

Figure 3.4. Findings: *Logan Strides* Process Evaluation Lesson 2-Influence.

Logan Strides Process Evaluation Lesson 2-Influence data proved to significantly deviate from normality ($p \leq 0.05$), using the Kolmogorov-Smirnov Normality Test (SD = .843, p = .023). The mean value of the lesson influence was 3.6, meaning between "Somewhat Influential" and "Very Influential."

Lesson 2 - Body Image: Descriptive

In Lesson 2-Body Image evaluation's the participants responded that they enjoyed listening to what their peers had to say about body image and that the lesson was

positively showing how different everyone is physically and intellectually. Two participants stated they would have liked more participation from the participants in the discussion portion. Another participant stated that she noticed a change from last week's session to the current, regarding her S.M.A.R.T goal. From these process evaluation comments, the author attempted to persuade more participants to converse by having longer pauses after the more talkative participants made their comments in the follow-up meeting discussions.

Lesson 3 - Media Impacts: Quality

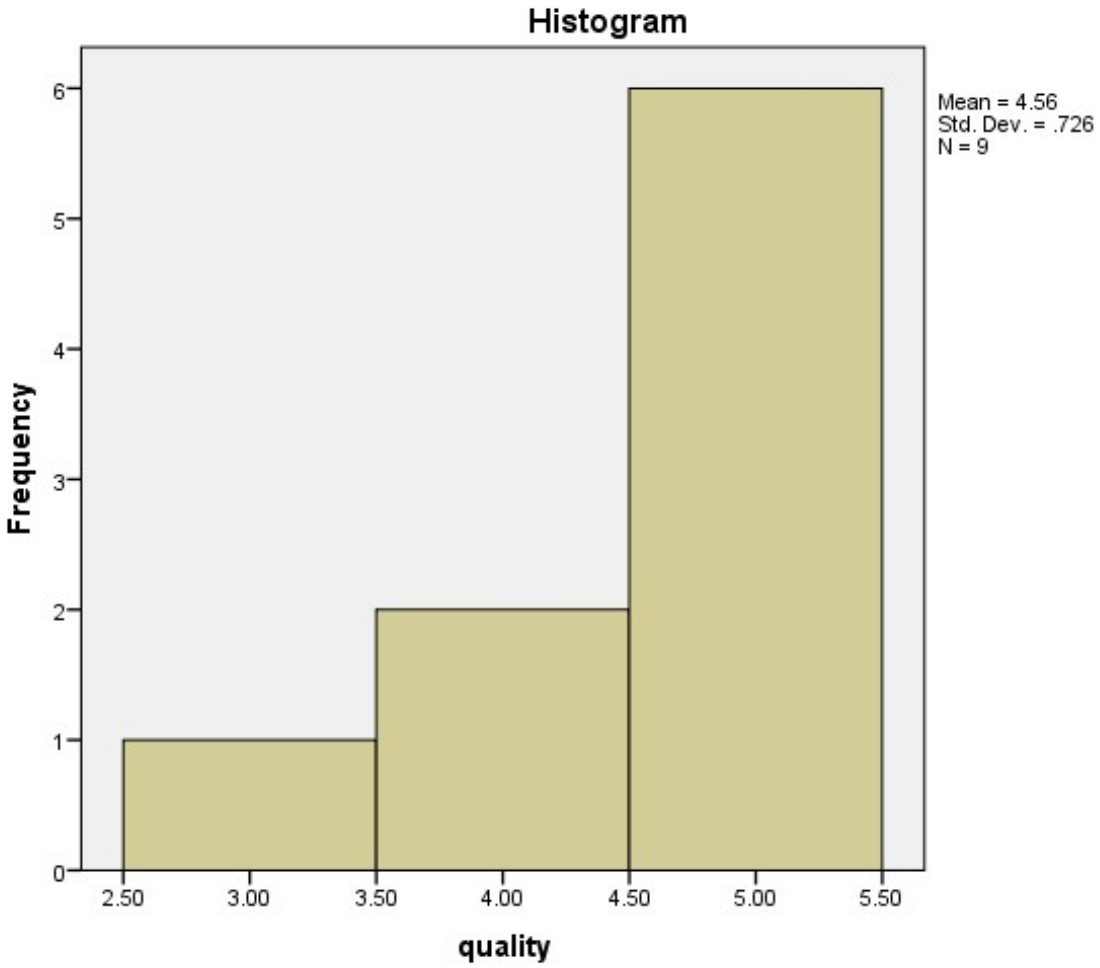

Figure 3.5. Findings: *Logan Strides* Process Evaluation Lesson 3-Quality.

Logan Strides Process Evaluation Lesson 3-Quality data proved to significantly deviate from normality ($p \leq 0.05$), using the Kolmogorov-Smirnov Normality Test (SD = .726, p = .000). For Lesson 3-Media Impacts the Kolmogorov-Smirnov Normality Test found the data to have statistical significance. The mean value of the lesson quality was 4.56, meaning the average of the participants thought the lesson quality was between "Very Good" and "Excellent."

Lesson 3 - Media Impacts: Influence

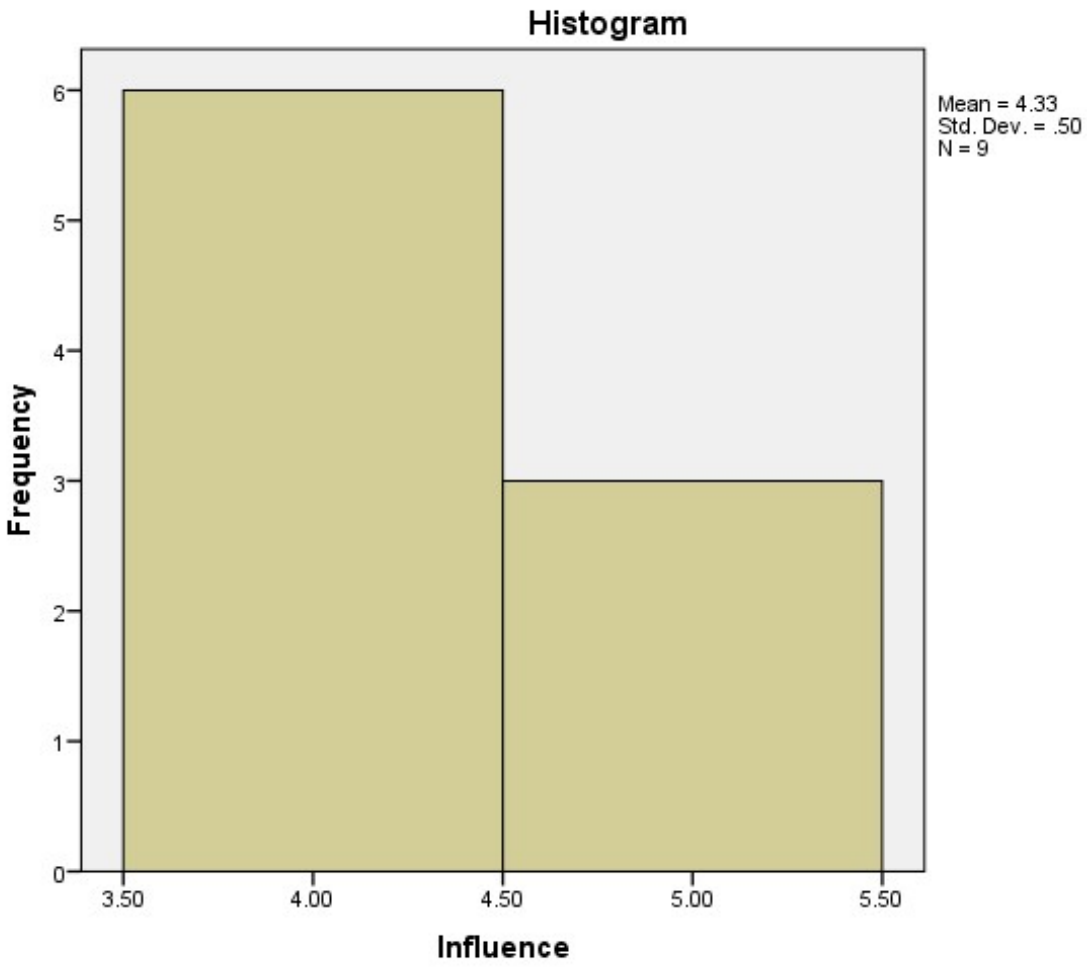

Figure 3.6. Findings: *Logan Strides* Process Evaluation Lesson 3-Influence.

Logan Strides Process Evaluation Lesson 3-Influence data proved to significantly deviate from normality ($p \leq 0.05$), using the Kolmogorov-Smirnov Normality Test (SD = .500, p = .000). The Kolmogorov-Smirnov Normality Test found the data for Lesson 3-Media Impacts to have statistical significance. The mean value for the data was 4.33, meaning the influence of Lesson 3-Media Impacts was between "Very influential" and "Extremely Influential."

Lesson 3 - Media Impacts: Descriptive

The participants' week three thoughts described how inspirational the lesson was to them and how it was nice to appreciate their own beauty. One participant would have enjoyed more videos on the media and body image. Due to time restraints, the project author fit in as many videos for the time allotted. A suggestion from a participant was to include the "Beautiful" and "Average" signs in the lesson. The video shown was of women all over the world making a choice to walk through a "Beautiful" or "Average" labeled door. The suggestion was to have the participants choose which door sign they would walk through, emulating the video. As that video was shown at the last minute, the project author noted to include in the recommendations in Section IV for future programs.

Lesson 4 – Nutrition: Quality

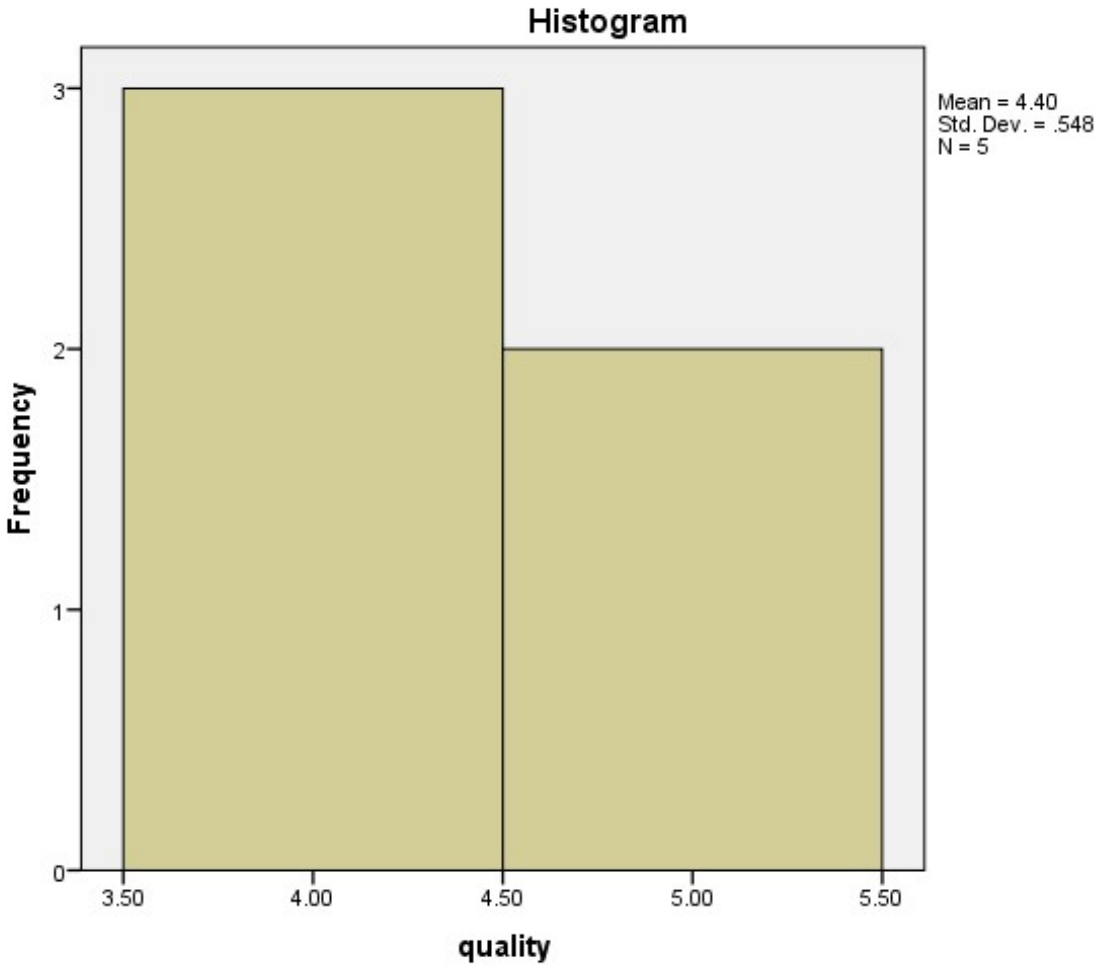

Figure 3.7. Findings: *Logan Strides* Process Evaluation Lesson 4-Quality.

Logan Strides Process Evaluation Lesson 4-Quality data proved to significantly deviate from normality ($p \leq 0.05$), using the Kolmogorov-Smirnov Normality Test (SD = .548, p = .026). The Lesson 4-Nutrition was found to be statistically significant for the quality of the session. The mean value for the session quality was found to be 4.4, meaning the session quality was between "Very good" and "Excellent" on average for the participants present at Lesson 4.

Lesson 4 - Nutrition: Influence

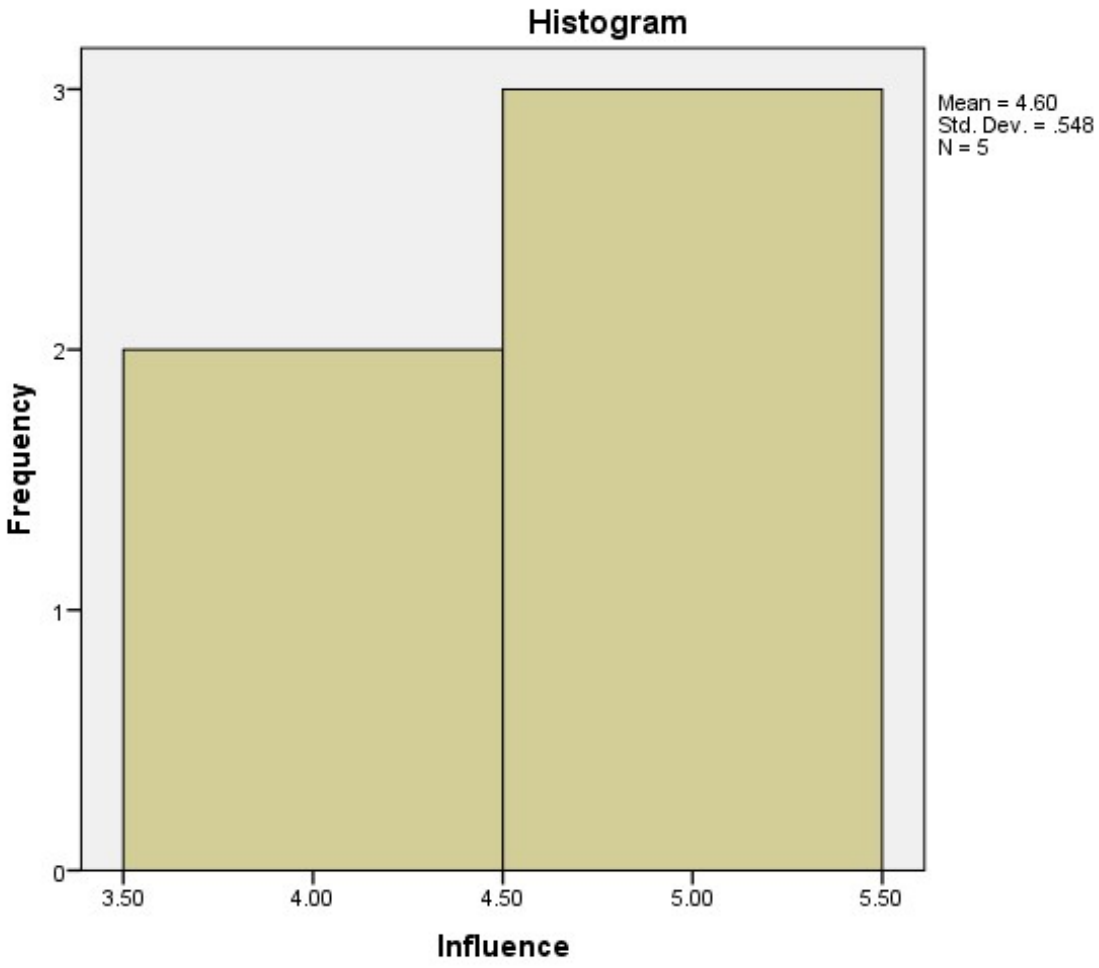

Figure 3.8. Findings: *Logan Strides* Process Evaluation Lesson 4-Influence.

Logan Strides Process Evaluation Lesson 4-Influence data proved to significantly deviate from normality ($p \leq 0.05$), using the Kolmogorov-Smirnov Normality Test (*SD* = .548, $p = .026$). The Lesson 4-Nutrition was found to be statistically significant for the quality of the session. The mean value for the session quality was found to be 4.6, meaning the session quality was between "Very Influential" and "Extremely Influential" on average for the participants present at Lesson 4.

Lesson 4-Nutrition: Descriptive

In reviewing the Lesson 4-Nutrition process evaluations, it was relieved that the participants enjoyed the discussion aspect of the lesson, along with learning what healthful diet-related choices were. A suggestion from a participant was to infuse a food log into the lesson.

Lesson 5-Physical Activity: Quality

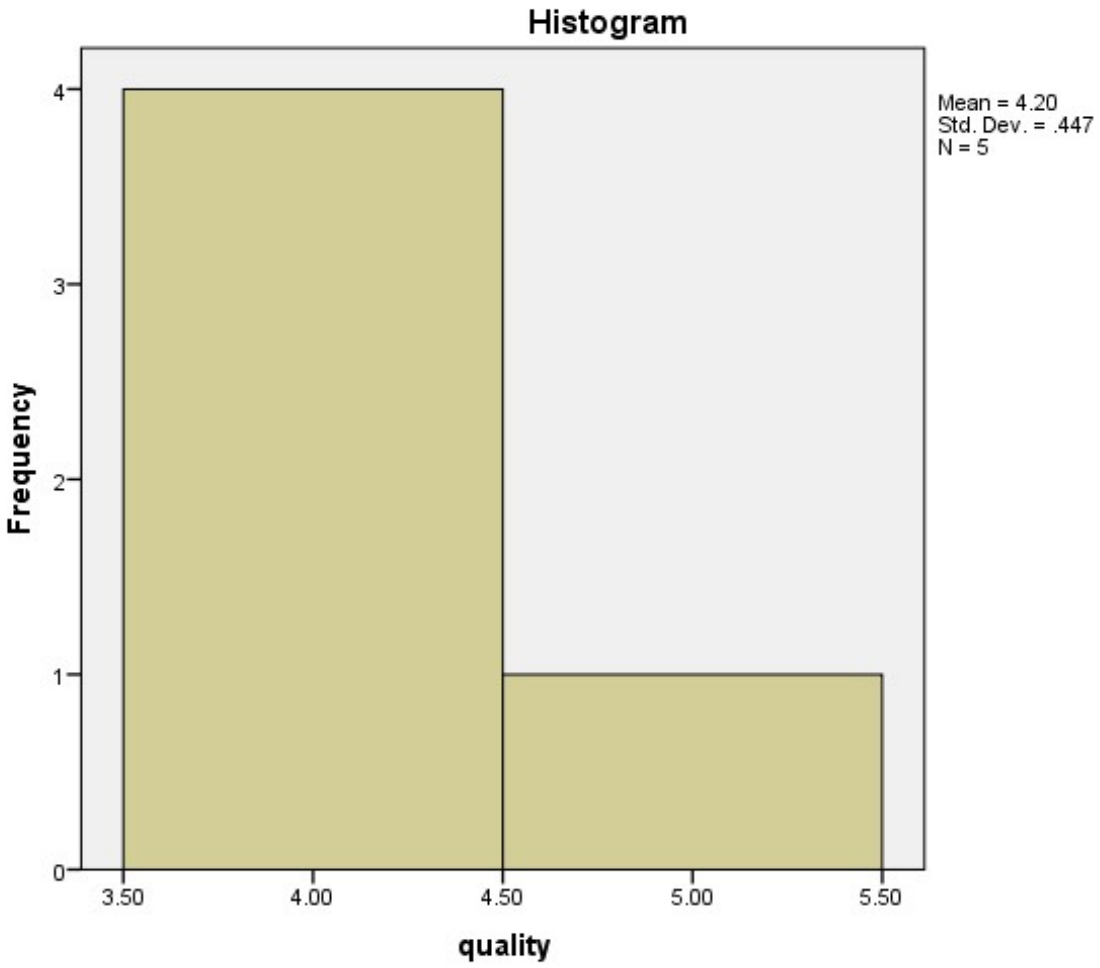

Figure 3.9. Findings: *Logan Strides* Process Evaluation Lesson 5-Quality.

Logan Strides Process Evaluation Lesson 5-Quality data proved to significantly deviate from normality ($p \leq 0.05$), using the Kolmogorov-Smirnov Normality Test (*SD* =

.447, p = .001). The session quality for Lesson 5-Physical Activity was found to be statistically significant using the Kolmogorov-Smirnov Normality Test. The mean value for Lesson 5's session quality was 4.2, meaning slightly over the "Very good" category.

Lesson 5-Physical Activity: Influence

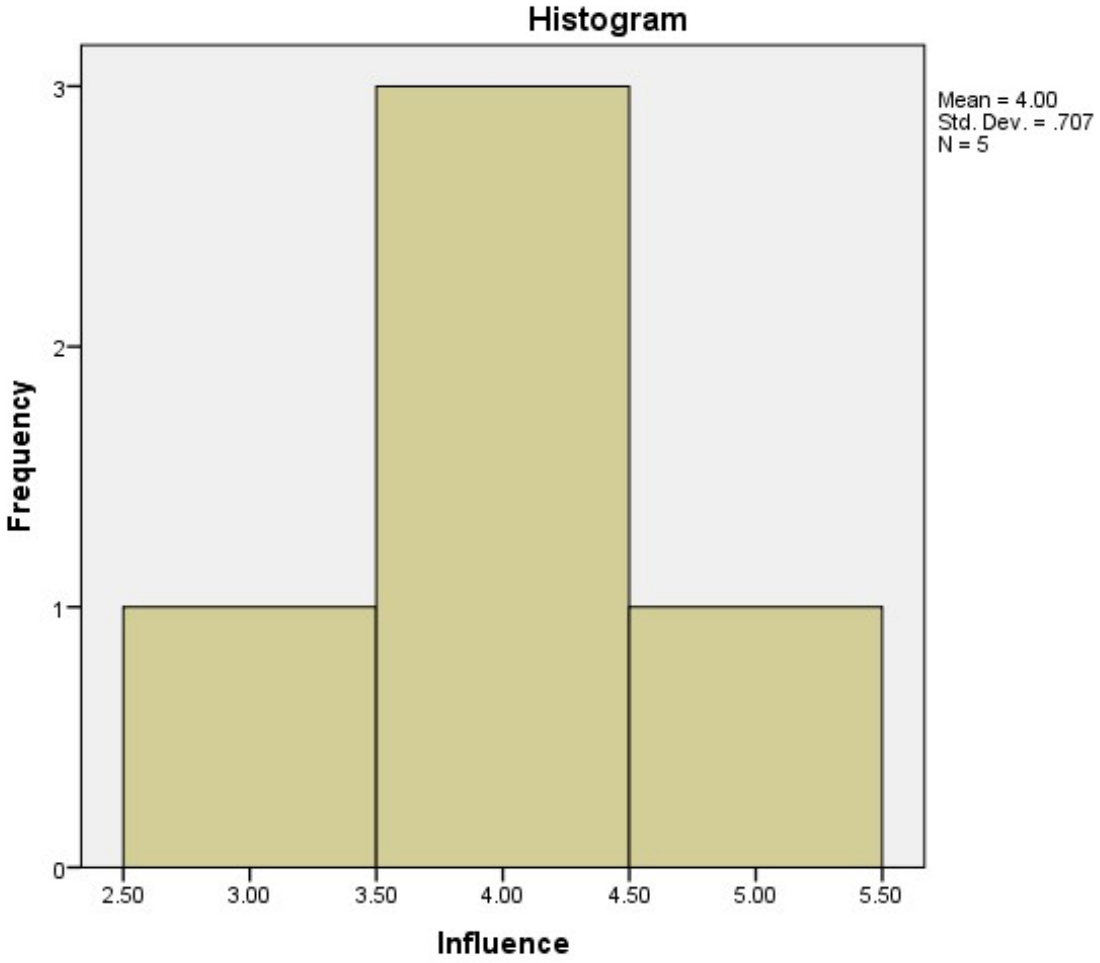

Figure 3.10. Findings: *Logan Strides* Process Evaluation Lesson 5-Influence.

Logan Strides Process Evaluation Lesson 5-Influence data proved to not significantly deviate from normality ($p > 0.05$), using the Kolmogorov-Smirnov Normality Test (SD = .707, p = .161). The mean score was 4, meaning it was on average "Very Influential" to the *Logan Strides'* participants.

Lesson 5-Physical Activity: Descriptive

The participants attending Lesson 5-Physical Activity, commented on how they enjoyed the lesson and learning new facts along with healthful suggestions for activities.

Description of Findings: Pre-/Post-Assessment Results

For the pre- and post-assessment comparison of "PART A", "PART B", and *Healthy Body Survey*, the author used descriptive analyses to review the effects of the six-week program intervention because of the small sample size. Both assessments were taken by the same six participants that had a high participation rate in the *Logan Strides* program. If there was a larger sample size with at least 5 responses per cell, the project author would have used the McNemar's test, a non-parametric test comparing the pre- and post-assessment in a 2x2 table. The non-parametric McNemar's test would be a more appropriate statistical measurement for "PART A" due to the nominal data.

Nutrition Assessment PART A

In "PART A" of the evaluation the participants were told, "Please answer the following questions as honestly as you can. There are no right or wrong answers, simply answer each question honestly. Please circle the most appropriate response" (See Appendix E).

Table 3.2. Findings: Logan Strides Pre-/Post-Assessment "PART A" Nutrition Assessment-Knowledge.

Question (**Correct Answer**)	Pre-Program Participants Response (N=6)		Percent Correct	Post-Program Participants Response (N=6)		Percent Correct	Change (+/-)
	T*	F*	%	T*	F*	%	%
1. What you eat can make a difference in your chances of getting heart disease. (**TRUE**)	**5**	1	83	**5**	1	83	0
2. What you eat can make a difference in your chances of getting cancer. (**TRUE**)	**2**	4	33	**5**	1	83	+50
3. People who are overweight are more likely to have a higher risk of health problems than people who are not overweight. (**TRUE**)	**5**	1	83	**5**	1	83	0
4. I know how to design a plan for better nutrition if I want to. (Answer Varies due to personal choice)	2	4	N/A	6	0	N/A	N/A
5. French fries are a "nutrient dense" food. (**FALSE**)	0	**6**	100	0	**6**	100	0
6. The word "lite" on a food package means low fat. (**FALSE**)	3	**3**	50	4	**2**	33	-17
7. The word "lean" on a food package means that food is fat free. (**FALSE**)	4	**2**	33	4	**2**	33	0

Key: T*=True, F*=False
N/A=not-applicable due to the item calling for personal preference.
Bolded data = columns 2, 3, 5, 6, those values are the correct answer for the assessment

The pre- and post-assessment of "PART A" suggest there was in relatively no increase in nutrition knowledge in the proportion of participants following *Logan Strides*.

There was a dramatic positive increase with the concept that "What you eat can make a difference in your chances of getting cancer." There was a negative increase in the concept that "The word 'lite' on a food package means low fat." Participants did have large increase in the knowledge to create a better nutrition plan for themselves if they wanted to (Question 4). The reasoning for the findings of "PART A" may be due to the socio-economics of the area, as well as the capacity to obtain the knowledge in the amount of time given for the educational portion of *Logan Strides.*

Nutrition Assessment PART B

For the pre- and post-assessment comparison of "PART B", the project author used descriptive analysis again. If there was a larger participation rate in a follow-up program they could use a paired sample t-test to compare the data. The non-parametric Wilcoxon Signed Rank Test would be the best statistical measurement for the participant's pre- and post-assessments in a large sample.

In "Part B" of the evaluation, the participants informed, "Please answer the following questions as honestly as you can. There are no right or wrong answers, simply answer each question honestly. Please circle the most appropriate response" (see Appendix E). The confidence levels for the Nutrition component of the assessment were given on a Likert-scale, from "not at all confident" which aligned with a value of one to "very confident" which aligned with a value of seven.

Table 3.3. Findings: Logan Strides Pre-/Post-Assessment "PART B" Nutrition Assessment-Confidence.

Question	Pre-Program Response (N=6)		Post-Program Response (N=6)		Change in Participant confidence
	Out of 42	%	Out of 42	%	%
8. How confident are you that you could eat more fruits and vegetables?	36	85.7	38	90.5	+ 4.8
9. How confident are you that you could eat less fat?	30	71.4	27	64.3	- 7.1
10. How confident are you that you could drink less pop?	34	81	28	66.7	- 14.3
11. How confident are you that you could eat healthy at a fast food restaurant?	30	71.4	24	57.1	- 14.3

The findings from "PART B" comparing the pre- and post-assessment were found to be perplexing. Question 8. "How confident are you that you could eat more fruits and vegetables?" had an increase in self-efficacy, which matched with the behavioral objective met (At the end of *Logan Stride*s' 6-week program, 75% of the participants will have increased their fruit and/or vegetable intake by at least two servings each week.). Question 9, 10, and 11, were found to have a loss in self-efficacy. The project author assumed the lower the participant's self-efficacy in those three questions due to the her, providing the participants with knowledge and creating awareness for the healthful choices, and the actual difficulty the participants may have had encountered in making the healthful choices.

Healthy Body Survey

For the pre- and post-assessment comparison of *Healthy Body Survey*, the author again used descriptive analysis. For a larger sample size, this assessment would be

analyzed with the McNemar's test, a non-parametric test comparing the pre- and post-assessment, like "PART A".

Table 3.4. Findings: Logan Strides Pre-/Post-Assessment Healthy Body Survey.

Questions as stated in the "*Healthy Body Survey*" (ANSWERS)	**Participant Response**						
	Pre-assessment (N=6)		**Percent Correct**	**Post- assessment (N=6)**		**Percent Correct**	**Percent Change (+/-)**
	True	**False**	**%**	**True**	**False**	**%**	**%**
1: I know that very skinny models and actresses have unhealthy eating and exercise lifestyles. I must not model myself after them. (**TRUE**)	**2**	3	N/A	**4**	2	N/A	N/A
2: No one can know how fit or unfit I am simply by looking at me. (**TRUE**)	**5**	1	83.3	**5**	1	83.3	0
3: Body shapes and sizes vary from one person to the next. No two bodies can or should look the same. (**TRUE**)	**4**	2	66.7	**5**	1	83.3	+ 16.7
4: Kids become overweight because they eat too much. They need to eat less. (**FALSE**)	0	**6**	100	0	**6**	100	0
5: You will be thinner if you skip breakfast. The fewer your meals, the thinner you become. (**FALSE**)	1	**5**	83.3	1	**5**	83.3	0
6: Sweets are not good for you. (**FALSE**)	5	**1**	16.7	4	**2**	33.3	+ 16.7
7: Eating fat in your food makes you become fat. (**FALSE**)	4	**2**	33.3	1	**5**	83.3	+ 50
8: I worry that the more I eat, the more weight I will gain. (**FALSE**)	3	**3**	50	1	**5**	83.3	+ 33.3

Table 3.4.
Continued

9: If I am overweight, I deserve to be teased or not accepted by my peers at school. (**FALSE**)	0	**6**	100	0	**6**	100	0
10: A person can gain a pound or more from eating a serving of cake, meat, or ice cream. (**FALSE**)	3	**3**	50	1	**5**	83.3	+ 33.3

The first question was non-applicable (N/A) because a participant left that question blank in the pre-assessment. The findings from the pre- and post-assessment of the *Healthy Body Survey* were all positive changes, where changes occurred. The greatest change occurred with the statement "Eating fat in your food makes you become fat." Statement 8 and statement 10, "I worry that the more I eat, the more weight I will gain." and "A person can gain a pound or more from eating a serving of cake, meat, or ice cream.", were also found to have an increase in positive correlation. Lastly statement 3 and 6, had a slight increase with a positive association, "Body shapes and sizes vary from one person to the next. No two bodies can or should look the same." and "Sweets are not good for you."

Description of Findings: Post-Program Evaluation

The post-program evaluation was given to the participants a week after the program completion, on May 16, 2017, to assess the behavior objectives of the program. The first question assessed how much physical activity the participants were including in their weekly routine. Four participants reported including physical activity three times a week, and two participants reported including physical activity five times a week.

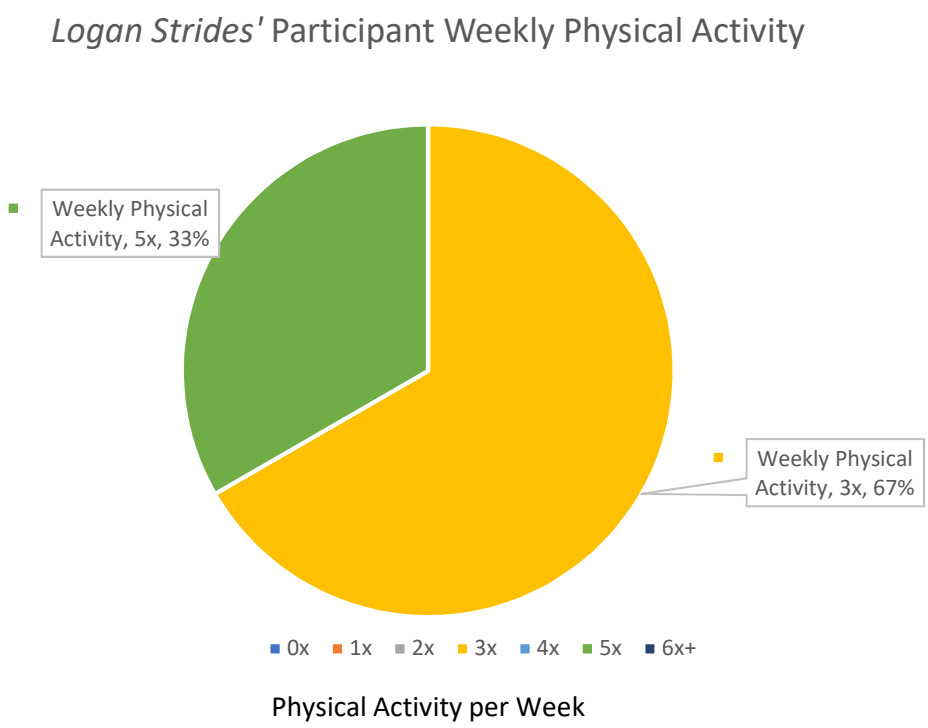

Figure 3.11. Findings: *Logan Strides* Post-Program Questionnaire: Participants Weekly Physical Activity Levels.

The second question was assessing if the participants fruit and/or vegetable consumption had increased. All the participants reported an increase in fruit and/or vegetable consumption. The participants ranged from 2-3, 4-5, and 6+ servings of fruit and/or vegetable increase in their weekly diet (Figure 2). Two participants reported 2-3 servings, one participant 4-5 servings, and one participant 6+ servings. Two participants did not specify the amount of their fruit and/or vegetable serving increase.

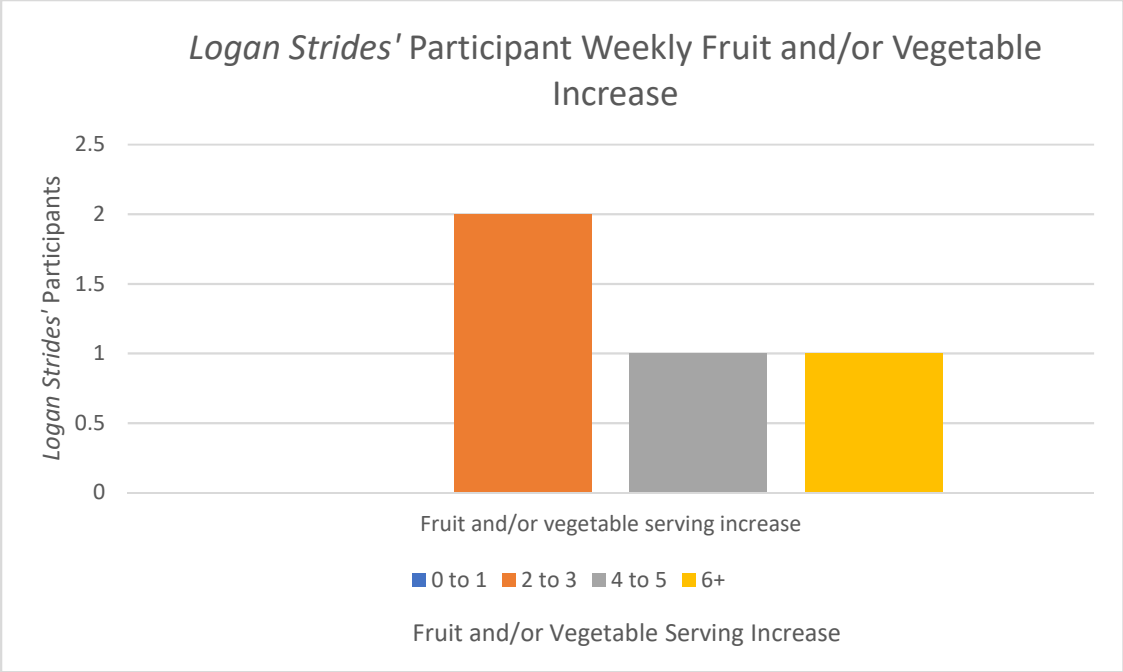

Figure 3.12. Findings: *Logan Strides* Post-Program Questionnaire: Participants Weekly Increase in Fruit and/or Vegetable Consumption.

Findings Aligned with the Purpose

The findings from the process evaluations demonstrated the overall "very good" "to excellent" quality rating from the participants, with an average quality rating of 4.28 of the five lessons combined. The findings found the overall average influential lesson rating to be 4.15, which was slightly above the "very influential" rating. Both findings demonstrate the participants connectivity to the weekly activities and procedures incorporated in the lessons.

The results of the findings from the post-program questionnaire show a positive correlation with the participants in meeting 100% of the behavioral objectives for *Logan Strides.* All the participants participated in the Three Rivers 5K. All the participants increased their fruit and/or vegetable consumption by at least 2 servings per week. Lastly,

the participants were including physical activity into their weekly schedule at least three times per week.

The findings from the pre- and post-assessments found a positive correlation with body image change. The project author connected the positive change in the *Healthy Body Survey* with the high ratings and positive comments on the process evaluation for Lesson 3-Media Impacts. "PART A" findings demonstrated little change, when comparing the pre-assessment to the post-assessment. A positive change in the statement "What you eat can make a difference in your chances of getting cancer" was found. All the participants responded they would "know how to design a plan for better nutrition if (they) want(ed) to." The highest influential lesson was Lesson 4-Nutrition, meaning that lesson presumably left a positive impact on the participants, allowing them to design a plan for better nutrition if they wanted to. A negative correlation was found with "PART B." Comparing the process evaluation comments to the "PART B" assessment results, found evidence to show a connectivity to Lesson 4-Nutrition along with participant excitement about the content in the lesson, the conclusion that to see through with the healthful diet choices was difficult and not attainable for the environments and surroundings they were in.

Activities Aligned with the Evaluation

The activities and procedures were assessed weekly with the process evaluation. Lesson 2-Body Image and Lesson 3-Media Impacts targets the *Healthy Body Survey*. The findings demonstrated the most change in this part of the pre-and post-assessments, one factor for this relationship could be, two lessons were devoted to the topic of this assessment. Lesson 4-Nutrition was aligned with "PART A" and "PART B" sections of

the pre- and post-assessments. The topic is very broad; the project author had the task to cover a variety of nutrition information in a short amount of time, this could be a reason for the little change in nutrition knowledge for the participants.

Reviewing Evaluation Criteria

This was the first implementation of the program. Without the prior knowledge of the program occurring it could lower the consistent participation rate. The *Logan Strides* program initially had the limit of participants for its capacity. The number dropped dramatically the first session. Looking retrospectively at the weekly process evaluations less with the lowest quality and the least influential to the *Logan Strides'* participants was the lesson April 11, 2017, Lesson 2-Body Image. The lesson that was rated the highest quality was Lesson 3-Media Impacts. The most influential lesson to the participants was reported as Lesson 4-Nutrition.

Barriers

Barrier 1: Participant Paperwork

The participants commented in the overall *Logan Strides* program evaluation that they would have enjoyed less paperwork for the weekly meetings. The paperwork was necessary for the project author to gauge how the participants perceived the program, as well as track the effectiveness of the program, and the degree to which learning and behavioral objectives were met throughout the program. While participant feedback from a program is critical, less paperwork in the program for participants would be beneficial for a future program such as *Logan Strides.*

Barrier 2: Two Different Focuses in One Meeting

The project author valued the time she had been granted for the program. After the first session, she realized how quickly the time passed, due to the meeting being split into two different focuses (the education portion and the physical activity portion). To get a good message across and have the participants grasp the understanding in the time allotted for the education portion was difficult in some weeks. Near the end of the program the participants would run out of time to fit in the full mileage for the activity portion. The project author appreciated every minute with the girls, but to fit a lesson, evaluation, and physical activity in an hour-long meeting, she at times felt rushed. Additional time would have been used for both the lesson and the physical activity portion.

Barrier 3: Participant Interest

The *Logan Strides'* participants could have had an interest in one portion of the program versus both the education portion combined with the physical activity. For example, the participant could have had an interest in the physical activity portion and not been focused on the education portion of the program, or alternatively, have had an interest in the education portion, but not in the activity portion.

Barrier 4: Family Support

The participants may have retained and conceptualized the knowledge, awareness, and information they were provided with through the program and the project author, but they may have been presented with no social support for healthy habits outside of the school setting. Without encouragement and support from the participants' home environment, it would have been difficult to follow through with the healthful nutrition

choices and habits. The author did not ask in any questionnaire about family or social support for the participants, Barrier 4 is based off assumption.

Summary

The weekly process evaluations revealed that the participants reported the lessons on average "very good" quality, along with the lessons being "very influential." Seven of the ten Likert-scale questions from the five weekly process evaluations were proven to be statically significant by the Kolmogorov-Smirnov Normality Test. *Logan Strides'* participants demonstrated more positive change than negative or no change in the pre- and post-assessments. After all, the participants proved to have positive behavior change in their diet and physical activity.

SECTION IV

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Introduction

The purpose of this project was to develop, evaluate, and implement *Logan Strides*, an eighth-grade girls' after-school program in La Crosse, WI. *Logan Strides'* sought to increase the participants' weekly physical activity levels, fruit and/or vegetable consumption. The program led up to a 5k race near the end of the program. Section IV includes the project conclusions, discussion, and recommendations. The findings from *Logan Strides* six-week program's process evaluations and the pre- and post-assessments provided concluding evidence, which led to the five different conclusions. The discussion offers both personal and professional viewpoints from the project author. The recommendations are offered for consideration by health education and health promotion professionals regarding an after-school health promotion program, such as *Logan Strides.*

Conclusions

Conclusion 1: Positive Impact

All the *Logan Strides'* consistent participants (i.e., participants who participated in 5 of the 6 sessions) met each behavioral objective for the program:

- At the end of *Logan Strides'* 6-week program, 90% of the participants will be able to walk and/or run a 5k.
- At the end of *Logan Strides'* 6-week program, 75% of the participants will be including physical activity at least three times into their weekly routines.

- At the end of *Logan Strides'* 6-week program, 75% of the participants will have increased their fruit and/or vegetable intake by at least two servings each week.

The program proved to have a positive impact on the participants' lives. Creating awareness from the lessons the first five weeks while combining physical activity was an effective way to impact the participant's behavior positively. From the project author's perspective and conversations with participants, she believed the program inspired them to live a healthier lifestyle, incorporating physical activity and nutritious choices into their daily habits.

Conclusion 2: Comprehensive Approach

Logan Strides' comprehensive approach proved to be beneficial for the consistent participants in many aspects of their lives. Based on evaluation data, the program appeared to create a more positive self-esteem and body image for the participants. In addition, the program also appeared to develop healthful diet choices and activity changes in the participant's weekly routines. All the participants felt they would be able to develop a better nutrition plan for themselves if they desired to do so.

Conclusion 3: Comradery

From the project author's perspective comradery developed of the participants over the six weeks. The sense of the togetherness as the students participated in the 5K. The relationships created through the program were positive and health promoting. The author believes that, when people surround themselves with people who tend to make healthful choices, it is easier to create those habits together and have the healthful habit reinforcement.

Conclusion 4: Evaluation Outcome Enhancement

The project author believes the participants' pre- and post-assessment scores could have demonstrated a more positive change if she would have included the health promotion information throughout the lessons rather than in one specific lesson. The retention of information may have been better if they had been consistently told throughout the five different lessons; e.g., the focus on nutrition would still have its own lesson section, but also would be included in the media impacts, body image, and physical activity lessons.

Conclusion 5: Primary Obesity Prevention

Logan Strides' type of programs should be available for adolescents in every community. More programs addressing adolescent inactivity and unhealthful diet choices should be incorporated throughout La Crosse, Wisconsin, the United States, and globally. Programs like *Logan Strides* are giving the opportunity to American adolescents to stay healthy and active; to be aware and exposed to healthful choices they may not have been exposed to elsewhere. The programs have the potential to positively affect adolescent obesity, which could end up lowering the amount of funding expected for health care in the U.S. These primary prevention programs are critical now, more than ever.

Discussion

Personal Impact

Logan Strides demonstrated to the project author how much of an impact just one educational meeting with adolescents could make with the participants. The project author's interest was inherent throughout the program, but connecting her interests and

passions through the program and community need was a new and inspiring experience for her. Positively impacting the lives of the participants by educating them on healthy habits and reasons to create a life-long healthy lifestyle was truly an eye-opening and enriching experience for the project author. According to Ms. Hartman, the Logan Middle School teacher, "[the project author] really connects with the participants. That is rare. You have a gift." The participants were considering the project author as a healthy role model, that they may or may not have had in their life elsewhere. The Three Rivers 5K was the first race for all the *Logan Strides* participants. One mother came with her daughter to the race and ended up participating with her. The other five participants had no family support at the race. This demonstrated to the author the imperative need for a *Logan Strides* type of program to be available in schools. Sharing the knowledge and love of physical activity, nutrition, and healthy habits was a remarkable experience.

Professional Enhancement

The author learned how to develop a program with physical activity, nutrition, and healthy habits as core concepts geared for adolescents. Given an opportunity to share health promotion data and information for a group of girls voluntarily participating in an after-school program was a professional breakthrough for the author. Presenting and facilitating in front of adolescents in a different dynamic compared to presenting and facilitating to peers and elders, learning to engage the participants as much as possible during the short lesson time was an added skill set. From the author's perspective, the program may have had a better retention rate if there was not as much paperwork and evaluations involved, based on participants' comments. The project author used the assessments and evaluations to modify and develop a possibly more effective and

impactful program. The comments and feedback from *Logan Strides'* participants will help any future program similar to *Logan Strides* or the Fall 2018 *Logan Strides* program at Logan Middle School.

Recommendations of Adolescent After-School Programs

Marketing

Based on the pilot program experience, the project author recommends, the marketing for the program's audience is brought to the program coordinator's attention and incorporated into the recruiting and implementation stages. The project author researched this program's target population prior to the development of the project, protocol, and the lessons. She was familiar, to the degree possible, with her audience. The program was not targeting the more athletically-inclined adolescent population, as during the meeting time there was track and other school competitive sports, but targeting the less active girls. Ms. Hartman and Mr. Brandt, the Logan Middle School Homework Club Coordinator, did the marketing and disbursement of the materials developed by the project author before the program. The forms of communication were disbursed via email, loudspeaker, and classroom announcements. It is recommended to broaden the marketing channel for the next program, while including marketing segmentation. For example, reaching the different social circles within the school and within the grades. Encourage "word of mouth" for the program. Involve the teachers and past participants to positively talk about the program and the experiences they had with students.

Bridge-Building

It is recommended for the program coordinator to start the personal connection to the program participants prior to the program sign-up and start date. The project author

would suggest for the next project coordinator to consider going into the classrooms/school before the program starts to promote the brand-new program, such as *Logan Strides,* too. A classroom appearance and introduction would also start to build relationships with the participants prior to the program initial start date. Doing so may create a stronger program retention rate, as the participants would have a connection to the program before it starts.

Lesson Planning

It is recommended to include the educational portion of the program, as the participants demonstrated positive behavioral change from the five different lessons. The program coordinator should remember to keep the audience in mind when creating/revising the lesson plans; the author put herself in the shoes of a current eighth-grader when developing the weekly lessons for *Logan Strides.* The educational part of the meeting was needed for this program; the time allotted for the lesson was taking in consideration of splitting the meeting time with physical activity and evaluation component along with the education piece. It was a good duration (about fifteen to twenty minutes depending on the lesson) for the participants to stay actively engaged the entire time while getting the lesson message across. Including visuals, handouts, and short video clips into the lesson is highly recommended; the participants tend to have a good connection to the visual and hardcopy material.

Based upon the participants' commentary on the process evaluation, Lesson 3-Media Impacts regarding the video added during the lesson implementation due to participants' requests, the author would include the "Beautiful" and "Average" labels above doors as an addition to the lesson plan when repeated next. The project

coordinator would create “Beautiful” and “Average” signs for the participants to choose which one they identify with, following with the video and discussion of participants’ reactions and feelings into the lesson.

Lesson 2-Body Image was the lowest scoring lesson by the participants in both the quality and the influence according to the process evaluations. Reviewing the 5-week curriculum, the author would have added a video regarding individual differences and strengths, for the participants to relate to in the second week. The comments from the third week, Lesson 3-Media Impacts, demonstrated the connectivity to the YouTube videos.

It is recommended that throughout the program the program coordinator is purposeful in the lessons. They are not only giving the message but looking to include every participant present. The program should give a message that everyone there is of value and has a purpose for being present. It is recommended to create a new program goal for the future programs involving all participants leaving the program feeling greater self-worth.

5K Inclusion

Including a type of race (does not necessarily have to be a 5K) is a great way to motivate the participants. It gives them a goal as a starting point in the program. They may not have been exposed to race or the race atmosphere before, demonstrating that that experience could be life-changing for an individual. The *Logan Strides’* participants had a program-long excitement towards the 5K. Aligning the program with a local 5K worked well for *Logan Strides.* The race set-up, medical staff, t-shirts, and water stops were already taken care of for the project author and *Logan Strides*. All of the

participants were pleased with themselves for completing their first 5K, and rightfully so. It also gives the participants the opportunity to think about doing the same race the following year.

Evaluations

It is recommended to continue the use of evaluation in future programs, as it shows the program affect and participants growth and/or positive change. The project author researched surveys already developed specifically for the program population; this is a critical part of obtaining relative data. All evaluations for the *Logan Strides* program were valid to the degree possible. The article *"Assessing the Eating Behaviors of Low-income Urban Adolescents*" connected to the *Student Nutrition Assessment,* was a study done in Detroit. The target population for their article matched well with the *Logan Strides* population. If a program is being developed from *Logan Strides* for a different population, the project author would urge the program developer to review surveys specific for their population.

Program Amplification

It is recommended that the program continues and looks to expand into other grade participation at Logan Middle School. *Logan Strides* was a pilot program developed in the purpose for program continuation. Regarding including more participants, Logan Middle School should consider setting up three different classroom educational sessions and then come together as one for the physical activity portion of the program. The school would be recommended to have different program volunteers for each grade. The program could do a fall and spring session around the different local 5Ks.

It is recommended to look into involving the providers from partners, such as local medical centers, would be another way to create a higher participation rate. The providers could have a pamphlet about the program and give it out to patients would benefit the most from a health promotion program. It would be a referral type of program with the La Crosse hospitals. It is recommended to create an awareness for the program based on the need.

Program Consistency

It is recommended to look into an incentive component to the program to create better consistency throughout the program entirety. Each week would have a piece to a puzzle or map. At the end of the program, participants would complete the puzzle or map by attending each week and receiving another piece. The school could promote an additional incentive program with the puzzle or map, having the puzzle or map could get the students a special circumstance or recognition.

Peer-to-Peer

It is recommended to create a peer-to-peer connection through the program. The program would set up the connection. It would be something optional for the participants to sign-up for within the program. Once the program is expanded into other grades and/or schools, the set up could be mixed with higher/lower grades or different schools. For example, the peer-to-peer connection could be two girls, one from eighth-grade another from seventh grade. The girls would be paired together for the duration of the program, sharing experiences, creating accountability, encouraging healthy habits, being supportive and available to the other person. This recommendation is based off the

participant's comments initially, enjoying the friendship and social aspect of the program. The peer-to-peer system should be explored further in future programs.

Caregiver Incorporation

It is recommended that the participants' caregivers are incorporated into the next program. The reason for this is to encourage healthy habits for the caregivers as well as the participants. Positive behavioral change is more likely to be consistent long-term if the family is providing the support and healthy habits along with the participant. The author suggests incorporating a handout for the participants to take home to their caregivers going over the lesson for that day. The participant would be able to share everything they learned from the educational part of the lesson with their caregivers. Along with the educational handout would be a physical activity suggestion to do with one-another, again creating the healthy habit with the caregiver. Sharing this with the caregiver would likely create a health encouraging relationship, which would have more effect in the long-term.

Summary

The project findings guided the project author to explain five different conclusions regarding the *Logan Strides* program. The project author felt honored to have been given the opportunity to develop, implement, and evaluate the pilot program for her graduate project at Logan Middle School, where she grew both personally and professionally from her experience there. The author recommended many additions and changes to future *Logan Strides* like programs, in the hope of developing a sustainable health promotion program for adolescents.

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APPENDIX A

PERSONAL COMMUNICATION

KAREN RUDE

JULY 28, 2017

Transcription of Personal Communication with Gundersen Health System Pediatric Nurse Practitioner Karen Rude, July 28, 2017

A: Kjirsten Anderson, Project Author.

R: Karen Rude, Gundersen Health System Pediatric Nurse Practitioner.

A: How long have you been practicing as a Nurse Practitioner at Gundersen Health System here in La Crosse, WI?

R: 32 years.

A: What is your daily patient load like on average?

R: About 14 patients a day with an age range of baby to 20-year-olds.

A: What trends have you noticed with your time at Gundersen?

R: Two trends: the BMI and growth charts continue to go up, and mood, anxiety, mental health issues are much more prevalent.

A: What are the top to contributing factors that you believe are causing the BMI's and growth charts to increase?

R: The top two issues: poor fruit and vegetable intake and the screen time. The basic eat well, exercise, and sleep.

A: In your option what could La Crosse do to help stop or slow the BMI and growth charts from continue to increase?

R: Walking, safe routes to school, kids don't walk to school anymore. Biking, obesity collation, teach parents how to cook. People don't have a dining room table anymore.

APPENDIX B

PERSONAL COMMUNICATION WITH MS. HARTMAN

REGARDING UWL PH 790 - PUUBLIC HEALTH ADMINISTRATION AND

ORGANIZATION FEBUARY 15, 2016

Personal Communication with Ms. Danielle Hartman, Logan Middle School 8th Grade Teacher

1. What are the main issues the children in your classes are faced with?

Students at our school are faced with myriad issues. We have a 70% poverty rate with many students' basic needs not even being met. Studies on poverty have shown a strong correlation to brains developing differently in these situations. We have many students who struggle to complete tasks and the lowest test scores in the district. Many students don't have role models at home or support for academics, therefore homework is a low priority for most students. We also have a high diversity rate as well as a transient population. Combined with the rise in autism, mental health needs, and electronics usage vs. reading, it can be a challenging scenario.

2. What kind of wellness and health promotion does Logan Middle School offer?

Students have PE classes every other day and outside optional recess every day for 20 minutes. Other than that, only after school sports programs. Not nearly enough.

3. How do you think an after-school program focuses on these issues for girls would be helpful?

I think it would be an amazing opportunity to foster an environment for girls to discuss current issues, concerns, and bond in a healthy way as well as offer another opportunity to be physically active. It would help self-esteem as well.

4. How many weeks would be a good timeframe for the program?

Weather dependent—fall or spring would probably be best. 6-8 weeks? Flexible with the schedule.

5. What would the program goals be?

*build self-esteem, participate in a 5k, cover an issue each week—wellness topic or other

open to suggestions

6. Where/who could we go to for funding?

Not sure any funding would be needed? I will donate my time as the staff person. We have funds at school to provide proper shoes for any student who would need them. If we decided to participate in some kind of community 5K run, I think we could get sponsors or help from our PTO.

7. How many girls would you project to participate?

I think 15-20 would be a realistic goal

8. Based on the average day at school how many mins of physical activity does the general student get in while at school?

On a PE day, an active student who chooses to also move at recess time would get 50 minutes. Since PE is only every other day, then 20 minutes on the opposite days.

APPENDIX C

LOGAN STRIDES PROPOSAL

Proposal: The Development, Implementation, and Evaluation of 6th Grade *Learn to Run* After-School Program for Girls at Logan Middle School, La Crosse, Wisconsin

Kjirsten Anderson

University of Wisconsin – La Crosse

I. The Need

With the well-established knowledge of physical, social, cognitive, and psychological benefits of physical activity, young people currently are failing to meet the public health guidelines for physical activity to be able to see any of the benefits from physical activity. Physical activity participation declines in the transition from childhood to adolescence years (Cohen, Morgan, Plotnikoff, Barnett, & Lubans, 2015, Pearson et al., 2014). The most recently reported prevalence of obesity among American school-aged children (6-11 years) was 17.5% and adolescents (12-19 years) at 20.5% (Ogden, Carroll, Fryar, & Flegal, 2015). The high percentages of obesity are demonstrating the need for youth/adolescent programs encouraging an active lifestyle.

Practical approaches are needed to increase the physical activity in La Crosse's adolescent population. A program that targets not only individual change but a social and environmental change in physical activity as well would be very useful (Cohen et al., 2015). The school setting is an ideal location and environment for a physical activity promotion program (Cohen et al., 2015; CDC, 2015).

"Suicide, depression, and eating disorders are some of the conditions that affect young people in disproportionate rates in comparison to many other population groups" (Biddle & Asare, 2011, p. 886). The popular belief that young people should participate in physical activity is good for physical and psychosocial outcomes e.g. self-esteem boosting and cognitive functioning (Biddle & Asare, 2011, p. 886).

II. The Program

The *Learn to Run* program development would be modeled off the international girls running program *Girls on the Run®*. *Girls on the Run®* is a 501(c)3 non-profit organization. To start a branch of that program, or an independent council, in the La Crosse area requires an initial membership fee of $7,500.

The *Learn to Run* program will be at no or minimal cost to develop and initiate. *Learn to Run* would be a six-week after-school girl's youth program unique to the La Crosse area which would focus on wellness topics while incorporating physical activity. The *Learn to Run* program created by MPH Graduate Candidate, Kjirsten Anderson would be guiding the facilitations each week.

III. Administrative Considerations (expecting 10-15 participants)

A. Budget

The program would be volunteer based so the program could be self-sustaining without cost association.

B. Personnel

1. *Learn to Run* group facilitator(s): Initially the developer of the program with a Community Health Education and Exercise Science background. Will be the program director in the pilot assessment.
2. Middle School teacher(s) to help and support the facilitator
3. Volunteers (5-10) for the purpose (e.g. water station, timing, check-in, encouragement) Race at the end of the program for 2-4 hours of support.
4. Volunteer EMT on site for the race duration
5. After-School Coordinator? – If they would like to be involved for any part, e.g. development, implementation, and/or evaluation.

C. Resource Needs

Logan Middle School Gymnasium? Or facilitation room and safe outside running area

D. Necessary Administrative Support Procedures

1. Present *Learn to Run* Program to Principal of Logan Middle School
2. All Logan Middle School teachers informed of the *Learn to Run* program in a staff meeting, to =promote and inform 6th-grade children and parents about the program and the benefits of the program.
3. Logistics at school site: e.g., Use of Facilitation and exercise space; inform students about *Learn to Run* before the start of the program with marketing, announcements, etc.

IV. Objectives

A. Learning Objectives

1. The *Learn to Run* participants will be able to develop appropriate individual S.M.A.R.T. goals borne out of the capacity depentdent on their ability to set physical activies of the physical activities within and after the program.

Method: Develop a lesson on how to create S.M.A.R.T. goals. Have participants create a S.M.A.R.T. goal for the 6-week program duration; at the end of the program, the participants would create a S.M.A.R.T. goal for their summer months or the duration of the calendar year.

Evaluation: The Community Health Educator and facilitator assistant would individually discuss the S.M.A.R.T. goals. This would mean that the assistant and Community Health Educator would ensure that the smart goal criteria are met and going to be realistic for the student to meet.

2. The *Learn to Run* participants will develop their own healthy body image.

Method: Develop a lesson on healthy body image with the guidance and framework of the *Healthy Body Image: A Lesson Plan for Middle School Students* developed by Steven P. McKenzie, M.Ed. (McKenzie, n.d.). Healthy Body Image: A Lesson Plan for Middle School Students

Evaluation: The participants will complete a questionaire assessing healthy body image. Fredrickson et al.'s (1998) four-item Objectified Body Consciousness Scale, which includes items such as "I often compare how I look with how other people look" and "I often worry about how I look to other people" (1 = strongly disagree, 4 = strongly agree). Second, we used Mendelson and White's (1982) 20-item Body Esteem Scale, which asks girls to rank their agreement with statements such as "I am proud of my body," "I wish I were thinner," "I really like what I weigh," and "I like what I see when I look in the mirror" (1 = strongly disagree, 4 = strongly agree). Items for both scales were appropriately recoded and averaged to create one mean score.
The scale was validated.

3. The *Learn to Run* participants will have the knowledge of healthy nutrition choices.

   Method: Develop a nutrition lesson including topics such as sugar, whole food, and processed food consumption.

   Evaluation: The participants will complete a survey assessing their knowledge of nutrition. The survey is still in the process of being selected. It will be another validated survey.

B. Behavioral Objectives

1. At the end of *Learn to Run*s' 6-week program, 90% of the participants will be able to walk and/or run a 5k.
2. At the end of *Learn to Run*s' 6-week program, 75% of the participants will be including physical activity* at least 3x into their weekly routines.
3. At the end of *Learn to Run*s' 6-week program, 75% of the participants will have increased their fruit and/or vegetable intake by at least two servings each week.

*physical activity: any bodily movement produced by skeletal muscles that requires energy expenditure, in a duration of 30 minutes or longer.
-Portions were drawn from World Health Organization, January 21, 2016.

V. Proposed Process

Step 1: The *Learn to Run* Community Health Educator and Logan Middle School teacher, Danielle Hartman, meet with Principal of Logan Middle School in La Crosse, WI. Go over what the *Learn to Run* program goals are and how it would benefit the community and 6th-grade girls, as well as the timeline for the program.

Step 2: Submit IRB material by Feb. 20th

Step 3: Email teachers explaining *Learn to Run*.

Step 4: Market *Learn to Run* with posters in Logan Middle School. Make an announcement to students informing students of *Learn to Run*. Teachers inform students in class about *Learn to Run* and send out written communication to parents.

The program was developed for this particular group (6^{th} graders). Marketing to the 6^{th} graders is important for the program's success and participation rate.

Step 5: Early notification email is sent out delegating tasks to volunteers for 5k the upcoming weekend.

Step 6: Have students pick up sign-up and waiver addressing medical concerns and participation form from their teacher if interested.

Step 7: *Learn to Run* (duration: one night a week for six weeks) program begins. All youth bring release waiver in a week before the first session to teachers or email to the Community Health Educator. The first session begins with two separate assessments measuring the current participant's concept of a healthy body image and knowledge of nutrition. After the surveys, the participants would be asked if there were any specific physical activity, nutrition, or self-esteem topics they would wish to cover in the program. Each week during the session a different topic is covered, e.g. social media and body image, sugar nutrition, processed food vs. whole food, while incorporating running and fitness drills. Each session is one-hour long. At the end of each session, the facilitator summarizes key points with the girls and encourages physical activity and healthy nutrition until they meet the next week. The sessions will be using a building block style approach; each week will recap and make new additions to the lessons.

The Community Health Educator is in the process of exploring the session activities.

Step 8: After the first session, the facilitator compiles all the answers from the surveys assessing the participant's current concept of a healthy body image and knowledge of nutrition for analysis. The developer would use descriptive statistics to analyze the comments from the participants. The developer takes results and decides if any changes and additions need to be made for proposed topics covered throughout the next five weeks.

Step 9: At the end of the last facilitation session a post-assessment and a process evaluation is handed out and collected asking again about academics, fitness, and social life.

Step 10: Email is sent out to participant's parents and teachers asking to complete a process evaluation about *Learn to Run* program.

Step 11: 5k Run/Walk is put on the Saturday after the 6-week program. (or join the local 5k May 6th)

Step 12: Thank you email sent out to all volunteers and teachers.

Step 13: Compile results from post-assessment.

Step 14: Compile results from feedback from parents and teachers.

Step 16: Compare results from pre- and post-assessments. Facilitator writes up summary and evaluation of the *Learn to Run* program with results.

Step 17: Community Health Educator and teacher meets with Principal and after-school coordinator to discuss results of the *Learn to Run* program and decides how the program will continue next school year.

VI. Implementation

A. Timeline

Date	Task
By February 20th	Submit IRB Protocol
By February 20th	Facilitator meets with Principal and Teacher(s)
Week of February 27th	Advertising for *Learn to Run* begins social media, email, posters, announcements.
Week of March 6th	Email sent out with release waiver for girls to participate in after-school program
Week of March 6th	The facilitator makes an announcement and appearance in class.
Week of March 20th	Begin *Learn to Run* 6-week program meeting 1x a week at Logan Middle school
May 6th 8:00 am	Run/walk a 5k
Week of May 8th	Evaluation Email sent out to all participants, teachers, parents, and volunteers.

Week of May 8th	Thank you, Email sent out to all volunteers and support staff.
Week of May 15th	Compile Evaluations
Week of May 15th	Meet with Principal and present evaluation results; decide on further action to continue the program in the fall.

B. Barriers and Proposed Solutions

1. Barrier: After-school sports and clubs.

Solution: Offer the *Learn to Run* program at the least conflicted time for
6^{th} graders.

2. Barrier: Parents initially non-supportive of their adolescent involved in the
experience.

Solution: Send out an email and handout to class, the Community Health Educator would offer to meet any parents with concerns, informing parent topics covered during the 6-week program.

3. Barrier: Transportation, getting home after the program.

Solution: Make a parent carpool sign-up sheet for those who would like to participate in the program and need ride assistance.

C. Responsibilities

1. Community responsibilities- Provide education and access to *Learn to Run* for Logan Middle School, 6th grade girls.

2. The developer's responsibilities- Competencies completed during the development, planning, and implementation of *Learn to Run* after-school program.

VII. Evaluation

A pre-assessment before *Learn to Run* participation will be given out to all youth participants, parents, and teachers assessing current physical activity level of youth participants.

A post-assessment will be given after the six-week *Learn to Run* program and 5k run/walk assessing youth participants, parents, and teachers assessing current physical activity level of youth participants.

Comparing the pre-assessment and post-assessment would determine the effectiveness of the program and degree to which *Learn to Run* would continue or expand onward.

The students will be asked to create a S.M.A.R.T goal to carry on into the summer or next school year.

The students will be assessed weekly on they activity level and fruit and vegetable consumption.

VIII. Summary

Long-term, the *Learn to Run* program would be designed to help improve the Logan Middle School concerning childhood obesity rate. The Logan Middle school students only get the option of physical education (50 minutes of activity) every other day, when the guideline is 60 minutes of physical activity for adolescents. While the program would encourage physical activity, it would also focus on health and personal issues the students are facing. A new health or personal topic, e.g. self-esteem and body image, would be covered each week. At the end of the program, the students would participate in a 5k walk/run. After the 5k the students would have an awards ceremony for all participants of the *Learn to Run* program. Setting physical fitness goals at the younger age is beneficial in lifelong lifestyle behaviors.

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APPENDIX D

LOGAN STRIDES PROJECT TIMELINE-TASK SHEET

Before the start of the program (By April 3rd)		Completed
	List of Participants	
	Informed consent of all participants	
	All materials printed for program	
	Have running route finalized	
Week 1 - April 4th		
3:00	Numbered Pre-surveys (Nutrition and Body Image)	
3:15	Lesson #1-SMART Goals	
3:30	Warm-Ups	
3:35	Run/Walk: 2mi	
3:55	Cool Down, Stretch	
4:00	Hand out process evaluation	
Week 2 – April 11th		
3:00	Review SMART goals	
3:05	Lesson #2-	
3:25	Warm-Ups, Run/Walk: 2mi	
3:55	Cool Down and Stretch	
Week 3 – April 18th		
3:00	Review Lesson 1 & 2	
3:05	Lesson #3	
3:25	Warm-Ups, Run/Walk: 2.5	
3:55	Cool Down and Stretch	
Week 4 – April 25th		
3:00	Review Lesson 1, 2, & 3	
3:05	Lesson #4	
3:25	Warm-Ups, Run/Walk: 2.75mi	
3:55	Cool Down and Stretch	
	Collect all registrations for 5k	
Week 5 – May 2nd		
3:00	Review Lesson 1, 2, 3, & 4	
3:05	Lesson #5	
3:25	Warm-Ups, Run/Walk: 3mi run/walk	
3:45	Cool Down and Stretch	
3:45	Race Day Preparation and Expectations	
May 5th		
12-6p	Expo @ La Crosse YMCA	
12-8p	Packet Pick-Up @ La Crosse YMCA	
May 6th - Race Day!		
7:30	Pick-up kids at Logan if need a ride to Riverside Park	
7:45	Meet at Riverside Park	
7:45	Packet Pick-up (if needed)	
8:30	5k Run/Walk Start	
9:30	Awards Ceremony	

Week 6 – May 9th		
3:00	Numbered Matched Post-surveys (Nutrition and Body Image)	
3:15	Awards ceremony for every participant in program	
3:20	Lesson #6 – Program Closing	
3:30	Warm-Ups	
3:35	Run/Walk: 1.5mi	
3:45	Cool Down, Stretch	
3:50	Thank you's and Goodbye	

APPENDIX E

LOGAN STRIDES IRB PROTOCOL

Institutional Review Board (IRB) Protocol

Kjirsten Anderson

University of Wisconsin – La Crosse

Table of Contents

ATTACHMENT A - APPLICATION FOR UNIVERSITY IRB REVIEW

(All submissions must be typewritten) Date 02/17/2017

1. a. Principal Investigator/Project Director (if thesis or undergraduate research project, student's name):
   Kjirsten Anderson
   b. Applicant Status: (Check all that apply)
   - ☐ Faculty
   - ☐ Academic Staff
   - ☑ Graduate Student
   - ☐ Undergraduate Student

   c. Investigator/Project Director Local Address:
   2609 Castle Place, La Crosse, WI 54601
   d. Investigator/Project Director Local Telephone # 715-441-3177
   E-mail: anderson.kjir@uwlax.edu
2. a. Title of Proposed Project: Logan Strides for Success

   b. Project Period: Begin Date: April 5, 2017 End Date: May 10, 2017
   c. If a student project of any type, Faculty Advisor's Name, Department, and Phone:
   Name: Dr. Gary Gilmore Signature:
   Department: Health Ed & Health Promotion Phone #: 608-785-8163 E-Mail: ggilmore@uwlax.edu
   * Names and Signatures of Thesis Committee Members:

   Name Signature

   Name Signature
3. If the researcher believes his/her project may be reviewed under expedited procedures (p. 6-9) and/or falls within the exemptible category, (p.4-5) please check the appropriate box(es) below
   - ☑ Expedited
   - ☐ Exemptible

   a. If expedited, please indicate the number(s) of the categories listed on pages (6-9) 7
   b. If exemptible, please indicate the number(s) of the categories listed on pages (4-5) _____
4. By signing this application, I agree to comply with any decisions made by the University of Wisconsin-La Crosse IRB in regard to the above named research project, and or the standards of professional ethics in my field of study.

   Kjirsten Anderson
   Signature

   02/17/2017
   Date

The IRB has reviewed the above research project and has determined that:

1. _____ APPROVAL IS GRANTED -as submitted or as modified per attached (check one)
   - ☐ a. the protocol does not contain procedures which place human subjects at risk, or
   - ☐ b. the protocol contains procedures which place human subjects at minimal but acceptable risk, or
   - ☐ c. the protocol contains or is likely to contain procedures that may place human subjects at greater than minimal risk; however, the risk(s) are outweighed by the sum of the anticipated benefits of the research.
2. _____ APPROVAL NOT GRANTED

The following IRB members participated in this review:

On behalf of the board:

IRB Chairperson or Coordinator Signature Date

Narrative Statement

1. The reason for the Logan Middle School after-school program is to inspire a healthier lifestyle in the middle schoolers lives. The program will teach the students how to create Specific, Measurable, Attainable, Realistic, Time-specific (S.M.A.R.T.) goals, it will give the students' knowledge of the concept of a healthy body-image, the program will incorporate physical activity into the students' lives, and lastly it will teach the students healthy nutrition choices. The students will take a pre- and post-assessment (Attachment 1 and 2) to assess the improvement on the concept of a healthy body image and knowledge and self-efficacy of nutrition. Each session will have an educational portion on goal setting/body image/nutrition, along with physical activity. The current projections are that first session and pre-assessments will be April 5, 2017, and the last session with post-assessments will be May 10, 2017. The girls will have the option to participate in the Three Rivers 5k walk/run, in La Crosse, WI on May 6, 2017.

2. The subject population is a maximum of 15 girls Logan Middle School, La Crosse, WI. The girl's age will range from 11 years to 13 years old. The girls, most likely, will all live within Northside of La Crosse. The girls may be coming from a low socio-economic status. The program is geared toward girls who are not getting enough physical activity currently, but that is not a requirement for program participation. This population is chosen because of the known low-activity level, low self-esteem, and low self-image of this population.

3. Middle school girls are chosen because they are pre-disposed to have body-image issues and obesity is a serious concern for this population.

4. The girls wanting to participate in the program will bring a voluntary consent form home to their parents/guardians. The form will be available March 1, 2017, to be picked up from Dani Hartman, an eighth-grade teacher, or Nick Brandt, the Logan Middle School Homework Club Coordinator and collected, one-week before the start date, on March 29, 2017.

5. The documents and questionnaires with any identification information on them will be only shared with the Community Health Educator, Kjirsten Anderson, the Community Health Educator's advisor, Dr. Gary Gilmore, and the Community Health Educator Middle School assistant, Mrs. Danielle Hartman. The pre- and post-assessments will be matched with a number.

6. There are no anticipated risks and/or inconveniences for the girls participating in the program. The amount of time asked of the participants is one hour a week for six weeks, along with the optional one hour for the 5k walk/run. Total program participation time is 7 hours.

7. To minimize potential risk(s), the program will be joining the Three Rivers 5k walk/run. They will have medical support staff on hand. The Community Health Educator and Community Health Educator assistant will emphasize the importance of hydration and proper nutrition, prior to and during physical activity occurring, in the sessions. There will always be water accessible during the physical activity portion. Girls without tennis shoes will not be able to participate in the physical activity portion of the session.

8. It is anticipated that the program participants will increase their physical activity during the 6-week program, along with their knowledge about how to incorporate physical activity into their schedules. The participants are anticipated to have knowledge of how to create and follow through with their Specific, Measurable, Achievable, Relevant, Time-specific (S.M.A.R.T.) goals, as well as the concept of a healthy body image, and knowledge of nutrition.

UNIVERSITY of WISCONSIN
LA CROSSE
Informed Parental Program Consent Form
Community Health Education
University of Wisconsin – La Crosse
201 Mitchell Hall, 1725 State Street, La Crosse, WI 54601, USA
Director: Dr. Gary Gilmore; Phone: 608.785.8163; Email: ggilmore@uwlax.edu

Informed Consent Form for Parent(s) or Care Taker(s) of Logan Middle School Girls participating in *Logan Strides for Success*

Kjirsten Anderson
University of Wisconsin – La Crosse
Logan Middle School
Logan Strides for Success

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the program with you)**
- **Certificate of Consent (for signatures if you agree that your child may participate)**

You will be given a copy of the full Informed Consent Form

Part I: Information Sheet for Parents

Introduction
I am Kjirsten Anderson, a Master of Public Health in Community Health Education candidate from the University of Wisconsin – La Crosse. I am creating an after-school program available to 6th, 7th, and 8th grade Logan Middle School girls. The program's goal is to help the girls become healthier and learn to stay active. The program incorporates walk/run activities once a week for six weeks. Within each meeting, there will be an education lesson incorporating topics such as Specific, Measurable, Achievable, Relevant, and Time-bound (S.M.A.R.T) goals, body image, and nutrition. At the beginning of the program, the participants learn what a S.M.A.R.T goal is and how to create a S.M.A.R.T. goal(s) for themselves in the program and after. In the first session, there will be an assessment of the participant's view of healthy body image and nutrition knowledge. In between the 5th and 6th (last) session of the program, the participants will have the option to participate in a 5k walk/run. The participants finish the program completing the same assessments on healthy body image and nutrition knowledge that they completed at the beginning of the 6-week program. Whenever there is a program involving children, educators talk to the parents and ask for their permission.

The next thing I will do is seek your daughter's agreement as well. You must agree independently before your daughter can participate in the program. You do not have to decide today whether you agree to have your child participate in this program. Before you decide you may reach me, the Community Health Educator, Dr. Gilmore, a University of Wisconsin – La Crosse Professor and Director of Graduate Community Health and Public Health Programs, Mrs. Hartman, a Logan

Middle School eighth-grade History and English teacher, at any time if you have any questions regarding the program.
If you have questions about any part of the informed consent part, please contact me at anderson.kjir@uwlax.edu or 715-441-3177.

Purpose
It is possible that the 6th, 7th, and 8th-grade girls are not getting enough physical activity in their day, and this program will provide the foundation for an active, healthy lifestyle. Middle school years are a critical time for one's self-image, and this program is designed to create an individual healthy body image. Additionally, nutrition is a key component to having a healthy lifestyle; the program informs the participants of good nutrition choices.

Type of Educational Intervention
A questionnaire, physical activity, and goal setting/body image/nutrition.

Selection of Participants
The program is limited to the first 15 girls who sign-up. We want to be able to provide the best experience educational experience possible for the participants. We would like your daughter to participate because she is in 6th, 7th, or 8th grade at Logan Middle School.

Voluntary Participation
Participation in the program is completely voluntary.

Procedure
1) The following applies to the once a week, one hour after-school sessions (April 5th – May 10th, 2017):

   With your consent, your daughter will take part in 6 one-hour long sessions facilitated by Community Health Educator, Kjirsten Anderson and 8th Grade Teacher, Danielle Hartman at the Logan Middle School at 3:00 pm on Wednesdays. The maximum number of girls in the program is 15. In the first session, your daughter will take two assessments handed out and collected by the Community Health Educator; one on healthy body image and another on nutrition. The Community Health Educator will be present the entire time to answer any questions the girls may have. The girls will have a different lesson each week that will focus on goal setting/body image/nutrition. The educational portion will take place in Mrs. Hartman's room number 103. Your daughter will need to have some type of tennis shoe. The girls will walk/run each week, training for the optional Three Rivers 5k walk/run on May 6th. The first session will include education on goal setting/body image/nutrition, a warm-up before the limited physical activity. In the last session, your daughter will take the same two assessments again that she took in the first session, handed out and collected by the Community Health Educator. The Community Health Educator will be present the entire time to answer any questions the girls may have. If your daughter does not wish to answer some of the questions in the assessment, she may skip them. All the assessments will be held confidential. There will be an awards ceremony for all the program participants in the last program session on May 10th, 2017.

2) The following applies to the 5k walk/run:

Through this program, your daughter may be conditioned to participate in a 5k walk/run May 6th at 9:00 am. If your daughter does not feel comfortable in participating in the 5k walk/run, she is not required to.

Duration
The program will be six weeks of 1 hour-long meetings after school, starting Wednesday, April 5th and ending May 10th, 2017. The optional Three Rivers 5k walk/run will be Saturday, May 6th, 2017 at 9:00. The parents are welcome to watch or participate (sign-up through Three Rivers http://www.grandadhalfmarathon.com/5k-runwalk.html to walk/run with your daughter) in the 5k with their daughter. If at any time your child does not wish to finish the program, she can stop participating.

Risks and Discomforts
I am asking your daughter through the assessments to share with us some very personal and confidential information, and she may feel uncomfortable talking about some of the topics. She does not have to answer any question or take part in the discussion/assessment/activities if she does not wish to do so or it is making her feel uncomfortable. She does not have to give us any reason for not responding to any question, or for refusing to take part.

Your daughter may choose to tell you about the questionnaire, but she does not have to do this. We will not be sharing with you the responses given to us by your child.

Benefits
There may be an immediate and direct benefit to your child with her physical activity levels and nutrition knowledge. Your daughter's participation is intended to help us in developing a program for encouraging adolescent girls to stay active and learn what a healthy body image is. Your daughter could use the goal setting skills she will learn for the rest of her life in any area where goals are used.

Reimbursements
Your daughter will not be provided with any payment for taking part in the program.

Confidentiality
We will not be sharing information about your daughter outside of the educational team. The information that we collect from this educational program will be kept confidential. Only the educators will be able to see the information from the completed assessments. Any information about your child will have a number on it instead of her name. Only the educators will know the number to participant correlation. The information will only be shared as grouped data in a final project.

Sharing of Program Findings
At the end of the program, overall findings will be shared with the Logan Middle School principal, homework club coordinator, and the eighth-grade teacher, in a timely fashion, with the information remaining grouped. The findings will be shared in June or July of 2017 at the University of Wisconsin – La Crosse. Nothing that your daughter shared will be attributed to her

by name. We also will publish the results, so that others may follow up on the educational and training experience.

Right to refuse or withdraw
You may choose not to have your child participate in this program, and your child does not have to take part in this program if she does not wish to do so. Choosing to participate or not will not affect you or your child in any way. Your child may stop participating in the assessments or program at any time that you or she wishes.

Who to Contact
If you have any questions, you may ask at any time, even after the program has started. If you wish to ask questions you may contact any of the following:

Kjirsten Anderson
715-441-3177
anderson.kjir@uwlax.edu

Dr. Gary Gilmore
608-785-8163
ggilmore@uwlax.edu

Mrs. Danielle Hartman
dhartman@lacrossesd.org

This proposal has been reviewed and approved by UWL-IRB for the protection of Human Subjects, which is a committee whose task it is to make sure that program participants are protected from harm. If you wish to find out more about the IRB, contact Michael Kennedy, Program Assistant, 233 Graff Main Hall, 608.785.8124, irb@uwlax.edu.

PART II: Certificate of Consent

Certificate of Consent

I have been asked to give consent for my daughter to participate in the *Logan Strides for Success* program, representing six one-hour sessions which include four assessments and physical activity training. I have read the previous information, or it has been read to me. I have had the opportunity to ask questions about it, and any questions that I have asked have been answered to my satisfaction. I consent voluntarily for my child to participate as a participant in this program.

Print Name of Parent or Guardian

_____

Signature of Parent or Guardian_____

Date _____

Day/month/year

If unable to read:
A literate witness must sign (if possible, this person should be selected by the participant and should have no connection to the education team). Participants who are illiterate should include their thumb print as well.

I have witnessed the accurate reading of the consent form to the parent of the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Print name of witness_____ **AND** **Thumb print of participant**

Signature of witness _____

Date _____

Day/month/year

Statement by the educator/person taking consent

I have accurately provided the information sheet to the parent of the potential participant, and to the best of my ability made sure that the person understands that the following will be done:

1. Confidentiality of the assessments done before and after the program

2. Availability of the walk/run physical activity training for a 5k experience, if consent to do is provided.

3. Knowledge of healthy body image, nutrition, and goal-setting.

I confirm that the parent was given an opportunity to ask questions about the study, and all the questions asked by him/her have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed Consent Form has been provided to the parent or guardian of the participant

___

Print Name of Educator/person taking the consent_____

Signature of Educator/person taking the consent_____ Date_____

Survey Material - Attachment 1

The Healthy Body Survey*

*Answer **True** or **False** to the following questions:*

1. I know that very skinny models and actresses have unhealthy eating and exercise lifestyles. I must not model myself after them. T F

2. No one can know how fit or unfit I am simply by looking at me. T F

3. Body shapes and sizes vary from one person to the next. No two bodies can or should look the same. T F

4. Kids become overweight because they eat too much. They need to eat less. T F

5. You will be thinner if you skip breakfast. The fewer your meals, the thinner you become. T F

6. Sweets are not good for you. T F

7. Eating fat in your food makes you become fat. T F

8. I worry that the more I eat, the more weight I will gain. T F

9. If I am overweight, I deserve to be teased or not accepted by my peers at school. T F

10. A person can gain a pound or more from eating a serving of cake, meat, or ice cream. T F

Answers:

1. T. It is unnatural and unhealthy to try to get your body to be thinner than it needs or wants to be . . . .no matter how normal the models or actors make thinness seem. When you eat right and stay active, your body will determine the best weight for you and will maintain that weight to keep you feeling good and fit.

2. T. Nobody can tell how fit you are simply by looking. Largely built or overweight people are frequently strong, healthy and in very good shape; their heredity may determine their large size. Did you know that many overweight people exercise regularly and vigorously and are fine athletes? All this, despite the fact that they may not look like fashion models or track stars?

3. T. Just as every fingerprint is different from every other; no two people are created to look just the same. We all come in different sizes and shapes, with different strengths and weaknesses, with different talents and interests. Our unique qualities set us apart and make us special. Who we are as people has less to do with how we look and more to do with how we think, feel, and behave.

4. F. No one becomes overweight because he or she eats too much good food. People become overweight when they eat too much of the wrong kinds of foods, (foods that are not nourishing to the body,) and/or when they do not remain active, riding bikes, or engaging in sports or other forms of regular exercise. Moving your body vigorously through space in some form of exercise is one sure way to keep your metabolism healthy and capable of burning fat, giving you energy and keeping you trim. When people are overweight, they do not need to diet or eat less. They need only to learn to eat differently, to establish a healthier eating and exercise lifestyle.

5. F. You can't expect to be alert and to learn efficiently at school unless you feed your brain well after its extended overnight fast. People who skip breakfast damage the function of their metabolism, interfering with their body's capacity to burn fat effectively. In addition, excessively hungry people tend to overeat their next meal or snack; non-breakfast eaters are more apt to develop weight problems in their childhood and into their adult years.

6. F. There is nothing wrong with eating sweets. A dessert now and then, even once a day is fine. Candy on Halloween, and cake and ice cream on birthdays is great fun and in the spirit of the celebration. It would in fact be problematic if you could not feel free to indulge yourself in this way. Sweets become problems only when people eat them in excess, or instead of foods that nourish and build strong bodies.

7. F. Eating fat in your diet does not make you become fat. Though an overabundance of saturated fats can be unhealthy, other kinds of fats are necessary to keep your body healthy and functional. The healthy eater is the person who eats all types of foods, as long as they are eaten in moderation (not too much and not too little).

8. F. When your body is well fed and healthy, it will eventually arrive at what it's called its "set point" weight. The body's set point weight is the weight your body wants and needs to be in

order to be healthy. Once this weight is achieved, there it will stay…. give or take a pound here or there. If one day you eat more than usual, the scale may show a slight increase in weight, but within a day or so of eating naturally again, your body will settle comfortably back to its set point weight. You can count on it.

9. F. You do not deserve to be teased, ever, for any reason. If you have something to learn about yourself from another person, there are more constructive ways to communicate those things than through teasing. You have done nothing wrong in being uniquely who you are. What is most important is that you learn to take care of yourself. If you have concerns about your weight or how you look, there is a lot you can do to bring about constructive changes short of feeling shame, going on a diet to restrict food, or becoming the butt of others' jokes.

10. F. It is important to understand that neither meat nor dairy products are bad for you. Quite the contrary. Some people believe that when they take in food, it will immediately be visible on their body as excess weight. This is not how food works. In fact, when a person eats food, it is broken down by the body into energy and fuel for growth and alertness. Particularly when you eat nutritionally dense or nourishing foods in appropriate amounts, it all gets used up and disappears before it could ever be stored as fat.

*Source: Survey authored by Abigail H. Natenshon. Original survey can be found on http://treatingeatingdisorders.com/healthybodysurvey.aspx Used by permission of author.

Survey Material - Attachment 2

Student Nutrition Assessment*

1. Name: _____

2. School: _____

3. Grade: _____

4. Gender: _____ Male _____ Female

5. Race:

____ Black or African American ____ Asian

____ White ____ American Indian or Alaska Native

____ Native Hawaiian or Other Pacific Islander ____ Other

6. Ethnicity:

____ Hispanic or Latino ____ Not Hispanic or Latino ____ Other

7. Age: _____

Part A: Please answer the following questions as honestly as you can. There are no right or wrong answers, simply answer each question honestly. Please circle the most appropriate response.

1. What you eat can make a difference in your chances of getting heart disease. true false

2. What you eat can make a difference in your chances of getting cancer. true false

3. People who are overweight are more likely to have a higher risk of health problems than people who are not overweight. true false

4. I know how to design a plan for better nutrition if I want to true false

5. French fries are a "nutrient dense" food true false

6. The word “lite” on a food package means low fat true false

7. The word “lean” on a food package means that food is fat free true false

PART B: Please answer the following questions as honestly as you can. There are no right or wrong answers, simply answer each question honestly. Please circle the most appropriate response.

8. How confident are you that you could eat more fruits and vegetables?

1	2	3	4	5	6	7
not at all confident		a little confident		somewhat confident		very confident

9. How confident are you that you could eat less fat?

1	2	3	4	5	6	7
not at all confident		a little confident		somewhat confident		very confident

10. How confident are you that you could drink less pop?

1	2	3	4	5	6	7
not at all confident		a little confident		somewhat confident		very confident

11. How confident are you that you could eat healthy at a fast food restaurant?

1	2	3	4	5	6	7
not at all confident		a little confident		somewhat confident		very confident

Thank you for your answers

*Source: Adapted in part from: *Detroit Healthy Youth Initiative* Survey Instrument.
Nate McCaughtry, Mariane Fahlman, Jeffrey J. Martin & Bo Shen (2011). Influences of constructivist-oriented nutrition education on urban middle school students' nutrition knowledge, self-efficacy, and behaviors. *American Journal of Health Education*, 42:5, 276-285, DOI: 10.1080/19325037.2011.10599198

Recruiting Materials for Program Participants

Such recruitment material will be forthcoming with the assistance from the Logan Middle School homework club coordinator, Nick Brandt.

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Kjirsten Anderson** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 10/14/2015.

Certification Number: 1889718.

APPENDIX F

UWL IRB APPROVAL LETTER

UNIVERSITY of WISCONSIN
LA CROSSE

To: Kjirsten Anderson

From: Bart Van Voorhis, Coordinator
Institutional Review Board (IRB) for the
Protection of Human Subjects
bvanvoorhis@uwlax.edu
5-6892

Date: February 22, 2017

Re: **RESEARCH PROTOCOL SUBMITTED TO IRB**

The IRB Committee has reviewed your proposed research project: ***"Logan Strides for Success"***

Because your research protocol will place human subjects at minimal risk, it **has been approved under the expedited review category in accordance with 45CFR46, 46.110(a)(b).**

Since you are not seeking federal funding for this research, the review process is complete and you may proceed with your project. Remember to provide participants a copy of the consent form and to keep a copy for your records. Consent documentation and IRB records should be retained for at least 3 years after completion of the project.

Please note that this approval is for a one year period only, from the date of this letter. **If the project continues for more than 12 months, an IRB renewal must be requested using Attachment C on the IRB website. Please submit Attachment C one month prior to the date on this letter. Continued data collection beyond this date will place your project in non-compliance. The IRB is required to report instances of noncompliance to the Federal Office of Human Research Protections.**

Good luck with your project!

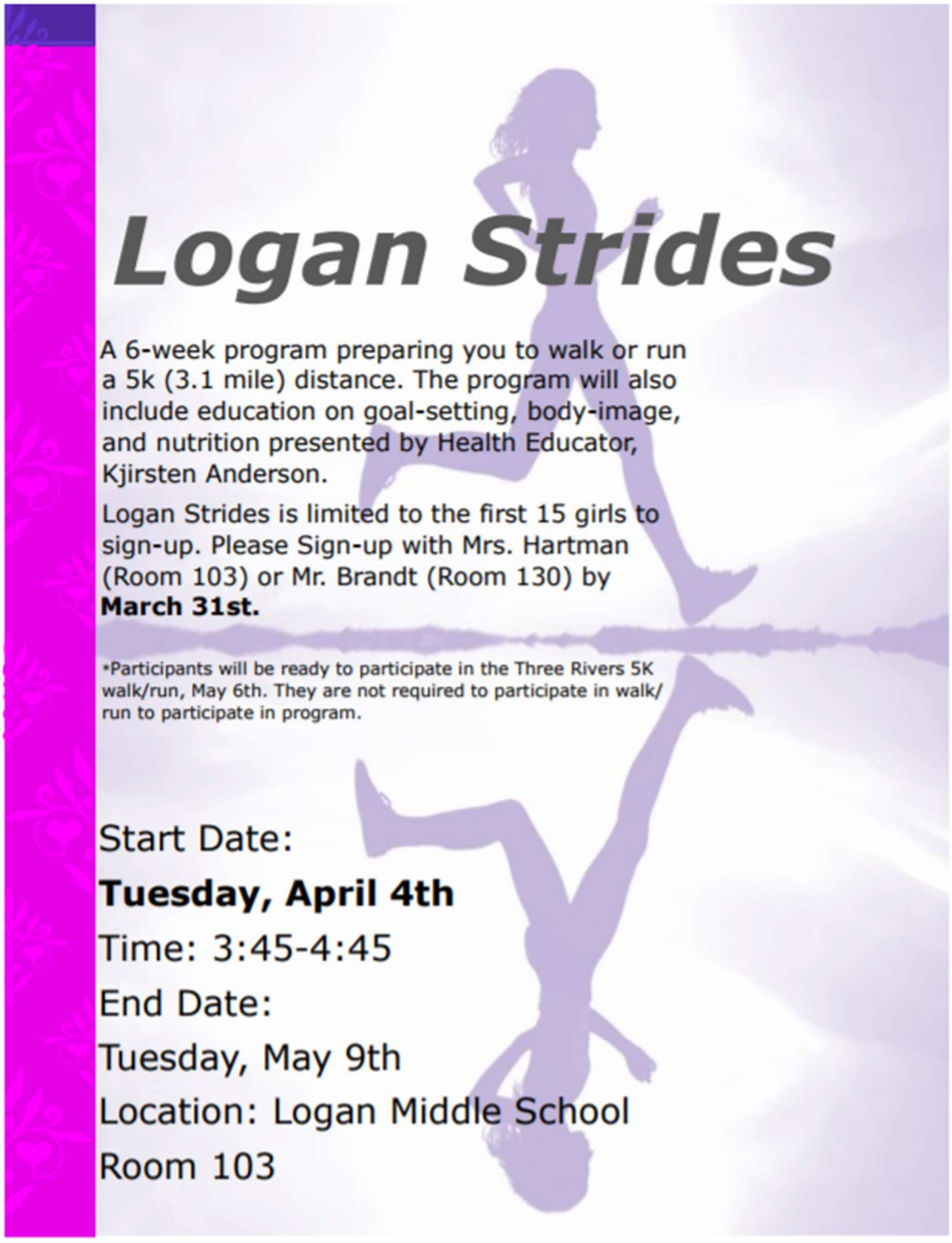
cc: IRB File
Gary Gilmore, Faculty Advisor

RESEARCH & SPONSORED PROGRAMS
223 Graff Hall
1725 State St. | La Crosse, WI 54601 USA

phone 608.785.8124
www.uwlax.edu/graduate
www.uwlax.irb

APPENDIX G

LOGAN STRIDES MARKETING FLYER


Logan Strides
A 6-week program preparing you to walk or run a 5k (3.1 mile) distance. The program will also include education on goal-setting, body-image, and nutrition presented by Health Educator, Kjirsten Anderson.
Logan Strides is limited to the first 15 girls to sign-up. Please Sign-up with Mrs. Hartman (Room 103) or Mr. Brandt (Room 130) by March 31st.
*Participants will be ready to participate in the Three Rivers 5K walk/run, May 6th. They are not required to participate in walk/run to participate in program.
Start Date:
Tuesday, April 4th
Time: 3:45-4:45
End Date:
Tuesday, May 9th
Location: Logan Middle School
Room 103

APPENDIX H

LOGAN STRIDES TEACHER ANNOUNCEMENT

Hello Logan Middle School Teachers and Faculty,

I am Kjirsten Anderson a UWL Master of Public Health – Community Health Education candidate. I am writing to inform you of the upcoming program at Logan Middle School, *Logan Strides* starting Tuesday, April 4th at 3:45. The program is meeting once a week Tuesday, for one hour for 6-weeks. The purpose of the program is to inspire a healthier lifestyle in middle schoolers lives. The program will teach the students how to create Specific, Measurable, Attainable, Realistic, Time-specific (S.M.A.R.T.) goals, it will give the students' knowledge of the concept of a healthy body-image, the program will incorporate physical activity into the students' lives, and lastly it will teach the students healthy nutrition choices. Each session will have an educational portion on goal setting/body image/nutrition, along with physical activity, Mrs. Hartman will be assisting me throughout the duration of this program with each program component. The girls will have the option to participate in the Three Rivers 5k walk/run, in La Crosse, WI on May 6, 2017, at 8:30. The program is open to the first 15 girls who sign up.

Please start to inform and encourage girls to sign up today, particularly girls not in afterschool physically active programs already, to go to Mrs. Hartman's room 103, or Mr. Brandt's room 130 to sign-up for *Logan Strides*. All girls must be a part of Homework Club (HWC) to participate in *Logan Strides*. If you or anyone else has any questions, please don't hesitate to contact me.

Thank you very much for your efforts in supporting *Logan Strides*,

With regards,

Kjirsten Anderson
Graduate Assistant, UWL-Health Education & Health Promotion Dept.
Snap Fitness - NETA-CPT
University of Wisconsin - La Crosse B.S., MPH Candidate Class of 2017
Email: Anderson.kjir@uwlax.edu
Phone: 715-441-3177

APPENDIX I

LOGAN STRIDES PA ANNOUNCEMENT

Logan Strides PA Announcement

Logan Strides is a brand-new girls program for girls that will meet one afternoon a week for six weeks. A 6-week program is preparing the girls to walk or run a 5k (3.1 miles) distance. The program will also include education on goal-setting, body-image, and nutrition presented by Health Educator, Kjirsten Anderson, if you choose to do so. Girls who sign up will have the option to join the Three Rivers 5k Walk/Run on May 6th, and run as a group if chosen to do so. *Logan Strides* is limited to the first 15 girls to sign-up. All participants must be a part of the Homework Club (HWC) to participate in *Logan Strides*. Please Sign-up with Mrs. Hartman (Room 103) or Mr. Brandt (Room 130) by March 31st. It is starting April 4th at 3:45, and it is open to the first 15 girls to sign-up.

If you want to learn how to lead a healthier lifestyle *Logan Strides* is for you!

APPENDIX J

LOGAN STRIDES

WEEK 1

LESSON PLAN

Week 1 (April 4th) Approval to go until 5:00

3:45 Start: Welcome, Introductions

3:50 Hand out Body Image survey

4:00 Collect Body Image survey &Hand out Nutrition Survey

4:10 Collect all surveys

4:15 Begin Lesson on S.M.A.R.T. goals

4:35 Warm up

4:40 Run/walk in gym or outside for 15mins

5:00 Departure

Lesson 1 – S.M.A.R.T Goals

Goal: To educate the *Logan Strides* participants on what a S.M.A.R.T Goal is and how to create a personal S.M.A.R.T Goal.

Objective: 100% of *Logan Strides* participants will be able to describe what a S.M.A.R.T Goal is.

100% of *Logan Strides* participants will be able to create a personal S.M.A.R.T Goal.

Discussion Outline:

I. What is a goal?
   A. The object of a person's ambition of effort; an aim or desired result

II. Setting goals
   A. Setting a personal goal takes thought, inner searching, and personal reflection.
   B. Think about: Priorities- what is most important in your life, Benefits- for you and those you care about, and Personal vs. Professional.

III. Make a plan
   A. Need a plan or roadmap on how to achieve or reach your goal.

IV. Personal Goal Evaluation
   A. Have all the participants Write down on Goal hand out their personal goal.
   B. Walk around and ask if there are questions
   C. Read all personal goals

V. What is a S.M.A.R.T Goal?
   A. S-Specific: What exactly will you accomplish? Answer the five "W"s, Who, What, When, Where, Why: I will finish the Three Rivers 5k, on May 6th, in under 35 mins by preparing with the *Logan Strides* program walk/run recommendations.

B. M-Measurable: How will you know when you have reached this goal?

C. A-Attainable: Is achieving this goal realistic with effort and commitment? Have you got the resources to achieve this goal? If not, how will you get them?

D. R-Realistic: Do you have the resources to achieve this goal? If not, how will you get them?

E. T-Time-bound: When will you achieve this goal? Set a date or time you will reach the goal by.

VI. Hand out SMART Goal Worksheet

VII. Help girls create goals, walk around make sure each girl is understanding. See if anyone needs help one-on-one.

VIII. Review all girls' goals
Take-home Message: S.M.A.R.T Goals are a good way to step-up and plan for a goal in any part of your life. Having a S.M.A.R.T Goal is setting a path to successfully reach your personal goal.

IX. Hand out Process Evaluation

APPENDIX K

LOGAN STRIDES

WEEK 1

GOAL HANDOUTS

Write down a personal goal:

_____

_____

_____

_____

Write down a personal goal:

_____

_____

_____

_____

Write down a personal goal:

_____

_____

_____

_____

Write down a personal goal:

_____

_____

_____

_____

SMART Goal Worksheet

Today's date: _____ Target date: _____ Start date: _____ Date achieved: _____

Goal: _____

Verify that your goal is SMART (Specific, Measurable, Attainable, Realistic, Timely)

Specific: *What exactly will you accomplish?*

Measurable: *How will you know when you have reached this goal?*

Attainable: *Is achieving this goal possible with effort and commitment?*

Realistic: *Do you have the resources to achieve this goal? If not, how will you get them?*

Timely: *When will this goal be achieved?*

APPENDIX L

LOGAN STRIDES

5K TRAINING GUIDE

5K Training							
Week	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
1		2m	35-60min walk	Rest	1.5mi	Rest or run/walk	2mi
2	Rest or run/walk	2.25m	40-60min walk	Rest	1.5mi	Rest or run/walk	2.25mi
3	Rest or run/walk	2.5m	45-60min walk	Rest	2m	Rest or run/walk	2.5mi
4	Rest or run/walk	2.75m	50-60min walk	Rest	2m	Rest or run/walk	3mi
5	Rest or run/walk	3m	Rest or run/walk	Rest	Rest	Three Rivers 5K!	Rest or walk

APPENDIX M

LOGAN STRIDES

WEEK 1

EVALUATION

Lesson 1: S.M.A.R.T. Goals

1. On a scale of 1-5, 1 – Poor, 2 – Fair, 3 – Good, 4 – Very good, 5 – Excellent, how would you rate the quality of this session?

   _____

2. On a scale of 1-5, 1 – not at all influential, 2 – slightly influential, 3 – somewhat influential, 4 – very influential, 5 – extremely influential, how would you rate the influential level of this session?

   _____

3. Regarding the lesson today what did you enjoy as much?

   _____

4. Regarding the lesson today what did you not enjoy or what could be improved?

   _____

5. What would you recommend to change about the lesson?

   _____

6. Are you planning to make changes in your lifestyle from today's session?

   _____Yes _____No

   If yes, please say more about it.

   _____

   _____

APPENDIX N

LOGAN STRIDES

WEEK 2

LESSON PLAN

Week 2 (April 11th)

3:45 Welcome and Review S.M.A.R.T. goals

3:50 Lesson 2

4:10 Warm-up, Run/walk

4:45 Departure

Lesson 2 – Body Image 1

Using Activity 1: *Differences Are OK* from Purdue University: Activity I: Differences Are OK.

Goal: To increase awareness that everyone is different, everyone has different strengths and weaknesses and that differences are to be embraced.

Objectives: 100% of *Logan Strides* participants will be able to list three reasons why differences in people are important and should be recognized.

100% of *Logan Strides* participants will be able to list two things that people can do to promote healthy growth and maturation.

Discussion Outline:

I. In what ways are people different from each other?

A. List some of the ways that people are different. Write responses on the board or paper. Possibilities are: Different heights. Different weights. Different body builds (slender, muscular, etc.). Different complexions. Different hair colors/types (straight, curly, etc.). Different eye colors. Different preferences. Different likes/dislikes. Different abilities (some of us are good in math, some in writing, some in art, some in sports, some in music, etc.). Different interests. Some things we can change through effort (by studying, practicing, etc.). Some things we can't change, even if we want to (height, eye color, etc.). Some things will change naturally over time whether we want them to or not (height and weight as we grow, preferences, interests, etc.).

II. List three things that you are good at. Of these, what are you best at?

A. Ask volunteers to tell the group their No. 1 item. Write responses on the board or paper.

B. Discuss that everyone has his or her strengths (and weaknesses).

C. A person's strengths and weaknesses are part of what defines them as a person (these are among their unique qualities).

D. One thing that makes the world interesting is that everyone has his or her own set of unique qualities.

E. There is a book titled “Gifts Differing” It is a book about how everyone has distinctive gifts that we can share with others.

III. Just as with other traits, each of us grows, develops, and matures at different rates.

A. Normal physical growth and development:

1. involves rapid changes in height, weight, and weight distribution.

In girls: - Begins earlier than in boys. - usually begins between 10.5 and 11.5 years (but may be as early as 8 or 9 and as late as 12 or older). - Full physical growth/development is usually reached by age 15.5. - maturation often is accompanied by a drop-off in physical activity.

Need to be aware of physical activity level and actively engage in more physical activity. Simple activity such as walking is sufficient.

IV. Do you feel like you have ever been picked on or teased about qualities (Physical or otherwise) that are unique to you?

A. How did you feel?
B. How could others change their approach to you to make the situation better?
C. What did you do to cope with your feelings about the situation?

V. Have you ever picked on others over some trait that is unique to them?

A. If so, how did the person you picked on respond?

B. If you had the situation to do over again, what would you do differently?

Take-home message: All of us are different in many ways, including physically. some of these differences are within our power to influence, while others are out of our control. each of us should focus on being the best we can be and showing respect toward others.

Sources:

Cooper, K.H. (1991). Kid Fitness: The Complete Shape-Up Program from Birth through High School. New

York: Bantam Books.

McKenzie, S. P. (n.d.). Healthy Body Image: A Lesson Plan for Middle School Students. Purdue Extension

Family and Consumer Sciences, CFS (736), W, 1-17. Retrieved January 25, 2017, from https://www.extension.purdue.edu/extmedia/cfs/cfs-736-w.pdf.

APPENDIX O

LOGAN STRIDES

WEEK 2

EVALUATION

Lesson 2: Body Image 1 (April 11th)

1. On a scale of 1-5, 1 – Poor, 2 – Fair, 3 – Good, 4 – Very good, 5 – Excellent, how would you rate the quality of this session?

   _____

2. On a scale of 1-5, 1 – not at all influential, 2 – slightly influential, 3 – somewhat influential, 4 – very influential, 5 – extremely influential, how meaningful was this session to you?

   _____

3. Regarding the lesson today what did you like the most about it?

   _____

4. Regarding the lesson today what do you think could be improved?

   _____

5. What would you recommend to change about the lesson today?

   _____

6. Thinking about your smart goal did you notice change from last week to today? _____

   If Yes, what changed? _____

   _____

APPENDIX P

LOGAN STRIDES

WEEK 3

LESSON PLAN

Week 3 (April 18th)

3:45 Welcome and Review Lesson 1 & 2

3:50 Lesson 3

4:10 Warm-up, Run/walk

4:45 Departure

Lesson 3 – Media Impacts

Goal: To increase awareness of the media's altered perception of normal and deflate the myth of the ideal body type presented.

Objectives: At the end of Lesson 3 all of *Logan Strides* girls will be able to:

- Describe how media images may be altered or enhanced.
- Describe the media's ideal body image.
- List implied messages sent by the media when advertising.

Discussion Outline:

I. Start with YouTube Photoshopping Real Women Into Cover Models Video
II. https://www.youtube.com/watch?v=iYhCn0jf46U
III. Review ways the images were altered in the video
IV. Ask, What kind of messages the media is sending to girls and women, and the public?
A. Sample responses:

1. It is not OK to be overweight (or even to have a large body frame).

2. It is not OK to be shorter or have a stocky build.

3. Slim people are the norm.

4. There is an ideal body type that is illustrated in advertisements.

a. For women: Tall and thin, like a fashion model.

b. For men: Lean, muscular, athletic.

5. If you want to have fun, achieving the ideal body type should be a goal.

B. Sometimes media messages may be reinforced by peers, friends, parents, family members, teachers, or coaches.

V. Do you believe there is an ideal body image?
VI. Is it realistic to have the model image as a goal body type?
a. Everyone has a specific body type (including models), which is largely inherited.

b. For most people, achieving the appearance of advertising models is not a realistic goal.
c. There is no ideal body type. Ideally, everyone should strive to maintain a healthy weight and strive to be physically fit, whatever their body type.

VII. Complement each other
a. Mix up who they are sitting with
b. Have the girls tell everyone at the table a compliment to each other.
c. Have the girls write down on paper their reaction to the compliments.

Take-home message: The media alters the "normal body type" perception. Most images show in mass media are heavily altered with technology. These images cause dissatisfaction with our current body types, trying to reach the media ideal image/body. There is no ideal body type. The goal for everyone should be to maintain our health while staying active.

Sources:

McKenzie, S. P. (n.d.). Healthy Body Image: A Lesson Plan for Middle School Students. Purdue Extension
Family and Consumer Sciences, CFS (736), W, 1-17. Retrieved January 25, 2017, from https://www.extension.purdue.edu/extmedia/cfs/cfs-736-w.pdf.

National Eating Disorders Association (NEDA) (2006). Media Watchdog Program.
www.nationaleatingdisorders.org/p.asp?WebPage_ID=300

Neumark-Sztainer, D. (2005). "I'm, Like, So Fat!" Helping Your Teen Make Healthy Choices about Eating
and Exercise in a Weight-Obsessed World. New York: The Guilford Press.

APPENDIX Q

LOGAN STRIDES

WEEK 3-5

EVALUATIONS

Lesson 3: Media Impacts (April 18th)*

1. On a scale of 1-5, 1 – Poor, 2 – Fair, 3 – Good, 4 – Very good, 5 – Excellent, how would you rate the quality of this session?

   _____

2. On a scale of 1-5, 1 – not at all influential, 2 – slightly influential, 3 – somewhat influential, 4 – very influential, 5 – extremely influential, how meaningful was this session to you?

   _____

3. Regarding the lesson today what did you like the most about it?

   _____

4. Regarding the lesson today what do you think could be improved?

   _____

5. What would you recommend to change about the lesson today?

   _____

*Week 3,4, & 5 process evaluations were the same except for the Lesson Title change. Week 4 was "Lesson 4: Nutrition (April 25th)" Week 5 was "Lesson 5: Healthy Lifestyle (May 2nd)".

APPENDIX R

LOGAN STRIDES

LESSON PLAN

WEEK 4

Week 4 (April 25th)

3:45 Welcome and brief review of Lesson 1-3
3:50 Lesson 4
4:10 Warm-up, Run/walk
4:45 Departure

Lesson 4 – Nutrition

Goal: To create awareness for healthy food choices and give resources on where to get nutrition information.

Objectives: At the end of the Lesson 4 the *Logan Strides* girls will be able to:

- List three characteristics of a healthy diet.
- List two eating behaviors to stay away from.
- List a credible nutrition resource.

Discussion Outline: (write responses to questions on the board)

I. What are the main factors in maintaining a healthy body weight?
   A. Types of food consumed
   B. Amount of food consumed.
   C. Amount of physical activity.
   D. Combination of food and exercise
   E. Genetics

II. What is a healthy diet composed of?
   A. The main food groups
      a. Fruit
      b. Vegetables
      c. Whole Grains
         i. Good carbohydrate vs. bad carbohydrate.
      d. Lean Proteins
      e. Small amounts of diary and sweets
         i. Fruit is a great sweets alternative.
         ii. Honey is the best natural sweetener
   B. Show the Harvard Healthy Eating Plate
   C. Hand out Harvard Plate handout
   D. What is an ultra-processed food?
      a. Food containing high amounts of sugar and sodium.
      b. Limiting ultra-processed foods
   E. Portion control sizes

III. What are eating habits to stay away from for a healthy diet?
   A. Don't eat to lose weight
      a. Fad Diets are not maintainable
      b. Whole food, balanced diet
   B. Eat when you are hungry, stop when your hunger is satisfied.
   C. Eat slowly. It takes 20mins for your body to know it is full.
   D. Don't do other things while eating.
      a. Such as TV and computer.
      b. Positive meal-related conversation can slow down consumption

c. Stopping to sip water from time-to-time.

E. Don't skip meals

F. Get adequate amount of sleep.

IV. Show Dietary Guidelines website

Take-home message: Healthy habits are essential to maintaining a healthy weight. Dieting to lose weight is not the key to maintaining a healthy weight. Focusing on a whole food diet is the best. Don't believe everything you read on the internet about diet.

Sources:

Harvard Plate

McKenzie, S. P. (n.d.). Healthy Body Image: A Lesson Plan for Middle School Students. Purdue Extension

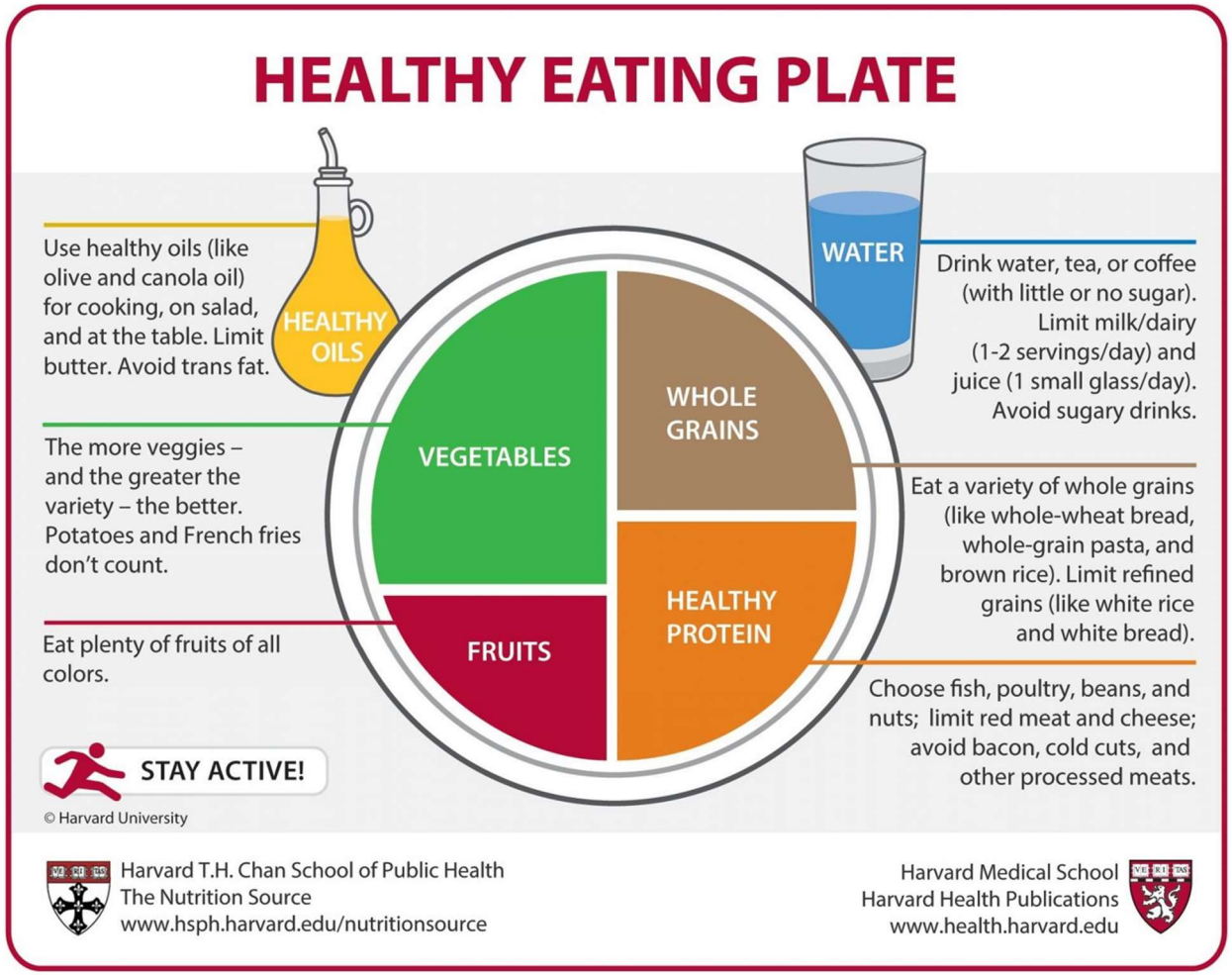
Family and Consumer Sciences, CFS (736), W, 1-17. Retrieved January 25, 2017, from https://www.extension.purdue.edu/extmedia/cfs/cfs-736-w.pdf.

APPENDIX S

LOGAN STRIDES

WEEK 4 - NUTRITION

HANDOUTS


HEALTHY EATING PLATE
Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.
HEALTHY OILS
WATER
Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.
The more veggies – and the greater the variety – the better. Potatoes and French fries don't count.
VEGETABLES
WHOLE GRAINS
Eat a variety of whole grains (like whole-wheat bread, whole-grain pasta, and brown rice). Limit refined grains (like white rice and white bread).
Eat plenty of fruits of all colors.
FRUITS
HEALTHY PROTEIN
Choose fish, poultry, beans, and nuts; limit red meat and cheese; avoid bacon, cold cuts, and other processed meats.
STAY ACTIVE!
© Harvard University
Harvard T.H. Chan School of Public Health
The Nutrition Source
www.hsph.harvard.edu/nutritionsource
Harvard Medical School
Harvard Health Publications
www.health.harvard.edu

SIDE-BY-SIDE COMPARISON

Original Label

Nutrition Facts

Serving Size 2/3 cup (55g)
Servings Per Container About 8

Amount Per Serving

Calories 230	Calories from Fat 72
	% Daily Value*
Total Fat 8g	**12%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 160mg	**7%**
Total Carbohydrate 37g	**12%**
Dietary Fiber 4g	**16%**
Sugars 1g	
Protein 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

New Label

Nutrition Facts

8 servings per container
Serving size **2/3 cup (55g)**

Amount per serving
Calories **230**

	% Daily Value*
Total Fat 8g	**10%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 160mg	**7%**
Total Carbohydrate 37g	**13%**
Dietary Fiber 4g	**14%**
Total Sugars 12g	
Includes 10g Added Sugars	**20%**
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Note: The images above are meant for illustrative purposes to show how the new Nutrition Facts label might look compared to the old label. Both labels represent fictional products. When the original hypothetical label was developed in 2014 (the image on the left-hand side), added sugars was not yet proposed so the "original" label shows 1g of sugar as an example. The image created for the "new" label (shown on the right-hand side) lists 12g total sugar and 10g added sugar to give an example of how added sugars would be broken out with a % Daily Value.

APPENDIX T

LOGAN STRIDES

LESSON PLAN

WEEK 5

Week 5 (May 2nd)

3:45 Welcome and brief review of Lesson 1-4
3:50 Lesson 5
4:10 Warm-up, Run/walk; Discuss Three Rivers Day.
4:45 Departure

Lesson 5– Healthy Lifestyle

Goal: To educate on characteristics of a healthy lifestyle and the benefits of a healthy lifestyle.

Objectives: At the end of the Lesson 5 100% of the *Logan Strides* girls will be able to:

- Describe three benefits of living a healthy lifestyle.
- Describe three characteristics of a healthy lifestyle.
- List the three components of a balanced exercise program.

Discussion Outline:

I. What makes up a healthy lifestyle?
   A. Maintaining a healthy diet
   B. Maintaining a healthy exercise routine.
   C. Maintaining a healthy sleep routine.

II. What are the benefits to maintaining a healthy lifestyle?
   A. Long term:
      a. Reduce risk of chronic diseases
         i. Heart healthy
         ii. Prevent, reverse, or control diabetes
         iii. Obesity
      b. Save money. Less medical issues and doctor visits.
   B. Sort term:
      a. More energy
      b. Reduce Stress
      c. Improve memory
      d. Improved self-esteem
      e. Improved self-confidence
      f. Improved mood
   C. Interacting with others who care about a healthy living

III. What counts as physical activity?
   A. At least 30 minutes of moderate-intensity physical activity is recommended for everyone on most days of the week.
      1. The 30 minutes can be accumulated in shorter bouts during the day, but each bout should last at least 10 minutes.

2. The exercise does not need to be performed in a gym: Work or play activities such as mowing the lawn, gardening, walking the dog, walking to the store, or riding bicycles in the neighborhood all count as physical activity.

B. An alternative is to participate in vigorous-intensity exercise, such as running or brisk cycling, for at least 20 minutes, at least three days per week (on alternate days).

IV. What should be included an exercise program?

A. Aerobic exercise
   a. Uses the large muscles in the body repeatedly over an extended time (examples: walking, running, cycling, aerobic dance, distance swimming, soccer, volleyball, etc.)
   b. 3-4 days a week, 30 mins

B. Resistance exercise
   a. Body weight exercise (push-ups, sit-ups, squats)
   b. Free weights or resistance machines
      i. Engage all muscle groups in the week
      ii. 3 sets
      iii. 8-12 repetitions
      iv. Proper breathing; exhale on exertion

C. Flexibility
   a. Stretching
   b. Yoga, Pilates

V. Have girls create their ideal weekly workout plan

Take-home message: Maintaining a healthy lifestyle will help with less medical issues in life. Diet, Exercise, and Sleep are main components to maintaining a healthy lifestyle. A balanced exercise program should include cardio, resistance training, and stretching.

Sources:

McKenzie, S. P. (n.d.). Healthy Body Image: A Lesson Plan for Middle School Students. Purdue Extension
Family and Consumer Sciences, CFS (736), W, 1-17. Retrieved January 25, 2017, from https://www.extension.purdue.edu/extmedia/cfs/cfs-736-w.pdf.

Three Rivers 5k:

7:45 Meet at the riverfront park

8:30 Run/Walk start

At finish take group photo

APPENDIX U

LOGAN STRIDES

BLANK WEEKLY WORKOUT

Balanced Weekly Workout Routine							
Day	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Exercise							

APPENDIX V

LOGAN STRIDES

CERTIFICATE OF ACHIEVEMENT

Certificate of Achievement

We gladly present this certificate to

Participant

In recognition of completion of the requirements for

Logan Strides

Awarded On May 9th, 2017

APPENDIX W

PERMISSION TO USE THE *INFLUENCES OF CONSTRUCTIVIST-ORIENTED NUTRITION EDUATION ON URBAN MIDDLE SCHOOL STUDENTS' NUTRITION KNOWLEDGE, SELF-EFFICACY, AND BEHAVIORS QUESTIONNAIRE*

Re: Influences of Constructivist-Oriented Nutrition Education on Urban Middle School Students' Nutrition Knowledge, Self-efficacy, and Behaviors Questionnaire

Mariane Fahlman <m.fahlman@wayne.edu>

Sun 2/19/2017 9:36 AM

To:Nate McCaughtry <natemccaughtry@wayne.edu>; Kjirsten Anderson <anderson.kjir@uwlax.edu>;

2 attachments (3 MB)

Survey Instrument.doc; Assessing the eating behaviors of low-income, urban adolescents.pdf;

Hi Kjirsten,
Attached is the survey we used for our studies. Note - because of the requirements of our funding agency, we asked "how many times' did students eat a particular food. This will not give you information about number of servings if that's what you need. Our knowledge section was designed to address the content that we taught using the MI Model so that may not be helpful to you. I'm also attaching the publication that we did to validate the survey instrument. If you have any additional questions, I'll be happy to answer them.
Be well,
Mariane

Raise the praise, Minimize the criticize,
Increase the peace, Silence the violence.

Mariane M Fahlman, Ph.D.
Professor and Coordination of Health Education
Wayne State University
2161 Faculty/Administration Bldg
656 West Kirby
Detroit, MI 48202
http://coe.wayne.edu/profile.php?id=42436

From: Nate McCaughtry
Sent: Sunday, February 19, 2017 9:33 AM
To: Kjirsten Anderson; Mariane Fahlman
Subject: Re: Influences of Constructivist-Oriented Nutrition Education on Urban Middle School Students' Nutrition Knowledge, Self-efficacy, and Behaviors Questionnaire

Kjirsten,

No problem. I'm copying your health education specialist, Mariane Fahlman, who should be able to provide the scale to you from that particular study.

Best wishes,

Nate

From: Kjirsten Anderson <anderson.kjir@uwlax.edu>
Sent: Saturday, February 18, 2017 1:15:58 PM
To: Nate McCaughtry
Subject: Influences of Constructivist-Oriented Nutrition Education on Urban Middle School Students' Nutrition Knowledge, Self-efficacy, and Behaviors Questionnaire

Hello Nate McCaughtry,

I am Kjirsten Anderson, an MPH student at UWL. I am writing in regards to the questionnaire used in the "Influences of Constructivist-Oriented Nutrition Education on Urban Middle School Students' Nutrition Knowledge, Self-efficacy, and Behaviors" study, would you mind if I took some of the questions from the study? I am currently developing a middle school program with a portion on nutrition. The use of your questionnaire would be very helpful!

Thank you in advance for your time!

Best regards,

--
Kjirsten Anderson - NETA-CPT
University of Wisconsin - La Crosse B.S., MPH Candidate Class of 2017

APPENDIX X

PERMISSION TO USE THE *HEALTHY BODY IMAGE* SURVEY

Re: email from abigailnatenshon.com

ABIGAIL NATENSHON <abigailnatenshon@gmail.com>

Mon 2/20/2017 6:32 AM

To: Kjirsten Anderson <anderson.kjir@uwlax.edu>;

Hi Kjirsten,

I would be happy for you to use my survey, with the stipulation that you reference the survey properly as being authored by Abigail H. Natenshon, and to be found on my web site, http://www.treatingeatingdisoders.com. http://treatingeatingdisorders.com/healthybodysurvey.aspx.

Thank you for your interest.

Abbie Natenshon

Abigail H. Natenshon, MA, LCSW, GCFP
Director, Eating Disorder Specialists of Illinois
Author of *When Your Child Has an Eating Disorder* and
Doing What Works: treatment strategies for professionals

http://www.TreatingEatingDisorders.com
abigailnatenshon@gmail.com
Phone: 847-432-1795
Fax: 847-266-9233

On Mon, Feb 20, 2017 at 12:21 AM, Kjirsten Anderson <abigail@treatingeatingdisorders.com> wrote:

> Hello Abigail,
>
> I am Kjirsten Anderson, a UWL MPH graduate candidate. I am in the process of developing an after-school program for girls. Part of the program will include education on body image. I found your survey from another publication "BODY IMAGE AND ADOLESCENTS" by Jillian Croll. I was wondering if I could use the survey in Table 3 "The Healthy Body Survey" for a pre- and post-assessment I will be doing with the participants?
>
> Thank you in advance for your time and consideration!
>
> Best regards,
>
> Kjirsten Anderson

APPENDIX Y

LOGAN STRIDES POST-PROGRAM QUESTIONNAIRE

Post-Program Questionnaire (May 16, 2017)

1. Please indicate, by circling, how many times a week you are including physical activity* into your weekly routine?
   *Physical activity: any bodily movement produced by skeletal muscles that require energy expenditure, in a duration of 30 minutes or longer.

   0x 1x 2x 3x 4x 5x 6 or more times a week

2. Please indicate if your fruit and/or vegetable consumption has increased?
   _____
   AND please circle by how many servings per week?

   0-1 2-3 4-5 6 or more servings each week

APPENDIX Z

LOGAN STRIDES

ATTENDANCE

LOGAN STRIDES ATTENDANCE

Week/Participant	1 (April 3)	2 (April 11)	3 (April 18)	4 (April 25)	5 (May 2nd)	5k	6 (May 9th)
[redacted]	x						
[redacted]	x	x					
[redacted]	x						
[redacted]	x		x	x	x	x	x
[redacted]	x	x	x	x	x	x	
[redacted]	x	x	x	x	x	x	
[redacted]	x	x	x		x	x	x
[redacted]	x	x	x	x	x	x	x
[redacted]		x					
[redacted]		x					
[redacted]		x	x				
[redacted]		x	x				

Logan Strides participants' names were blocked out for anonymity purposes.