THE EXPERIENCES OF LIVING WITH EXCESS WEIGHT AS AN ADOLESCENT:
EVERYDAY LIFE AND HEALTHCARE ENCOUNTERS

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The purpose of this study was to gain an understanding of the experiences of living with obesity as an adolescent. Of special interest was how adolescents living with obesity experience their health care encounters. A Heideggerian interpretive phenomenological method was used, which seeks to understand the hidden meaning of human experiences. The sample included 21 adolescents and young adults, 13 to 23 years of age, who were living with, or had lived with, obesity as adolescents. Participants were recruited from two clinics, the community, and the Northern Ohio National Association to Advance Fat Acceptance Chapter. In-depth individual interviews were conducted and recorded. Participants provided rich descriptions of their day-to-day lives living with obesity and their health care encounters. Diekelman & Allen’s procedures for interpretive analysis were used. Four broad topics were identified: the physical experiences of living with excess weight, the social experiences of living with excess weight, ways of managing excess weight, and health care experiences when living with excess weight. Participants’ experiences are best described as a complex interplay between the physical and social challenges they faced and the skillful coping that they brought to their situations. Several key constructs that captured the participants’ experiences emerged: existence (being), authenticity, embodiment, modes of engagement, the medical gaze, and practical know-how (spielraum). These constructs were interpreted with works of Heidegger, Merlau-Ponty, and Foucault.
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CHAPTER 1: INTRODUCTION

In this study, an interpretive phenomenological approach was used to gain an understanding of the experiences of living with obesity as an adolescent. A brief overview of the research problem and its significance will be presented. The purpose of the study will then be discussed, and the philosophical foundations guiding the study will be identified. Finally, major concepts will be defined.

Significance of the Problem

Pediatric obesity is a significant public health concern that has reached epidemic proportions (Lobstein, Baur, & Uauy, 2004; Wang & Lobstein, 2006). One out of every four children in the United States (US) lives with overweight or obesity (Ogden, Carrol, & et al., 2006). Obesity is associated with high morbidity, mortality, and increased health care costs (Finkelstein, Fiebelkorn, & Wang, 2003; Flegal, Graubard, Williamson, & Gail, 2005; Wang & Dietz, 2002; Woolford, Geremariam, Clark, & Davis, 2007). Furthermore, obesity is associated with societal biases and stigma (Puhl & Brownell, 2001; Puhl & Latner, 2007; Schwartz & Puhl, 2003). Despite concern at a national level, treatment and prevention efforts have failed to abate the growing epidemic of obesity in children (U.S. Department of Health and Human Services, 2000). Up to 80% of obese children 10 to 14 years of age will carry excess weight into adulthood (Engeland, Bjore, Tverdal, & Sogaard, 2004; Nader et al., 2006; Whitaker et al., 1997).

Adolescents living with obesity are particularly vulnerable. Along with the demands of living with a stigmatizing chronic health condition, they must deal with the developmental tasks of adolescence. During adolescence, children seek to develop their
own identity and to emotionally separate from their family (Erickson, 1968). Friends and intimate relationships are a significant part of their life, and adolescents worry about how others perceive them. Adolescents experience dramatic changes in physical, cognitive, emotional, and social development (American Psychological Association, 2002). Body image is a major concern among adolescents (Weinshenker, 2002). The nature of their interactions with family, peers and the community affect how adolescents accomplish the tasks of this developmental period (Bronfenbrenner, 1979; 2004). Negative life experiences can affect the physical, social and psychological health of adolescents. Although the focus of this study is on the adolescent population, the review will encompass children of all ages because most studies combine younger child and adolescent populations.

Research findings indicate that obese children are at an increased risk for numerous detrimental physical, social and psychological health outcomes (Must & Anderson, 2003). Physical health consequences of obesity include Type-2 Diabetes, cardiovascular disease, metabolic syndrome, asthma, early sexual maturation, and sleep apnea (Daniels, 2006; Deckelbaum & Williams, 2001; Dietz, 1998; Must & Anderson, 2003; Must & Strauss, 1999; Reilly et al., 2003). Social health effects include being teased, bullied, isolated, and rejected (Dietz, 1998; Puhl & Latner, 2007; Must & Anderson, 2003., Must & Strauss, 1999, Puhl & Heur, 2009; Schwartz & Puhl., 2003). Psychological health effects include depressed mood, low-self esteem, and poor body-image (Friedman & Brownell, 1995; McGuire, Jeffery, & French, 2002; Wadden & Stunkard, 1985; Wardle & Cooke, 2005).
Efforts to develop effective weight loss and weight maintenance interventions for obese children are often not successful, and few health promotion strategies for obese children have been investigated. The majority of treatment studies have focused on behavioral and lifestyle interventions (American Dietetic Association, 2006; Summerbell et al., 2003; Whitlock et al., 2005). The limited intervention research that has been conducted suggests that multi-component family-based intensive interventions are most effective. These programs, however, have not been tested in primary care settings. Recently, researchers have examined biological based therapies, including pharmacological and surgical interventions, for the treatment of pediatric obesity (Cuttler, Whitaker, & Kodish, 2005; Yanovski, 2001). These interventions may lead to weight loss, but findings are limited and adverse effects are a major concern. Few studies have examined how adolescents experience treatment programs.

Guidelines for the management of pediatric obesity by Health Care Providers (HCPs) are based on the best available data and expert opinion (Barlow & Dietz, 1998; Spear et al. 2007; U.S. Preventive Service Task Force, 2005). Evidence suggests, however, that HCPs face many barriers in the treatment of pediatric obesity, including lack of patient and parent motivation, lack of support services, lack of time, perceived futility of efforts, and concern regarding the adverse effects of treatment (Allen, Touger-Decker, O’Sullivan-Maillet, & Holland, 2003; Jelalian, Boergers, Alday, & Frank, 2003; Kolagotla & Adams, 2004; Story, Neumark-Sztainer, & et al., 2002). Furthermore, HCPs often share the same stigmatizing views of obesity that are prevalent in our society.
Research on children living with obesity has focused on negative health outcomes and treatment effects. Only a few qualitative studies have examined pediatric obesity from the perspective of the child (Alm et al. 2008; Curtis, 2008; Murtagh, Dixey, & Rudolf, 2006; Neumark-Sztainer, Story, & Fabisch, 1998; Rich et al., 2002; Wills, Backett-Milburn, Gregory, & Lawton, 2006). The majority of these studies have focused on specific aspects of obese children’s experiences, including weight-related stigmatization (Neumark-Sztainer et al.), barriers and facilitators to weight-loss (Alm et al.; Murtagh et al.), health-related attitudes and behaviors (Willis et al.), and experiences at school (Curtis). These studies indicate that the majority of children living with obesity report negative experiences, including being teased, bullied, socially rejected, socially excluded and socially isolated. Children in these studies rarely discuss concerns about the negative physical health effects of obesity; rather, they reveal that they want to lose weight to fit in and be normal. Obese girls desire to be thin and socially accepted, whereas obese boys desire to be muscular and competitive at sports (Alm et al.; Murtagh et al.). Qualitative studies have also revealed that children living with obesity experience emotional distress and frustration in response to dietary restrictions and the inability to lose weight (Murtagh et al.). Despite these negative experiences, some obese children are comfortable with their bodies and report positive aspects of being obese, including physical dominance, developing a sense of humor, and a sense of non-conformity (Rich et al.; Willis et al.). To date, little research has focused on adolescents’ day-to-day experiences of living with obesity, and no study has examined obese adolescents’ experiences of their health care encounters. An in-depth description of the daily lives of
obese adolescents would help HCPs understand what it is like for them to live with a stigmatizing chronic health care condition. This study will also provide an in-depth understanding of obese adolescents’ health care encounters from their own perspectives. The results of this study, therefore, may be used to promote more sensitive and supportive healthcare experiences for adolescents living with obesity.

Purpose of the Study

The purpose of this phenomenological study is to arrive at an understanding of adolescents’ daily experiences of living with obesity. Of special interest is how they experience health care encounters. The specific aims of the study are therefore to:

1. Generate a rich description of the day-to-day lives of adolescents who are obese.
2. Explore adolescents’ understandings of how obesity affects their experiences.
3. Describe how adolescents who are obese experience their health care encounters.
4. Explore obese adolescents’ recommendations and thoughts regarding how they feel HCPs can best care for them while they are living with obesity.

Philosophical Insights and Beliefs Guiding Study

This study will be guided by the philosophy of Martin Heidegger (1927/1962). A brief understanding of Heidegger’s philosophical stance and the interpretive phenomenological research method will be discussed here, with a more detailed discussion provided in Chapter 3. According to Heidegger (1927/1962), the basic state of man’s being is ‘being-in-the-world,’ which is his or her existence within ‘the life world’-
the world directly experienced. Heidegger believed that human beings cannot be separated from the world in a mechanistic way (Benner, 1994; Draucker, 1999), but must be understood within the social, cultural, and historical period in which they live (Wojnar & Swanson, 2007). Experiences within the world shape our individual realities (Lopez & Willis, 2004). Heidegger (1927/1962) was primarily concerned with investigating the meaning of being. He questioned what it means to be a person and how we understand the world in which we live.

Research based on Heidegger’s interpretive phenomenology seeks to understand the hidden meanings of human experiences through the use of language (Cohen & Omery, 1994; Leonard, 1994). In interpretive phenomenological research, understanding and interpretation is accomplished through dialogue between the participant and researcher (Koch, 1996; Whitehead, 2004). The researcher is not asked to bracket out his or her past experiences and understanding (Koch, 1995; Lopez & Willis; 2004), but is an active participant, bringing his or her presuppositions or expert knowledge to the interpretive process (Draucker, 1999; Hamil & Sinclair, 2010; Koch, 1995; Lopez & Willis, 2004; McConnell-Henry, Chapman, & Francis, 2009). The researcher is encouraged to rigorously document and explicitly describe his or her evolving interpretation of the phenomenon being studied (Koch, 1994).

**Biases and Assumptions**

To adhere to the guidelines of the interpretive phenomenological method, a beginning understanding of the phenomenon of interest will be documented by noting the primary investigator’s (PI’s) current biases and assumptions.
First, it is important to let the reader know that the PI has lived with obesity as a child. I lost most of my excess weight in middle adolescence, but have struggled to maintain a “normal” weight throughout my life. As a registered nurse, I have witnessed the stigmatization of children and families living with obesity from health care providers. As a pediatric nurse practitioner, I have felt the uncertainty of the care I was providing for children living with obesity, questioning whether I could make a difference in their lives. As a mother, I have struggled with effective ways of encouraging my own children to adapt healthy eating and activity habits. As a member of society, I have observed children and their families fighting their own battles with obesity. As a nurse scholar, I am committed to making a difference in the lives of children and families living with obesity.

I believe that I cannot walk away from this past, I cannot skip over my present, and I cannot ignore my hopes and dreams for the future. This is all part of who I was, who I am, and who I will become. I cannot bracket out my history. I cannot bracket out where I am, and where I want to go. Therefore it is important to make my beliefs and assumptions visible.

Biases and assumptions for this study include:

1. Children living with obesity face numerous physical, social, and psychological health challenges, and obese adolescents are particularly vulnerable.
2. Although it is in the best interest of children living with obesity to lose weight, efforts to identify effective weight loss interventions have not been successful.

3. Children deserve to be treated with respect and compassion regardless of their size.

4. A cure for obesity is unlikely in the near future. It is essential, therefore, to focus on improving the lives of children living with this highly stigmatized chronic condition.

5. Understanding experiences of adolescents living with obesity can assist HCP in providing better care.

Major Concepts Defined

The major constructs addressed in this study are listed and defined below.

Adolescent: Some authors consider individuals between 10 to 21 years of age to be an adolescent (Spano, 2004). For this study, however, adolescents are considered to be individuals from 13 to 18 years of age. These individuals have likely entered puberty but have not reached complete growth and maturity.

Young Adult: For the purpose of this study, individuals from 18 to 24 years of age are considered young adults as they likely have not yet fully transitioned into adulthood.

Obesity: A major, chronic and relapsing health problem with the principle characteristic of excess adipose (fat) tissue that develops from a complex interplay of genetic, social, economic, behavioral and environmental factors.

**Overweight:** A body mass index (BMI) at the 85th to less than the 95th percentile for age and gender (Barlow et al., 2007).

**Obese:** A BMI equal to or greater than the 95th percentile for age and gender or equal to or greater than 30 kg/m², which ever is lower (Barlow et al., 2007).

**Severe Obesity:** A BMI equal to or greater than the 99th percentile for age and gender, which is approximately 33 to 40 kg/m² for children 13 to 17 years of age (Barlow et al., 2007).

**Health:** A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO, 1998).

**Pediatrics:** Concerned with the physical, social, and psychological health, growth, and development of children, beginning with the fetus and continuing through 21 years of age (National Association of Pediatric Nurse Practitioner’s, 2008).

**Pediatric Population:** All children birth to 21 years of age (National Association of Pediatric Nurse Practitioner’s, 2008).

**Phenomenology:** Study of lived experience or the life world (Van Manen, 1990).
CHAPTER 2: REVIEW OF THE LITERATURE

A comprehensive review of literature on pediatric obesity is presented. Although the focus of this study is on the adolescent population, the comprehensive review encompasses children of all ages because many studies address younger children and adolescents. This review begins with an overview of pediatric obesity with relevant statistical and epidemiological data provided. A detailed explanation of the key concepts obesity and adolescence are presented. This review then moves into a summary of the physical, social and psychological health effects of pediatric obesity. The efficacy of interventions for the treatment of pediatric obesity is reviewed, as are HCPs challenges in the management of pediatric obesity. Finally, qualitative studies aimed at understanding the experience of obesity from children’s perspectives are described.

Pediatric Obesity: The Extent of the Problem

*Incidence and Prevalence*

Pediatric obesity has become a global problem of epidemic proportions that is rising at alarming rates in industrialized and developing countries (Lobstein, Baur, & Uauy, 2004; Wang & Lobstein, 2006). The International Obesity Task Force (IOTF) estimates that at least 155 million school aged children worldwide and 9 million school aged children in the United States (U.S.) are overweight or obese (Lobstein et al., Wang & Lobstein). Data from the National Health and Nutrition Examination Survey (NHANES) indicate obesity prevalence in the U.S. has increased among boys and girls of all ages, among all ethnic groups, and across various socioeconomic strata (Hedley et al., 2004; Ogden, Carroll, Curtain, Lamb, & Flegal, 2010; Ogden, Carroll, & Flegal, 2008;
Ogden et al., 2006; Ogden, Flegal, Carroll, & Johnson, 2002). NHANES data show the obesity rates between 1980 and 2008 increased from 5% to 10.4% in children aged 2 to 5 years, from 6.5% to 19.6% for those aged 6 to 11 years; and from 5% to 18.1% for those aged 12 to 19 years. Prevalence rates are particularly high among certain ethnic groups (Hedley et al.; Ogden et al., 2002; 2006; 2008; 2010). The most recent NHANES data from 2007 to 2008, for instance, shows that among adolescents, approximately 20% of African American boys and 27% of Mexican American boys are obese, compared to 17% of non-Hispanic white boys. The data also indicate that 29% of African American girls and 17% of Mexican American girls are obese, compared to 15% of non-Hispanic white girls (Ogden et al., 2010). High rates of obesity have also been found in American Indian children and lower socioeconomic groups (Caballero et al., 2003; Gordon-Larson, Adair, & Popkin, 2003; Zephier, Himes, Story, & Xia Zhou, 2006). Findings from the Youth Risk Behavior Surveillance System (YRBSS) indicate that more than one out of every four U.S. high school children are overweight or obese (Eaton et al., 2010).

**Economic Costs**

Pediatric obesity is associated with increased morbidity, mortality, and high health care costs. Hospitalizations among children aged 6 to 17 years of age for disease associated with obesity have increased dramatically between 1979 and 1999 (Wang & Dietz, 2002). The costs associated with these hospitalizations, based on 2001 constant U.S. dollar, have more than tripled, increasing from $35 million to $127 million during this time. Obesity as a secondary diagnosis is also associated with significantly higher hospital charges and longer length of hospital stay in children (Woolford, Gebremariam,
Clark, & Davis, 2007). Higher health care utilization and health care charges have been documented in obese children in primary care settings (Eastbrooks & Shetterly, 2007; Hampl, Carroll, Simon, & Sharma, 2007). The primary care sick visits and mental-health related visits of obese children cost approximately $72 more per visit than an average weight child (Eastabrooks & Shetterly, 2007). The economic burden of obesity continues into adulthood; in 1998, an estimated $78.5 billion dollars ($92.6 billion in 2002 dollars) was spent in the U.S. to treat adult obesity and obesity-related diseases (Finkelstein, Fiebelkorn, & Wang, 2003). Obesity in adolescence is related to increased mortality in middle age from several important causes of death including ischemic heart disease, colon cancer, respiratory system diseases, and sudden death (Bjorge, Engeland, Tverdal, & Smith, 2008). The 2000 estimates of the annual number of deaths in the U.S. attributable to obesity vary, but range from 111,909 deaths (Flegal, Graubard, Williamson, & Gail, 2005) to 350,000 deaths (Mokdad, Marks, Stroup, & Gerberding, 2004) each year.

*Societal Stigma and Bias*

Pediatric obesity is also associated with societal stigma and bias. Goffman (1963) defines *stigma* as a deeply discrediting attribute that arises during a social interaction when an individual’s attributes does not meet society’s normative expectations. Individuals who are stigmatized are deprived of full social acceptance and are viewed as not quite human. Several comprehensive reviews on societal stigmatization of obese individuals have found growing evidence that peers, parents, and educators frequently endorse negative attitudes toward obese children (Puhl & Brownell, 2001; Puhl & Latner,
Studies show that individuals, some as young as three years of age, ascribe negative characteristics, including ugly, stupid, likely to be left out of games, friendless, mean, selfish, lazy, having lack self control, and less likely to succeed. In a classic study by Richardson and colleagues (1961), children 10 to 11 years of age were asked to view six line drawings of children with and without visible handicaps and rank order them from most to least liked. The participants ranked the child with no visible handicap first for who they would want most for a friend, followed by a child with crutches, a child in a wheelchair, a child with a hand missing, and a child with a facial disfigurement. The overweight child was ranked least likable (Richardson, Goodman, Hastorf, & Dornbusch, 1961). In a replication of this study, Latner and Stunkard (2003) reported that negative views toward obese children had increased over the last 40 years. They found that differences in liking between a picture of a child with no physical handicap and an obese child were 40.8% greater in 2001 than in 1961.

Although the origins of obesity stigmatization are not fully understood (Puhl & Brownell, 2003a), Crandal (1994) proposed that the negative attitudes toward obesity occur when there is a cultural preference for thinness and a belief that obesity is controllable.

Social attitudes and biases are communicated through a host of contemporary media including television, radio, magazines, and the Internet. In a review of literature on the mass media and American adolescents’ health, Brown & Witherspoon (2003) found that the cultural norms of the ideal female body have increasingly valued thinness, and the ideal cultural norms of the male body have increasingly valued muscularity. The media often portrays overweight individuals as unattractive, unhappy, less social, lazy,
lacking will power, and gluttonous (Blaine & McElroy, 2002, Greenberg et al., 2003). The media implies that weight is controllable, and anyone can lose weight with little effort (Blaine & McElroy). In reality, obesity is difficult to control and efforts to date have failed to abate the growing epidemic of obesity in children.

**Failure to Abate**

Pediatric obesity has become one of the most daunting public health care concerns of the 21st century. *Healthy People 2010* listed the top two major health concerns in the U.S. as physical activity and obesity (U.S. Department of Health and Human Services, 2000). Decreasing the number of overweight children was one of the top three nutritional objectives. In 2001, the U.S. Surgeon General released a “Call to Action” to prevent and decrease overweight and obesity in children and adults (U.S. Department of Health and Human Services, 2001). The Call to Action identified increasing sensitivity to obesity stigmatization and the myriad problems encountered by obese children as an important strategy in the fight against obesity. Guidelines on the prevention, treatment, and management of pediatric obesity have been developed by the *American Medical Association (AMA), Association of Pediatric Nurse Practitioners (NAPNAP), Institute of Medicine (IOM), National Institute of Health (NIH), and the National Society of Behavioral Medicine* (Barlow et al., 2007; Eastabrooks, Fisher, & Hayman, 2008; Koplan et al., 2005; NAPNAP, 2006; National Institute of Health, 2004). In a landmark report, the Institute of Medicine (IOM) examined the nature, extent, and consequences of obesity in children, and presented strategic plans for preventing obesity and promoting a healthy weight among children (Koplan et al., 2005). There has also been growth in pediatric
obesity public health policies focused on decreasing the number of children living with obesity (Cutler & Whitaker, 2003; Levi, Vinter, Laurent, & Segal, 2010; Simpson, Alendy, Cooper, & Gunther, 2008; Towey & Fleming, 2004). In 2010, the U.S. Surgeon general expanded on the “Call to Action” – promoting good nutrition, regular physical activity, and stress management – in an effort to combat obesity (U.S. Department of Health and Human Service). A “White House Task Force on Childhood Obesity” (2010) was created with the goal of decreasing childhood obesity rates from 17 percent to 5 percent by 2030. Despite the efforts, in a report from the seventh annual edition of F as in Fat, Trust for America’s Health (TFAH) concluded that efforts to date have failed to reverse the trends of increased obesity in this country (Levi et al., 2010).

**Persistence into Adulthood**

Longitudinal studies show the persistence of pediatric obesity (Engeland, Bjore, Tverdal, & Sogaard, 2004; Freedman, Mei, Srinivasan, Berenson, & Dietz, 2007; Nader et al., 2006; Whitaker et al., 1997). Approximately 60% of obese preschoolers and 80% of obese elementary school children will continue to gain weight and reach obesity status by early adolescence (Nader et al.). Increased BMI in adolescence is predictive of adulthood obesity (Freedman et al.; Engeland et al.; Whitaker et al.). Obese children 10 to 14 years of age have a 30% to 80% probability that their obesity will persist into adulthood (Whitaker et al.). In a study of 1,161 children; children with a BMI < 50\(^{th}\) percentile had only a 5% chance of becoming obese adults, whereas 84% of obese children and 100% of morbidly obese children became obese adults (Freedman et al.). Morbidly obese children also had an 88% chance of becoming a morbidly obese adult.
Summary

The prevalence of pediatric obesity is considered epidemic in this country. Pediatric obesity is a problem that results in high economic costs to society and is associated with significant social stigma. In addition, pediatric obesity is of particular concern because national prevention efforts have not abated the problem and obesity often persists into adulthood. Understanding the experience of living with obesity from the adolescent’s perspective, especially in regards to their health care encounters, may inform efforts to prevent pediatric obesity or alter its course for adolescents who experience it.

Indices of Obesity

*Obesity* has been defined as a major, chronic and relapsing health problem with the principle characteristic of excess adipose (fat) tissue (National Institute of Health, 2004). The development of obesity involves a complex interplay of genetic, social, economic, behavioral, and environmental factors (Davison & Birch, 2001a; National Institute of Health). The complexity of obesity is evident in the variety of scientific and social meanings that encompass it.

*Scientific Meanings of Obesity*

The scientific specifications of obesity are complex and varied. Body Mass Index (BMI), calculated by dividing weight in kilograms by the square of height in meters, is commonly used to assess obesity due to the practicality of two simple measures and correlation with body fatness (Pietrobelli et al., 1998). There are noted limitations of the use of BMI as an index of obesity; an athletic person, for example, can be mislabeled as
obese because of increased muscle mass (Reilly et al., 2000). BMI is, nonetheless, the standard assessment for classifying overweight and obesity in adults (National Institute of Health, 1998; World Health Organization, 1998), and is supported and validated for use in children (Barlow et al., 2007; Dietz & Bellizi, 1998; Freedman & Sherry, 2009; Koplan et al., 2005; Pietrobelli et al.; Reilly et al.).

Adults are identified as overweight \((BMI \geq 25 \, kg/m^2)\), obese \((BMI \geq 30 \, kg/m^2)\), and severely obese \((BMI \geq 40)\) with easily-remembered and internationally-recognized cut-off points that define health risks accordingly (National Institute of Health, 1998; World Health Organization, 1998). Obesity classification is more difficult in children due to dramatic changes and variations between boys and girls in adiposity, height, and weight during normal growth and development (Cole, Bellizzi, Flegal, & Dietz, 2000; Kuczmarski et al., 2000). To date, no universally accepted classification system for pediatric obesity exists, and many different systems are in use with various cutoff points and terminology (Neovius, Linne, Barkeling, & Rossner, 2004).

In 2000, The International Obesity Task Force (IOTF) attempted to establish a worldwide standard definition of overweight and obesity in children 2 to 18 years of age with international cut-off points defined by percentile curves to intersect with the established BMI of adults (Cole et al., 2000). The Center for Disease Control (CDC) BMI-for-age-sex growth charts were created to allow longitudinal tracking of growth and BMI in U.S. children 2 to 20 years of age (Kuczmarski et al., 2000). The CDC avoid the term obese due to the associated negative connotations and recommend that children with a BMI between the 85th and 95th percentiles be defined “at risk for overweight” and
children with a BMI at or above the 95th percentile be defined as “overweight” (Kuczmarski et al.). Consequently, the terms *obese* and *overweight* are often used interchangeably in the literature. More recently, several expert and advisory groups have consciously departed from using the CDC’s term “overweight” and instead recommend the term “obese” (Barlow et al., 2007; Koplan et al., 2005). The American Medical Association expert committee recommended children 2 to 18 years of age with a BMI between the 85th and 94th percentile for age and gender be identified as *overweight*, and children with a BMI over the 95th percentile, or greater than 30kg/m² (whichever is smaller) be identified as *obese* (Barlow et al.). The expert committee also recommended the need for a third cutoff point to define *severe obesity* and suggested a BMI at the 99th percentile, which is approximately 33 to 40 kg/m² for children 13 to 17 years of age. The expert committee warned that these clinical terms should only be used for documentation and risk assessment, and more neutral terms such as “weight,” “excess weight,” or “BMI” should be used when talking to the child and family due to the derogatory nature of the terms “obese” and “fat.”

*Social Meanings of Obesity*

Several studies have attempted to gain a better understanding of the social meanings of weight-related terminology (Cohen, Tanofsky-Kraff, Young-Hyman, & Yanovski, 2005; Greenleaf, Starks, Gomez, Chambliss, & Martin, 2004; Wadden & Didie, 2003). Greenleaf and colleagues (2004) explored how college students conceptualize and perceive various weight-related terms. In this study, the term “obese” was associated with a more severe and negative weight condition, compared to the terms
“overweight” and “fat.” The terms “overweight,” “fat,” and “obese” were associated with negative and pejorative characteristics including unhealthy, lazy, unhappy, sad, ugly, gross, and disgusting. In contrast, the terms “skinny” and “thin” were mostly associated with positive characteristics, including healthy, athletic, attractive, pretty, and nice (Greenleaf et al.). In a study of 62 severely overweight and 29 normal weight adolescents, researchers examined what terms teens preferred providers use when referring to people with weight difficulties (Cohen et al.). Approximately 47% of adolescents preferred the term “overweight,” 19% “obese,” 6% “fat,” and 3% “big bodied.” In another study, obese men and women rated the terms “obesity” and ‘fatness” as undesirable or very undesirable descriptors for HCPs to use when describing excess weight (Wadden & Didie). The participants rated the terms “weight,” “excess weight,” and “BMI” as neutral to desirable. The National Association to Advance Fat Acceptance (NAAFA) prefers the term “fat” to define excess body weight (http://www.naafa.org/documents/policies/obesity_research). They argue that despite the derogatory meaning society has given to the term ‘fat,’ it is nothing more than an adjective like ‘tall’ or ‘thin’ and should not be offensive (NAFFA). An article examining the perceptions of pediatric obesity among health professionals, scientists, parents, and children determined that the different meanings indicate that our society has not come to an understanding on how to best express the problem (Dalton & Watts, 2002).

Summary

In summary, while several national groups have classified obesity, classification of childhood obesity is especially difficult due to dramatic changes and variations
between boys and girls in adiposity, height, and weight during normal growth and development. In addition, the use of weight-related terminology, such as fat and obese, is problematic because of derogatory meanings associated with these terms. The various classifications and terminology make it difficult to compare, analyze, and generalize research findings. Also, varied classifications and terminology create confusion on the best way for HCP’s to approach and converse with children about obesity. The classification of adolescent obesity is of particular concern due to the dramatic developmental changes occurring during adolescence. In addition, adolescents are particularly vulnerable to the stigma associated with labels considered to be derogatory.

**Adolescent Development**

Adolescence is a time between childhood and adulthood in which young people experience great physical, cognitive, social/emotional, and interpersonal changes between childhood and adulthood (Spano, 2004). There is no clear beginning or ending to adolescence, but it is often divided into three stages: early (approximately 10 to 14 years of age), middle (approximately 15 to 16 years of age), and late (approximately 17 to 21 years of age) adolescence. Adolescence is now believed to be prolonged in industrialized societies as many individuals do not engage in the tasks of adulthood until 25 years of age (Arnett, 2000). Key issues of adolescent development will be discussed.

**Theories on Adolescent Development**

Many models or theories have been developed that describe the critical development task of adolescence. *Freud* (1962), in his *Psychosexual Development Theory*, focused on adolescence as a period of sexual tension and pleasure, as well as a
time when the formation of friendships and preparation for marriage is important. 

Erickson (1968) in the *Psycho-Social Development Theory*, focused on the development of identity formation during adolescence. Adolescents seek independence, explore relationships with individuals outside the family, and become preoccupied with how others view them. Identity achievement occurs when adolescents receive proper encouragement and feedback from interactions with others, leading to a strong sense of self. Role confusion results when adolescents cannot see clearly who they are and struggle to belong and be accepted, leading to isolation and loneliness. Piaget (1969) in his *Cognitive Development Theory*, focused on adolescence as a time for formal operational thought. Adolescents become abstract thinkers and can identify and solve problems in a logical, organized way. Instead of depending solely on past experiences, adolescents begin to think about possible consequences and outcomes of actions (Piaget, 1969). These theories suggest adolescence is a time of growth in which independence, identity formation, the development of friendships and intimate relations, and operational thinking are critical.

*Growth and Development of Adolescent*

During adolescence, children experience dramatic physical, cognitive, emotional, and social changes (American Psychological Association, 2002). *Physical development* during adolescence includes a growth spurt and sexual maturation. Girls usually mature earlier than boys, with physical changes typically beginning at 10 years of age and ending at 17 to 19 years of age. Physical changes in boys usually begin at approximately 12 to 14 years of age and end at 20 years of age. During these changes, some adolescents become
preoccupied with their physical appearance and are overly critical of their own bodies. Some adolescents become more comfortable within their bodies in late adolescence. The cognitive development of adolescents moves from concrete ‘black-and-white’ thinking in early adolescence, to abstract ‘shades-of-gray’ thinking that begins in middle adolescence and is established by late adolescence. As they advance in higher levels of thinking, the adolescents become future oriented and can plan and pursue personal goals. Adolescent emotional development involves developing a sense of identity, which includes self-concept (i.e., individuals’ beliefs about self), and self-esteem (i.e., how individuals like their perceived self as a whole, or certain parts of their self.) The social development of adolescents begins with an emotional separation from the family and the establishment of stronger ties with peers. Younger adolescents usually establish strong friendships with peers of the same sex. In middle adolescence, peer groups include both genders, and adolescents begin to pursue dating. By late adolescence, less emphasis is placed on groups of peers, and adolescents focus on more intimate one-on-one friendships and romances. School is a major part of adolescent life, and as adolescents grow older, many begin part-time work. The cognitive, physical, social, and emotional developmental tasks allow adolescents the opportunity to experiment with new behaviors (American Psychological Association, 2002).

**Body Image in Adolescence**

Body image is an internal perception of one’s own physical appearance that may or may not correlate with objective reality (Weinshenker, 2002). The “ideal” body image is determined by one’s cultural group, which defines what the optimum physical state of
bodies should be (Martin, 2010). Body image dissatisfaction refers to a negative evaluation of one’s physical appearance (Presnell, Bearman, & Madely, 2007). During adolescence, individuals become concerned about their physical appearance and desire to “fit in” with their peers (American Psychological Association, 2002). Weight and shape-related concerns are particularly prevalent, especially among girls. Findings from a community sample of adolescents, for instance, indicated that 46% of girls and 26% of boys are dissatisfied with their bodies (Neumark-Sztainer, Story, Hannan, Perry, & Irving, 2002). Nationwide, 59% of adolescent girls and 31% of adolescent boys report they are trying to lose weight (Center for Disease Control and Prevention, 2010).

Adolescents who have body dissatisfaction are at risk for the development of disordered eating, unhealthy weight control behaviors, depressed mood and low-self esteem (Martin; Presnell et al.).

Brofenbrenner’s Bio-Ecological Systems Theory Related to Adolescence

According to Brofenbrenner’s Bio-Ecological Systems Theory (1979; 1994; 2005), developmental changes in adolescence are shaped by the complex layers of the adolescents’ environment. Family, peers, religion, schools, the media, community, culture, society, and world events, as well as the child’s genetic and biological makeup, all contribute to pediatric development and health. Conflict or change in any one area will spread throughout other areas and present the adolescent with challenges, opportunities and barriers. Adolescents who experience more positive environmental interactions, including guidance, encouragement, social support, role models, and protection from abusive experiences will have better development and health outcomes. In contrast,
adolescents who experience more negative environmental interactions will have poorer
development and health outcomes (Bronfenbrenner, 1979; 1994; 2005).

Bronfenbrenner (1979; 1994; 2005) identified five interrelated environmental
systems that influence how a child grows and develops. They are the microsystem,
mesosystem, exosystem, macrosystem, and chronosystem. Each system is comprised of
norms, roles, and rules that impact childhood development. The microsystem is the
immediate environment and includes structures such as the home, school, and
neighborhood, within which a child has direct contact with others such as parents, peers,
and teachers. The child’s biological and genetic make-up is embedded within the
microsystem. For instance, adolescents bring their own constellation of characteristics,
such as age, gender, physical appearance, health, temperament, and motivation into
various social situations. The mesosystem includes connections and processes taking
place between two or more Microsystems, such as the link between home and school
(1979; 1994; 2005). For instance, when a parent and teacher work together to educate the
adolescent they constitute a mesosystem.

The exosystem is the larger social system which indirectly influences the child’s
development, such as a parent’s work place and community-based family resources
(Brofenbrenner, 1979, 1994; 2008). For instance, adolescents are affected when parents
lose their jobs if they can no longer afford food or rent. The macrosystem is the larger
socio-cultural context – the “social blueprint” of a given culture - that consists of cultural
values, customs, laws, public policies, and beliefs. The chronosystem is the pattern of
environmental events and transitions overtime,. Children’s developmental processes vary
according to the specific historical events that are occurring at different points throughout their life course (1994, 2005).

**Summary**

In summary, during adolescence, children experience dramatic changes in physical, cognitive, emotional, and social development. Adolescence includes rapid maturation and growth, development of abstract thinking, the obtaining of a sense of identity, emotional separation from family, and forming of a connection to peers. Body image concerns are particularly prevalent among adolescents. Environmental interactions and biological makeup affect how adolescents accomplish the tasks of this developmental period. Several tasks facing adolescents make dealing with obesity especially challenging.

**The Health Consequences of Pediatric Obesity**

An expanding body of literature has addressed the impact of obesity on physical, social, and psychological health outcomes in children. The majority of studies indicate that obesity places children at an increased risk for a wide array of negative health consequences. This section will discuss the physical, social, and psychological health effects of obesity in children.

**Physical Health Consequences**

Several comprehensive literature reviews on the health effects of pediatric obesity indicate obese children are at risk for experiencing a wide array of immediate and long-term physical health consequences (Daniels, 2006; Dietz, 1998; Lobstein, Bauer, & Uauy, 2004; Must & Anderson, 2003; Must & Strauss, 1999; Reilly et al., 2003).
Physical health consequences of pediatric obesity include sleep disorders, orthopedic problems, skin and fungal infections, acanthosis nigricans, pseudotumor cerebri, gallstones, fatty liver, polycystic ovary disease, and Cushings syndrome. Several physical health effects, including Type-2 Diabetes, cardiovascular disease, metabolic syndrome, asthma and early sexual maturation, warrant closer examination because they are increasingly prevalent in obese children and pose potential for harm.

*Type-2 Diabetes*

Type-2 Diabetes has emerged as a major health consequence of pediatric obesity (American Diabetes Association, 2000; Hale, 2004; Hannon, Rao, & Arslanian, 2005). Once referred to as adult onset diabetes, Type-2 diabetes has increased in prevalence among North American children (Fagot-Campagna et al., 2000) and children throughout the world (Pinhas-Hamiel & Zeitler, 2005). In 2000, The *American Diabetes Association* issued a consensus statement that identified Type-2 Diabetes as a pediatric disease that is prevalent among obese children. Researchers first reported the high prevalence of Type-2 diabetes in a population-based sample of Pima Indian children prone to obesity (Savage, Bennett, Senter, & Miller, 1979). Pinhas-Hamiel and colleagues (1996) examined 1027 clinical cases of children 19 years of age or younger newly diagnosed with diabetes. The researchers reported a 10-fold increase in the incidence of Type-2 diabetes between 1982 and 1994. In 1994, Type-2 diabetes accounted for 33% of newly diagnosed diabetes cases among children 10 to 19 years of age. Over 90% of the children diagnosed with Type-2 diabetes in 1994 were obese (Pinhas-Hamiel et al.). A recent study that estimated the lifetime risk of diabetes for individuals born in 2000 in the U.S. revealed that
approximately 30% of boys and 40% of girls will develop diabetes at some point in their lives (Narayan, Boyle, Thompson, Sorenen & Williamson, 2003). African American and Hispanic children are at an estimated 50% lifetime risk of developing diabetes (Narayan et al.). Advanced complications related to Type-2 diabetes include blindness, limb amputation, kidney failure, stroke, and cardiovascular disease (American Diabetes Association, 2000).

Cardiovascular Disease

Cardiovascular disease risk factors identified in obese children include hypertension, dyslipidimia, left ventricular hypertrophy, obstructive sleep apnea, and atherosclerosis (Daniels, 2001; Daniels et al., 2005). The American Heart Association has issued scientific statements on the significance of cardiovascular health promotion and cardiovascular disease prevention in pediatric populations, with obesity identified as a modifiable risk factor (Daniels et al.; Hayman et al., 2004; Hayman et al., 2007; Kavey et al., 2003; Williams et al., 2002). In a review of literature on obesity-related hypertension in children, Sorof and Daniels (2002) noted that high blood pressure in obese children is a significant problem. In one study of 2460 children from public schools, obese children were at a three times greater risk for hypertension than non-obese children (Sorof, Proffenbarger, Franco, Bernard, & Portman, 2002). In another study, researchers examined the relationship of BMI and blood pressure in 18,618 children from primary care pediatric practices (Falkner et al., 2006). Approximately 37% of the children were overweight or obese, and increasing BMI status was associated with significant increases in higher blood pressure in children as young as 2 to 5 years of age. Recent data from
national surveys indicate high blood pressure trends in children are still on the rise (Dinizetham, Liu, Bielo, & Shamsa, 2007).

Studies from the Bogalusa Heart Study (1972-present), the longest and most detailed study of a biracial population of children in the world, have provided much insight into the early natural history of coronary artery disease and essential hypertension (Berenson et al., 2001). For instance, Freedman and colleagues (1999) examined the relationship of obesity to cardiovascular risk factors among a community-based sample of 9,167 children aged 5 to 17 years. The researchers reported that compared with non-obese children, obese children were at an increased risk for adverse levels of cholesterol, low-density lipoprotein, high-density lipoprotein, triglycerides, and hypertension. Approximately 60% of obese children had at least one cardiovascular risk factor and 20% had two or more (Freedman et al., 1999). In a more recent study of participants from the Bogalusa Heart Study, researchers found that among 6,731 children 5 to 17 years of age, as BMI-for-age increased the prevalence of cardiovascular risk factors increased (Freedman, Mei, Srinivasan, Berenson, & Dietz, 2007). Five percent of children with a BMI <25th percentile, 39% of children with a BMI from the 95th up to the 99th percentile, and 59% of children with a BMI ≥99th percentile had two cardiovascular risk factors. Six percent of children with a BMI at the 90th percentile, 7% of children at the 95th percentile, and 33% at the 99th percentile, had three or more cardiovascular risk factors.

Other studies have noted a similar clustering of cardiovascular risk factors in obese children (Morrison, Sprecher, Barton, Waclawiw, & Daniels, 1999; Morrison, Barton, Biro, Daniels, & Sprecher, 1999). In a study of 1578 healthy adolescents, obesity
was identified as the predominant risk factor for the clustering of cardiovascular risk factors (Goodman, Dolan, Morrison & Daniels, 2005). In the *Bogalusa Autopsy Study*, Berenson and colleagues (1998) found that multiple cardiovascular disease risk factors place children at the greatest risk for the development of asymptomatic atherosclerotic lesions.

**Metabolic Syndrome**

A growing body of research supports that the greatest physical health threat of pediatric obesity may be the clustering of cardiovascular risk factors known as the insulin resistance syndrome or metabolic syndrome (Cruz, Shaibi, Weigensberg, Spruijt-Metz, Ball, & Goran, 2005; Ten & Maclaren, 2004; Yensel, Preud’Homme, & Curry, 2004). The *metabolic syndrome* has been defined as a clustering of at least three of five cardiovascular risk factors that include abdominal obesity, elevated triglycerides, reduced high-density lipoprotein (HDL), elevated plasma glucose, and elevated blood pressure (Grundy, Brewer, Cleeman, Smith, & Lenfant, 2004). This syndrome places individuals at risk for the development of Type 2 Diabetes and premature cardiovascular disease (Grundy et al.; Steinberger & Daniels, 2003; Ten & Maclaren) and has become increasingly prevalent among obese children during the last decade (Duncan, Li, & Zhou, 2004). In a nationally representative sample of 2,430 children aged 12 to 19 years, Cook et al. (2003) reported that approximately 30% of obese children have the metabolic syndrome, compared with only .1% of non-obese children. In a school-based cross-sectional study of 1,513 African American, Caucasian, and Hispanic adolescents, researchers reported that the metabolic syndrome was prevalent almost exclusively
among obese children, and up to 39% of obese children were effected (Goodman, Daniels, Morrison, Huang, & Dolan, 2004). In another study, the prevalence of the metabolic syndrome increased to 50% in severely obese children (Weiss et al., 2004). The metabolic syndrome has been identified in obese African American children as young as 5 years (Young-Hyman, Schlundt, Herman, De Luca, & Counts, 2001).

The American Heart Association (2003) issued a scientific statement that detailed the significance of the metabolic syndrome and cardiovascular disease risk in children (Steinberger & Daniels, 2003). In a review of literature on the pathophysiology of type-2 diabetes and cardiovascular risk in obese children, obesity was identified as the clearest factor contributing to the increased prevalence (Goron, Ball, & Cruz, 2003). Not only is obesity associated with increased prevalence of cardiovascular risk factors in childhood, but a more recent review of literature has found emerging evidence that childhood obesity increases the risk for adult metabolic abnormalities and cardiac disease (Monarty-Kelsey & Daniels, 2010). The mechanism whereby obesity in children increases the risk of diabetes, insulin resistance, and cardiovascular disease is not clear (Daniels, 2001; Goran et al.).

In summary, Type-2 diabetes, cardiovascular disease, and the metabolic syndrome have emerged as major health concerns in obese children of all ages. African American, Hispanic, and severely obese children appear to be at an increased risk. Approximately one-third of adolescents who are obese have Type-2 Diabetes, and one-third of adolescents who are obese have metabolic syndrome. Onset of Type-2 diabetes,
cardiovascular disease, and the metabolic syndrome in obese children can result in immediate and advanced complications.

**Asthma**

Numerous cross-sectional studies indicate an increased prevalence of asthma or asthma symptoms in obese children (Bibi et al., 2004; Epstein, Yow-Wu, Paulch, Cerny, & Dorn, 2000; Figueroa-Munoz, Chinn, & Rona, 2001; Michelson, Williams, Benjamin, & Barnato, 2009; Rodriguez et al., 2002; Sulit et al., 2005; von Kries, Hermann, Grunert, & von Mutius, 2001; von Mutius, Schwartz, Neas, Dockery, & Weiss, 2001). In a large representative U.S. sample of 12,388 children aged 2 months to 16 years, researchers found a strong association between obesity and asthma in children, independent of age, sex, and ethnicity (Castro-Rodriguez et al., 2002). Similar findings have been reported in other studies of large representative samples of U.S. children (Epstein, Yow-Wu, & et al.; Michelson et al.; von Mutius et al.).

Other research evidence suggests that morbidity secondary to asthma is enhanced in obese children (Belamarich et al., 2000; Bibi et al., 2004; Carroll, Bhandari, Zucker, & Schramm, 2006). In an inner-city sample of 1,322 children aged 4 to 9 with asthma from the National Cooperative Inner-city Asthma Study (NCICAS), Belamarich et al. (2000) found that obese children with asthma used more medicine, wheezed more, and had more emergency department visits than non-obese children with asthma. In the Israeli Lung Health Study, researchers reported that compared with non-obese children, obese children were more likely to be diagnosed with asthma and experienced more coughing, wheezing, and inhaler use (Bibi et al.). Data collected from the longitudinal Tucson
Children’s Respiratory Study indicate that children who are obese at age 11 are at a threefold increased risk for persistence of infrequent wheezing after the onset of puberty and with a twofold increased risk for persistence of asthma (Guerra et al., 2004). In a retrospective study of children admitted to the intensive care unit with status asthmaticus, obese children had a significantly longer length of stay, and received more respiratory medications compared to non-obese children (Carroll et al., 2006). In a retrospective study of children presenting to the emergency department with an asthma exacerbation, obese children were significantly more likely to be admitted to the hospital or ICU than non-obese children (Carroll et al., 2007).

The association between pediatric obesity and asthma is complex. Some studies noted the association between obesity and asthma is greater or only evident in girls (Castro-Rodriguez et al., 2003; Figueroa-Munoz et al., 2001; Gold, Damokosh, Dockery, & Berkey, 2003; von Kries et al., 2001). Other studies suggest a greater association between obesity and asthma in boys (Bibi et al., 2004; Gilliland et al., 2003; Mannino et al., 2006; Sulit et al., 2005). Researchers conducting a large cross sectional Canadian study of 11,199 children aged 4 to 11 years reported no statistical association between pediatric obesity and asthma (To et al., 2004). Several researchers speculate asthmatic children exercise less, which leads to obesity (Epstein, Paulich, Gordy, & Dorn, 2000), while some longitudinal studies indicate obesity precedes the development of asthma or asthma symptoms (Castro-Rodriguez et al., 2001; Gilliland et al., 2003; Gold et al., 2003; Mannino et al., Scholtens et al., 2009). These studies also have conflicting findings regarding gender differences. For instance, in the Tuscon Children’s Respiratory Study,
Castro-Rodriguez et al. (2003) found that girls who become obese between 6 and 11 years of age are at a 7 times increased risk for the development of new asthma symptoms at ages 11 or 13, whereas no increased risk of asthma symptoms existed in males. In Gold et al.’s study (2003), 9828 children aged 6-14 years were examined annually over a 5 year period to assess the relationship between weight and the risk of asthma. Girls who had a higher BMI at entry into the study or who had a higher annual increase in BMI during follow up years had a greater risk of new onset diagnosis. In boys, the findings were more complex with the smallest and largest annual changes in BMI associated with increased asthma. In the Children’s Health Study cohort of 3,792 school aged children 7-18 years, obese children were at an increased risk of asthma development during the four-year follow up (Gilliland et al., 2003). In this study, the risk was larger in boys than girls. In the National Longitudinal Survey of Youth (2006), 4,393 children were followed for up to 14 years to determine the relationship between BMI and the development of asthma (Mannino et al.). Overweight boys, but not girls, were more likely to develop asthma and this increased risk persisted for boys but not girls. The reason behind differences in reports is unclear. A review of literature on the relationship between asthma and obesity (Tantisira & Weiss, 2001) and a report from the National Health and Lung Blood Institute workshop (Weiss & Shore, 2004) recognized the complex interactions between these variables.

In summary, there is an increased prevalence of asthma in obese children. Compared to non-obese children, obese children are at an increased risk of morbidity secondary to asthma, including increased wheezing, increased use of medicine, more ED
visits, and longer stays in the ICU and hospital. The association between pediatric obesity and asthma is complex. Some studies show that obese girls are more likely to develop asthma, and other studies indicate that obese boys are at an increased risk. The majority of studies indicate that pediatric obesity precedes the development of asthma, but these studies show gender differences in the course of development of the two disorders. Despite the incomplete understanding of the complex relationship between pediatric obesity and asthma, however, the research evidence suggests an association between these conditions.

Sexual Maturation

An association between pediatric obesity and early sexual maturation in girls has been well documented in both cross sectional and longitudinal studies (Adair & Gordon-Larsen, 2001; Anderson, Dallal, & Must, 2003; Biro et al., 2001; Kaplowitz et al., 2001; Lee et al., 2007; Wang, 2002). The American Academy of Pediatrics (AAP) Pediatric Research in Office Setting (PROS) network study of 17,077 girls, provided evidence that girls, especially Black girls, start puberty at ages previously considered precocious (Herman-Giddens et al., 1997). In a follow-up PROS study, Kaplowitz et al. (2001) concluded that pediatric obesity is an important contributing factor to the earlier onset of puberty in girls. These findings were supported in a study that compared relative weight, race, and menarche status of girls from two nationally representative surveys conducted 25 years a part (Anderson et al.). In this study, researchers reported that in girls 10 to 15 years of age, the shift upward in relative weight was paralleled by an increased likelihood of early menarche, even after controlling for age and race. In the well designed National
A longitudinal study of adolescent health, Adair and Gordon-Larsen (2001) examined the relationship between maturational timing and overweight prevalence in a sample of 6,507 Hispanic, Black, White, and Asian American girls. In all racial and ethnic groups, early maturing girls were almost two times as likely as average maturing girls to be overweight.

Some studies have shown that African American girls are more likely to experience early menarche than White girls, independent of the effect of relative weight (Anderson et al., 2003; Freedman et al., 2003; Kaplowitz et al., 2001). Other studies indicate that obese girls may experience different patterns of sexual maturation (Biro et al., 2003; Himes et al., 2004). In a 10-year longitudinal study of White females, girls who entered puberty with increased breast development had earlier menarche and increased BMI one year before and throughout puberty, compared with girls who began puberty with pubic hair maturation (Biro et al.). Himes et al. (2004) reported similar findings in a study of African American girls, with increased stages of breast development, but not stages of pubic hair development, associated with obesity. When compared with prepubescent girls, pubescent girls with increased breast development were greater than eight times more likely to be obese.

The causal direction of the association between pediatric obesity and early sexual maturation remains controversial. Some studies suggest that obesity is a consequence of early sexual maturation in girls (Demerath et al., 2004; Ridder et al., 1992), whereas other studies indicate that pediatric obesity leads to early sexual maturation in girls (Davidson, Susman, & Birch, 2003; Freedman et al., 2003; Must et al., 2005). In a
longitudinal study, Freedman et al. (2003) followed 1,179 subjects from the *Bogalusa Heart Study* to determine the relation of menarcheal age to obesity in pediatric and adult samples. In this study, pediatric obesity influenced both early menarche and the later development of adult obesity. Similar findings were reported by Must et al. (2005), who reported that girls who were overweight before their first menstrual periods were more likely to mature early and were almost eight times more likely to be overweight in adulthood.

Limited research has been conducted that examines the association between obesity and sexual maturation in boys. Wang (2002) reported a significant reverse association between obesity and sexual maturation in a nationally representative sample of 1,501 boys and 1,520 girls. When compared with average or late maturing children, early maturing boys were less likely to be obese, and early maturing girls were two times more likely to be obese.

In summary, research evidence suggests that obese girls are at an increased risk for early sexual maturation. Early stages of breast development, but not development of pubic hair, are associated with pediatric obesity. The causal direction of the association between pediatric obesity and early sexual maturation remains unknown. Some researchers have found that obesity leads to early maturation, and others argue that early maturation leads to obesity. It does appear that obese girls who mature early continue to carry the excess weight into adulthood. Less is known about the sexual maturation of obese boys, but it appears they are more likely to mature late.

*Social Health Consequences*
The social health consequences of pediatric obesity are often the most immediate, affecting many aspects of overweight children’s lives. Several literature reviews examining the health effects of pediatric obesity have documented the social impact of being obese (Dietz, 1998., Must & Anderson, 2003., Must & Strauss, 1999, Puhl & Latner, 2007; Schwartz and Puhl., 2003). This section will focus on social experiences of obese children, including being teased, bullied, socially rejected, and socially isolated. The adverse academic and economic effects of pediatric obesity will also be addressed.

Teased and Bullied

Obese children report more experiences of being teased and bullied than their non-obese peers (Berg, Simonsson, & Ringqvist, 2005; Faith et al., 2002; Fox & Farrow, 2009; Griffiths et al., 2006; Hayden-Wade et al., 2005; Janssen, Craig, Boyce, & Pickett, 2004; Lumeg et al., 2010; Neumark-Sztainer, Falkner, & et al., 2002; Pearce, Boergers, & Prinstein, 2002; Stern et al., 2006; Sweeting & West, 2001). In a large, population-based study drawn from Project EAT (Eating Among Teens), Neumark-Sztainer, Falkner, and colleagues (2002) examined the prevalence of perceived weight-teasing among 4,747 adolescents in grades 7 to 12. Approximately 63% of obese girls and 58% of obese boys reported being the targets of weight-teasing from peers compared to 21% of average weight girls and 17% of average weight boys. Furthermore, 47% of obese girls and 34% of obese boys reported experiencing weight-teasing by family members compared to 24% of average weight girls and 11% of average weight boys (Neumark-Sztainer et al.). Hayden-Wade and colleagues (2005) compared the teasing experiences of a clinical sample of 70 obese children and 86 non-obese children from public schools. Nearly 90%
of the obese children reported being the targets of weight-related teasing versus 30% of non-obese children. The main source of teasing was peers in general, but obese children also reported other sources of teasing that included friends, teachers, parents and family members.

In the World Health Organization’s *Health Behavior in School-aged Children* (HBSC) Survey, researchers examined the associations between obesity and bullying behaviors among 5,749 Canadian children in grades 6 to 10 (Janssen, Craig, Boyce, & Pickett, 2004). Obese children were more likely to report being the victims of verbal bullying (e.g., name-calling, teasing), physical bullying (e.g., hitting, kicking, pushing), and relational bullying (e.g., withdrawing friendships, spreading rumors, lies) than non-obese peers. Compared to non-obese peers, obese children 15 to 16 years of age were also more likely to report being the perpetrators of bullying behaviors. The researchers concluded that older obese children may use their size to initiate peer-group domination at a time when peer groups become increasingly important for self esteem development. Similar findings were found in a cross-sectional school-based survey of 989 Swedish boys 15 years of age (Berg, Simonsson, & Ringqvist, 2005). Compared to non-overweight boys, obese boys were two times more likely to report being teased, kicked or hit, and bullied. Obese boys were also more likely to be perpetrators of bullying behavior; 33% reported they had kicked or hit a peer, and 40% reported they had bullied a peer. Likewise, in a longitudinal study of 8,210 children in Southwest England, obesity was predictive of preadolescent boys and girls being victims of bullying (Griffiths et al., 2006). Obese boys were also 1.66 times more likely to be overt bullies compared to
average weight boys, presumably using their physical size to exercise dominance in the peer group.

Some studies have shown apparent gender differences in obese children’s experience of being teased and bullied. Pearce and colleagues (2002) examined the associations between obesity and peer relations in a study of 416 students in grades 9 to 12. In this study, obese boys were more likely to report overt victimization such as being teased, hit, kicked, or punched. Obese girls were more likely to report relational victimization such as peers refusing to spend time with them, giving them the silent treatment, or not sitting near them at school (Pearce, Boergers, & Prinstein, 2002). In other studies, obese girls report more weight-teasing (Eisenberg, Neumark-Sztainer & Story, 2003; Neumark-Sztainer, Falkner, & et al., 2002), more distress over weight-teasing (Neumark-Sztainer, Falkner, & et al.), and more weight criticism during physical activity (Faith et al., 2002) than obese boys.

Little is known regarding the mediators of the relationship between obesity and bullying. In a recent study, however, Fox and Farrow (2009) identified several factors that might explain the relationship between a child’s weight status and being a victim of verbal or physical bullying. These factors include global self worth, self-esteem for physical appearance and body dissatisfaction.

Research evidence suggests that children who experience weight-related teasing and bullying are at an increased risk for other psychosocial health problems. In studies of overweight and obese African American children, weight-related teasing was associated with low self-esteem (Young-Hyman, Schlundt, Herman, De Luca, & Counts, 2003) and
decreased social quality of life (Stern et al., 2006). In another study of overweight children 8 to 18 years of age, peer victimization was associated with increased reports of depression, anxiety, loneliness and decreased physical activity (Storch et al., 2007). Two major studies from Project EAT examined the associations of weight-based teasing and disordered eating behaviors (Neumark-Sztainer, Falkner, & et al., 2002) and emotional well-being (Eisenberg, Neumark-Sztainer, & Story, 2003) among adolescents. In the first study of 4,746 adolescents in grades 7 to 12, Neumark-Sztainer and colleagues (2002) reported that obese children who experienced weight-teasing were at a significantly greater risk for unhealthy weight control and binge-eating behaviors than obese children who did not report being teased. For instance, 29% of obese girls and 18% of obese boys who experienced weight-teasing reported binge-eating as compared to 16% of obese girls and 7% of obese boys who were not teased. The researchers found similar findings of disordered eating behaviors among all children who experienced weight-teasing regardless of weight status.

Eisenberg and colleagues’ (2003) found that regardless of weight status perceived weight-teasing is associated with poor emotional health. In this study of 4,746 adolescents, children of all weight groups who experienced weight-teasing consistently reported low body satisfaction, low self-esteem, high depressive symptoms, and suicidality. Weight-teasing from two sources was associated with the highest prevalence of emotional health problems. For instance, children who reported being teased by both peers and family were three times more likely to report a suicide attempt compared with children who did not experience weight-teasing (Eisenberg, Neumark-Sztainer, & Story,
Similarly, in Hayden-Wade et al.'s study (2005), obese and non-obese children who experienced weight teasing were more likely to report higher weight concerns, more loneliness, poorer self-perception of one’s appearance, and preference for sedentary, isolative activities than children who were not teased (Hayden-Wade et al.). One study found that children who experienced weight criticism during physical activity reported less enjoyment of sports and decreased activity than peers who were not criticized (Faith et al., 2002). Longitudinal findings from Project Eat, indicate that weight-related teasing among 2516 adolescents predicted disordered eating behaviors (Haines et al., 2006) and poor emotional well-being (Eisenberg, Neumark-Sztainer, Haines, & Wall, 2006) at 5-year follow-up. Haines et al. (2006) found that compared to their peers, boys who were teased about their weight reported increased binge eating and unhealthy weight control behaviors, and girls who were teased were more likely to become frequent dieters. Eisenberg and colleagues (2006) found that weight-teasing predicted lower self-esteem, lower body image, and higher depressive symptoms. Researchers have concluded that it may be the experience of being teased about weight instead of the actual body shape of children that seems to be the contributing factor for increased emotional health problems (Eisenberg et al., 2003).

In a review of literature on the nature and extent of bullying at school, Dake and colleagues (2003) found evidence that children who are victims of bullying are likely to experience numerous physical, mental, and social detriments. In a study of a large, representative sample of 15,686 U.S. students in grades 6 to 10 who completed the HBSC Survey, children who were bullied reported greater difficulty making friends, poorer
relationships with classmates, and greater loneliness than non-bullied children (Nansel et al., 2001). In a study of 2766 elementary school children age 9 to 12 years from the Netherlands, bullied children were more likely to report depression and a wide range of psychosomatic symptoms, including headaches, sleep problems, abdominal pain, anxiety, feeling tired, and bed wetting (Fekkes, Pijpers, & Verloove-Vanhorick, 2004). In a more recent study, researchers evaluated whether Black and White adolescents who reported high levels of unfair treatment related to the adolescent transition, including being treated with less respect or being threatened or harassed, experienced elevated ambulatory blood pressure during a school day (Matthew, Salomon, & Shou, 2005). In this study, high levels of mistreatment attributed primarily to race was not associated with elevated BP, but mistreatment attributed primarily to physical appearance was strongly associated with elevated ambulatory blood pressure throughout the school day. The researchers found that the elevated blood pressure due to unfair treatment associated with physical appearance could not be attributed to a variety of usual high blood pressure determinants including weight, race, gender, and physical activity. In a study of 15,686 U.S. students in 6th thru 10th grade, adolescents who suffered from at least one or more frequent physical or emotional symptoms, including headaches, stomachaches, backaches, dizziness, or sleep difficulties, were at 2.4 to 3.5 times more likely to be involved in frequent bullying incidents, as a bully, a victim, or both, compared to students who did not experience frequent symptoms (Strabstein, McCarthy, Shao, & Huang, 2006).

In summary, obese children are at an increased risk for being teased and bullied compared to non-obese children. Teasing and bullying experiences differ between obese
boys and obese girls, obese boys experience more overt victimization and obese girls experience more relational victimization. Children who experience being teased and bullied, especially adolescents, are at an increased risk for numerous detrimental physical and psychosocial health outcomes. Weight-related teasing and bullying may be more strongly associated with adverse health outcomes than obesity.

*Social Isolation and Social Rejection*

Obese children are also at risk for social isolation and social rejection (Berg, Simmonsson, & Ringqvist, 2005; Boneberger et al., 2009; Falkner et al., 2001; Pearce, Boergers, & Prinstein, 2002; Strauss & Pollack, 2003). In the landmark *National Longitudinal Study of Adolescent Health*, Strauss & Pollack (2003) investigated the social networks of a large U.S. representative sample of 90,118 adolescents aged 13 to 18 years. The researchers found that obese children are more likely to be socially isolated and peripheral to social networks than non-obese children. These findings were most pronounced in non-Hispanic White children and Hispanic boys, and least pronounced in African American children and Hispanic girls. Among obese and average weight children, stronger social ties were reported by those individuals who participated in sports and school clubs and watched less television. In a study of adolescent boys, researchers found obese boys were more than two times more likely than non-obese boys to report that it was difficult to find new friends, and more than three times more likely to report having no friends or only one close friend (Berg, Simmonsson, & Ringqvist, 2005). Increased prevalence of peer relationship problems, such as solitary play and limited
friends, had been noted in overweight and obese children as young as 5 to 6 years of age (Boneberger et al., 2009).

Studies indicate obese girls may be at a greater risk for social isolation and rejection than obese boys (Boneberger et al., 2009; Falkner et al., 2001; Pearce et al., 2002). Falkner and colleagues (2001) examined the social, educational, and psychological correlates of weight status in a population-based study of 9,943 adolescents in grades 7, 9 and 11. Obese girls were more likely to feel friends do not care about them, were less likely to hang out with friends, and were more likely to have trouble getting along with other students than non-obese girls. Obese boys and underweight boys were less likely to hang out with friends than average weight boys. In another study, Pearce and colleagues (2002) examined associations between obesity and romantic relationships among adolescents and reported obese girls were less likely to date than non-obese peers. Both obese girls and obese boys reported less satisfaction with their dating status than their non-obese peers.

No known research has specifically addressed the impact of social isolation on obese children. An abundance of research evidence, however, suggests that supportive relationships protect individuals from a multitude of physical and psychological health problems, and a perceived lack of supportive relationships increases the risk of chronic health conditions (Uchino, 2004). In a longitudinal study of 496 adolescent girls, researchers found that deficits in perceived parental support, but not perceived peer support, predicted an increase in depressive symptoms and the development of major depression (Stice, Ragan, & Randall, 2004). In a retrospective study of 2,905 individuals,
Researchers found that perceived lack of parental social support in childhood was associated with increased levels of depressive symptoms and chronic conditions in adulthood (Shaw, Krause, Chatters, Connell, & Ingersoll-Dayton, 2004). In a New Zealand longitudinal study of 1,037 children, researchers examined the impact of social isolation from peers in children from birth to 26 years of age (Caspi, Harrington, Moffitt, Milne, & Poulton, 2006). The researchers found that social isolation in childhood had persistent and cumulative detrimental effects on adult health. Socially-isolated children were at increased risk for social isolation in adulthood and a clustering of cardiovascular risk factors, including overweight, elevated blood pressure and elevated total cholesterol compared to non-isolated children. This association was independent of other well established risk factors for poor adult health including pediatric obesity, low socioeconomic status, and low pediatric IQ.

In summary, obese children are at an increased risk for social isolation and social rejection from peers. Research on social isolation has focused primarily on adolescents. Rejection is of particular concern to obese White adolescent girls. These girls report that their friends do not care about them, they have trouble getting along with peers, and they hang out with friends less and date less. Participation in sports and school clubs and decreased TV viewing may promote stronger social ties of obese children. Social isolation in childhood may lead to persistent and cumulative detrimental effects on adult health regardless of obesity status.

Adverse Academic and Economic Outcomes
Pediatric obesity may have a negative effect on the academic experience of obese children. In a cross-sectional school-based survey of 9,957 adolescents, researchers found overweight boys and girls reported lower expectations of their educational future than non-overweight boys and girls, and compared to non-overweight boys, overweight boys reported poorer school performance (Mellin, Neumark-Sztainer, Sory, Ireland, & Resnick, 2002). In Falkner et al.’s study (2001), compared with average weight girls, obese girls were 1.5 times more likely to report being held back a year in school and 2.1 times more likely to report being a poor student. Obese boys were 1.5 times more likely to report being a poor student and 2.2 times more likely to expect to quit school than average weight boys.

Several studies have found that obese children are more likely to miss more days of school than non-obese children (Geir et al., 2007; Schwimmer, Burkwinkle, & Varni, 2003). For instance, in a study of 1069 children from nine public elementary schools, Geir and colleagues (2007) found that overweight children missed on average 12 days of school per year versus 10 days for normal-weight children. Schwimmer, Burkwinkle, and Varni (2003) found that severely obese children 5 to 18 years of age reported they missed approximately four days of school per month, compared to children in the general population who reported they missed less than one day of school per month. These studies did not examine the reasons for the missed days of school. Geir and colleagues (2007), however, speculated that obese children may miss more school for several reasons, including social concerns, such as fear of being ostracized by peers, and medical conditions, such as asthma associated with obesity.
Two studies have used objective measures to examine school performance among obese children (Datar, Sturm, & Magnabosco, 2004; Mo-suwan, Lebel, Puetpaiboon & Junjana, 1999). Mo-suwan and colleagues (1999) examined the relationship between weight status and school performance among 1,207 Thai children grades 3 to 6 and 587 children grade 7 to 9. Among children in grades 7 to 9, overweight children were two times more likely to have low language and math scores than average weight children, and being overweight or becoming overweight was significantly associated with lower grade-point averages. No association was found between these variables in children in grades 3 to 6. In a U.S. nationally representative sample of 11,192 children, Datar and colleagues used data from the Early Pediatric Longitudinal Study to examine the relationship between obesity status in kindergarten and academic performance in kindergarten and first grade. In this study, obese children scored lower on math and reading scores at baseline and at a one-year follow up than non-obese children. However, these associations were weakened after controlling for socioeconomic and behavioral factors that included report of physical activity, television viewing, mother’s education, and stimulating home environment. The researchers concluded that obesity is a marker, but not a causal factor for decreased academic performance.

Pediatric obesity may also have effects on subsequent educational attainment and economic status. Two reports from Crandal (1991, 1995) demonstrated that heavy-weight adolescent college students, particularly females, are significantly less likely to receive financial support from their parents for college than average-weight adolescents. The impact of pediatric obesity on the subsequent educational attainment and economic
status has been demonstrated in a *National Longitudinal Survey of Labor Market Experience Youth Cohort (NLSY)* of 10,039 young people aged 16 to 24 years (Gortmaker, Must, Perrin, Sobol, & Dietz, 1993). In this study, over a seven-year period, women obese at baseline were more likely to report detrimental social and economic consequences. They had completed fewer years of school, were less likely to be married, had lower household incomes, and experienced more poverty than women who had not been obese. Men who had been obese at baseline were less likely to report being married than men who had not been obese.

In summary, pediatric obesity may place children at risk for experiencing adverse academic outcomes. Adolescent girls are more likely to report being held back in school, and boys are more likely to report quitting school. Obese children miss more days of school on average than their non-overweight peers. Severely obese children miss on average 4 days of school per month. Obese children, especially adolescents, have lower scores on math, reading, and language tests. Long-term negative effects of pediatric obesity on educational attainment and economic status in adulthood have been documented.

*Psychological Health Consequences*

Reviews of the literature over the last two decades on the relationship between pediatric obesity and psychological factors have produced inconsistent findings (Friedman & Brownell, 1995; McGuire, Jeffery, & French, 2002; Wadden & Stunkard, 1985; Wardle & Cooke, 2005; Zametkin, Zoon, Klein, & Munson, 2004). Research evidence suggests that compared to non-obese children, obese children in the general
population do not appear to differ on measures of overall psychological function, but some obese children are more likely to experience poorer psychological health than others (Friedman & Brownell; McGuire et al., 2002; Wadden & Stunkard; Wardle & Cooke). This section will examine the empirical evidence on the relationship between pediatric obesity and depression and self-esteem. The relationship between pediatric obesity and other psychological responses, including body dissatisfaction and overweight concerns, dieting and disordered eating, and impaired health-related quality of life, will also be discussed.

Depression

Research evidence indicates that the relationship between obesity and depression in children is complex. Studies of clinical samples of obese children seeking treatment for their condition suggest a relationship between obesity and depression (Britz et al., 2000; Erermis et al., 2004; Vila et al., 2004). Several of these studies include non-clinical obese groups and average-weight population controls (Britz et al.; Erermis et al.). Britz and colleagues detected major depressive disorders twice as often in a clinical group of 48 severely obese adolescents, when compared with 47 gender-matched population-based obese controls and a population-based control group of 1,608 adolescents. Erermis and colleagues found a depressive disorder in 10 out of 30 clinically obese adolescents, compared to 6 out of 30 non-clinically obese and 2 out of 30 normal weight controls. Caution must be taken when interpreting these findings due to the small sample size of obese children. Also, the clinical groups of obese children had significantly higher BMIs than the non-clinical obese groups (Britz et al.; Erermis et al.).
Population-based studies examining the association between obesity and depression or depressive symptoms have mixed findings. Some studies suggest that obesity is not a significant predictor for depression or depressive symptoms in adolescents (Daniels, 2005; Kim & Kim, 2001; Lamertz et al., 2002; Wardle, Williamson, Johnson, & Edwards, 2006). Daniels (2005) analyzed data from 16 to 18 year olds who participated in the Center for Disease Control’s 1999 (n=9,528) and 2001 (n=7,993) Youth Risk Behavior Surveillance System (YRBSS) and found BMI was not a significant predictor for depression. In this study, depressive symptoms were related to perceived weight concerns and dieting behaviors. Adolescents who perceived themselves as overweight or underweight were 35% more likely to report depressive symptoms compared to adolescents who reported their weight was “OK.” The report of depressive symptoms was 50% higher in girls than boys. Similar findings were noted by Kim & Kim (2001) who found that perception of a weight problem, but not BMI, predicted increased depressive symptoms in a smaller sample of 303 Korean adolescent females. In this study, close to 80% of females reported that they desired to be underweight (Kim & Kim). Lamertz et al. analyzed data from The Early Developmental Stages of Psychopathology (EDSP) study with a sample of 3,021 German subjects aged 14 to 24 and found no association between BMI and general psychopathology, including depressed mood or somatoform disorders. Data from two large UK school-based studies of adolescent health (n=4,320) and adolescent well being (n=1,824) were analyzed to determine the association between obesity and depression. Researchers found that reports of depressive symptoms were not significantly higher in obese adolescents compared
with normal-weight adolescents, and no differences were noted after controlling for the gender, socioeconomic status, and ethnicity of the obese children.

Other population-based studies indicate that obese children (Goldfeld et al., 2010; Sjorberg, Nilsson, & Leppert, 2005), especially obese girls (Erickson, Robinson, Haydel, & Killen, 2000; Needham & Crosnoe, 2005; Xie et al., 2003), are at risk for increased depression or depressive symptoms. However, the effects of experiences of being degraded or ridiculed, parental separation (Sjorberg et al.), overweight concerns (Erickson et al.), body image (Xie et al.), or dieting and perception of health (Needham & Crosnoe) may explain this association. For instance, Needham and Crosnoe (2005) analyzed data from the National Longitudinal Study of Adolescent Health (NLSAH) to determine the association between overweight status and depressive symptoms among a sample of 18,924 adolescents aged 11 to 21. The researchers found that increased BMI significantly predicted greater levels of depressive symptoms in girls, but not in boys. Reports of dieting, however, decreased the association between BMI and depressive symptoms in girls by approximately 50%. In this same study, the association between overweight status and symptoms of depression was stronger in both boys and girls during early adolescence, but reports of lower self-rated health explained this association.

Prospective studies that followed individuals over time also had mixed findings. In a representative sample of 991 White rural youth 9 to 16 years of age followed annually over an 8-year period, Mustillo et al. (2003) reported that only boys with persistent obesity from early childhood into adolescence were at risk for depression. In contrast, in a community-based sample of 776 youth 9 to 18 years of age assessed four
times over a four year period, researchers reported that adolescent obesity in females predicted an increased risk for major depressive disorder in girls but not in boys (Anderson, Cohen, Naumova, Jacques, & Must, 2007). Other prospective studies of adolescent females indicate increased BMI does not predict major depression (Boutelle, Hannan, Fulkerson, Crow, & Stice, 2010; Stice & Bearman, 2001; Stice, Cameron, Hayward, Killen, & Taylor, 2000).

Other researchers have reported that depression may predict the development of obesity (Anderson, Cohen, Naumova, & Must, 2006; Goodman & Whitaker, 2002; Pine, Goldstein, Wolk, & Weissman, 2001; Richardson et al., 2003). In a school-based sample of 9374 adolescents drawn from the NLSAH, Goodman and Whitaker (2002) found no correlation between baseline obesity and baseline depression, but over a one-year period, depressed mood predicted the development and persistence of pediatric obesity. Pine and colleagues (2001) found that depression during childhood was associated with an increase BMI in adulthood. Other prospective studies have shown that depression or depressive symptoms in children predicts the development of obesity, but only in girls (Anderson, Cohen, Naumova, & Must, 2006; Richardson et al., 2003). Stice and colleagues (2005) collected data annually for five years on 496 adolescent girls and found that for each additional depressive symptom reported, there was more than a four-fold increased risk for development of obesity.

The question of whether depression is a result of obesity or is a risk factor for obesity remains to be established. Several reviews on the relationship between obesity and depression in adults and children indicate no clear relationship between these
variables, and many obesity-depression covariates have been identified (Faith, Matz, & Jorge, 2002; Stunkard, Faith, & Allison, 2003). Potential moderators and mediators included severity of depression, severity of obesity, gender, socio-economic status, binge eating disorder status, genotype, teasing, stress, eating, physical activity and pathophysiology (Faith et al.; Stunkard et al.). In a review of literature on depression and obesity, Stunkard, Faith, & Kelly (2003) identified adverse childhood experiences as promoting the development of both obesity and depression and their co-occurrence.

In summary, there appears to be some association between pediatric obesity and depression or depressive symptoms, but this relationship is complex and influenced by several other factors. Morbidly obese adolescents, obese adolescent girls, and obese boys with persistent obesity are at the greatest risk for depressive symptoms. Factors thought to moderate or mediate the relationship between pediatric obesity and depression include perceptions of health or weight, over-weight concerns, dieting, poor body-image, parental separation, and adverse childhood experience, including being degraded or ridiculed.

Self-Esteem

In a review of literature, French and colleagues (1995) examined the relationship between self-esteem and obesity in children and adolescents and found mixed results and inconclusive findings. The cross-sectional studies reviewed indicate an inverse association between obesity and self-esteem, but this relationship was only modest, and the majority of obese children and adolescents within these studies had self-esteem scores within normal ranges (French, Story, & Perry, 1995). Prospective studies to date also
show inconsistent findings (French, Perry, Leon, & Fulkner, 1996; Gortmaker et al., 1993; Hesketh, Wake, & Waters, 2004; Strauss, 2000). In the *National Longitudinal Survey of Labor Market Experience Youth Cohort (NLSY)* of 10,039 young people aged 16 to 24 years, researchers reported that obese adolescents did not have decreased self-esteem scores at baseline or at the 7-year-follow-up (Gortmaker et al.). In a three-year longitudinal study of 1,278 adolescents, French, Perry et al. found only a modest association between self-esteem and obesity. Hesketh and colleagues reported a strong association between BMI and low self-esteem across the elementary school years in a sample of 1,157 Australian children 5 to 10 years of age. In a study of 1,520 children 9 to 10 years of age born to mothers in the *National Longitudinal Survey of Youth (NLSY)*, no significant differences in global self-esteem among obese and non-obese children were noted at enrollment (Strauss). However, over a four year period, almost 70% of obese Caucasian and Hispanic females had decreased levels of self-esteem, compared with 43% of non-obese Caucasian and Hispanic females. Only mild decreases in self-esteem were noted in obese boys compared to non-obese boys, and no association was observed between obese and non-obese African American girls. These discrepancies may be attributed to many factors, including small and select samples, lack of comparison groups and differences in measures.

Several intervention studies have shown that obese children from clinical samples who seek treatment are more likely to suffer from low self-esteem than obese children in the community (Cameron, 1999; Floodmark, 2005). Other studies indicate that obese girls are at a greater risk for low self-esteem than obese boys (Davison & Birch, 2001b;
French, Perry, Leon, & Fulkner, 1996; Israel, & Ivanova, 2002; Stradmeijer, Bosh, Koops, & Seidell, 2000; Strauss, 2000, Young-Hyman, Schlundt, Herman-Wenderoth, & Bozylinski, 2003), with decreased self-esteem noted in obese girls as young as 5 years of age (Davison & Birch, 2001). Kim and Kim (2001) found that obesity did not predict decreased self-esteem in adolescent Korean girls. Other studies have reported apparent ethnic differences among obese girls, with obese African American girls least likely to exhibit low-self esteem (Kimm et al. 1997; Strauss). In a study of 2,205 African American and Caucasian girls aged 9 to 10 years, from the National Heart and Lung Blood Institute (NHLBI) Growth and Health Study (NGHS), Kimm and colleagues (1997) examined the effect of obesity on domain-specific measures of self-esteem. A significant inverse relationship between obesity and physical appearance and global self worth was noted in all girls, but the impact was much greater in Caucasian girls than African-American girls. The researchers also found a significant inverse relationship between obesity and social acceptance in Caucasian girls, but not African-American girls. The authors conclude that Caucasian girls are more concerned with physical appearance than African-American girls, and obese African-American girls are more socially accepted than obese Caucasian girls.

Other studies indicate that the relationship between obesity and self-esteem may be mediated by various factors including children’s perception of a weight problem (Kim & Kim, 2001), parental concern of their child’s overweight status (Davison & Birch, 2001b; Stradmeijer, Bosh, Koops, & Seidell, 2000), parental restriction of food (Davison & Birch, 2001b), parental weight criticism (Davison & Birch, 2002), and parental
perception of child’s size as heavier than average (Young-Hyman, Schlundt, Herman-Wenderoth, & Bozylinski, 2003). Several studies have found peer teasing mediates the relationship between obesity and self-esteem or self-concept (Kimm et al., 1997; Davison & Birch, 2002). Young-Hyman and colleagues (2003) found that in a sample of overweight to very obese 5-to-10-year-old African-American children, weight-related peer teasing predicted low self-esteem. As children increased in adiposity, they reported less social acceptance, increased teasing, and more peer attention related to weight. In a study of 3197 females from the National Longitudinal Study of Adolescent Health (NLSAH), obese girls exhibited lower self-esteem, but these findings were no longer significant after body-image was controlled (Pessa, Syre, & Jones, 2000). Strauss (2000) reported that obese and non-obese children with decreasing levels of self-esteem were more likely to report increased rates of loneliness, sadness, nervousness, and were more likely to smoke or drink compared to children whose self-esteem remained the same or increased.

In summary, studies examining the relationship between pediatric obesity and self-esteem have mixed findings. Research evidence suggests that some obese children, especially Caucasian girls, treatment-seeking children, and those who are teased or criticized about their weight, are more likely to suffer from poor self-esteem. Parental concerns and perceptions of child’s overweight, parental restriction of food, and parental weight criticism also place obese children at increased risk for low self-esteem. Children with decreasing levels of self-esteem are likely to experience increased sadness, loneliness, and nervousness and are more likely to smoke or drink.
Body Dissatisfaction and Overweight Concerns

Body dissatisfaction and overweight concerns have been well documented among obese children. In a meta-analysis of studies, Friedman and Brownell (1995) found a large effect size between obesity and body image dissatisfaction or distortion. Subsequent cross-sectional studies support findings that obese children are significantly more likely to exhibit body image dissatisfaction or body image concerns than average weight peers (Berg, Simmonsson, & Ringqvist, 2005; Buddenberg-Fisher, Klaghofer, & Reed, 1999; Goldfield et al., 2010; Mirza, Davis, & Yanovski, 2005; Neumark-Sztainer et al., 2002; Thompson et al., 2007; Vander Wal, 2004; Vander Wal & Thelen, 2000). Neumark-Sztainer and colleagues (2002) assessed weight-related concerns and behaviors among a large population-based sample of 4,756 adolescents from Project EAT (Eating Among Teens). In this investigation, 66% of obese girls and 47.8% of obese boys reported low body satisfaction, and 82.6% of obese girls and 76.5% of obese boys reported caring somewhat or very much about controlling their weight.

In a review of literature examining body image concerns among children, Ricciardelli and McCabe (2001) concluded that increased BMI is a main contributing factor associated with increased body image concerns, along with being female and increasing age. More recent longitudinal studies have shown that pediatric obesity is a predictor of body dissatisfaction and overweight concerns, especially among girls over time (Davison, Markey, & Birch, 2002; Presnell, Bearman, & Stice, 2004; Stice & Whitenton, 2002; Sweeting, Wright, & Minnis, 2005). Davison and colleagues found that among 182 five-year-old girls, those with increased BMIs reported higher weight
concerns and higher body dissatisfaction at ages 7 and 9, and the strength of this relationship increased with age. Stice and colleagues noted that over a one-year period, increased BMI was one of the most potent predictors of body dissatisfaction among a sample of 496 females 11 to 15 years of age. Sweeting and colleagues found a strong association between obesity and weight-related concerns in a school-based sample of 2,127 children at 11 and 15 years of age. The association was greater in females at both ages and increased over the four-year period in females but decreased in males. In a 9-month prospective study of 531 children 16 to 19 years of age, Presnell and colleagues demonstrated that increased BMI predicted increased body dissatisfaction for girls, but not for boys. The researchers noted, however, that scales to assess body image dissatisfaction have been primarily developed for girls and may not be reliable for measuring this variable in boys.

Research evidence suggests that the association between BMI and body dissatisfaction or weight concern may differ for girls and boys (Hill, Draper, & Stack, 1993; Neumark et al., 2002; Presnell, Bearman, & Stice, 2004). Several studies found girls report high body satisfaction with underweight bodies and body satisfaction decreases as BMI increases, illustrating a linear relationship between these variables (Neumark et al.; Presnell et al.). In contrast, boys report more body satisfaction with average weight bodies and body satisfaction is decreased with low or high BMIs, showing a U shaped relationship between the variables (Neumark et al.; Presnell et al.). Hill and Colleagues (1993) found that in children as young as 9 years of age, girls report a preference for thin bodies, while boys prefer an athletic muscular body type. In one
study that examined the body image of adolescent boys, researchers found 44% of obese boys reported they were not satisfied with their weight and 21% reported not being satisfied with their looks, compared to 13% and 9% of normal weight boys (Berg, Simonsson & Ringqvist, 2005). In a review of literature on body image dissatisfaction among males across the life span, McCabe and Ricciardelli (2004) concluded that the role of BMI in body dissatisfaction in males is limited and needs further exploration.

In summary, obese children are at risk for increased body dissatisfaction and increased weight concerns. These findings are especially prevalent among obese adolescent females. The association between BMI and body dissatisfaction or weight concern may differ for girls and boys; obese girls prefer thin underweight bodies, and obese boys prefer athletic average-weight bodies. Limited research has focused on the role of obesity in body dissatisfaction among boys.

*Dieting and Disordered Eating*

Numerous cross-sectional studies have found that obese children are more likely to diet and to engage in more unhealthy methods of weight control than non-overweight children (Crow, Eisenberg, Story, & Neumark-Sztainer, 2006; Goldfeld et al., 2010; Mellin et al., 2002; Neumark-Sztainer, Story, French, et al., 1997; Neumark-Sztainer, Story, Resnick et al., 1997; Neumark-Sztainer et al., 2002; Neumark-Sztainer, Wall, Eisenberg, Story, & Hannan, 2006; Story et al., 2001). A study with 1,441 second-and third-grade American Indian children found that approximately 70% of obese children were trying to lose weight compared to 38% of average weight children (Story et al.). In studies of 4746 adolescents from Project EAT, overweight adolescents were
approximately 1.5 to 3 times more likely to report dieting (Crow et al., 2006), and 76% of obese girls and 56% of obese boys reported that they were currently trying to lose weight, compared to 34% of average weight girls and 8% of average weight boys (Neumark-Sztainer et al., 2002). In a study of 287 randomly selected obese children from Taiwan, 98% reported weight control behavior such as dieting and exercise (Wu et al., 2003). In this study, severely obese children were more likely to report inappropriate methods of weight loss such as diet pills or weight loss tea when compared to mild or moderately obese children. In several large school-based surveys, including 31,122 adolescents (Neumark-Sztainer, Story, French, & et al., 1997), 11,686 Native American adolescents (Neumark-Sztainer, Story, Resnick, & Blum, 1997), and 8,330 adolescents (Boutelle, Neumark-Sztainer, Story, & Resnik, 2002), researchers found that obese children were more likely than non-obese children to engage in disordered eating behaviors such as vomiting, taking diet pills, frequent dieting, and binge eating.

Findings from the five year Project Eat longitudinal study of 2,516 adolescents indicate a high prevalence of overweight and disordered eating among adolescents (Neumark-Sztainer et al., 2007; Neumark-Sztainer, Wall, Eisenberg, Story, & Hannan, 2006; Neumark-Sztainer, Wall, Guo, Story, Haines, & Eisenberg, 2006). In one analysis, approximately 30% of boys and girls were overweight in early adolescence and remained so into late adolescence (Neumark-Sztainer, Wall, Eisenberg, Story, & Hannan, 2006). Researchers identified a steep longitudinal increase in the use of unhealthy or extreme weight control behaviors, including smoking cigarettes, fasting, skipping meals, vomiting, and the use of laxatives or diet pills, throughout adolescence in both males and
females. In a different analysis, adolescents using unhealthy weight control behaviors were more than three times more likely to become overweight 5 years later (Neumark-Sztainer, Wall, Guo, Story, Haines, & Eisenberg, 2006). In another analysis, researchers reported that approximately 40% of overweight girls and 20% of overweight boys engaged in at least one type of disordered eating behavior that included binge eating or extreme weight control (Neumark-Sztainer et al., 2007). Several variables, including weight-related pressures from society, personal weight concerns, and the use of dieting and unhealthy weight control behaviors placed children at an increased risk for developing weight-related problems. Studies have found that overweight adolescents who report higher levels of family connectedness, parental expectations, priority of family meals, positive mealtime environment, and moderate levels of parental monitoring experienced the lowest levels of unhealthy weight control behaviors (Fulkerson et al., 2007; Mellin et al., 2002; Neumark-Sztainer et al., 2007).

Binge eating and loss of control over eating are significant problems among obese children. Berkowitz and colleagues (1993) noted that 30% of obese adolescent girls seeking treatment for obesity had binge-eating problems. More recent studies of treatment and non-treatment samples of obese children indicate that binge-eating or loss of control over eating appears to be a prevalent problem with an estimated prevalence rate of 20% to 37% (Decaluwe & Braet, 2003; Decaluwe, Braet, & Fairburn, 2003; Isnard et al. 2003; Morgan et al., 2002; Tranfosky et al., 2005). A significant relationship between binge eating and obesity in children was also found in two large studies that included a school-based sample of 4,746 adolescents from Project EAT (Ackard,
Neumark-Sztainer, Story, & Perry, 2003) and a cross-sectional survey of 2,020 parents of children 5 years of age (Lamerz et al., 2005). Britz and colleagues (2000) found that obese adolescents in clinical treatment were 6 times more likely than population-based controls to report eating disorders. In this study, 60% of females and 35% of males in clinical treatment for extreme obesity reported experiencing episodes of binge eating.

Several studies indicate that pediatric obesity precedes dieting (Sinton & Birch, 2005), overeating and binge eating (Decaluwe & Braet, 2003). In Delcaluwe and Braet’s study, all of the obese binge eaters 10 to 16 years of age reported that their obesity was present before they began binge-eating. In a four year longitudinal study, Sinton and colleagues found that increased BMI at 5 years of age predicted the emergence of dieting at 9 years of age. Other prospective studies have shown that dieting may actually predict future onset of obesity (Stice, Cameron, Killen, Hayward, & Taylor, 1999; Stice, Presnell, Shaw, & Rohde, 2005) and weight gain (Field et al., 2003). In the Growing Up Today study (GUTS) of 14,972 children 9 to 14 years of age at baseline, dieting to control weight was ineffective and children who reported increased dieting gained more weight over a three-year period than non-dieters (Field et al.). Stice and colleagues (2005) followed 496 adolescent girls for 4 years. Girls who labeled themselves as dieters at baseline were more than a threefold increased risk for obesity onset than non-dieters. In a four year study of 692 adolescent girls, girls who reported dietary restraint and radical weight control behaviors such as vomiting or laxative abuse were more likely to gain weight than girls who did not report these behaviors (Stice et al., 1999). In this study, binge-eating also predicted subsequent weight gain. However, Stice and colleagues
(2005) found that binge eating did not predict future onset of obesity. Other studies suggest that increased dieting (Crow, Eisenberg, Story, & Neumark-Sztainer, 2006), weight-body concerns (Neumark-Sztainer, Wall, Story, & Perry, 2003), and weight-teasing (Haines, Neumark-Sztainer, Eisenberg, & Hannan, 2006), rather than BMI, leads to unhealthy weight control. Studies indicate that obese children who do report binge eating or loss of control over eating experience greater psychopathology such as decreased self-esteem and body satisfaction, increased depression, anxiety, and suicide attempts (Acknard et al., 2003; Decaluwe & Braet, 2003; Decaluwe, Braet, & et al., 2003; Isnard et al., 2003; Morgan et al., 2002; Tanfosky-Kraff et al., 2005). Ackard and colleagues (2003) found that more than one fourth of children who met criteria for binge eating syndrome reported that they had attempted suicide. Extreme weight control behaviors have also been found to be associated with increased suicidal ideation and suicide attempts in adolescent boys and girls (Crow, Eisenberg, Story, & Neumark-Sztainer, 2008).

In summary, compared to non-obese children, obese children, especially obese girls, are more likely to diet and to engage in more unhealthy methods of weight control and disordered eating behaviors that include taking diet pills, frequent dieting, vomiting, binge-eating and loss of control over eating. A positive family relationship protects overweight children from unhealthy weight control behaviors. The associations between these variables are complex and research findings are inconclusive. However, obese children who do report binge eating, loss of control over eating, or unhealthy weight control behaviors are at risk for experiencing greater psychopathology such as decreased
self-esteem and body satisfaction, increased depression and anxiety, and increased suicide attempts.

**Quality of Life**

In the past decade, researchers have begun documenting the impact of pediatric obesity on health-related quality of life (HRQOL). HRQL is defined by the CDC as an individual’s perceived physical, psychological, and social well-being (CDC, 2011). Each of these specific domains of health is influenced by the person’s experiences, expectations, beliefs, and perceptions (Kolotkin, Meter, & Williams, 2001). In a systematic review of the literature, Griffiths and colleagues (2010) noted that studies show significant reductions in quality of life in obese youth particularly related to physical competence, appearance and social functioning. Studies indicate that clinical samples of obese children may be at the greatest risk for poor HRQOL (Hughes, Farewell, Harris, & Reilly, 2007; Modi et al, 2008; Schwimmer, Burkwinkle, & Varni, 2003; Zeller, Roehrig, Modi, Daniels, & Inge, 2006). In a landmark study, Schwimmer and colleagues (2003) examined the HRQOL of a clinical sample of 106 severely obese children 5 to 18 years of age. Compared with healthy children, obese children had significantly lower HRQOL scores in physical, social, emotional and school functioning domains. The likelihood of obese children experiencing impaired HRQOL was 5.5 times greater than healthy children and similar to children diagnosed with cancer. Parents were more likely to report impaired HRQOL in their obese children compared with obese children’s self ratings. Similar findings were noted in a clinical sample of 126 severely obese children 5 to 12 years of age in the UK (Hughes, Farewell, Harris, & Reilly, 2007).
Obese children were more likely to report impaired HRQOL compared to normal weight controls, but the degree of HRQOL impairment was greatest when assessed from the parent perspective rather than the child perspective.

Other studies indicated that population-based samples of obese children also experience poor HRQOL, but to a lesser extent than clinical samples of obese children (Freidlander et al., 2003; Swallen, Reither, Haas, & Meier, 2005; Williams et al., 2005). In a longitudinal investigation, Williams and colleagues (2005) used the Peds QL 4.0 survey, as did Schwimmer, to determine the relationship between obesity and HRQOL in a community-based sample of 1456 Australian elementary school children. Over a three-year period, child and parent reported scores were similar and showed decreases in physical and social functioning for obese children compared with non-overweight children, but emotional and school functioning scores by weight category were not significant. In a large population-based sample of 4,743 adolescents 12 to 20 years of age from the National Longitudinal Study of Adolescent Health, obese children had significantly lower self-reported general and physical health outcomes compared with normal weight children, but no significant differences were noted in psychosocial health outcomes (Swallen et al.). In a study of parental reports of HRQOL in 371 pre-adolescent children, overweight or obese children were 2 to 4 times more likely to score lower on psychosocial health, self-esteem, and physical functioning (Friedlander et al.).

In summary, obese children are at risk for experiencing impaired HRQOL. Clinically obese children may be at the greatest risk and report HRQOL scores similar to children diagnosed with cancer. The degree of HRQOL impairment is greatest when
assessed from the parent perspective versus the child’s perspective. Obese children from the general population also report impaired HRQOL but to a lesser degree, with some obese children experiencing more physical health impairments, while others have poorer psychosocial health.

**Summary**

Children living with obesity are at risk for experiencing numerous physical and psycho-social health consequences, including cardiovascular disease, Type-2 diabetes, asthma, depression, low self-esteem, body-image concerns and being teased and bullied. While much is known about health-related consequences of obesity, little is known about how children experience, understand, and manage these health challenges. Because of the serious health consequences of pediatric obesity, many efforts have been made to develop effective prevention and treatment strategies.

**Treatment of Pediatric Obesity**

The standard approach to the treatment of obesity in children involves counseling the individual child and/or parent on ways to decrease energy intake and increase energy expenditure to lose weight. However, obesity is a difficult condition to treat and long term weight loss is difficult to achieve. In this section, research on interventions for the treatment of overweight children will be reviewed. These interventions include behavioral and lifestyle approaches, and biologically-based therapies, including pharmacological and surgical treatments.

*Behavioral and Lifestyle Interventions*
The majority of behavioral and lifestyle interventions for the treatment of pediatric obesity consist of several components, including dietary management, physical activity, behavioral modification, and parental involvement (American Dietetic Association, 2006; Summerbell et al., 2003; Whitlock et al., 2005). Several systematic reviews that have examined the efficacy of behavioral and lifestyle interventions for obese children will be presented.

Summerbell et al. (2003) reviewed eighteen randomized controlled studies of lifestyle interventions for the treatment of pediatric obesity that were conducted for 6 months or longer. Lifestyle interventions included dietary, physical activity, and or behavioral therapy components, with or without family involvement. Most studies included participants 7 to 12 years of age. The reviewers found the most promising treatment interventions for pediatric obesity included relaxation, reduction in sedentary behavior, and parental behavior change. However, due to the significant limitations of the studies, including the use of samples of primarily White middle school-aged children, a focus on motivated groups in hospital settings, evaluation of mainly short-term interventions, high attrition rates, and lack of measurements of psycho-social outcomes, few conclusions could be drawn with confidence. The reviewers recommended that interventions to reduce obesity may have different outcomes depending on the age of the child due to the metabolic, developmental, emotional and nutritional differences children experience throughout infancy, childhood, and adolescence. The reviewers noted the lack of data on the unintended effects of pediatric obesity treatments, such as eating disorders, and recommended additional research to determine the most effective interventions for
the treatment of pediatric obesity. The review also indentified the need for qualitative research to be incorporated into intervention studies.

The U.S. Preventive Services Task Force reviewed 25 randomized, controlled studies on behavioral counseling interventions, including behavioral modification, activity components, and/or special diets (Whitlock et al., 2005). The reviewers concluded that behavioral counseling interventions lead to no change or modest short-term improvements of BMI and overweight in children. They noted that adverse effects of interventions, such as stigmatization, binging or purging, eating disorders, suppressed growth, or exercise-induced injuries, were not adequately addressed. The reviewers reported that the majority of studies use small samples, examined short-term interventions, and had limited generalizability. The majority of studies took place in research or specialty obesity clinics and included comprehensive, intensive, behavioral treatment. The reviewers concluded that specialty clinics are not easily accessible for referral and there is limited evidence on interventions for pediatric overweight that can be conducted in primary care setting.

The American Dietetic Association (2006) conducted a rigorous systematic analysis of nearly 100 individual-, family-, school-, and community-based prevention and treatment interventions for pediatric overweight. Forty-four studies of individual- and family-based interventions that targeted the treatment of overweight children were reviewed. All but one of the interventions were classified as multi-component programs that consisted of two or more components including dietary, physical activity, sedentary activity, behavioral, family counseling, and parent training. The reviewers found
sufficient evidence that these multi-component family-based interventions are effective in
decreasing weight and reducing BMI among obese children between the ages of 5 and 12.
Little evidence was available, however, to support developmentally appropriate
overweight interventions for children under the age of five and adolescents. The
reviewers examined seven multi-component, school-based treatment studies and found
limited evidence to support this type of intervention. They concluded that the treatment of
overweight children in schools may even be contradicted, as children who participate
may be at risk for teasing, embarrassment and body dissatisfaction. No studies were
identified in this review that evaluated community-based treatment programs for pediatric
overweight. The reviewers concluded that additional research is needed in many areas,
especially for adolescent weight-loss intervention programs.

Three systematic reviews have evaluated the effect of family-based interventions
for pediatric obesity (Berry et al. 2004; Kitzman & Beech, 2006; McLean, Griffin,
Toney, & Hardeman, 2003). McLean et al. (2003) reviewed eight randomized studies,
with at least a one year follow-up, that targeted both parent and child alone or parent and
child together. The studies, however, used small heterogeneous samples and were poorly
described. Only one study included participants 13 years of age or older, and none
included participants less than 6 years of age. The reviewers noted that parental
involvement typically lead to weight loss in children, with the most beneficial effects
associated with a greater number of behavior change techniques taught to both parent and
child. Adolescent girls, however, achieved greater weight loss when treated individually
than when treated with their mothers, perhaps due to their needs for independence. The
reviewers identified a need for well-designed studies, including research on adolescents and studies with a qualitative component.

Berry et al. (2003) reviewed 13 family-based studies, all of which incorporated nutritional education, exercise, and behavioral interventions. The reviewers reported that behavioral modification and behavioral therapy interventions that targeted children and their parents together or separately were relatively successful in improving weight loss in children. Problem-solving interventions that targeted parents of obese children also resulted in improved weight-loss, but no improvements were noted when children and parents were targeted together or when children were targeted alone. The reviewers noted that it was difficult to draw conclusions across studies because of methodological limitations, including small sample sizes, combined interventions, and limited information on the socioeconomic status or ethnicity of the samples.

Kitzmann & Beech (2006) examined 31 family-based interventions for pediatric obesity. Only three studies targeted children older than 13 years of age, and only two studies targeted children less than 5 years of age. The reviewers reported that children in family-based treatment programs showed significant weight loss compared to controls. Findings on the benefits of high parent involvement were mixed. Some studies showed clear advantages to high parent involvement, others showed mixed evidence, and some found no difference between high versus low family involvement. Despite mixed findings, the reviewers argued for a broader focus on family influences in pediatric obesity treatment, including the effects of family stress, family climate, and parenting style. They reported that the majority of families seeking treatment for their obese
children are functioning well, recognize the need for change, and are organized enough to attend intensive programs. Families who are not functioning well may be less likely to participate or complete a weight-loss program. The reviewers concluded that researchers need to take into account the variability in family functioning when evaluating treatments.

Two systematic reviews on the efficacy of dietary interventions for obese children were reviewed (Collins et al., 2006; Gibson, Peto, Warren, & dos Santos Silva, 2006). Collins et al. (2006) examined thirty-seven randomized controlled studies that included a dietary intervention alone or in combination with other behavioral or lifestyle modifications. Interventions included food or calorie exchange programs, low carbohydrate versus low fat diets, and the “traffic light diet” in which foods are color coded into green-light foods (low calories=no restrictions), yellow-light foods (moderate calories=moderation) and red-light foods (high calorie=high restriction). Results indicate that obese children achieved weight loss with dietary treatments, but positive effects diminished over time. Limitations of these studies included small samples, samples with wide age ranges, varied lengths of intervention and duration of follow-up, and heterogeneity of study designs. The reviewers concluded there is insufficient evidence to evaluate the effectiveness of dietetic interventions in treating obese children. Gibson et al. (2006) reported similar findings in their review of nine dietary intervention studies. All dietary interventions examined, including energy-restricted diets, reduced carbohydrate diets, and low-glycemic diets, were found to be effective for short-term weight reduction. However, the study samples were small and none supported long-term effectiveness. The
researchers concluded that there is little evidence to support the current dietary recommendations of a low fat energy restricted diet in pediatric.

DeMattia, Lemont & Meurer (2007) conducted a critical review of six clinic-based treatment studies of interventions to limit sedentary behaviors. Four of these studies had only 4 to 21 obese participants. Only one study targeted teens 12 to 16 years of age and none targeted children less 7 years of age or less. The majority of interventions were conducted over a 6 week to 6 month period, and one intervention lasted only 20 minutes. The reviewers found these interventions resulted in decreased sedentary behavior and improved weight indices in children. The reviewers concluded that decreasing sedentary behaviors is an effective intervention to control weight in children and adolescents. The findings from this review, however, should be approached with caution due to the limitations of the studies.

In another systematic review on physical activity interventions, Reilly, & McDowell (2003) used a more critical appraisal, by including only randomized control studies that followed children for at least one year post treatment. They concluded that most interventions resulted in short-term lifestyle changes, but the changes were not sustained. The reviewers found only two high-quality randomized controlled studies that targeted activity or inactivity in obese children. Both studies, conducted by Epstein et al. (1995, 2000), supported the use of increased physical activity and decreased inactivity in the treatment of pediatric obesity, with the greatest effect noted in children targeted for reductions in sedentary behavior. The reviewers questioned the generalizability and clinical relevance of existing interventions.
In summary, there is a paucity of high-quality evidence-based research on behavioral and lifestyle interventions to treat pediatric obesity. The most effective treatments consist of multi-component family-based interventions, including nutrition education, promotion of physical activity, reduction in sedentary behavior, and behavioral therapy. These intensive treatment programs are implemented in research centers or specialty clinics through a multi-disciplinary team of obesity specialists, and the ability to generalize these findings to the primary care setting has not been demonstrated. Most studies are limited by small sample sizes and short-term treatment. The majority of studies have been conducted on children 5 to 12 years of age, and few have included very young children and adolescents. The unintended effects of pediatric treatment, including eating disorders and stigmatization, have not been adequately addressed. Little is known about how children experience these interventions, and few studies have examined how families and children explain treatment success or failures.

**Biologically-Based Therapies**

Biologically-based therapies that include pharmacological and surgical interventions are increasingly considered for the treatment of pediatric obesity (Cuttler, Whitaker, & Kodish, 2005; Yanovski, 2001). Reviews of literature on the use of pharmacological (Duncan, Desilets, & Montalbano, 2007; Molnar, 2005; Oude et al., 2009; Rogvik, Chanoine, & Goldman, 2010) or surgical (Apovian et al., 2005; Inge, 2006; Inge, Xanthakos, & Zeller, 2005) interventions for the treatment of pediatric obesity have found that there are few systematic controlled studies, and guidelines are
limited. This section will discuss the use of sibutramine and orlistat as a pharmacological intervention and the use of bariatric surgery in the treatment of pediatric obesity.

**Sibutramine**

Sibutramine (Meredia), an appetite suppressant, is a selective serotonin and noradrenaline reuptake inhibitor approved by the Food and Drug Administration (FDA) for weight-loss in adults and children sixteen years of age or older (Dunican, Desilets, & Montalbano, 2007; Molnar, 2005). Clinical trials indicate that obese adolescents who take sibutramine have an increased weight loss compared to placebo control groups (Berkowitz, et al., 2006; Berkowitz, Wadden, Tershakovee, & Cronquist, 2003; Garcia-Morales et al., 2006; Godoy-Matos et al. 2005). Berkowitz et al. (2003) published the first randomized, placebo controlled study of the use of Sibutramine for the treatment of adolescent obesity. The study consisted of 82 obese adolescents 13 to 17 years of age who participated in a one year family-based behavioral weight-loss program. During the first 6 months, the participants were randomly assigned to receive sibutramine (n=43) or a placebo (n=39). In the following 6 months, all participants received open label sibutramine. The researchers found that the addition of sibutramine to a behavioral weight-loss program resulted in an increased weight loss of 4.6 kg compared to the behavioral weight-loss alone, but after 6 months of therapy weight loss plateaued with a weight regain of .8kg. Also, the sibutramine dose had to be reduced in 23 participants and discontinued in 10 participants due to adverse effects that included elevated blood pressure, increased pulse, ventricular premature complexes, ecchymoses and a rash (Berkowitz et al., 2003). In a larger 12 month study that consisted of 498 adolescents
aged 12 to 16 from various outpatient clinics, Berkowitz et al. (2006) demonstrated that the addition of sibutramine (n=368) to a behavior therapy program resulted in an average of 6.35 kg weight-loss compared to the placebo group (n=130), who gained an average of 1.8 kg. Adverse effects from sibutramine included tachycardia, hypertension, dry mouth, constipation, dizziness and insomnia. In this study, 24% of patients in the sibutramine group and 38% of the placebo group withdrew from the study (Berkowitz et al. 2006). In two six month, randomized, double-blind, controlled studies of the use of sibutramine in obese adolescents (sample sizes of 60 or less) no participants withdrew because of adverse events, and no adverse side effects were reported (Garcia-Morales et al.; Godoy-Matos et al.). Researchers have concluded that long term studies are needed and sibutramine should be used on an experimental basis in adolescents and children until safety and efficacy data are available (Berkowitz et al., 2006; Berkowitz et al., 2003; Garcia-Morales et al.; Godoy-Matos et al.). In 2010, the Sibutramine Cardiovascular OUTcomes (SCOUT) trial revealed increased cardiovascular side effects with use in adults which led to a safety review of the product and a label warning by the FDA (James et al., 2010).

**Orlistat**

Orlistat (Xenical) is a gastrointestinal lipase inhibitor that decreases dietary fat absorption by up to 30% (Dunican, Desilets, & Montalbano, 2007; Molnar, 2005). A systematic review of the literature evaluating the clinical effectiveness of orlistat in the management of obesity has found it to be effective in adults (O’Meara et al., 2004). Several open label design studies indicate that orlistat is also effective in facilitating
weight loss in obese children 8 to 12 years of age, but the sample sizes are small (N=11 to 22) and follow up was only 3 to 15 months (McDuffie et al., 2002; McDuffie et al., 2004, Norgen et al., 2003; Ozkan, Bereket, Turan, & Keskin, 2004). McDuffie et al. (2002) published the first trial to evaluate the use of orlistat in children less than 16 years of age. In this study, researchers examined the three-month safety, tolerability, and potential efficacy of orlistat in 20 obese adolescents 12 to 17 years of age enrolled in a behavioral weight-loss program and found participants achieved a weight loss of 2 to 11 kg (McDuffie et al., 2002). In a larger multi-center, randomized, double-blind, placebo-controlled study of 539 obese adolescents 12 to 16 years of age, Chanoine et al. (2005) evaluated the safety and efficacy of orlistat in combination with diet, exercise, and behavior therapy. Over a one year period, participants treated with orlistat (n=357) had a 0.55 decrease in BMI compared to the placebo group (n=182) that had a 0.31 increase in BMI. Based partly on the unpublished findings from this study, the FDA approved the use of orlistat in obese adolescents 12 years of age or older in December 2003 (Chanoine et al., 2005).

However, the use of orlistat in the treatment of pediatric obesity should be approached with caution. A six-month randomized control study of 40 obese adolescents demonstrated that there was no significant difference in weight loss between orlistat and placebo groups (Maahs et al., 2006). Attrition rates are also high in studies and make it difficult to interpret data (Chanoine et al., 2005; Maahs et al.; McDuffie et al., 2002; McDuffie et al., 2004; Ozkan et al, 2004). Chanoine et al’s (2005) reported that only 65% (n=232) of the orlistat group and 64% (n=117) of the placebo group completed the one
year of treatment. In Ozkan et al.’s study (2004), seven out of 22 participants treated with orlistat dropped out within the first month due to adverse effects. Studies show that 50% to 100% of participants report adverse effects from orlistat that include loose stools, fecal urgency/frequency/incontinence, oily discharge, increased flatulence and deficiency of fat soluble vitamins (Chanoine et al.; Maahs et al.; McDuffie et al., 2002; McDuffie et al., 2004; Norgen et al., 2003; Ozkan et al.). Some researchers report these adverse effects as mild, tolerable, and no major safety concern (Chanoine et al.; McDuffie et al., 2002; McDuffie et al., 2004; Norgen et al.), whereas other researchers report gastrointestinal effects are a major concern that limit the usefulness of Orlistat (Maahs et al., 2006; Ozkan et al.). Molnar (2005) concluded that strict guidelines are needed regarding the use of orlistat in the treatment of adolescents.

**Bariatric Surgery**

Bariatric surgery or weight loss surgery refers to various surgical procedures that dramatically reduce the amount of nutrient intake and/or absorption of fewer nutrients by modification of the gastrointestinal tract (Inge, Zeller, Lawson, & Daniels, 2005). In 1991, a National Institute of Health (NIH) consensus panel established guidelines for the use of gastrointestinal (bariatric) surgery in severely obese adults, but at that time little data was available to support this procedure in adolescents (Consensus Development Conference Panel). A systematic review of the literature on bariatric surgery in adults indicates the procedure can lead to significant weight loss and improve or resolve obesity related co-morbidities (Buchwald et al., 2004). Consequently, there has been an increased interest in the development of bariatric surgical programs for severely obese adolescents.
An analysis of nationwide trends of the use of adolescent bariatric surgery indicate the procedure rates have more than tripled between the year 2000 and 2003 (Tsai, Inge, & Burd, 2007) and increased 5-fold from 1997 to 2003 (Schilling et al., 2008). A survey of bariatric surgeons found that over 53% had performed at least one adolescent bariatric surgery, and 75% had planned to perform the procedure within the next year (Allen, Lawson, Garcia, & Inge, 2005). Several reviews of literature on adolescent bariatric surgery indicate the procedure is safe and associated with significant weight loss and decreased obesity-related co-morbidities and improved psycho-social status (Apovian et al., 2005; Inge, 2006; Inge, Xanthkos, & Zeller, 2007). However, the few studies available are small single-center cases, and the long-term safety and efficacy of surgical treatment of adolescent obesity remains uncertain.

The majority of studies have examined the outcomes of severely obese adolescents undergoing gastric bypass surgery (Anderson & Soper, 1980; Barnett et al., 2005; Collins et al., 2007; Inge, Krebs, & et al., 2004; Lawson et al., 2006; Soper, Mason, Printen, & Zellweger, 1975; Stanford et al., 2003; Strauss, Bradly, & Brolin, 2001; Surgeman et al., 2003). Findings suggest gastric bypass results in significant weight-loss and improvement or resolution of obesity-related co-morbidities in adolescents. All but two of these studies (Lawson et al.; Surgeman et al.), however, have 30 participants or less and many post-operative complications have been reported. Surgeman and colleagues (2003) reviewed their 20-year bariatric surgery database that included 33 adolescents 12 to 17 years of age. Follow-up data was available on 20/24 patients at 5 years, 14/18 patients at 10 years and 6/9 patients at 14 years. Significant weight reduction
was observed, and correction of obesity co-morbidity and improved self-image and socialization were noted. However, six patients who had regained their weight were excluded from this analysis and four patients could not be located at the 5-year-follow-up. Major post-operative complications included pulmonary embolism, wound infections, stomal stenosis, small bowel obstruction, and incisional hernias. Two patients died of unknown causes (Surgeman et al.). Another weight loss center found 7 out of 10 adolescent bariatric surgical patients were readmitted or returned to the operating room due to post-op complications that included partial obstruction, gastric leakage, deep vein thrombosis, poor oral intake, food impaction, thiamine deficiency, and the dumping syndrome (Inge, Krebs, & et al. 2004). The dumping syndrome occurs when food moves too quickly through the stomach causing nausea, faintness, weakness, sweating and diarrhea.

In 2004, a group of obesity treatment specialists developed conservative guidelines for using a surgical approach in the treatment of severely obese adolescents based on the knowledge available and their clinical practice experience (Inge, Krebs et al., 2004). They concluded that adolescent candidates for bariatric surgery should be severely obese with obesity-related co-morbidities and have completed linear growth. They also recommended that potential candidates for bariatric surgery should be referred to centers with multidisciplinary weight management teams. In 2005, three pediatric centers that followed these guidelines participated in the Pediatric Bariatric Study Group (Lawson et al., 2006). The multicenter cohort compiled weight loss and complications data on 41 adolescents who had undergone gastric bypass surgery and were followed for
at least 1 year. Postoperatively, adolescents lost significant weight with a 37% decrease in BMI and showed significant metabolic improvements. In this study, 15 surgical patients had complications, two experienced severe long-term consequences including beriberi and one death was noted at 9 months due to severe infectious colitis. Also, two patients experienced weight re-gain within the first year.

Stanford et al. (2004) was the first to examine the use of a less invasive laparoscopic gastric bypass surgery in 4 morbidly obese adolescents and no complications were noted. Expanding this study, Collins et al. (2007) examined the initial outcomes of laparoscopic gastric bypass in 11 morbidly obese adolescents. The participants in this study lost approximately 73% of their excess weight at 12 months follow-up. Approximately 70% reported significant improvements or resolution of at least fifty percent of their obesity-related co-morbidities. Only three of the participants developed post-operative complications, including postoperative bleeding and ulcers.

More recently, U.S. FDA-approved trials examining the safety and efficacy of laparoscopic adjustable gastric banding (LAGB) have been conducted (Holterman et al., 2007; Nadler et al., 2007; Nadler, Youn, Ren, & Fielding, 2008). The researchers have found that LAGB leads to weight loss with minimal morbidity and improved co-morbidities at short-term (Holterman et al.; Nadler et al. 2007) and long-term follow-up (Nadler et al., 2008). In the largest study, researchers collected pre-operative and post-operative data every month for the first year and then every 3 months on 73 obese adolescents who have undergone LAGB (Nadler et al., 2008). Sixteen participants were followed for at least 2 years. Participants experienced an estimated weight loss of more
than 55% at both 1 year and 2 year follow up, which led to resolution or improvement of major obesity-related co-morbidities. In this study, 15% of the patients experienced post-operative complications that required surgical repair, including two band removals, 6 band slippages, 3 hiatal hernias, and 1 postoperative leak. Non-surgical complications included hair loss, iron deficiency, Vitamin D deficiency, and gastroesophageal reflux. The researchers concluded that the complications associated with LAGB were minimal compared to gastric bypass, and report LAPG is the optimal surgical option for morbidly obese adolescents at this time.

In summary, biologically-based therapies that include pharmacological and surgical interventions are becoming more common in the treatment of pediatric obesity. Research indicates that these more intensive therapies may lead to weight loss and improve obesity related co-morbidities in obese children. However, there is very little scientific data available, and many gaps remain. The majority of these studies have small samples and no long-term-follow-up. Adverse effects associated with pharmacological and surgical treatments are a major concern. The long-term safety and efficacy of these procedures must be considered before subjecting obese children to biologically-based therapies.

**Summary**

Numerous behavioral and lifestyle interventions and biologically-based therapies have been proposed for the treatment of pediatric obesity. While some show promise, interventions need to be more rigorously evaluated to determine their overall safety and efficacy. Furthermore, few studies have examined children’s perceptions of weight-loss
programs and their experiences of receiving treatment. Children’s perspectives are essential to develop effective and appropriate interventions. An understanding of how children experience health care encounters could also inform how HCPs manage pediatric obesity.

HCPs Challenges in the Management of Pediatric Obesity

The management of pediatric obesity is one of the most challenging issues facing health care providers today. HCPs, especially pediatricians, pediatric nurse practitioners, pediatric nurses, and registered dieticians, play a major role in the management of pediatric obesity to promote health and prevent illness in obese children. There is very little guidance on effective management techniques, however, and HCPs are often left questioning the best way to provide care. This section will discuss expert recommendations on the management of pediatric obesity and HCP’s attitudes and practices related to the management of pediatric obesity.

*Expert Recommendations on the Management of Pediatric Obesity*

In 1998, a pediatric expert committee convened by the Maternal and Child Health Bureau (MCHB) developed the first guidelines on the evaluation and treatment of pediatric obesity (Barlow & Dietz, 1998). The committee recommended that treatment should begin early, involve the child’s family, and proceed in a stepwise manner with frequent visits, continuous monitoring, and reinforcement to institute permanent change. The committee warned HCPs that if they lacked the time required to care for, or were frustrated by, obese children, they should refer these patients to another practitioner due to the potential adverse effects that such responses may have.
In 2005, the American Medical Association (AMA) convened an expert committee to make revised recommendations for the prevention, assessment, and treatment of pediatric obesity (Barlow and the Expert Committee, 2007; Davis et al., 2007; Krebs et al., 2007; Spear et al., 2007). The committee proposed a comprehensive four stage approach to the treatment of overweight and obese children, two to 19 years of age (Spear et al.). In the first stage, prevention plus, interventions are aimed at the development of a healthful lifestyle, including consumption of 5 or more fruits and vegetables per day, elimination of sugar-sweetened beverages, limited daily screen time to 2 hours or less, and 1 hour or more of physical activity per day. The second stage, structured weight management, includes a balanced diet with small amounts of energy dense foods, structured meals, supervised activity of one hour or more, one hour or less of screen time, and behavioral monitoring with reinforcement for achieving goals. Stage three, comprehensive multidisciplinary intervention, includes planned negative energy balance, structured behavioral modification that involves the primary care provider and families in children less than 12 years of age, weekly office visits for at least 8 to 12 weeks, followed by monthly visits. This comprehensive treatment should be implemented by a multidisciplinary obesity care team, including a behavioral counselor, registered dietician, and exercise specialist. The final stage, Tertiary Care Intervention, is delivered by highly trained obesity experts. The interventions include continued counseling on diet and exercise and consideration of highly restrictive diets, medication, and surgery. Candidates for stage four include children who are over 12 years of age, severely obese or obese with significant co-morbidities, and have not been able to achieve weight loss
through lifestyle interventions. The committee noted that there were few randomized controlled intervention studies to guide these recommendations. Therefore, recommendations were based on the best available data and expert opinion, and their effectiveness has not been evaluated. The committee also noted that the treatment of pediatric obesity is “time-consuming, frustrating, difficult, and expensive” (Spear et al., 2007, p. S255).

The U.S. Preventive Service Task Force (USPSTF) reported that there is insufficient evidence to endorse universal screening for pediatric obesity in the primary care setting (2005). The experts noted that once children are identified as obese and at risk for adverse health outcomes, HCPs are confronted with what treatment to implement due to the lack of effective interventions delivered in primary care setting. Potential harms of universal screening include eating disorders, decreased self-esteem, and adverse family relations (USPTF, 2005). Cutler & Whitaker (2003) argued that HCPs have no empirically documented methods to treat obesity that can be implemented in a primary care setting or that have sustained benefits for a wide spectrum of patient groups. According to Cutler & Whitaker (2003), many advances have been made in our knowledge of pediatric obesity, but “the basic biological characteristics of appetite, weight control, genetic susceptibility, environmental triggers, and potential therapies remain elusive” (p. 723).

The National Association to Advance Fat Acceptance (NAAFA) notes that billions of dollars have been spent in the last fifty years on unsuccessful attempts to find permanent dietary, behavioral, pharmaceutical and surgical treatments for obesity
(http://www.naafa.org/documents/policies/obesity_research.html). According to NAAFA, assumptions of researchers and policy makers run contrary to the experience of most obese people, which is that “permanent weight loss is impossible to achieve, that dieting makes them fatter, that many of them are healthy, and that valuing thinness over fatness is a cultural bias” (p.1). NAAFA advocates that voices of “fat people” are essential in weight-related research.

In summary, there are limited empirically-supported approaches for the treatment of pediatric obesity in a primary care setting. Guidelines, therefore, have been based on the best available data and expert opinion, and their effectiveness has not been evaluated. Experts note that the treatment of pediatric obesity is time-consuming, costly and frustrating, and that HCPs who initiate treatment may cause more harm than good.

**HCPs Attitudes and Practices Related to the Management of Pediatric Obesity**

The attitudes and practices of HCPs in the management of pediatric obesity have been examined in one study and the findings presented in various articles (Barlow & Dietz, 2002; Barlow, Dietz, Klish, & Trowbridge, 2002; Barlow, Trowbridge, Klish, & Dietz, 2002; Jonides, Bushbacher, & Barlow, 2002; Story et al., 2002; Trowbridge, Sofka, Holt, & Barlow, 2002). Participants included 203 pediatricians, 293 pediatric nurse practitioners (PNPs), and 444 registered dieticians (RDs). The findings suggest that the majority of HCPs are concerned about pediatric obesity; seventy-five percent to 93% indicated that pediatric obesity is a condition that needs to be treated, 76% to 89% indicated that overweight affects chronic disease risk, and 83% to 93% indicated that overweight affects future quality of life (Story et al.). Only 50% to 77% of the HCPs,
however, reported the initiation of treatment in overweight individuals with no associated medical conditions, and only 13% to 29% initiated treatment in overweight individuals who did not want to control their weight (Jonides et al.).

The knowledge of appropriate evaluation and treatment practices varied among HCP’s (Barlow, Dietz, Klish, & Trowbridge, 2002; Barlow, Trowbridge, Klish, & Dietz, 2002; Jonides, Bushbacher, & Barlow, 2002). Thirty-three percent to 40% of HCPs indicated that they followed all the recommendations made by the expert committee regarding eating interventions, and 81% to 90% adhered to the physical activity intervention recommendations (Barlow, Trowbridge, & et al). Less than 6% of HCPs had recommended the use of prescription medication for weight loss, over-the-counter appetite suppressants, and/or herbal remedies. There were no HCPs who had recommended weight loss surgery. Nine percent to 25% of HCPs had referred overweight children to a pediatric obesity specialist or a pediatric weight loss program, and 27% to 42% of HCPs indicated that specialists and specialty programs were not available. At least 67% of the HCPs indicated that they adhered to the recommended psychological and emotional evaluation of obese children that included the discussion of self-esteem, depression, weight-related stigmatization, readiness to change, and family dynamics. Less than 10% of HCPs followed the expert committee recommendations regarding the thorough evaluation of current obesity-related medical complications. Barlow, Dietz and colleagues (2002) noted the findings from this study may not be representative of HCP’s as a whole. Response rates were low, with only 19% of pediatricians, 33% of pediatric nurse practitioners, and 27% of registered dieticians returning the questionnaire.
(Trowbridge, Sofka, Holt, & Barlow, 2002). The responding HCPs might have been more likely to be concerned about pediatric obesity and be more invested in obesity treatment than those who did not respond.

Other studies have also examined HCP’s practices related to the management of pediatric obesity (Allen, Touger-Decker, O’Sullivan-Maillet, & Holland, 2003; Neumark-Sztainer, Story, Evans, & Ireland, 1999). In a survey of 1,567 HCPs working with adolescents, more than 85% of pediatricians, nurses, and dieticians, and nearly 50% of social workers and psychologists, reported that they currently manage obesity (Neumark-Sztainer, Story, Evans, & Ireland, 1999). Ninety-five percent to 99% of HCPs focused on nutrition and physical activity when discussing weight-related issues with adolescents. In this study, only 43% to 55% of HCPs addressed weight-related stigmatization with overweight adolescents. In a survey of 424 pediatricians, approximately 88% to 98% had discussed diet, physical activity, and weight with the child and/or parent when the child was identified as obese (Allen, Touger-Decker, O’Sullivan-Maillet, & Holland, 2003). In this study, physicians reported the average time spent seeing patients was 12 minutes.

Several studies indicate HCP’s could benefit from additional training regarding the treatment of pediatric obesity (Jelalian, Boergers, Alday, & Frank, 2003; Kolagotla & Adams, 2004; Moyers, Bugle, & Jackson, 2005; Perrin, Flower, Garrett, & Ammerman, 2005). Jelalian et al. (2003) conducted a large survey of 1,243 physicians regarding attitudes and practices related to the treatment of pediatric obesity in a primary care setting. In this study, physicians estimated that approximately 25% of their patients were overweight, but only 4.3% of the physicians reported they received special training in the
treatment of pediatric obesity. The number of physicians who reported frequent discussion of weight-related issues with children increased incrementally with the severity of overweight. The most common treatment approaches included the discussion of physical activity programs or counseling on how to lose weight, with the average time spent with children and parents being approximately 12.6 minutes. Approximately 27% of the physicians considered themselves to be not at all or only slightly competent in the treatment of pediatric obesity, and 18.8% reported they were not at all comfortable or only slightly comfortable. Seventy-seven percent of physicians reported that they found the treatment of pediatric obesity to be very frustrating.

Moyers et al. (2005) surveyed 104 school nurses regarding their perceptions of obesity in school-aged children. The majority of nurses recognized the increased prevalence of pediatric obesity and the associated health risks. Greater than 94% of nurses perceived that obesity is caused by poor eating and sedentary behavior, and 54% believed that hereditary played a major role. Approximately half did not usually recommend treatment for all obese children, and only 25% felt competent in recommending weight-loss programs. Counseling children and parents regarding weight loss was reported to be difficult by 88% of nurses. In a survey of 356 pediatricians, Perrin et al. (2005) found that the majority of physicians felt ineffective in their ability to treat obese children, with only 12% reporting high self-efficacy in pediatric obesity management. In another survey of 287 primary care pediatricians and family physicians, researchers found that 19% of physicians were aware of the expert committee
recommendations for the evaluation and management of pediatric obesity, and 3% reported adherence to all recommendations (Kolagotla & Adams, 2004).

One study assessed HCPs performance in the identification and management of pediatric obesity through a retrospective medical record review of all health supervision visits of children 3 months to 16 years of age in a pediatric academic primary care center (O’Brian, Holubkov, & Reis, 2004). A total of 244 patients were identified that met the obesity criteria, representing approximately 10% of the visits. HCPs, including nurse practitioners, faculty physicians, and pediatric residents, identified obesity as a concern for only 53% of the obese children examined. The highest identification of obesity occurred among the heaviest adolescents. The majority of children identified as obese by their PCP received some type of obesity management, 71% of HCPs recommended dietary changes, 33% recommended increased activity, and 83% recommended close follow-up. Only 22% of HCPs referred obese children to a nutritionist, and only 13% requested laboratory studies. The researchers in this study concluded that pediatric obesity is under-recognized and under-treated by HCPs.

There appear to be many barriers that may deter HCPs from addressing obesity in children. In Story, Neumark-Sztainer et al.’s (2002) study, the most frequent barriers reported by HCPs were lack of patient motivation, lack of parent involvement, and lack of support services. HCPs also cited treatment futility, lack of clinician time, and lack of reimbursement as significant barriers. Other surveys have noted similar perceived barriers reported by physicians (Allen, Touger-Decker, O’Sullivan-Maillet, & Holland, 2003; Jelalian, Boergus, Alday, & Frank, 2003; Kolagotla & Adams, 2004). Allen et al.
(2003) identified the top 4 barriers to enhancing obesity management were patient non-compliance (87%), no time to provide services (75%), lack of patient interest (51%), and reimbursement constraints (47%). In a study by Kolagtlala et al. (2004), lack of patient motivation, poor patient compliance, lack of effective treatment, and no insurance for referral were the most frequently encountered barriers in obesity treatment. Jellian et al. (2003) found that too little time to treat, too few specialists to refer, limited staff support, limited training, and insufficient insurance reimbursement may impede physicians in addressing concerns with overweight children. Physicians were also concerned that treatment may lead to the development of eating disorders in children, damage of their self-esteem, and poor growth (Jelalian et al.).

Barlow, Richert, & Baker (2006) used a qualitative approach to explore eight pediatricians’ experiences discussing obesity during office visits. The pediatricians voiced concern about pediatric obesity and attempted to manage it. The researchers found the most vivid message from the interviews, however, were that pediatricians observed little success and felt their treatment efforts were virtually ineffective. The ineffectiveness of treatment was perceived by pediatricians to be related to lack of time to treat obesity, barriers in the children’s homes, and futility of efforts.

Other studies suggest that HCPs view obesity as a chronic health condition that needs to be treated, but carry the same bias and stigma toward obesity that is prevalent in our society. There are currently no known studies that specifically address bias and stigma of obese children by HCPs. In a review of literature on bias, discrimination, and obesity, however, Puhl and Brownell (2001) examined 24 articles that discussed negative
attitudes of health professionals, including nurses, physicians, dieticians, and medical students, toward obese adults and identified the impact these negative views had on health care of these individuals. The studies indicate professionals view obese individuals as lazy, worthless, overindulgent, non-compliant, ugly, and having emotional problems. In addition, caring for obese patients elicited feelings of discomfort, repulsion, blame, and reluctance. Evidence suggested that negative views of providers led to poor clinical judgment, diagnoses, and care of obese individuals (Puhl & Brownell, 2001). In a recent investigation, strong weight bias was examined among health professionals who were responsible for the clinical management or research of obesity (Schwartz, Chambliss, Brownell, Blair, & Billington, 2003). The health professionals implicitly associated thin people with positive characteristics such as being valuable, smart, and motivated, whereas obese people were associated with stereotypes of being worthless, stupid, and lazy. Professionals who reported understanding the experience of obesity reported lower levels of bias.

In summary, research indicates that HCPs are concerned about pediatric obesity and believe it is a condition that needs to be treated, but few initiate treatment. Many lack specialized obesity training and the average office visit is only 12 minutes. HCPs report a number of barriers that may deter them from addressing pediatric obesity including a lack of patient motivation, lack of parental involvement, lack of support services, lack of time to provide services, insufficient insurance reimbursement, and futility of treatment efforts. HCPs are concerned about the adverse outcomes of treatment, such as the development of eating disorders and low-self esteem in obese children. In addition, HCPs
hold the same bias and stigma regarding obesity that is prevalent in our society.

Professionals who report understanding the experience of obesity report lower levels of bias.

**Summary**

HCPs often struggle with the best way to provide care for children with obesity. There is very little guidance on effective management techniques and HCPs are often uncertain about the best way to provide care. Current guidelines are based on expert opinions. Children’s preferences for care in the primary care setting have not been studied. Also, children have not been given the opportunity to describe their experiences related to treatment of their obesity. Research that illuminates children’s experiences with HCPs could inform and improve treatment.

**Qualitative Research Related to the Experiences of Children Living with Obesity**

Some researchers have used qualitative research methods to explore the experiences of obese children from their own perspectives. These studies have focused on select aspects of overweight or obese children’s lives (Alm et al., 2008; Curtis, 2008; Murtagh, Dixey, & Rudolf, 2006; Neumark-Sztainer et al., 1998; Wills, Backett-Milburn, Gregory, & Lawton, 2006). Neumark-Sztainer et al. (1998) explored how 50 overweight African-American and Caucasian adolescent high school girls perceived weight-related stigmatization and their responses to these experiences. Individual interviews based on a semi-structured interview guide were conducted. All but two of the fifty girls who self-identified as overweight reported experiencing hurtful comments that were both intentional and unintentional, including weight-related teasing, name calling, jokes, and
criticism. Twelve girls reported being mistreated or rejected due to being overweight. The girls also described how people make negative assumptions about them regarding their weight. These assumptions included that they (a) eat too much and the wrong foods, (b) are unable to partake in certain physical activities, (c) enjoy fighting, (d) are tough, (e) have no feelings, (f) are unclean, and (g) cannot get a boyfriend. The stigmatizing experiences were most often inflicted by peers and family members. The adolescents’ responses to the stigmatizing experiences included ignoring or attempting to ignore hurtful situations, feeling hurt by the experiences, and/or getting mad.

Two studies investigated the barriers and facilitators to achieving weight loss among obese children attending weight management programs (Alm et al., 2008; Murtagh, Dixey, & Rudolf, 2006). Murtagh and colleagues (2006) interviewed 20 obese children 7 to 15 years of age. Fourteen were boys and six were girls. The participants described the main reasons they wanted to loose weight was to stop social torment and exclusion, to “fit in” or “be normal” and to enhance their physical abilities. Barriers to weight loss included difficulty in adhering to lifestyle changes, delayed parental recognition of their weight problem, and previous negative experiences with weight-loss attempts. The participants identified the need for continued social support to maintain the actions needed for successful weight control. Alm and colleagues (2008) reported similar findings from interviews of 20 obese inner-city adolescents. Eleven participants were Hispanic, 6 were African American, and 1 was Caucasian. The sample included 12 girls and 6 boys. Several gender differences were identified in this study. Obese girls were more likely to report a desire to be “thin” as a way to improve physical appearance and
social acceptance. Obese boys were more likely to report a desire to be muscular and to weigh less to improve their physical conditioning to be more competitive in sports. Girls reported unsafe neighborhoods and the embarrassment of wearing workout clothes as barriers to reaching physical activity goals, whereas boys revealed no safety concerns and were comfortable wearing workout clothes despite their size.

Wills and colleagues (2006) used a qualitative approach to explore how overweight or obese and average weight adolescents perceive their own and others’ bodies. Eighteen average weight and 18 overweight or obese teenagers, 13 to 14 years of age, participated in the study. The overweight and obese participants mainly referred to themselves as fat or big, but not overweight or obese. Out of all of the participants, three-fourths of the participants reported that they were comfortable with their body size or shape regardless of BMI classification. Only three participants, two with the highest BMI’s in the study and one with an average BMI, reported utter disapproval of their bodies. Approximately one-half of the overweight and obese adolescents reported being teased or bullied, mainly at school. One of the participants with the highest BMI reported she was not bullied at school because she had a large group of popular female friends, and others were intimidated by this group. Both participants with the highest BMI’s, however, reported being constantly criticized by their mothers and a maternal grandmother about their weight and eating habits. Participants rarely mentioned health-related consequences of obesity, but some participants, mostly girls, reported that their excess weight restricted what clothes they could buy and other participants (mostly boys) perceived that their excess weight slowed them down when playing or participating in
sports. The two teenagers with the highest BMI’s reported attempts at ‘crash dieting’ and feelings of frustration, depression, and anxiousness due to failed attempts at weight-loss.

Curtis (2008) used focus group discussions, involving 18 children 10 to 17 years of age from the UK, to explore their experiences of being obese and the effects of obesity on their social lives with a focus on the school setting. The researcher found the issues prioritized in the healthy school agenda, including physical activity classes and healthy eating, were problematic for obese children. They described several concerns with physical education classes, including changing into shorts, being bullied, and the ability to avoid challenging and uncomfortable situations. Obese children felt they were always under surveillance when choosing and consuming food. Almost all reported being bullied and socially excluded. The majority of children stated that they did not have access to, or had not experienced an obesity intervention program. The researcher concluded that the school approach to health may fail to address the needs of the vulnerable and marginalized group of obese students.

Only one study was identified that examined broader experiences and issues of living with pediatric obesity (Rich et al., 2002). These researchers explored the experiences of 13 obese adolescents, ages 11 to 18 years, from a grounded theory perspective. Data consisted of video documentation of their lifestyles and health-related attitudes and behaviors. Video narratives were coded for themes and analyzed using grounded theory. Prominent themes included voracious eating behaviors, self-comforting with food, above average physical activity, hyperactive behaviors, and increased media use. Obese adolescents expressed many negative aspects of being overweight, including
family conflict regarding food or weight, emotional distress from dietary restrictions, resentment toward attractive celebrities, and sadness in response to teasing and social isolation from peers. Positive features to being overweight included being appreciated for a sense of humor, physical dominance, protection against sexual objectification, and a sense of non-conformity.

Summary

In summary, the majority of obese children reported negative experiences of being overweight, such as being teased, bullied, and socially rejected by their peers, friends, and family. These stigmatizing experiences led to feelings of sadness, hurt, and anger. Obese children reported wanting to lose weight to fit in and be normal, but rarely discussed the negative health effects associated with obesity. Obese girls desired to be thin and socially accepted, whereas obese boys desired to be muscular and competitive at sports. Emotional distress and frustration were experienced in responses to dietary restrictions and the inability to lose weight. Despite these negative experiences, some obese children were comfortable with their bodies. Severely obese children, however, reported disgust with their over-weight bodies. Perceived positive outcomes of obesity, such as physical dominance, a sense of humor, non-conformity, and a barrier from sexual objectification were reported by obese children.

Gaps in the Literature

Many studies have examined pediatric obesity. Much is known about the prevalence of pediatric obesity and the associated health-related and quality of life effects. Yet, there are several gaps in the literature.
First, numerous studies have measured discrete, quantifiable variables to identify negative correlates of pediatric obesity. Yet, only a few studies have examined the experience of obesity from the perspectives of children who are living with it. These studies have focused on specific aspects of the obese child’s experience, such as weight-related stigmatization, barriers and facilitators to achieving weight-loss, and health-related attitudes and behaviors. Little research has been conducted that has focused on the day-to-day experiences of living with pediatric obesity.

Second, a growing body of literature has examined the efficacy of weight loss treatments for children. These studies have been conducted primarily in specialty clinics by teams of weight-loss specialists. Few effective interventions are available for children treated in primary care settings. Further, HCPs in primary care settings find the treatment of pediatric obesity frustrating and futile. Although it is likely, therefore, that obese children and their families find treatment encounters with HCPs problematic, little is known about how they experience these encounters. Understanding the experience of pediatric obesity from the perspective of obese children can assist HCPs with ways to provide care in more thoughtful, meaningful, and effective ways.

To fill the gaps in the literature, this phenomenological study was aimed at understanding adolescents’ daily experiences of living with obesity. Of special interest were their experiences with health care encounters. This was accomplished through the use of Heidegger’s interpretive phenomenological method, which seeks to understand the hidden meanings of human experiences through dialogue between the participant and researcher. I chose this phenomenological method because I believe that adolescents, like
all humans, are self-interpreting beings and that by seeking a convergence of the participants’ understanding of their lives and researcher interpretations informed by Heideggerian philosophical tenets, a rich description of the participants’ everyday experiences of living with obesity, including their healthcare encounters, could be best obtained.
CHAPTER 3: METHODOLOGY

This study used a Heideggerian hermeneutic (interpretive) phenomenological approach to explore the experiences of living with obesity as an adolescent. Interpretive phenomenology seeks to increase understanding of what it means to be a person in the world. Heidegger steps back from the Cartesian view of epistemology, which asks how we know what we know, and moves into the ontological view of phenomenology, which explores what it means to exist and how the world is intelligible to us at all (Leonard, 1994). An interpretive phenomenological approach was warranted for this study because the aim was to uncover what it means to “be in the world” as an adolescent living with obesity.

Phenomenology

Phenomenology is the study of lived experience or the life world (Van Manen, 1990). There is no single school of thought, or one specific view, of phenomenology (Miller, 2003). The phenomenological movement refers to a variety of philosophical beliefs (Cohen, Kahn, & Steeves, 2000). Edmund Husserl (1859-1938) and Martin Heidegger (1889-1936) are two influential philosophers in the phenomenological movement. Their philosophical beliefs reflect two different world views that have served as the foundation for two phenomenological research approaches most commonly used in healthcare: Husserlian eidetic-transcendental (descriptive) phenomenology and Heideggerian hermeneutic (interpretive) phenomenology. Koch (1995) recommended that nurse researchers explicate the philosophical foundation of the research methods they employ. According to Draucker (1999), such philosophical underpinnings should inform
both the methodology and the interpretation of the findings. In this section the philosophical traditions of Husserlian phenomenology are first described because they served as a foundation for Heidegger’s contribution to philosophy. Descriptive phenomenology as a research approach is then briefly described in order to contrast its basic tenets with those of interpretive phenomenology. Finally, the philosophy of Heidegger and the basic principles of Heideggerian interpretive phenomenology, the foundation of this study, are discussed.

*Husserl’s Descriptive Phenomenology*

Edmund Husserl (1859-1938), a German philosopher, is considered the founder and central figure of the phenomenological movement (Cohen & Omery, 1994). Husserl studied as a mathematician before dedicating his life to philosophy. His first phenomenological work was published in *Logical Investigations* (1900-1901; trans. 1970). In this book, he asserted that the philosopher’s task is to look attentively and thoughtfully at the *essences* of things from the first-person point of view (Wojnar & Swanson, 2007). In Husserl’s most influential work, *Ideas: A General Introduction to Pure Phenomenology* (1913; trans. 1931), he defined phenomenology as a descriptive analysis of the essence of pure consciousness. He referred to this pure or *transcendental* phenomenology as a science of essential Being (Husserl, 1913/1931). Husserl’s phenomenology followed the Cartesian tradition in which the researcher has a privileged stance as the knower and assumes an epistemological position (Johnson, 2000).

*Epistemology* has been defined as the “study or theory of the nature and grounds of
knowledge, especially with reference to its limits and validity” (Cohen & Omery, 1994, p.137).

Husserl focused on the study of phenomena as they appeared through consciousness (Koch, 1995; 1996). The Life-world (Lebenswelt), or the world of lived experience, is a significant concept introduced by Husserl (Cohen & Omery, 1994; Koch, 1995; 1996). Husserl felt that this world of everyday experience is not readily accessible to us in our “natural attitude” because it involves what we take for granted or things that are common sense (Cohen & Omery, 1994; Koch, 1995). Husserl wanted to return to the taken-for-granted experiences and reveal consciousness, the condition of all human experience (Wojnar & Swanson, 2007). Conscious awareness or ‘intentionality’ is the directedness of the mind toward objects (Cohen & Omery, 1994; Koch, 1995). Husserl believed that through conscious awareness one could begin to build knowledge or a description of reality by returning to the ‘things themselves.’ According to Husserl, a description of a particular reality could be developed by coming face to face with ultimate structures of consciousness that he referred to as essences.

A central component of Husserl’s phenomenology is phenomenological reduction, a process of defining the pure essence of phenomenon by suspending one’s personal beliefs (Cohen & Omery, 1994; Dowling, 2007; Koch, 1995). Epoche was a concept Husserl used to define the suspension of commonly held beliefs regarding the world (Hamil & Sinclair, 2010; McConell-Henry, Chapman, & Francis, 2009). Husserl proposed that phenomenological reduction is accomplished by bracketing, which involves consciously stripping away prior expert knowledge and personal bias to grasp
the essential description of the phenomenon at hand (Lopez & Willis, 2004; Wojar & Swanson, 2007). Through bracketing one is able to obtain *transcendental subjectivity*, which is a state of consciousness in which an observer successfully disconnects from his or her own lived experience and describes the phenomenon of interest in its purest sense (Lopez & Willis, 2004; Wojar & Swanson, 2007).

*The Descriptive Phenomenological Research Method*

Research based on Husserl’s *eidetic* or descriptive phenomenology seeks to describe the meaning of an experience from the perspective of an individual who has had that experience (Koch, 1995). Researchers aim to bring to light the phenomenon based on descriptions of experience provided by individuals who have encountered the phenomenon (Cohen & Omery, 1994). Researchers who utilize Husserl’s phenomenology will seek answers to epistemological questions of how we know what we know about the world and the objects within it (Koch, 1995; Mackey, 2005).

A key epistemological approach in descriptive phenomenology is Husserl’s phenomenological reduction or bracketing. *Bracketing* is a method in which the researcher puts aside any preconceived ideas, prejudices, and personal knowledge about the phenomenon of interest in order to see the phenomenon as clearly as possible, so the phenomenon can be precisely described and understood (Cohen & Omery, 1994; Dowling, 2007; Hamil & Sinclair, 2010; Koch, 1995; 1996; Lopez & Willis, 2004; McConell-Henry, Chapman & Francis, 2009; Wojnar & Swanson, 2007). Husserl asserted that bracketing ensures that the researcher’s presuppositions are held in abeyance
so that he or she can focus on the participant’s reality to generate valid data (Hamil & Sinclair; McConell-Henry et al.).

Wojnar & Swanson (2007) identified other essential steps consistently identified in the descriptive phenomenological method of inquiry: analyzing, intuiting, and describing. *Analyzing* data is often guided by Collaizzi’s (1978) seven step method. This method involves (1) transcribing interviews and reading them several times to get a feel for the experience, (2) extracting significant statements that pertain to the experience under investigation, (3) formulating meaning from these significant statements, (4) categorizing the significant statements into clusters or themes to reveal common patterns or trends in the data, (5) describing the experience in detail, (6) returning to participants to validate the findings, and (7) incorporating any changes based on participants’ feedback, so that a theoretical model can be presented that reflects the universal features of the phenomenon. *Intuiting* is a process in which the researcher gets a sense of what it is like to have lived the participants’ experiences. *Describing*, the end point of a descriptive phenomenological study, occurs when a theoretical model is presented that identifies the essential structures of the phenomenon being investigated (Wojnar & Swanson, 2007).

*Heidegger’s Interpretive Phenomenology*

Martin Heidegger (1889-1976) was a German philosopher and Husserl’s protégé’. Heidegger’s studies began when he entered the seminary at Freiburg University in 1909. In 1911, he left the study of theology to pursue studies in mathematics and philosophy. During this time, he studied Husserl’s *Logical Investigations* and was influenced by his
work. Heidegger obtained a doctorate in philosophy in 1913. In 1914, Heidegger’s academic career was interrupted when he joined the German army, although he was soon released due to health problems. In 1915, he completed a second dissertation which provided him with the opportunity to teach at Freiburg. In 1916, Heidegger met Husserl, who had become a faculty member at Freiburg, and became Husserl’s assistant in 1919. Heidegger used Husserl’s phenomenological ideas to gain a better understanding of the meaning of being, but he would later distance himself from Husserl and develop his own phenomenological tradition. In 1923, Heidegger moved to the University of Marburg where he became an associate professor. At this time, Heidegger wrote his most influential work, *Being and Time*, (1927/1962), earning him a full professorship to Marburg. One year later, Heidegger would return to Freiburg to become chair of philosophy upon Husserl’s retirement. Although Heidegger dedicated *Being and Time* to Husserl, it became apparent he had departed from Husserl’s epistemological views, as he was primarily concerned with an *ontological* view, or investigation of the meaning of being. Heidegger’s interpretive phenomenology questioned what it means to be a person and how we understand the world in which we live.

*Dasein*, man’s being, is defined by Heidegger as “that-living thing whose Being is essentially determined by the potentiality for discourse” (1927/1962, p.47). According to Heidegger, the basic state of *Dasein* is ‘*Being-in-the-world,*’- his or her existence within the *lebenswelt*. The *lebenswelt* is ‘the life world,’ which is the world directly experienced (1927/1962). Heidegger believed that human beings cannot be separated from their world in a mechanistic way (Benner, 1994; Draucker, 1999); rather, they must be understood
within the cultural, social, and historical period in which they exist (Wojnar, 2007). Language, relationships, and practices of our culture and society are part of the world we are born into, and these experiences shape our individual realities (Lopez & Willis, 2004). Dasein’s familiarity with the lifeworld brings understanding. This understanding allows Dasein to see the unhiddeness in the world, which Heidegger considered the truth, the *Alethia* (King, 2001).

Heidegger was primarily concerned with understanding the ‘average everydayness’ of human beings as they exist in their world (Guignon, 1993). Dasein is directed toward the world, relating him or herself to whatever specific beings he or she meets (King, 2001). Understanding the world is led by preconceptions, and Dasein is always in the process of interpretation. Dasein is finite and not free to choose his or her being, yet Dasein is free to take responsibility over his or her being. Dasein is self-interpreting and takes a stand towards itself. Human beings have the potential to take hold of their existence, opening up a range of possibilities. Heidegger warned, however, that it is Dasein’s tendency to turn away from his or her being in a self-absorbed disowned existence by ‘average everydayness’ (1927/1962). Things can become hidden in *average everydayness*, and this obscures Dasein’s understanding. Heidegger stated that the Being “can be covered up so extensively that it becomes forgotten and no question arises about it or about its meaning” (1927/1962, p. 59). In King’s guide to *Being and Time* (2001), she notes the following:

How a Dasein is himself is determined by the way in which he lets his being be his. No Dasein has freely chosen his being; he may not have wished it if he
had any say in the matter; nonetheless, he can freely take over his being as his own responsibility, he can turn to it face to face, letting it fully disclose itself as singly and uniquely his. Existing in this way, Dasein is wholly his own self, according to the fullest possibility of his finite being. Or he can turn away from himself, not letting his being fully disclose itself as his own, covering over its finiteness by throwing himself into those “endless” possibilities that come to him from the world. Existing in this way, Dasein disowns the possibility of the utmost illumination of which his being is capable and falls into the disguise that characterizes his lostness to the world (2001, p.41).

Heidegger believed that to understand Dasein, it needed rescued or unhidden from the verfallen (1927/1962). Verfallen, ‘falling’ or ‘decay’, is a way of existence where Dasein loses itself to the world. King (2001) states that during this lostness Dasein finds understanding “from his makings and doings in company with other people, from the successes and failures he expects or fears” (p.124) and not from his own utmost possibility.

Heidegger (1927/1977) identified three modes of engagement within everyday dealings of life that he called ready-to-hand, unready-to-hand, and present-at-hand. The ready-to-hand mode of engagement involves practical, everyday activities that take place in an ordinary way and go unnoticed. The ready-to-hand is grasped without theorizing. For instance, Heidegger discussed the use of a hammer. He felt that we see a hammer as equipment that is handy or remote and that is available ‘in-order-to’ achieve or produce something. We use things and manipulate them with little thought. According to
Heidegger, “this activity is not a blind one; it has its own kind of sight.” It was Heidegger’s belief that these average everyday experiences in the world are essential to gain an understanding of man’s Being. The *un-ready-to-hand* is triggered by a breakdown in the practical everyday activity. In this mode, the equipment is no longer functioning properly, and the user becomes more aware of its function (Plager, 1994). When equipment breaks or something goes wrong, Heidegger felt that practical everyday activity ceases and the equipment is then revealed in a deficient or present-at-hand mode. In the *present-at-hand* mode, the entity becomes just a property, and the observer is only concerned with strict characteristics or concepts that can be looked at ‘theoretically’ (Plager, 1994). For instance, when a hammer is damaged or unsuitable for use, it just becomes something there, present-at-hand, that needs to be replaced or repaired.

For Heidegger, understanding has a three-fold *fore-structure* in which all interpretation is founded. He designated the *fore-having* as ‘something we have in advance,’ *a fore-sight* as ‘something we see in advance,’ and *a fore-conception* as ‘something we grasp in advance” (1927/1962, p.191). According to Heidegger, for something to become intelligible as something, or to be understood and have meaning, the fore-structure or pre-understanding cannot be eliminated. ‘Historicality,’ or the person’s background understanding, is essential for the *as-structure* of interpretation or meaning. Heidegger described a ‘circle of understanding’ that makes interpretation possible. Within this circle, the fore-structures of understanding are expressed, and the ‘most primordial kind of knowing’ is hidden (1927/1962, p.195). The flow of understanding is a backward or forward movement, in which the phenomenon is revealed
through the task of working it out. To gain a genuine understanding of the phenomenon, Heidegger stated that during interpretation—“our first, last, and constant task is never to allow our fore-having, fore-sight, and fore-conception to be presented to us by fancies and popular conceptions, but rather to make the scientific theme secure by working out these fore-structures in terms of the things themselves” (1927/1962, p.195). Interpretation makes explicit what is already understood.

Heidegger stressed that *Time* is a central component in the understanding and interpretation of *Being* (1927/1962). For Heidegger, time and human existence are linked, Dasein’s *Being* is essentially temporal, and meaning is found in temporality. *Temporality* is identified as the threefold unity of the future, the past, and the present: a time of everydayness (King, 2001). Heidegger suggested that human experience is made up of the connectedness of the three main structures of ‘*care*,’ which he articulated as existence, facticity, and fallness (Guignon, 1993; King, 2001). *Existence* means that Dasein projects himself forward upon various possibilities of the future. As *facticity*, Dasein reveals himself as he already is, as being thrown within the past world of having-been or has-been. *Fallness* is a way of being in which Dasein exists, scattering and giving himself away in the midst of the beings and things in the present day, in a disowned existence. According to Heidegger, Dasein can live out temporality in an ‘*authentic*’ or ‘*inauthentic*’ way. For the most part, Dasein lives an *inauthentic* or *disowned* existence, the ‘falling’ way of existing in which Dasein becomes scattered about caught up in average everydayness, ‘forgetting self,’ lost in the world of equipment, losing him-self in the present. Dasein is usually separated from an *Authentic* or *owned* existence, which is
Dasein’s “potentiality-for-Being-a-whole” (Heidegger, 1927/1962, p.428), its “ownmost possibility” of future and past (Guignon, 1993, p. 156). Heidegger states that the authentic present or ‘the moment of vision’ “permits us to encounter for the first time what can be ‘in a time’ as ready-to-hand or present-at-hand” (1927/1962, p. 388).

Discourse or language reveals being and is a manifestation of meaning (1927/1962). For Heidegger, discourse is the “articulation of the intelligibility of Being-in-the-world” (p.204). It is a medium in which one expresses his or her perspective of the world and that guides one’s understanding of being-in-the-world. Discourse that expresses itself is referred to by Heidegger as communication. The function of communication is to bring the listener to participate in the ‘disclosedness’ of the things discussed in genuine talk (1927/1962). Hearing and keeping silent are essential for effective communication. According to Heidegger, the term hearing “constitutes the primary and authentic way in which Dasein is open for its ownmost potentiality-for-Being” (p.206). Keeping silent is also an authentic way of Dasein that ‘can make one understand’ (p. 208). The ability to keep silent authentically is only possible through genuine discourse, and Dasein must have something to say. Heidegger warns that idle talk, gossiping, passing the word along, and hearsay are modes of communication that can close off communication and cover up entities within-the-world. Idle talk means to pass the word around without any grounds to stand on, and it’s something anyone can make up. Genuine writing, a mode of communicating discourse, can also degenerate into ‘scribbling’, which provides only superficial reading (King, 2001; Heidegger, 1927/1962). According to Heidegger, “the average understanding of the reader will never
be able to decide what has been drawn from primordial sources with a struggle, and how much is gossip” (p.212). Idle talk and scribbling will only lead to an average understanding of being in the world. Bringing Dasein’s being to light, the ‘disclosedness of Being-in-the-world,’ requires a long and difficult analysis that takes place steadily over time (Guignon, 1993; Heidegger, 1927/1962).

In *Being and Time*, Heidegger discussed a method and design of investigating the question of Being, that could be achieved by accessing Dasein in “its average everydayness” (p.38). He called phenomenology that seeks to understand the meaning of Being ‘hermeneutic’, and designated the ‘ontological’ investigation an ‘interpretation of Daesin’s Being’ (p. 62). Heidegger believed that “it is one thing to give a report in which we tell about entities, but another to grasp entities in their Being” (p 63). Heidegger did not intend, however, for his philosophical beliefs to become a method for phenomenological research and rebelled against any claim of being ‘scientific’ (Cohen & Omery, 1994; Makey, 2005). It was up to others to develop Heidegger’s interpretive phenomenology as a method.

*The Interpretive Phenomenological Research Method*

Research based on Heideggerian interpretive phenomenology seeks to bring out the hidden meanings of human experience through the medium of language (Cohen & Omery, 1994; Leonard, 1994). Researchers aim to understand individuals everyday skills, practices, and experiences and to reveal the taken for granted practices and commonalities in meaning (Cohen & Omery, 1994). Understanding and creation of meaning is accomplished through dialogue between the participant and researcher (Koch,
Researchers who utilize Heidegger’s interpretive phenomenology will seek answers to ontological questions of experiencing and understanding and ask what it means to be a person (Koch, 1996).

In *Truth and Method* (1989), Gadamer, a student of Heidegger, elaborated on Heidegger’s interpretive phenomenological approach in an attempt to uncover the nature of human understanding. Gadamer does not provide a method for interpreting texts but describes what is common in all modes of understanding or interpretation (Binding & Tap, 2008; Gadamer, 1989; Koch, 1996). To understand the interpretive process, several key elements have been identified, including the hermeneutic circle, fusion of horizons, and dialogue (Gadamer, 1989; Koch, 1996; Whitehead, 2004).

The *hermeneutic circle* is a metaphor used to describe the experience of analytic movement between the part and the whole, a process that brings forth understanding (Koch, 1996; Mackey, 2005; Whitehead, 2004). The interpretive process takes place within the hermeneutic circle to obtain a sensible meaning of texts (Koch, 1996; Mackey, 2005; Whitehead, 2004). *Texts* are another name for data in Heideggerian analysis (Koch, 1996). In the interpretive phenomenological approach, the researcher is an active participant and brings his or her presuppositions or expert knowledge to the text (Draucker, 1999; Koch, 1995; Lopez & Willis, 2004, Walters, 1995). It is believed that the researcher cannot bracket out of his or her past experience and understanding, and this understanding is essential to inquiry (Koch, 1995; Lopez & Willis, 2004). Texts are co-created by the researcher and participants as they engage in the hermeneutic circle of understanding, making interpretations meaningful (Koch, 1995; Koch, 1996; Lopez &
Willis, 2004; Wojnar & Swanson, 2007). This process is referred to as *co-constitution* (Koch, 1995; Lopes & Willis, 2004).

*Dialogue*, or conversation, is an exchange of ideas through which we come to understand the phenomenon in question (Gadamer, 1989; Koch, 1996). A genuine conversation is a way of being with another that is authentic, real, and true (Binding & Tapp, 2008; Gadamer, 1989). In interpretive phenomenology, an open dialogue occurs through questioning. The conversations are non-directive, and the researcher encourages the participants to tell their stories as freely as possible, reflecting on their experience of the phenomenon in question (Koch, 1996; Lindseth & Norberg, 2004). A story is made up of a dialect between one’s past, present, and future (Lindseth & Norberg, 2004). The researcher will also bring his or her own past history, culture, and concerns to the conversation (Binding & Tapp, 2008). Questioning can be used to encourage further narration or to maintain a focus on the experience. Questions might include: Tell me about a time when…? What is it like…? What happened next…? The spoken dialogue is transcribed into written texts, and field notes are taken (Binding & Tapp, 2008; Lindseth & Norberg, 2004). The dialogue between the researcher and participant creates a new understanding of the phenomenon.

*Fusion of Horizons* was a metaphor used by Gadamer to explain the process of interpretation and understanding (1989). A *horizon* is the wide range of vision that the person who is seeking understanding must have (Annels, 1996; Walsh, 1996). In order to gain a better understanding, one must look past what is close at hand to see more clearly within a larger whole (Annels, 1996). One opens up to the views of others and lets these
views speak to him or her (Koch, 1996). Every person will come to a situation with a
story to tell, or ‘pre-understanding’ or ‘fore-conception’ (Heidegger, 1927/1962; Koch,
1996). Pre-understanding is made of our prejudices, which are placed up against the text
to provide illumination (Walsh, 1996). A *fusion of horizons*, or interpretation and
understanding, takes place when the horizon of the participants and researcher are fused
with the horizons of texts, and something new is brought to light (Koch, 1996; Walsh,
1996). The phenomenon will never be completely understood, and the final interpretation
is provisional (Johnson, 2000; Walters, 1995; Whitehead, 2004). The researcher holds a
‘temporal understanding’ of the data; as horizons evolve, further analysis would lead to
different interpretations (Whitehead, 2004, p.513). The interpretive process, however,
must come to an end. One is not seeking absolute truth or valid analysis, but a shared
understanding of the phenomenon (Johnson, 2000; Walters, 1995; Whitehead, 2004). The
meaning created must be clear and credible, and it must reflect the experience of
participants (Lopez, 2004). The Heideggerian interpretive phenomenological method
does not negate the use of a theoretical framework or the development of theory (Benner,
1994; Cohen & Omery, p.145; Lopez, 2004). It is recognized, however, that there are
many uses and guises of theory in qualitative research, and “it is naïve to assume that any
human project can ever be approached naively or atheoretically” (Sandelowski, 1993a,
p.215).

Diekelman & Allen (1989) developed a process of analyzing narrative text. The
analysis is usually conducted by an interpretive team that follows seven stages: (1)
reading the text to obtain an overall understanding; (2) writing interpretive categories and
supporting with excerpts from the text to support interpretation; (3) comparing interpretations to find similarities and differences and to clarify discrepancies; (4) identifying relational themes that cut across multiple texts and supporting the themes with extensive documentation; (5) seeking constitutive patterns, also known as the highest level of interpretive analysis; (6) validating the analysis with persons who are not on the research team, but who are familiar with the content and or research methods; (7) preparing the final report using sufficient excerpts from the texts to allow for validation of the findings by anyone who reads it. The goal of this analytical process is to discover and understand meaning embedded in the text (Dickelman & Allen, 1989).

A discussion paper articulated the lived experience of conducting Heideggerian interpretive phenomenological research, as perceived by the authors who met regularly at the Institute for Interpretive Phenomenology (Smythe, Ironside, Sims, Swenson, & Spence, 2008). In this paper, the process of doing interpretive phenomenological research was described as a journey of thinking, where the researchers are immersed in a cycle of reading, writing, and dialogue that spirals onwards. Insight comes from disciplined engagement. According to Smythe and colleagues (2008), the researcher keeps an open mind, “freeing what is known to be surprised by the revealing of what comes” (p. 1397). Heideggerian interpretive phenomenology is not a process of ‘do whatever you want’, but a process of being attentive and attuned to “thinking and listening to how the text speak” (Smythe et al., p. 1389).

Rigour: Trustworthiness in Interpretive Phenomenological Research
Rigour or trustworthiness is the means by which the researcher demonstrates the legitimacy of the research (Tobin & Begley, 2004). The goal of trustworthiness in qualitative inquiry is to persuade the audience that the inquirer’s findings are “worth paying attention to, worth taking account of” (Lincoln & Guba, 1985, p.290). The best way to establish trustworthiness in qualitative research is often debated throughout the literature and a broad range of criteria exist (Koch, 1994; Koch, 1996; Rolfe, 2004; Sandelowski, 1993a; Tobin & Begley, 2004; Whitehead, 2004; Witt & Ploeg, 2006). Interpretive researchers often endorse Lincoln and Guba’s (1985) trustworthiness criteria that is well suited to the naturalistic/interpretive approach.

Lincoln and Guba (1985) devised trustworthiness criteria that parallel the conventional criteria for judging the quality of quantitative research: internal validity, external validity, reliability, and objectivity. According to Lincoln & Guba (1985), trustworthiness criteria in qualitative inquiry can be operationalized using four terms: credibility (comparable with internal validity), transferability (comparable with external validity), dependability (comparable with reliability), and confirmability (comparable with objectivity).

*Credibility* relates to confidence in the ‘truth value’ or the believability of the research findings and interpretations (Lincoln & Guba, 1985). Lincoln & Guba (1985) provide a variety of techniques to increase the likelihood that the multiple constructed realities arrived at via inquiry are credible, including prolonged engagement and member checks. *Prolonged engagement* is spending enough time with the participant to build trust and to understand him or her. *Member checking* is a process whereby the participants are
asked to verify data and interpretations. Credibility is also established when the researcher describes and interprets their experiences throughout the research process (Koch, 1994). Self-awareness can be increased through journaling, in which the researcher documents personal reactions and interactions.

*Transferability* relates to ‘applicability’ and implies that the findings can fit into another setting, situation, circumstance, or population, and that the findings are meaningful, believable, and applicable (Lincoln & Guba, 1985). According to Lincoln and Guba (1985), transferability is dependant on the similarity between the sending and receiving contexts, also referred to as the “fittingness.” Transferability is enhanced through a ‘thick description’ of the sample and a rich description of the data. This allows others interested in using the findings to determine the possibility of a transfer to groups or setting in which the findings are applicable.

*Dependability* relates to the ‘consistency’ of research findings and interpretations over time (Lincoln & Guba, 1985). According to Lincoln and Guba (1985) one technique to establish dependability is through an ‘inquiry audit.’ An auditor is responsible for ensuring that the ‘process’ by which the accounts are developed are fair and not based on “creative accounting” (Lincoln & Guba, 1985, p.315). According to Sandelowski (1986), research findings are “auditable when another researcher can clearly follow the decision trail used by the investigator in the study” (p.29) and would arrive at similar conclusions. A *decision trail* includes audits and documents and explicitly describes any decisions regarding the ‘theoretical, methodological and analytic choices’ made throughout the study (Koch, 1994, p.92).
*Confirmability* refers to the way in which interpretations have been arrived at via inquiry (Lincoln & Guba, 1985). There should be a smooth, logical, and natural progression of findings in the research report. Findings should be shaped by the data collected and not just the biases of the researcher. For Lincoln and Guba (1985), confirmability can be established by also using the ‘inquiry audit’ to examine the ‘product’ (the data, interpretations, findings, and recommendations) to affirm that it is logical and coherent. Keeping a ‘reflexive journal’ is another technique for establishing confirmability (Lincoln & Guba, 1985).

It should be noted that Sandelowski (1993b) believed that reliability (dependability) is a threat to validity (confirmability), and questioned the use of ‘member validation’ by participants or other experts in establishing the validity of the researcher’s interpretations. According to Sandelowski (1993b), because reality is considered to be “multiple and constructed” versus “singular and tangible” (p.3), repeatability of findings is not essential in interpretive phenomenology. She warned that in an attempt to establish rigour in qualitative research, researchers may succumb to a rigid technique that draws them away from the “sensitivity” and “artfulness” that is essential in qualitative work. Sandelowski (1993b) states:

> We can preserve or kill the spirit of qualitative work; we can soften our notion of rigor to include the playfulness, soulfulness, imagination, and technique we associate with more artistic endeavors, or we can further harden it by the uncritical application of rules. The choice is ours: rigor or rigor mortis (p. 8).
The issues raised by Sandelowski (1993b) bring to light the difficulty of providing one set of criteria to establish trustworthiness in qualitative research, when in reality it constitutes a variety of approaches and methods (Morse & Field, 1995). According to Sandelowski (1993), it is up to researchers to recognize the complexity of strategies used to ensure trustworthiness, critically examine the different strategies, and then carefully select appropriate criteria for the study being conducted.

According to Draucker (1999), the critique of Heideggerian interpretive phenomenological nursing research should focus on two issues: (1) a merger of participants’ and researchers’ experiences in the interpretation, and (2) integration of Heideggerian ideas and concepts within the research findings. In her critical literature review of Heideggerian phenomenological nursing research conducted between 1987 and 1997, she found the degree to which research findings reflected these two issues varied. Regarding convergence, or merging of the participants’ and researchers’ perspectives along with other relevant data sources, participants’ voices were often evident, but the perspectives of the researchers were lacking in many reports. The research process of how the actual merger of perspectives was generated was rarely discussed. In regards to the extent to which Heideggerian writings enriching the research findings, some reports did not include specific references to Heidegger, while others clearly used Heideggerian philosophy to enrich their interpretations. Draucker recommended that Heideggerian nurse researchers (a) seek publication outlets that allow creative presentations of interpretive findings, and (b) join forces with philosophers and other scholars skilled in
Heideggerian interpretive phenomenology to gain new insights and enrich findings (Draucker, 1999).

_Heidegger’s Influence on Nursing Research_

Heideggerian interpretive phenomenology was first introduced to nursing by Benner (1984) and has subsequently been embraced as a method of inquiry by other nursing scholars and nurse researchers (Annells, 1996; Benner, 1994; Cohen & Omery, 1994; Diekelman & Allen, 1989; Draucker, 1999; Johnson, 2000; Koch, 1995; Koch, 1996; Lindseth & Norberg, 2004; Lopez & Willis, 2004; Mackey, 2005; Van der Zalm & Bergum, 2000; Walters, 1995; Whitehead, 2004; Wojnar & Swanson, 2007). Interpretive phenomenological inquiry has many implications for nursing practice (Draucker, 1999; Walsh, 1996). Annels (1996) noted that interpretive phenomenology is appropriate for nursing research and informs practice and found support for this approach across various continents. Johnson (2000) showed the usefulness of Heidegger’s philosophy within phenomenological research in nursing, arguing that Heideggerian interpretive phenomenology can increase our understanding of problems or concerns that arise in nursing and offer new insight into potential solutions. Van der Zalm and Bergman (2000) reported that the meanings of human experience revealed through interpretive phenomenology influences a more thoughtful attentive nursing practice. Fjelland & Gjengedal (1994) argued that the most important factor in good nursing is the ability to understand the patient’s life world and this can be accomplished through the use of interpretive phenomenology. According to Wojnar and Swanson (2007), interpretive phenomenology is the research method of choice when attempting to examine the
meanings of the lived experience as generated from a blend of information provided by the participant, data obtained from other relevant sources, and the researchers understanding of the phenomenon.

The goal is interpretation of phenomenon to uncover shared practices and common meaning (Cohen & Omery, 1994; Walsh, 1996). If the researcher selects an interpretive phenomenological method for their study, he or she must commit to an ontological approach that seeks to understand the meaning of Being, versus a Husserlian eidetic or descriptive method that requires an epistemological approach that seeks to describe (Cohen & Omery, 1994; Mackey, 2005). An interpretive phenomenological method was chosen for this study because the researcher sought to understand the ontological meaning of living with obesity on a day-to-day basis. Rather than describing the essence of the experience of living with obesity by bracketing the researcher’s pre-understanding of the phenomenon, a rich and nuanced understanding of what it means to live in the world with excess weight was sought by a fusion of horizons – a convergence of participant understandings and researcher understandings informed by Heideggerian philosophy.

**Significance of Qualitative Research in the Study of Children’s Health**

There is a growing body of research that recognizes the significance of qualitative research in the study of children’s health (Berman, 2003; McPherson & Thorne, 2000; Rich & Ginsburg, 1999; Woodgate, 2001). Yet, children’s perspectives in relation to their day-to-day experiences are often over looked by researchers. In a historical analysis of childhood, Berman (2003) noted that over the decades children have been “silenced and
marginalized” (p. 112). Woodgate (2001) proposed that researchers may be reluctant to conduct qualitative research with children due to misguided perceptions that children are not capable of or have a difficult time communicating the subjective meanings of their experiences. However, reviews of the literature on qualitative research with children shows that they have the ability to provide rich description of their lives and are willing to share their stories (Christian, Pearce, Roberson & Rothwell, 2010; Taylor, Gibson & Franck, 2008).

The literature has highlighted several challenges of conducting interviews with children, but several strategies have been identified to deal with these challenges (Faux, Walsh & Deatrix, 1988; Irwin & Johnson, 2005). For instance, gaining access to children for the participation in a study often involves dealing with numerous gatekeepers, including institutions, health professionals and parents (Faux et al.). To gain cooperation of gatekeepers, the researcher must establish credibility as an expert communicator with children and cite literature on the potential benefits children obtain from sharing their stories. The inability to develop rapport with participants is another issue that may arise due to the inherent nature of the adult-child relationship in which adults are viewed as authority figures (Faux et al., Irwin et al.). To build rapport, children should have the opportunity to choose the interview site. They should be assured that there is no right or wrong answers to the researcher’s questions and should be informed whether their responses will remain confidential.

There are also several issues in developing an interview guide that will bring forth credible data from children, including language comprehension and adult-child
communication (Faux et al., Irwin et al., 2005). These issues can be addressed by using simple words and sentences and avoiding non-judgmental wording. When conducting interviews with children, researchers should allow children to tell their stories without interrupting them. Questions should be ordered from non-threatening to more sensitive. The researcher should remain flexible, expect the unexpected, and adapt the interview techniques and questions to allow the child’s authentic voice to emerge.

The proposed study used a Heideggerian interpretive phenomenological approach to explore the meaning of what it is like to “be in the world” as an adolescent living with obesity. A Heideggerian interpretive phenomenological approach was chosen because the goal of this study was to better understand the everyday experiences and health care encounters of adolescents living with obesity. The phenomenological concepts of the co-constitution of data, the importance of dialogue, the fusion of horizons as the source of interpretation, and Diekelman and Allen’s (1999) procedure of analysis provided the foundation for the study design.

Procedures

Sample Selection

The phenomenon of interest for this study was adolescent (ages 13 – 18 years) obesity. Two groups believed to have knowledge of this phenomenon were interviewed. One group included adolescents between 13 to 18 years of age who were currently living with obesity. This range was chosen because at 13 children are likely to have begun puberty, but many at age 18 have not yet fully transitioned to adulthood (Arnett, 2000). Children who have reached puberty are less likely to “grow into” their weight, and their
obesity often persists into adulthood (Nader et al., 2006; Whitaker et al., 1997). This group could share recent and contemporaneous experiences of living with obesity.

The other group included individuals 18 to 24 years of age who lived with obesity when they were between the ages of 13 and 18. This group, who are referred to as young adults, were included because they could reflect back on their entire adolescence and provide a perspective not available to adolescents who were still living with obesity as teens. These individuals were nonetheless still close to their teen years and memories of their experiences of living with adolescent obesity would likely still be “fresh.”

Sample

A purposeful sample of individuals who self-identified as living with a significant amount of excess weight as an adolescent was sought. Because studies suggest that the experiences of boys and girls who live with obesity differ significantly (Daniels, 2005; Eisenberg, Neumark-Sztainer & Story, 2003; Faith et al. 2002; Neumark-Sztainer et al. 2002; Pearce, Boergers & Prinstein, 2002), the sample was stratified to include equal gender representation. While other variables, including ethnicity or developmental stage, were also relevant, stratifying on each of these variables was outside the scope of this study. An effort to recruit minority participants to ensure a diverse sample, however, was made by targeting geographical areas that had a large population of African Americans.

Because self-perception of excess weight was central to the research question, participants were required to self-identify as being, or having been, an overweight adolescent. To avoid highlighting the term obesity in recruitment materials, which research suggests is offensive and off-putting (Cohen et al., 2005; Wadden & Didie,
2003), recruitment materials emphasized participants were sought who “live [lived] with a significant amount of excess weight.” The materials did acknowledge that professionals often use the term obesity to refer to significant excess weight. Sample criteria for the adolescent group, therefore, included children (a) 13 to 18 years of age, (b) who self identified as having lived with a significant amount of excess weight, and (c) who spoke English. Sample criteria for the young adult group included individuals (a) 18 to 24 years of age, (b) who self identified as living with significant excess weight when they were between the ages of 13 and 18, and (c) who spoke English.

Sample Size

In a phenomenological study, the exact number of participants cannot be determined a priori as research continues until the research questions can be answered (Benner, 1994; Morse & Field, 1995). Phenomenological studies of children living with obesity typically use samples of between ten and twenty participants (Alm et al., 2008; Murtagh, Dixey & Rudolf, 2006; Rich et al., 2002). Because this study investigated the experiences of both male and female adolescents, a sample size of about 20 was anticipated as it was believed that this sample would likely provide enough data to obtain a rich, comprehensive description of both boys’ and girls’ daily experiences with living with obesity.

Setting and Recruitment

Participants were recruited from several areas in Cuyahoga, Stark, Summit and Portage counties in Northeast Ohio. Participants were drawn from two clinical facilities, the Future Fitness Clinic and the Children’s Clinic of Summit and Stark County; the
The Future Fitness Clinic at Akron Children’s Hospital

The Future Fitness Clinic is a weight management program for overweight children conducted at the Sports Medicine Clinic of Akron Children’s Hospital, Akron Ohio. The program provides children and their families with guidance to improve diet and eating habits to maintain good health. Gradual weight loss is encouraged. Children initially undergo a complete medical exam, an exercise tolerance evaluation, and a nutrition evaluation. An individualized weight loss program is developed with weekly or monthly meetings to monitor progress. Follow-up visits are conducted until a healthy weight is maintained. The program currently enrolls approximately 75 children per year.

The pediatricians, nurse practitioners, and nutritionists at the Future Fitness Clinic were provided with a detailed explanation of the study by the investigator. Posters with information about the study were displayed in the waiting rooms and treatment rooms (Appendix A). The poster included a brief explanation of the study, a statement about the $35.00 Target gift certificate for study participation, and a toll free number to contact the researcher. Contact information cards were available to take from a plastic sleeve on the poster. The card had the title of the study, the primary investigator’s name, and the toll-free number. In addition, HCPs were asked to promote the study to obese
adolescents 13 to 18 years of age by using the recruitment script (Appendix C) and by distributing handouts with information about the study (Appendix A-same information as Poster). If an adolescent was interested in participating in the study, she/he was instructed to call the confidential toll free number provided.

Children’s Clinic

The Children’s Clinic is a large pediatric practice in Massillon and Alliance, Ohio. It consists of seven doctors and two nurse practitioners who provide primary health care for children birth to 21 years of age. At each office, they see approximately 65 to 100 patients each day. The pediatricians and nurse practitioners at this location were provided with a detailed explanation of the study by the investigator. Posters with information about the study were displayed in the waiting areas and treatment rooms (Appendix A). The poster included a brief explanation of the study, a statement about the $35.00 Target gift certificate for study participation, and a toll free number to contact the researcher. Contact information cards were available to take from a plastic sleeve on the poster. The card had the title of the study, the primary investigator’s name, and the toll-free number. In addition, pediatricians and nurse practitioners were asked to promote the study to obese adolescents 13 to 18 years of age by using the recruitment script (Appendix C) and by distributing handouts with information about the study (Appendix A). If an adolescent was interested in participating in the study, she/he was instructed to call the confidential toll free number provided.

Northern Ohio National Association to Advance Fat Acceptance Chapter
The Northern Ohio *National Association to Advance Fat Acceptance (NAAFA)* chapter is a non-profit organization that promotes size diversity and acceptance. The Chapter holds events for “fat” persons that provide a safe environment to meet and socialize. Members meet the first Saturday every month at the Brooklyn Branch of the Cuyahoga County Public Library in Brooklyn, Ohio. The primary investigator attended several meetings to promote the study. Participants were recruited at NAAFA in two ways. First, members who met study criteria were invited to participate. Second, obese parents are likely to parent obese children; therefore, if members had children who met study criteria, the parents were asked to inform their children about the study. Handouts with information regarding the study were distributed at two meetings (Appendix A, Appendix B). Potential participants were asked to meet with the primary investigator after the meeting or to call the toll free number provided to obtain more information or request an interview.

*Community Recruitment*

Participants were also recruited from four Canton, Ohio area communities including Canton City, Canton Township, Jackson Township, and Plain Township, all located in Stark County. Canton, Ohio is a mid-sized city and was selected for several reasons. First, Canton, Ohio has a diverse population that includes urban and suburban areas consisting of various socio-economic and ethnic groups. *Canton city* is an urban area with a population of 78,319 (US Census Bureau, 2006). The racial mix of the *Canton city* is as follows: 74.5% White, 21% Black, and less than 1% American Indian, Asian, Pacific Islander, or other. The estimated median yearly household income is
$29,401. Canton Township is a suburban area that is 11% rural with a population of 13,882. The racial mix is 93% White, 5% Black, and less than 1% other, and the estimated yearly median household income is $44,209. Jackson Township is a suburban area that is 8% rural with a population of 37,744. The racial mix is 95% White, 2% Black, and less than 1% other, and the estimated yearly median household income is $60,184. Plain Township is a suburban area with a population of 51,263. The racial mix is 94% White, 3% Black, and less than 1% other, and the estimated median yearly household income is $51,253 (US Census Bureau, 2006). The second reason for recruiting in this vicinity was that the primary investigator has lived in Canton, Ohio for the last 25 years and therefore is familiar with the community. Professional colleagues of the investigator facilitated recruitment and secured interview sites.

Posters and fliers were used for recruitment. Posters and fliers were placed at libraries, YMCAs, churches, children’s health centers and college campuses (Kent State University-Stark Campus, Malone College, Stark State University, Walsh University) where adolescents and young adults were likely to visit (Appendix A, Appendix B). Attempts were made to recruit African Americans by placing posters and fliers in community centers in racially diverse neighborhoods. In addition, to obtain a socio-economically diverse group, posters and pamphlets were placed in community centers that care for the economically disadvantaged; including the American Red Cross, Canton City Health Department, Stark County Health Department, and the Shipley Child Health Clinic. The investigator contacted several youth leaders via phone and requested their
assistance in community recruitment. They were given information regarding the study and provided with handouts.

Potential participants were asked to call the toll free number if they were interested in participating in the study. The toll free message described the screening procedure (including the need for parental consent if the potential participant was under 18 years), the requirements of the study, and a request for a convenient time to call (Appendix D). If the individual was under 18 years of age, the investigator asked for a time that both the adolescent and parent were available.

Screening

The investigator contacted all individuals who expressed an interest in participation. Some parents made the initial contact for younger children. In this situation, the investigator discussed the study and consent procedures with the parent, but informed them that to proceed further, the investigator needed to speak with the adolescent. Efforts were made to first talk with the adolescent regarding the study. A telephone interview/screening script was used to guide the discussion (Appendix E1, E2, E3). If the individual was under 18 years of age, the investigator asked if a parent was home and willing to speak with the investigator. The investigator described the study and consent procedures to the parent and obtained verbal permission to conduct a brief screening with the adolescent.

Potential participants were asked if they were between 13 and 18 years of age and if they considered themselves to be living with a significant amount of excess weight, or if they were between 18 and 24 years of age and if they considered themselves to have
lived with a significant amount of excess weight between the ages of 13 to 18 (Appendix E3). Next, all participants were asked if they were available to meet with the investigator for a 30 to 60 minute interview. If they met the sample criteria and were available to meet for an interview, they were invited to participate. Parents or guardians of adolescents less than 18 years of age were informed that their child met the sample criteria. They were then asked if they preferred to sign the parental consent forms (Appendix H, K) at the time of the interview or if they preferred to have them mailed to them with an instruction letter (Appendix L). Interviews were scheduled with the adolescents and young adults.

A contact information sheet was used to track each potential participant (Appendix F). The contact sheet included the participant’s name, address, phone number, if study criteria were met, and projected interview place, date, and time. If the adolescent was less than 18 years of age, parental/guardian name and consent information was also collected. The contact information sheet was also used at a later date to document other information, including the interview start and stop time.

Consent Procedures

A date and time for interviews were scheduled on the phone. Signed consent procedures varied according to whether the individuals were age 18 or over or under age 18. If they were at least 18, they signed a young adult informed consent form (Appendix I) and an audio-recording consent form (Appendix J) at the time of the interview. For children less than 18 years of age, parental/guardian signed consent was obtained in one of two ways. First, if the parent/guardian stated they would accompany the adolescent to the interview, parental consent forms (Appendix H, K) and adolescent consent forms
(Appendix G, J) were obtained at that time. Second, if the parent/guardian did not plan to accompany the adolescent to the interview, the primary investigator sent two copies of the parental/guardian consent form (Appendix H) and parental/guardian audio-recording consent form (Appendix K) and an instruction letter to obtain consent via the mail (Appendix L). The investigator requested the parent return the highlighted consent forms as soon as possible in the stamped returned-addressed envelope and keep the other copy. Upon receipt, the primary investigator contacted the adolescent to arrange a time for the interview.

Data Collection

Interviews were conducted in private areas that were safe and free from distractions. The Future Fitness Clinic and Children’s Clinic provided private rooms to interview participants. Participants recruited from NAFFA were interviewed in a private room at the Cuyahoga County Public Library. Within the community, interviews were conducted at various private meeting rooms, including Kent State University-Stark and Kent Campus Library, Malone College Library and the Huntington Bank Building in downtown Canton. All interviews were conducted by the primary investigator. The primary investigator is a pediatric nurse practitioner who has had over 15 years of nursing experience and is skilled in interviewing and collecting sensitive information with the target population.

Before each interview, a verbal explanation of the study was given to each participant and if present, his or her parent/guardian. Both participant and the parent/guardian were informed that the information the adolescent provided would not be
shared with parent unless the adolescent revealed information suggesting s/he was in
danger or was a danger to others. The adolescent was informed s/he was free to stop the
interview at any time.

If the person was 18 years of age or older, they were asked to read and sign the
young adult informed consent form (Appendix I) and audio-recording consent form
(Appendix J). If the person was under 18 years of age, and the parent/guardian
accompanied the adolescent, both the adolescent and parent/guardian signed the informed
consent form (Appendix G; Appendix H) and audio-recording consent form (Appendix J;
Appendix K). If the person was under 18 and the parent/guardian did not accompany the
adolescent, the primary investigator re-checked the signed parent/guardian informed
consent form (Appendix H) and parental/guardian audio-recording consent form
(Appendix K) that was obtained in the mail. The adolescent then signed the adolescent
informed consent form (Appendix G) and adolescent audio-recording consent form
(Appendix J). Any person accompanying the participant was then asked to wait in an
adjoining waiting area.

A semi-structured interview using a funnel approach that moves from broad to
more specific questions was used. The interviewer provided a series of open-ended
questions to encourage participants to freely describe their experiences. Participants were
asked to tell stories about what it is like to live with excess weight as an adolescent. The
following statement began the interview, “You have indicated that you live(d) with
excess weight. I am interested in finding out what that experience is (was) like for you
and how it affects your life” (Note: The interviewer used the terminology of the
participant when describing excess weight throughout the rest of the interview).

The interview had two main components: the everyday lives of adolescent’s and their healthcare experiences (Appendix M, Appendix N). Although the interview questions were guided by the participants’ responses, the following questions and statements were used as guides.

**Daily Life**
1. Tell me a about your day-to-day life as a teen.
2. Does your excess weight affect your day-to-day experiences? If so how?
3. Tell me a story about an experience that you have had that will help me to understand how your excess weight affects your daily life.
4. Tell me about the time you became aware of or concerned about your excess weight.
5. Tell me about a time when you were aware that others noticed your weight.
6. Tell me about interactions you have had with family regarding your weight.
7. Tell me about interactions you have had with peers regarding your weight.
8. Tell me things that have been helpful to you in living with excess weight.
9. Tell me things that were not helpful or hurtful to you in living with excess weight.

**Healthcare Experiences**
1. Tell me about your experiences with health care providers, such as doctors and nurses, have been like.
2. When you visit your health care provider, is your weight discussed? If so what is that like for you?
3. Has your health care provider worked with you to lose or manage your excess weight? If so, what is that like for you?
4. Does your health care provider obtain your weight measurements as part of your care? If so, what is that like for you?
5. What role do you think heath care providers should have in helping you manage or lose weight?
6. What advice do you have for health care providers who work with teens who live with excess weight?

The interview will conclude with statements such as:
1. Tell me about your hopes and dreams for the future.
2. Are there other stories that you can share with me to help me understand what it is like for you to live with excess weight.

At the completion of each interview, a demographic data sheet was completed by the participant (Appendix O1, O2). This information was used to provide a full
description of the sample. Demographic data included age, gender, ethnicity, level of education, health problems, extra curricular activities, number of years living with excess weight, history of dieting, weight management programs attended, date of birth, and estimated height and weight.

The participants were thanked and asked to call the investigator at the toll free number if they thought of anything else they wished to discuss. The participants were presented with a Target gift card to compensate them for their time and travel. A signature was obtained from the participant showing that they received the $35.00 gift card (Appendix P) and the date/time of interview was documented (Appendix F). Participants were asked if the PI could contact them at a later date with any questions or requests for clarification of information provided. Immediately following the interview, the PI wrote out any field notes and documented reflections and insights in a journal.

Data from audio-tapes and field notes were transcribed verbatim. The PI listened to the tapes and checked the transcriptions for accuracy. The audio-tapes were then erased by the PI.

*Data Analysis and Interpretation*

The data was analyzed interpretively by the PI. The dissertation chair (DC) and a dissertation committee member (DM), both professors skilled in interpretive phenomenological research, provided guidance and assistance with data analysis. Data analysis began with data collection (Cohen, Kahn, & Steeves, 2000). During each interview, the PI listened and thought about the meaning of each story and recorded
thoughts or insights. In accordance with procedures outlined by Diekelmann & Allen (1989), data were analyzed in seven stages:

1. The PI became immersed in the data as a whole (Morse & Field, 1995) by reading and rereading the transcripts to gain an overall understanding of each participant’s experiences. The process of understanding took place by moving from parts of the text, to the whole text, and back to the parts of the text again (Diekelman & Allen, 1989). The PI wrote an interpretive essay of each interview that summarized the interview and contained the PI’s reflections on the participant’s narrative. The essay was titled to capture the main storyline. The essay was presented to the DC and DM for discussion.

2. Interpretive categories were identified using a traditional cut and paste and index card technique. The PI first highlighted salient or recurring text units from the transcripts that enlighten understanding of each individual’s experiences. Significant excerpts were then cut out and placed on index cards to organize data and support interpretive texts. Text units were examined for similarities and differences. Meetings took place between the PI, DC and DM on a weekly basis, or as needed, to clarify any concerns regarding interpretations.

3. Emerging interpretations were presented to the DC and DM by the PI. Interpretations that were not clear or supported by data were reexamined by returning to the transcripts.
4. Through discussions with DC and DM, four broad topics were identified. The PI wrote in-depth descriptions of the topics and supported them with extensive documentation.

5. Within each group of the topics, several notable constructs emerged. The PI used the works of phenomenological scholars whose writings resonate with the emerging findings to explore the constructs in greater depth. The works of Heidegger, Merleau-Ponty, and Foucault were most relevant. The PI wrote a phenomenologic essay for each construct. The PI discussed emerging findings with the DC. The PI wrote memos about discussions. The DC’s responses and suggestions were taken into account before preparing the final draft.

6. The final report was prepared. Findings were supported with excerpts from transcripts to allow validation of the findings from the reader (Diekelmann & Allen, 1989).

**Rigor/Trustworthiness**

Criteria outlined by Lincoln & Guba (1985) were used to enhance the trustworthiness of the study (Lincoln & Guba, 1985). The following strategies were used to enhance the credibility, transferability, and confirmability of the findings. Dependability criterion will not be used, because it is not relevant to interpretive phenomenological inquiry; the goal is to seek a deeper understanding of the phenomenon and not to obtain findings that can be repeated over time.

**Credibility**
Credibility is confidence in the “truth value” of the research findings. In this study, credibility was addressed through prolonged engagement and member checks. Prolonged engagement was accomplished through in-depth interviews. Member checks took place throughout the interview; the PI repeated or clarified participants’ responses to ensure understanding and explored topics that were emerging in data analysis.

Transferability

Transferability implies that the findings have applicability in other contexts. To address transferability, a ‘thick description’ of the sample is provided. This will allow others interested in using these findings to determine the possibility of transferring them to groups or settings in which the findings are applicable.

Confirmability

Confirmability is the degree to which the findings are shaped by the data collected and not just the biases of the researcher. To establish confirmability, the DC regularly examined the products of analysis, including interview data, findings, interpretations and recommendations, to determine their accuracy or coherency. An audit trail was conducted that included all written field notes and documents, transcribed audio-tapes and field notes, interpretive memos and phenomenological writings. A reflexive journal was maintained throughout the study. This journal contained: (1) the daily schedule and logistics of the study, (2) thoughts regarding the investigators’ own values, interests, and insights related to the study, and (3) a methodological log to document any methodological decisions and rationale for these decisions.

Protection of Human Rights
Formal permission for recruitment was obtained from all facilities. Approval for the study was obtained from the Kent State University Institutional Review Board (IRB) and the review board at Akron Children’s Hospital prior to subject recruitment. Participants were informed that participation in the study was voluntary, that they could refuse to answer any questions or stop participation at any time, and that all of the information provided was confidential within limits of the law. Participants’ names appeared only on the consent forms, contact information forms, and participation gift certificate forms. Transcripts were identified by a code number. Consent forms, contact information forms, and participation gift certificate forms were kept in a locked file cabinet in Dr. Claire Draucker’s office (311 Henderson Hall) at Kent State University. The code list was kept secure in a locked file cabinet at the home office of the primary investigator, and was the only link between the participant and the data. Participants will not be identified in any publications.

Although it was not believed that participation in this study placed individuals at an increased risk from what they encountered in everyday life, minor risk related to participation was anticipated. Because living with obesity as an adolescent is a sensitive topic, the researcher recognized participants may be emotionally upset by the interviews. Plans were made to manage emotional distress in the following three ways. First, if the interview seemed distressing to the participant, the investigator would stop the interview and talk with him/her about his/her distress until he/she seemed composed. Second, if the participant remained distressed, the investigator would discuss with him/her available resources and provide him/her with a list of outside sources of help. Outside referrals
included suicide and crises hotlines, along with specific community health agencies serving Canton, Akron and Brooklyn, Ohio (Appendix Q). Third, in the unlikely event a participant’s distress suggested danger to his-self or her-self or others, the investigator planned to inform the parent and assist the family in obtaining emergency treatment at the health facility or at a community agency. The participants may have also sought guidance in weight management. If so, they would have been instructed to contact their primary care health care provider. When talking with the adolescent, efforts were made to avoid using derogatory terms such as “obesity” and “obese;” more neutral terms such as “weight” or “excess weight” were used.

There were several benefits associated with participation. Participants had the opportunity to share their experiences, and telling their stories was for many a rewarding experience. The participants were also informed that they may benefit from knowing their stories may make a difference in future understanding of the obese adolescent experiences, which may lead to better care.
CHAPTER 4: FINDINGS

Participants provided a rich description of their day-to-day lives as adolescents living with excess weight and conveyed an in-depth understanding of how excess weight affects their experiences. They also described their experiences with health care encounters and provided insight on how health care providers can best provide care for teens living with excess weight. From their narratives, four broad topics emerged: the physical experiences of living with excess weight, the social experiences of living with excess weight, ways of managing excess weight, and health care experiences when living with excess weight. In this chapter, the sample and the interviews will be described. Then, each of the four topics will be discussed in-depth. A phenomenological interpretation of several key constructs will follow based on the ideas of Heidegger, Merlau-Ponty, and Focault. These constructs are existence (being), authenticity, embodiment, modes of engagement, medical gaze, and practical know-how (Spielraum). Gendered differences in the topics that were notable in the analysis will be specified in the topics description.

The Sample

The sample included a diverse group of 21 participants who had experienced living with excess weight as an adolescent. Ten were adolescents, 5 boys and 5 girls, who were currently obese. Eleven were young adults (YA), 4 men and 7 women, who had lived with obesity as adolescents. Fifteen participants were Caucasian, 2 were African-American, and 4 were Bi-racial. The participants ranged in age from 13 to 23 years. There were two sets of siblings: 2 brothers, and 2 sisters and a brother. All but 1
participant, who volunteered 40 hours per week at the Salvation Army, were students. Of the participants, 9 were enrolled in college and 2 attended technical schools. Seven participants, 1 adolescent and 6 YAs, were employed. Nine of the participants had no physical health complaints, 4 had high blood pressure, 2 had Type-2 diabetes, 5 had asthma, and 4 had ‘other’ physical health complaints that included fibromyalgia, allergies, anorexia nervosa and polycystic ovary syndrome (PCOS).

To be eligible for the study, adolescents and young adults were required to self-identify as “living (having lived) with significant excess weight.” The recruitment posters noted that “health care providers sometimes refer to this excess weight as obesity.” Height and weight measures were not required to ensure participants met standard obesity requirements. Nonetheless, all of the participants - based on their estimated height and weight - were obese or significantly obese as a teen. Eleven had an estimated BMI of 30 to 39.9 during adolescence and 10 had an estimated BMI of 40 or greater during adolescence. Eleven participants had lived with excess weight all of their lives. Some claimed to have been born large. Five had lived with excess weight for 9 to 10 years, two for 7 to 8 years, one for 5 to 6 years, and two for 3 to 4 years. Most gained weight early in life and steadily got heavier.

Participants, however, while well aware of their excess weight, did not refer to themselves as obese. Rather, they described themselves with terms such as “big,” “the big girl,” “big boned,” “bigger,” “bigger kid,” “fat,” “fat girl,” “fat kid,” “heavy,” “huge,” “overweight” and “chubby.” Some used descriptive terms such as “a watermelon with a cherry head.” They referred to the excess weight on their bodies as “fat rolls,” “love
buckets,” “love handles,” “man tits,” “spare tire” and “pot belly stove.” Several found the term “obese” to be offensive. The term “excess weight” will be used the remainder of this report to describe the overweight condition.

All the participants had tried some type of diet and weight management techniques, including increased exercise (n=16), increased consumption of healthy food (n=15), decreased consumption of junk food (n=17), and fasting or skipping meals (n=11). The YA participants had tried additional weight management techniques, including over-the-counter diet pills or amphetamines (n=6), prescribed weight loss medication (n=1), induced vomiting after eating (n=2), and smoking cigarettes (n=3). Participants had participated in different diet and weight management programs, including Weight Watchers (n=9), Nutra-System (n=1), Adkins (n=2), teen weight loss programs (n=2), diet or exercise programs guided by their parents/guardians (n=5) or their primary doctors (n=6), hospital-based weight loss programs (n=1), sports programs (n=2), and lap band surgery (n=1). Five participants did not report participation in any diet or weight management programs. Some felt they were unable to lose weight because they were genetically predisposed to being heavy.

Participants were recruited at the following sites: The Future Fitness Clinic (n=1), Children’s Clinic (n=2), NAAFA (n=3), college campuses (n=8), and the community (n=7). Twenty-three individuals were screened and agreed to participate in the study via phone. One mother cancelled her daughter’s appointment and one man did not show up for the interview; neither individual could be reached for rescheduling.
Interviews were conducted in person in private meeting rooms at several locations, including doctors offices (n=3), college campuses (n=9), libraries (n=2), churches (n=2), and professional buildings (n=5). Interviews lasted from 40 to 100 minutes, with an average of 60 minutes. The majority of participants provided rich descriptions of their day-to-day lives as adolescents living with excess weight. Many articulated an in-depth understanding of how excess weight affected their experiences. All readily provided descriptions of their health care encounters as well as recommendations about how health care providers might best provide care for adolescents living with excess weight.

The majority of participants seemed enthusiastic about participation. For instance, before the start of one interview, a 16-year-old Bi-racial girl stated, “I am an open book. You can ask me anything you like.” A 22-year-old woman stated, “I have so much to tell you… I really want to be part of this.” Parents who were present to sign consent forms also seemed enthusiastic about the study. Several expressed disappointment that the study was not an intervention study and would consist of only one interview. Three mothers, a stepmother and a father expressed that more needs to be done to help teens living with excess weight. Two of the mothers indicated that support groups for overweight teens are needed.

Most of the participants were forthcoming in sharing their stories. For instance, in response to the first interview question, “Tell me about your day-to-day life as a teen” or “Tell me what it was like for you living as a teen,” the participants immediately began sharing stories about living with excess weight. A few participants were more reticent
and answered questions briefly and quickly. Only one participant, a 16-year-old
Caucasian girl, was tearful during their interview; she stated that she was comforted by
the hope that her story would “make a difference.” The majority of participants
expressed gratitude for the opportunity to share their stories. Concluding comments
included, “This was very good. I liked it,” “This has been very helpful,” “It is
interesting” and “I really enjoyed this, this was amazing.” A 16-year-old girl and a 17-
year-old boy initially resisted taking the gift card for their time and travel. The boy stated,
“Thank you. You know I would have done this for nothing. It wasn’t the gift card… I just
knew I had a good story to tell.”

The Physical Experiences of Living with Excess Weight

One major topic that emerged from the data was the participants’ physical
experiences of living with excess weight. They provided rich descriptions of the physical
burden of carrying excess weight. In addition, they were often constrained by many
objects in their physical surroundings that did not accommodate their size.

Being Burdened by Excess Weight

Many participants were burdened by their excess weight and found everyday
activities challenging. A 21-year-old Caucasian woman, for instance, was in disbelief that
her peers complained about gaining the “freshman fifteen.” She stated, “Are you kidding
me… Try walking a day in my shoes… Try carrying my weight around for just one
day’… My weight, now that is a lot of weight to carry.” Physical exertion left some
participants short of breath and diaphoretic. A 21-year-old Caucasian man, for instance,
became overheated as a teen when he walked down the street in the summertime.
Carrying his excess weight around was “like walking all day in a fur coat.” He stated, “I felt like I was drowning by the time I finished.”

Excess weight was especially burdensome for teens during gym class. It was difficult for participants to keep up with the required exercise regimens due to their weight. The majority had a difficult time running. Many mentioned, in particular, the one-mile run. They became physically overexerted and could not complete runs in the time allotted. For instance, a 21-year-old Caucasian man as a teen felt like he was “going to drop” within the first five minutes of his required run. Some participants had difficulties with basic exercises, such as stretches, crunches and bends. According to a 14-year-old Bi-racial boy, “All the weight just got in the way.” Several others were asked to pull the physical weight of their bodies up on ropes or bars, which they found impossible to do. A 19-year-old Caucasian man explained: “I couldn’t… because of this (encircled stomach with hand). It is like lifting up a big bar bell.” Some participants avoided gym class. A 19-year-old African-American woman as a teen intentionally left her gym clothes at home so she would not have to participate.

Many participants had a difficult time participating in other organized activities, such as competitive sports and band. Some incurred weight-related injuries that involved their muscles, bones, and ligaments. For instance, during football practice in middle school, a 21-year-old Caucasian man broke both of his feet and could not play the rest of the season. He stated, “The doctor told me it was because I was too big… my body wasn’t ready for the strain I was putting on it, especially on my feet and my legs.” Others had exercise-induced respiratory difficulties that were attributed to their weight. For
instance, while marching in a high school band, a 21-year-old Caucasian man had an asthma attack and was taken to the hospital. Marching was difficult for him because he had to move quickly. He explained: “I am more of a slow easy kind of person. I had to learn to adapt, to learn to be slow and easy and at the same time, quick, quick, quick.”

Several participants dropped out of organized activities due to the difficulties incurred from carrying around their excess weight. For instance, a 16-year-old Caucasian boy did not make it through football tryouts. He stated, “All we did was run… I am like, ‘I can’t do this. I quit.’” A 17-year-old African-American stopped playing softball when her “knees started locking up” from her excess weight.

Despite struggles with their physical inabilities, some participants learned that their weight did not always have to be a burden and at times worked to their advantage. For these participants, their excess weight provided them with physical strength and dominance. Certain sports, such as football and volleyball, showcased these assets. For instance, as a teen, a 21-year-old Caucasian man played defense in football. He stated, “The whole job of an offensive line is to not move. Since I was big, I had an advantage over the small guys… I excelled. I was able to stand my guard just because it was hard to move me.” A 19-year-old Caucasian woman as a teen began appreciating her size when she started playing volleyball. She stated,

It wasn’t until I saw that I was capable of using my body to do things.
That I could excel, that I really started appreciating myself physically. I realized that I could use my body to do things that I wanted. ‘That I was a strong person. That I was a capable person.’
When a 19-year-old Caucasian man was in fourth grade he found a unique way to use his excess weight. He placed himself at the bottom of a human pyramid to help hold up a group of his friends.

In summary, most participants experienced being burdened by their excess weight and found everyday activities, especially sports, as challenging. Shortness of breath, fatigue, and weight-related injuries were common. Yet, some participants found that their weight could at times work to their advantage for some physical activity. The burden of excess weight was exacerbated by a physical world that did not accommodate their size.

**Being Constrained by Objects**

Participants were constrained by objects in the physical world. Many objects they encountered did not accommodate their physical size. Several objects were of particular concern, including physical structures, desks and chairs, theme park rides, clothing, and scales.

**Physical Structures**

Some participants had a difficult time negotiating their bodies through physical structures, particularly common walkways. For instance, a 16-year-old Caucasian girl struggled with the aisle on the school bus. The seats were too close together so she had to “squish” past them. When a 21-year-old Caucasian man went to his grandmother’s house as a teen, he had to “suck in a little” and then “swished” through the front door. It was also difficult for him to maneuver about the hallways and stairwells in high school with his peers: “It was an interesting experience trying to pass by everyone quickly without bumping into them and such.” Several participants had a hard time getting into their
lockers at school. They had to squeeze in or wait for others to move away so they could remove what they needed. A few carried all the items they would need for the day so they would not have to stop at their locker.

*Desks and Chairs*

Some participants had a hard time fitting into their desks and chairs. Desks at school were particularly problematic. A 14-year-old Caucasian boy could not get into his “freakin desk” even if he sucked in his stomach. He laughed as he described himself and three other “big” teens simultaneously trying to sit down: “You hear eerrkk. Like we squish in and the chairs go eerrkk, we all go eerrkk and all the chairs scoot over.” A 16-year-old Caucasian boy shared an almost identical experience. He stated, “The desks are like tiny… I am like ‘what the hell.’ I can’t fit into these things… You sit down and it is like, eerrkk, eerrkk, eerrkk. Squeakin... I have to squeeze in… the other kids’ just laugh.” Several participants did not have enough room to write on small desks. A 16-year-old Caucasian boy, for instance, managed to get in his desk but it was hard for him to do his work with the limited space. A few had to have their desks special ordered to accommodate their size.

One participant, a 21-year-old Caucasian woman, had a particularly difficult time fitting into desks and chairs. She began having problems in kindergarten, and it continued throughout college. When she was five, her peers leaned over to get things out of the chair cubby, while she had to get out of her chair and get down on the floor to reach anything. As a teen, she squeezed herself into a desk that was too small and had a hard time getting out. She waited for everyone to leave the classroom and slid to the floor to
get out. The desks left cuts and bruises on her stomach and sides. She stated, “It was painful… cutting so much into me that I was sick.” She had problems with gum that was stuck under the desk tops getting all over her clothing. She also crammed herself into the seats at concerts, school plays and sporting events. The auditorium chairs left no room for anyone to sit beside her. If a person did sit next to her, the participant had to squeeze her arms together and “suck in” her stomach. She stated, “You are squished in and then you got the spillage.”

*Theme Park Rides*

Some participants did not easily fit on rides at theme parks. Several had to squeeze into the seats. A 16-year-old African-American girl tried to go on a ride at Cedar Point, but because of her size, the bar would not come down far enough to secure her thin aunt who was riding with her. The person in charge of the ride pulled a larger woman out of the crowd to take her aunt’s place. A few participants exceeded the maximum weight requirements. A 21-year-old Caucasian man as a teen could not ride the ride the Segway at Disney due to his excess weight. Several avoided theme park rides because they knew they would not fit on them. A 17-year-old Caucasian boy, for instance, sat on the sidelines while his friends rode roller coasters. He explained, “I don’t even try to get on them… there are really restrictive. I am just too big.”

*Clothing*

Most participants had a difficult time fitting into clothing. Many, especially girls, could not fit into the stylish clothing that their peers were wearing. For instance, a 22-year-old Caucasian woman as a teen wanted to wear “spaghetti strap tops and daisy duke
shorts and bikinis” like her older friend but could not because she was too big. Some were unable to shop in “regular” stores. A 19-year-old Caucasian man as a teen, for instance, traveled approximately two hours to shop at a store that carried clothing in his size or purchased “Big and Tall” clothing on-line. School uniforms were particularly problematic for some participants. Their non-overweight peers could wear a “normal” size that was readily available, whereas they had to have their uniforms special ordered or custom made. A 21-year-old Caucasian woman struggled throughout elementary school to fit into standard school uniforms: “My feet were too big for the school shoes. I was too big for the uniforms. I had to get my own special uniform, the only one.”

Not fitting into clothing was distressing for the participants. Several girls avoided shopping for clothes and cried when they had to go to a clothing store. A 22-year-old Caucasian woman explained:

When you go to a store you know that you went up a size. And you feel like complete garbage, because you stop weighing your self after awhile.

But you go to the store and reality kicks in. Oh, I have to go up a size. Oh my God! How many more sizes until I am in the next section of the store.

It is so degrading.

For some, not fitting into certain clothing was a pivotal experience. An 18-year-old Caucasian woman as a teen could no longer fit into her favorite jeans. She explained:

I was getting ready to go out with some friends… I got my jeans out of the dryer and I let them cool out and I stretched them out a little bit. I tried to get into them and I couldn’t get them up past my hips. Then I got them up
a little bit past my hips and I had to lay on the bed and try to, I couldn’t. I
got them buttoned, but then I had that little roll that wouldn’t hide with my
shirt. I had to find jeans that would fit better and I had to change my whole
outfit. It was just really sad, really sad. I hung them up and I am like I
can’t fit into these anymore. I eventually had to get rid of them. I knew I
was never going to fit into them.

Some participants found peace with their inability to fit into certain clothing as
they got older. For instance, when clothes would not fit a 22-year-old Caucasian woman
as a young teen, she would blame herself for being too big. As she got older, however,
she just learned to find something that would fit her better. She explained: “Now it is like,
‘you know what, that is obviously not for my body type. I need to get something else.’
You just learn to work with it.”

Scales

Scales were particularly troublesome for some participants. They were often not
made for persons of a heavy weight. For example, a 19-year-old Caucasian man and a 21-
year-old Caucasian man provided estimates of their weight because their pediatricians
had “old school” scales that could not calculate extreme weights. A 16-year-old
Caucasian girl required a 100-pound “special weight” added on to the scale because she
weighed more than the standard scale could measure. Several refused to be weighed
because they knew the scale would not accommodate their size. A 14-year-old Caucasian
boy, for instance, informed his science teacher that he could not be weighed for a school
project. He joked that the scale would break if he stepped on it and he did not have the money to replace it.

In summary, participants experienced difficulties living in their physical life world because it did not accommodate their size. They had to squeeze through physical structures and into desks, chairs and theme park rides. Not fitting into clothing was particularly distressing for participants, especially for girls. Participants detested scales that did not go high enough to weigh them. Despite their difficulties, many participants adapted to their physical environment and learned to how to deal with the situations and objects they encountered. Living in their social world, however, offered additional challenges.

The Social Experiences of Living with Excess Weight

The social experiences of living with significant excess weight were an important concern for all participants. The foundation of these experiences was a sense of being different. Each participant described interactions with important others, including parents, peers, teachers, friends, family, casual acquaintances, and strangers, in which weight was the focus. Many of the stories participants shared about their interactions with others centered on experiences of being bullied, being told, and being seen. The participants also shared stories about positive connections they had with others related to their weight.

*Being Different*

A basic aspect of living with excess weight as a teen involved a feeling of being different. Participants, for the most part, were more concerned that their excess weight rendered them different than they were concerned that it rendered them unhealthy. For
instance, when a 21-year-old Caucasian man started gaining weight as a child, it never occurred to him that he was “becoming unhealthy” - only that he was becoming different from his peers. An 18-year-old Caucasian woman shared similar thoughts on her excess weight: “It didn’t feel like a health issue. It just felt like a burden. Like I was different and I didn’t want to be different.”

Participants were acutely aware that their size was different than their peers. A 16-year-old Caucasian girl ranked her body size in comparison to others: “disgusting skinny… normal skinny…. heftier set… and then it gets bigger and then there is me.” This awareness often came at an early age. At age five, a 21-year-old Caucasian woman knew she was bigger than her babysitter’s children: “Her kids were like this size (makes a tiny circle with her hands)... then there was me (laughing and making a big circle). I rolled into the room.” Some had defining moments when they realized they were larger than their non-overweight peers. For instance, a 16-year-old Caucasian boy as a young child was weighed in for flag football; he weighed 120 pounds and the other “little skinny kids” weighed only 60 pounds.

Being different from others in their physical appearance was especially troublesome for girls. A 19-year-old Caucasian woman stated, “I was very self conscious… I was always thinking about how I looked… I wish I could look different… that I didn’t look huge.” Many focused on particular body parts, including their stomach, thighs, breasts, buttocks and arms. Some worried about their stretch marks. As a teen, a 22-year-old Caucasian woman’s weight concerns were “completely image focused” and she constantly worried about new stretch marks emerging on her body. For many
participants, concerns regarding their physical appearance stemmed from their perceptions that others saw them as different. A 19-year-old Caucasian woman stated, “Every kid has their own struggles, but people look at excess weight differently, it is more of a social stigma, people look at fat people differently, you see things about what is attractive and it does affect you.”

Participants’ were most acutely aware of looking different in middle school. This was a time when things became “cliquish” and peers judged each other based on their looks. In 6th grade, for instance, a 16-year-old Bi-racial girl recognized the significance of her physical appearance when she met her best friend’s cousin for the first time. The cousin pulled her friend to the side and asked her why she hung out with a fat girl. The participant stated, “That was when I first realized that people did not look at me for my personality. They looked at me for what I looked like on the outside.”

Participants, especially boys, perceived themselves as being different from others in their physical abilities. They realized they were slower and less athletic than their peers. Some lamented that other individuals could do things that they could not do. A 17-year-old Caucasian boy, for instance, has never played sports as well as his “skinny” peers. He stated, “I can’t do the same things… because of my weight.” Many did not have the same stamina as other individuals and could not run and walk at the same pace. As an older teen, a 21-year-old Caucasian woman took forty-five minutes to get across campus - compared to the 10 minutes it took her peers.

Participants often perceived themselves as being different from others in their ability to regulate their weight. Some were frustrated that “skinny” people could eat
whatever they want and never gain weight, but they could not. A 19-year-old Caucasian woman explained: “All of the other [skinny] girls eat the fries and ice cream… I am the one making salads and chicken… If I ate like other people, I would gain weight like crazy.” Some felt that their appetite was inherently different from their peers, which led to weight gain. They noticed that some people were content eating smaller portions of food, whereas they ate frequently or consumed large quantities of food in one sitting. A 16 year-old Caucasian girl explained:

I am hungry all the time. Even as a kid, people have the click where you know you are done. I don’t have it… I have never felt full. That is one word I know what it is, but I have never felt it.

Several questioned why they struggled to regulate their weight and their peers did not, but they speculated it was not just about poor eating habits. A 19-year-old Caucasian woman, for instance, believed that some people are just “wired differently.” A 23-year-old Caucasian man stated, “Genetic, mindset - whatever it is - some people are just geared to be… obese.”

In summary, participants perceived themselves as being different from others in several areas, including their physical size, physical appearance, physical abilities and ability to regulate their weight. The sense of being different permeated, and was perpetuated by, many of their social interactions.

**Being Bullied**

Most of the participants had at least one reference to being bullied because of their weight, and many discussed it extensively. Any experience in which the participants
were intentionally mistreated, hurt or humiliated by another individual or a group of individuals were considered bullying. This section will describe the types of bullying the participants’ experienced, the variety of ways in which they attributed meaning to their bullying experiences, their responses to the bullying, and the responses of important others to the bullying.

Types of Bullying

Participants experienced several different types of bullying, including verbal bullying, physical bullying, relational bullying, sexual-harassment, and cyber-bullying. The bullying was inflicted by peers, family members, friends, teachers, casual acquaintances or strangers. Bullying took place in schools, homes and other public areas. The bullying was most often inflicted by peers at school and seemed to peak during the middle school years. In the school setting, bullying most often occurred in cafeterias, hallways, locker rooms, and physical education classes.

Verbal bullying. Verbal bullying, the most prevalent type of bullying, was experienced by most participants at some point. Verbal bullying consisted of weight-related teasing, including name calling, offensive comments and mockery. The majority of participants were called derogatory names such as fat, fat ass, fatty, fat boy, fuckup, chubby, Godzilla, chunky cheese, cow, Shamu, elephant, tub-tub, lard-ass, ham thighs, man tits, pudgy, Forrucia, and Ralph Wiggum. Several participants could not think of a particular derogatory name that they were called; rather, they indicated that they were called “normal names that you call an overweight kid.”
Many participants were subjected to offensive comments about their weight.

Offensive comments were often made by peers. A 19-year-old African-American woman referred to these comments as “regular fat comments” and stated, “If you would try to get in an argument with someone that is the first place they go, your weight, then your color. The weight always trumps the color.” If the peers were friends, the comments hurt more. Strangers also made offensive comments. Several screamed out the car window and told participants to stop eating because they were too fat. A 21-year-old Caucasian man (as a teen) and his family were accosted while shopping by a man who barraged them with offensive comments. The man said, “You are causing an earthquake” and “I bet you can’t walk through the barn with that fat ass.” Offensive comments were also made by individuals who were close to participants, such as family members and family friends. The step-father of a 17-year-old African-American girl, for example, told her that she could not sit in the back of his van because she was wearing down the tires. A 22-year-old Caucasian woman was approached by a male neighbor when she was in high school. He told her that he was glad she had lost weight, because all he could see previously was her “fat ass” when she walked down the street.

Some participants were mocked indirectly. For instance, many participants heard others laugh and joke about them behind their back. A 14-year-old Caucasian girl heard people constantly laughing about her weight. Some girls assumed when others laughed and joked, it was about them. A 21-year-old Caucasian woman was “paranoid” as a teen when she heard people laughing. She could never tell who was making fun of her and who was not. As a college student, she heard “fat jokes” at a diversity conference, despite
the fact that the speaker was supposed to focus on accepting people’s differences. She pointed out that it is politically incorrect “to offend anyone that is a homosexual…a different race…a different religion…or any one that has a disability,” but not someone who is “fat.”

**Physical bullying.** Some participants experienced physical bullying in which they were attacked, pushed, pulled, tripped, pinched, hit or spit on. One of the most graphic depictions of physical bullying came from an 18-year-old Caucasian woman. As a teen, her peers had snapped her bra, pulled her pants off and pinched her. One time a group of kids chased her down and put a jump rope around her waist. She stated, “They would try to measure me… pulling me back… picking at my clothes. They were going, ‘Oh what are you going to do sit on me? You will kill me if you sit on me.’” As a teen, the peers of a 21-year-old Caucasian woman spit food in her face and threw things at her when she ate lunch in the cafeteria. The peers of a 14-year-old Caucasian boy slammed his books out of his hands when he walked down the hallway. Several participants were threatened with physical assault. For example, the schoolmates of a 16-year-old Caucasian girl told her that they would push her down the stairs if she did not hurry up and walk faster.

**Relational bullying.** Many participants experienced relational bullying in which they were socially excluded or rejected from certain groups or situations. Some were blatantly rejected by their peers. For instance, when a 19-year-old Caucasian woman was in middle school, a girl told her that no one would ever like her because she was fat, and if she had friends it was only because they felt sorry for her. A few peers discouraged other individuals from associating with participants. A friend of a 16-year-old African-
America girl, for example, was told by a cousin not to hang out with a “fat girl.” Other participants experienced more subtle forms of relational bullying. They were often picked last for group projects or team sports. Some were not accepted by the “preppy kids.” A few participants had friends who did not want to be seen out in public with them. A 21-year-old Caucasian woman felt relational bullying was a “little under the radar thing.” She provided an example:

I will just sit down. People file in. There is clearly a ring around me of empty chairs. Everyone fills in everywhere else first. Except for the chairs right next to me… sitting next to me is the last thing that will ever happen… it isn’t like in your face, like ‘Oh I am not hanging out with her because she is fat.’ You can just tell.

She referred to this situation as “let’s segregate the fat girl.”

Some participants were rejected from relationships that were more intimate. A 16-year-old African-American girl, for instance, had a crush on a boy in third grade. She told him that she liked him, but he rejected her because of her weight. She recalled his harsh words: “I don’t go out with people that look like you… I don’t go out with fat girls.” A 21-year-old Caucasian man met a girl on-line in middle school. They liked each other, but she rejected the participant once he posted his picture and she realized he was overweight. He stated, “That is when I realized this [excess weight] is going to be trouble. This is going to make things difficult.”

Sexual harassment. Several girls were sexually harassed because of their weight. They received comments such as “I am going to tap that fat ass,” “You are thick,” and
“Give me some of that bacon.” A 14-year-old Caucasian girl had been the brunt of sexually explicit comments made by a boy in front of the entire classroom. A 19-year-old African-American woman had sex with boys in high school who later denied knowing her. One boy told her to put a bag over her head. A 17-year-old African American girl received numerous weight-related sexually explicit comments from a variety of men she came in contact with. She stated that such behaviors “creep the crap out of you.”

**Cyber-bullying.** Several participants experienced cyber-bullying that consisted of on-line hurtful comments, prank phone calls and threatening messages. The peers of a 22-year-old Caucasian woman left their numbers on her pager in middle school, only to call her “fat” names and threaten her when she returned their calls. The peers of a 14-year-old Caucasian boy refused to talk to him on MySpace because he was bigger.

**Meanings of Bullying**

The meaning the participants attributed to the bullying and the role bullying played in their overall narratives varied considerably. For some participants, being treated cruelly was a salient part of their stories, and for others it was barely mentioned. In regards to the meaning participants attributed to being bullied, they fell into three groups: (1) bullying as devastating, (2) bullying as not as bad as it could be, and (3) bullying as not important.

**Bullying as devastating.** Bullying was a devastating experience for several female participants. Being bullied was a major theme in their narratives. They suffered extensively because others bullied them on a regular basis. A 16-year-old Caucasian girl, for example, who reported the highest estimated BMI, was bullied beginning in pre-
school. The bullying got progressively worse as she went through school. At the time of the interview, she continued to face daily harassment from peers, family members, teachers and strangers. School days began with her feeling so upset that she got physically ill. The hallways felt like “a war-zone” with kids threatening and attacking her. She experienced walking down the halls as “torture” and dreaded every time the bell rang. She stated, “I have to think, just walk to class, walk to class, you only have four minutes, you only have to last for four minutes and you are done.” At the end of the day, she went home, crawled into bed and cried. A 22-year-old Caucasian woman, who had one of the lowest estimated BMIs as a teen, described what bullying was like for her as an adolescent:

I have post-traumatic stress from it… The hell and the shit that I went through growing up like that… everyday I would wake up and think to myself, can I get through today with out one person saying anything to me.

For this group, therefore, bullying was perceived as harsh, unrelenting and enduring; it colored much of the participants’ experiences of interacting with others.

Bullying as “not as bad as it could be.” The majority of participants were bullied but stressed it was “not as bad as it could be.” For some, being bullied was a major theme in their narratives, but they pointed out that the bullying could be worse because others were bullied more. These participants endured various types of bullying that was inflicted by many different individuals, but they witnessed others who “got it worse.” For instance, a 21-year-old Caucasian woman experienced verbal, physical, and relational
bullying, but pointed out that her sister was a “walking target.” She compared their situations:

Mine is not nearly the degree as hers is. Hers is up front and in your face dealing with it. Mine is more like, you can tell something is going on, but it is not something you can totally put your finger on.

A 19-year-old African-American woman who was verbally bullied and sexually harassed, witnessed other “fat” girls who were bullied more because they were “timid” and cried when bullied. The participant felt that she was not bullied as much as those girls because people perceived her as mean and tough due to her weight and ethnicity. She used her tough demeanor for protection.

Some experienced bullying, but indicated it was not as bad as it could have been because they were not bullied frequently. Some felt that bullies were kept at bay because the participants or their friends would respond to bullying with aggression. Several others were not bullied much because they befriended people whom they knew would not pick on them. For instance, a 19-year-old Caucasian woman only socialized with boys as a teen because girls picked on her about her weight. A 16-year-old African-American girl believed that she was not bullied often because many people today live with obesity and it is not that “big of a deal.” This group, therefore, experienced bullying but provided a variety of explanations as to why it was not as bad as it could have been.

Bullying as not important. Several participants barely mentioned being bullied in their narratives. They shared a few isolated incidences in which they were bullied verbally, but suggested these incidents were not important. For the most part, they got
along with everyone and people were “pretty nice.” A 13-year-old African-American girl stated, “There are some people I just don’t like, but there’s other people who don’t like me, but we are nice to each other, because what is the point in being mean.” For this group, therefore, bullying was perceived as irrelevant, and for the most part, did not influence the participants’ experiences of relating to others.

Responses to Bullying

The reactions of adolescents and others to bullying behaviors were varied. This section will describe how participants and important others who witnessed the participants being bullied responded.

Adolescents. Participants responded to being bullied emotionally and behaviorally. Most were upset by the bullying, and many felt hurt, angry, depressed, embarrassed and afraid. When people made “smart remarks” about a 17-year-old African American girls’ weight, she felt disgusted with herself. She would get depressed, go to her room, watch TV and eat. Several girls cried about being bullied, usually when they were alone. A 16-year-old Caucasian girl explained: “Once they [the bullies] know they can get a tear out of you, they will rip you apart.” A few tried not to let people know the bullying affected them by laughing it off or throwing “fancy one-liners” at their bullies.

Participants often ignored, or attempted to ignore, bullying behaviors by “blowing it off,” “tuning it out” and “letting it go.” Several “tuned out” by putting up an imaginary “shield” or “bubble” to block out verbal bullying. For a 21-year-old Caucasian man, the everyday derogatory comments he received as a teen eventually became “background noise.” Yet, he needed a “new line of defense” for novel comments. For instance, it was
“no big deal” for him to hear the names like “chubby” and “fat ass,” but when his peers called him things like “Ralph Wiggum” – an overweight animated character from The Simpsons television show - he became distressed.

Participants often avoided social situations that might result in bullying. Some did not socialize with people they did not know for fear of being rejected. Others were afraid to approach members of the opposite sex because they had been rejected in the past. For instance, when an 18-year-old Caucasian woman was turned down by a boy she asked out in high school, she began admiring boys from a distance. She stated, “I knew that I didn’t have a chance… every time I tried I got shot down.” Several female participants avoided the cafeteria and spent their lunch period at other “safe” places, such as the guidance office. Some tried to keep “low key” to avoid being bullied. For instance, a 21-year-old Caucasian man stated he became “pretty invisible” by high school, because he learned that “the nail that stands out gets hammered down.” A few avoided school all together. For instance, when a 22-year-old Caucasian woman received threatening phone messages as a teen, she would not go to school the next day because she knew she would be bullied.

Other participants retaliated, or threatened to retaliate, against those who bullied them. Boys were more likely to retaliate than girls. For instance, many boys who were bullied by peers fought back by punching or shoving their tormentor. A 21-year-old Caucasian man shared two stories of retaliation. One time he slammed a book into a bully’s face, and another time he jammed a fork into a bully’s arm. He was remorseful for these situations but stated, “I felt there was a certain sense of trying to stick up for myself
and my family.” Some participants let bullies know that they would physically fight back if they needed to. For example, people thought they could pick on an 18-year-old Caucasian woman as a young teen because she would just sit there and keep her mouth shut. As an older teen, however, she got her “reins” and learned to fight back. She was never in a physical fight, but bullies walked away when she used her excess weight to intimidate them.

*Important others.* The responses of important people in the participants’ lives when the others witnessed the bullying also varied significantly. Many teachers saw the participants being bullied, but did not stop it. A teacher who saw a 16-year-old Caucasian boy being tormented by his peers, for example, told him to “suck it up.” A few participants pointed out that a no-bullying program implemented at their school was ineffective. For instance, a 14-year-old Caucasian boy explained that the no-bullying program at his school only focused on physical bulling: “It is like they are reading a book, a fairy tale. It is like the bullying with the fighting bully, the fist-fighting bloody bully.” A 16-year-old Caucasian girl revealed:

Nobody is doing anything about it… and like the thing is, the people who want to focus on bullying are the people that don’t even know, they know the definition, the basics of it, but they do not know what it is like on a daily basis. Bullying is so much more than a written down definition. You can not define that word. There is stuff in between that people don’t like to document… it is also the fear of what, after the punishment, or whatever
you do to the bully, they are going to come back and hit you harder that
what they have been saying.

Several participants, however, described helpful responses from others. A 16-
year-old Caucasian boy pointed out that his teachers were always available and never
tolerated anyone being bullied. Several participants had family members who supported
them when they were bullied. In some cases, they showed up at school to stop the
bullying. For instance, when a 14-year-old African-American girl was called fat by a boy
in her class, her mother “went off” on him. She pulled the boy out of class and “got him
straight,” after which he never said anything again. Some adults offered guidance on how
the participants should respond to bullying. The aunt of a 21-year-old Caucasian woman
helped her as a teen think of “little comebacks” that she could use to fend off the bullies.
Many participants’ friends “stuck up” for them when they were being bullied.

In summary, the majority of participants had been bullied by others because of
their weight. They experienced verbal bullying, physical bullying, relational bullying,
sexual-harassment and cyber-bulling. Several experienced the bullying as devastating and
a few experienced it as not important, but the majority stressed that it was not as bad as it
could have been. While most were distressed when bullied, many learned to ignore or
avoid social situations in which they might be bullied, and some, especially boys,
retaliated against the bullies. Others often saw participants being bullied and did nothing
to stop it, but some defended the participants or helped them find ways to deal with being
bullied. Other social interactions were stressful, not due to bullying, but because others
often told participants they were overweight, despite the fact that participants were acutely aware of their size.

*Being Told*

Participants were often told by others in their social world that they were overweight and “needed to do something about it.” Participants were frequently provided with advice, often unsolicited, regarding what they could do to lose weight. The comments came from family members, friends, health care providers, and teachers. Because being told so colored the participants’ experiences of interacting with others these others are referred to as “tellers.” Whereas a few tellers were supportive and seemed genuinely concerned about the participants’ well-being, most were callous or harsh. This section will describe four groups of tellers: family members, health care providers, friends, teachers, and the media. Participants’ responses to being told will also be discussed.

*Family Members as Tellers*

Most participants were told by family members, including parents, step-parents, grandparents, aunts, uncles and siblings, that they were heavy and needed to lose weight. A few family members were perceived by participants as supportive. For instance, a grandfather of a 19-year-old Caucasian man always talked to the participant about his weight when he was a teen. The participant stated, “He was worried… He said it is like pushing your organs. It is going to get squished. You are going to get sick.” The mother of a 21-year-old Caucasian woman told the participant as a teen that the entire family had gained too much weight and they all needed to eat better and exercise.
Many family members, however, told participants they were heavy and needed to lose weight in a way that participants perceived as non-supportive. The great-aunt of a 21-year-old Caucasian man told him, starting at age fifteen, that he was going to die of a heart attack. Some family members told participants they were overweight under the guise of concern but were actually insulting. The parents of an 18-year-old Caucasian woman told her as a teen that her excess weight was unhealthy, but her father also constantly told her that she was fat and lazy. The mother of a 14-year-old African-American girl said she was worried about her daughter’s health, but also lamented that she could not dress her up in cute little clothes that thin girls wore.

A few family members were particularly harsh in their telling. The mother of a 17-year-old African-American girl degraded the participant for being overweight when she became out of breath while chasing her little brother around a store. The participant recalled her mother’s harsh words:

‘Look at you, just look at you with that heaving breathing… You better start losing some weight or you and me are going to have it out... You need to lose weight…. It is not cute, it is ugly. All that fat is ugly.’

When a 21-year-old Caucasian woman was a teen, her mother told her she needed to lose 30 pounds. The mother then pulled a pack of ground beef out of the refrigerator, stating “This is five pounds. Imagine what this would look like off of your body.”

Family members often offered well-intended, but unhelpful, advice by telling participants they needed to stop eating so much, go on a diet, be active and eat better. The brother of a 17-year-old Caucasian boy constantly told the participant that he needed
to eat less and move more. The participant realized that his brother was trying to help but found his advice annoying: “He is skinny. He doesn’t see what I go through. It is easy for him to say that.” Family members of a 19-year-old African-American woman when she was a teen told her to diet and exercise. The participant felt her family could not understand her situation because she was adopted and did not have their thin “blood line.”

In an attempt to help participants lose weight, some family members monitored participants’ food intake and told them what they should and should not eat. An aunt of a 21-year-old Caucasian woman told the participant as a teen, in front of a group of people, that she should not eat a second helping of pizza. The participant felt attacked by her aunt’s words. A different aunt tried to justify the comments. She stated, “It is OK. She just thinks she is doing you a favor. She feels that she is helping you, keeping you from being overweight.” Family members of a 22-year-old Caucasian woman began monitoring her food intake as a teen when they noticed she was gaining back weight she had lost. The participant stated, “Everything and anything I ate, it was like, should you be eating that? Aren’t you on a diet?” When the participant took a bite of her birthday cake, one family member warned her she was going to get “fat” again.

Many family members paired telling with attempts to force the participants’ weight loss. For instance, the mother of a 16-year-old African-American girl tried to force her into a weight-loss program when she was 7 and 10 years of age. The participant completed the physical exam but did not return: “I didn’t want to come back. I was crying. I did not want to do it at all.” Some family members forced participants to
exercise. The mother of a 14-year-old Caucasian girl made the participant walk around the block for 20 minutes before she could eat dinner. The father of a 16-year-old Caucasian girl made the participant run around the house before she was allowed to turn on the television.

Other family members restricted participants’ food intake. The father of an 18-year-old Caucasian woman took food away from her when she was a teen and forbid her from eating certain foods such as bread. She stated,

That didn’t set well with me. It was really hard trying to deal with someone trying to put restrictions on a kid. Not knowing why. I didn’t know why they were trying to make me eat this and eat that. Finally it just broke through to where it wasn’t working. They realized it was not working. Putting restrictions on me wasn’t working.

Others would not give participants food when they were hungry. An 18-year-old Caucasian woman asked, “Do you know how hard it is to not eat when you are hungry? Your stomach is just growling and growling and then your stomach starts to hurt because you are hungry.” Several responded to food restrictions by sneaking food that was forbidden. A 16-year-old Caucasian girl and a 14-year-old Caucasian boy both hid “junk food” in their bedrooms.

*Health Care Providers as Tellers*

Almost every participant was told by HCPs that they were obese and needed to lose weight. A few participants perceived their HCPs as supportive when they suggested weight loss strategies. For instance, the pediatrician of a 22-year-old Caucasian woman
told her at a young age that if she wanted to lose weight, that she should gradually exercise more and decrease her milk and candy intake.

The majority of participants, however, did not perceive HCPs as supportive when they advised weight loss. The participants described their HCPs as “arrogant,” “rude,” “forceful” and “strict” in regards to the participants’ weight. A 21-year-old Caucasian woman stated, “They ridicule you and make you feel horrible.” As a young teen, her pediatrician reprimanded her for gaining so much weight. The pediatrician then threatened to call child protective services because the participant’s mother had let the participant gain so much weight. When a 22-year-old Caucasian woman was a teen, an orthopedic surgeon told her that before he could not treat her back pain until she got “the fat off.” For many participants, a discussion about their weight came up every time they went to the doctor’s office. For a 14-year-old Caucasian boy, it was “like going to kindergarten over and over again,” because his HCPs always told him that he was “obese” and needed to “go out and get skinny.”

HCP tellers often provided participants with weight-loss advice that they perceived as unhelpful. For the most part, they were told to restrict their calories and expend more energy. A 21-year-old Caucasian man referred to this advice as an “eat less and move more kind of spiel.” A few participants complained that weight-loss advice was not accompanied with any specific recommendations. According to a 23-year-old Caucasian man, you can tell people who are overweight to eat less and move more but it does not give them a “real grasp” on what they can do specifically. A few participants were given generic diet and exercise sheets, but they found this information useless.
Some HCPs advised participants to start a new diet or introduced a “weight-loss gimmick” that they had already tried. The HCPs of a 16-year-old Caucasian girl told her repeatedly that Weight Watchers was the answer to her weight problems, despite her failed attempts with the program in the past. A few participants were referred to dieticians, but their parents did not believe it would be helpful and refused to take them. A 13-year-old Bi-racial girl provided several reasons for not wanting to see a dietician: “They would be more strict and controlling about what I eat, and I think it would be more expensive for mom.”

Friends as Tellers

The friends of some participants told them they were overweight. A few participants perceived their friends’ words as caring. For example, the friends of a 16-year-old Caucasian boy told him they cared about him and were worried that if he did not lose weight, he would die. Often, however, the telling was not perceived as supportive. For instance, the friends of a 19-year-old African-American woman told her when they were teens that she would look good if she just “took care of” her weight. A few participants had friends who off-handedly told them to join a weight loss program. The friends of a 21-year-old Caucasian woman tried to force her as a teen into going to the gym so she would lose weight.

Teachers as Tellers

The teachers of a couple of participants told them that they were overweight and offered advice about how to lose the weight. Many teachers of a 16-year-old Caucasian girl approached her regarding her weight. Three different gym teachers told her she was
“fat” and needed to walk during gym. Her fourth grade teacher started her on a Weight Watchers program. She also took the participant to the gymnasium during recess and made her walk the entire time instead of letting her go outside to play. The next year, her fifth grade teacher took over and did the same things to try to help her lose weight. This time, however, the participant was subjected to weekly weigh-ins at the nurse’s office to monitor her weight-loss. The participant resented their telling: “Teachers should stick to what they went to school for… They are not doctors. They really shouldn’t be telling me what I should be doing.”

When a 21-year-old Caucasian woman began college at eighteen years of age, she had a college professor who hounded her to join Weight Watchers. The professor told the participant how much better she would feel if she lost weight and that it would be easier for her to walk up the hills. However, the participant had tried Weight Watchers in the past and had not found it helpful. She stated, “It is just so uncomfortable….like she has just provided me with the Holy Grail of how to lose weight. ‘Yeah, I got that. I have been this way my whole life. I know the drill.’” Both participants’ teachers justified their behavior by stating they knew how the participants felt because the teachers were also once heavy.

The Media as Tellers

For a few participants, the media served as tellers. Advertisers touted various weight-loss programs, such as the “Special-K Challenge.” A 21-year-old Caucasian man routinely saw commercials that promoted a healthy diet and exercise as an “end all, cure all” for weight loss. Another 21-year-old Caucasian man stated,
I know obesity is a big problem in North America. I know we have to watch it. I just wish they would quit pitching it throughout the television…

I keep hearing it on TV. And yes, it sometimes bothers me to watch, because all I am seeing on TV anymore is people talking about watching weight and cutting calories.

One participant laughed about the absurdity of these commercials, and another participant just felt annoyed when they were on.

*Participants Responses to Being Told*

The majority of participants were irritated with tellers. Participants were well aware of their excess weight and felt they did not need anyone to tell them they were overweight. A 16-year-old Caucasian girl explained:

Everybody seems like they need to be the teller, like I don’t look in the mirror everyday. I can tell myself that I am big. I don’t need a doctor, or a kid at school, or a teacher to tell me that. I know I am big… It is just like you are fat, like I don’t know… I can obviously tell myself. I don’t need people to tell me.

A 17-year-old Caucasian boy shared similar sentiments of being told that he was overweight and that he needed to eat healthy and exercise: “I knew all of that…. I already knew that stuff and was always being reminded of it. I didn’t like that. I didn’t need them to tell me.” An 18-year-old Caucasian woman lamented that someone was always there to tell her she was a “fat kid.” She stated, “I know I am fat, but you don’t have to say anything to me about it.” It was especially annoying when others told her she
needed to “do something” about her weight: “I hate when people say that… They are stating the obvious.” A 21-year-old Caucasian woman was not sure how to respond to being told about her weight. For her, it was a “weird situation” where she was not sure what she wanted them to say or do: “Whatever they did, it just wasn’t right. It wasn’t going to work no matter what. I was still going to be the fat girl.”

In summary, participants were routinely told by others in their social world that they were overweight, advised that they should lose the weight, given unhelpful advice about weight loss strategies, and at times forced to diet and exercise. Some tellers were perceived as supportive, but, for the most part, participants found tellers to be callous, harsh and non-supportive. Just as the experiences of being told were distressing, the experience of being seen due to one’s excess weight was often troubling.

*Being Seen*

Participant’s narratives frequently included descriptions of the experience of being seen by others in their social world. Their social interactions were influenced by how they perceived the gaze of others. They particularly felt gazed upon when they ate or drank in public, exercised, or disrobed. Participants’ perceptions and responses to being seen by others will be discussed.

*Participants’ Perceptions of Being Seen by Others*

Because having excess weight is a highly visible condition, the perception of being seen was a salient social experience for the participants. They routinely worried about being seen by others and were aware that people looked at them differently because
of their weight. Many participants described specific instances in which they experienced a particularly discrediting glance from others. They referred to this as “the look.”

Many participants were particularly aware of being gazed upon by others when eating or drinking in public. They believed that people scrutinized everything they purchased and consumed. A 13-year-old African-American girl, for instance, thought people looked at her critically when she ordered high calorie drinks at Starbucks. Several participants were afraid to eat in the school cafeteria because they thought people might examine what they were eating. An 18-year-old Caucasian woman, for example, was given “the look” by peers as a teen when she ate in the cafeteria. She stated, “They would just circle in on what I was eating at lunch. I felt the looks and the comments. They are like, ‘Oh, she doesn’t need to be eating that. Look at her.’”

Some participants were aware of being looked at by others when they exercised. They felt highly visible due to their size and limited physical abilities. For instance, peers of an 18-year-old-Caucasian woman gave her “the look” as a teen when she participated in gym class: “People would be like, oh, ‘Look at her.’ They would do the points and the stares and the laughs.” Several participants were made a “spectacle” by gym teachers who forced them to do things that they were physically unable to do. Participants who could not keep up while running, for instance, were made to finish their run while everyone else stood on the sidelines and watched. A 21-year-old Caucasian woman described what this was like:

People are passing me by, a couple of times… I am the last one on the track. Everyone is just sitting there. The whole class is waiting for me.
Watching me, the fat girl, walk around, run around the track. ‘I am like, wow.’

A 16-year old Caucasian boy was singled out by a teacher who made him get up in the front of the class and do pushups for forgetting his homework. The boy felt humiliated as the entire class laughed when he was unable to do the pushups.

Many participants feared being seen when they had to disrobe in front of others. They were especially concerned about being seen by others when they changed for gym class. An 18-year-old Caucasian woman explained that peers stared at her stretch marks in the locker room and informed her that she looked “gross.” Several participants were uncomfortable disrobing in front of HCPs. A 22-year-old Caucasian woman described her scoliosis check by the school nurse as “nerve-racking.” She explained: “It was a female nurse, but I was still embarrassed because you have to take off your shirt and bend forward… I am thinking, ‘Oh my gosh, she is going to see my rolls. She is going to see all this fat.’” When a 19-year-old African-American woman as a teen had to get “completely naked” at the doctors office, it made her nervous. She stated, “You sit there and think, ‘Wow, I wonder if they think I am gross.” All she wanted to do was “cover up” so she would not be seen.

Many participants perceived “the look” from others during routine encounters. A 21-year-old Caucasian man received “the look” from a woman he approached at an office counter. The stranger did not say anything about the participants’ weight, but “the look” itself was disapproving. He stated, “It was just basically that look, like ‘Oh dear lord’…” She had this look like, ‘Oh dear God’.” Some participants felt family members give them
“the look.” For instance, a 16-year-old Bi-racial girl received “those ugh, kind of looks” from two different family members who noticed her weight gain. An aunt, who made the participant weigh-in every time she visited, gave the “the look” when the participant reported her weight as 250 pounds. The participant described this experience:

She looks at me like, ‘Oh God’… She wanted me to do it [get weighed] in front of her. So she goes up stairs and she brings the scale down. She goes, ‘Ok, now step on it again.’ I step on it. She looks down. Then she looks up at me and gives me this disapproving look.

Her father, who had not seen the participant for two years, gave her “one of those looks like, ‘Wow you have changed… You have gotten bigger.’”

Participant’s Responses to Being Seen

Participants described how being seen by others made them feel embarrassed, hurt and ashamed. It was especially painful when “the look” came from a family member. A 16-year-old African-American girl stated, “It hurts me ten times worse when it is someone in my circle.”

Being seen was such an aversive experience that participants developed strategies to avoid being seen. Participants often avoided social situations in which they would likely be gazed upon by others. Some avoided the school cafeteria so as not to have to eat in front of their peers. A 16-year-old Caucasian girl, for example, had not been to the cafeteria in three years. She went all day without food because she did not want others to look at her while she was eating. Others chose not to participate in certain physical activities to avoid being seen. For instance, a 19-year-old Caucasian woman as a teen
would not do anything that involved running or balancing. She stated, “I did not want to be put in a situation where they were going to be saying, ‘Oh, look at her, she’s bouncing, Oh look at her rolls bounce.’”

Participants also found ways to avoid being seen when they changed for gym class. Some found private changing areas, such as bathroom stalls, showers or “hidey holes.” A few wore their gym attire under their school clothes. A 21-year-old Caucasian man as a teen, for example, was a “little creative” when it came to changing: “I had my gym clothes underneath my regular clothes. I had a bag, just basically a change of tennis shoes, a change of socks… I kind of fooled everybody.” Several refused to change for gym. A 16-year-old Caucasian girl stated, “I am not going to do it. I know you get sweaty and then I stink, but I have perfume.” Several others opted out of gym or signed up for a gym class where they were not required to change their clothes. A 14-year-old Bi-racial girl, for instance, planned on taking a recreation class in high school where she could wear her everyday clothing. She explained: “Me and my friends are trying to get around the whole changing for gym thing… we just don’t like it. We change, like around each other… And then there are the people that would bother us, the people that are super skinny.”

Many participants tried to cover-up their perceived flaws so they would not be seen by others. A 22-year-old Caucasian woman as a teen searched for cream “concoctions” to hide her stretch marks. Some hid their bodies with clothing, such as hooded sweat shirts and pants. A 19-year-old African-American woman as a teen wore full coverage clothing even during the summer months. Others found creative ways to
cover up their bodies. For instance, an 18-year-old Caucasian girl used a purse, coat or pillow to hide the weight on her mid-section.

In summary, participants perceived being seen negatively by others in their social world. Many experienced “the look” while eating or drinking, exercising, or disrobing in front of others. Because being seen was particularly problematic, participants developed several strategies to avoid being seen, including not eating in public, not changing in front of others, and “covering up.” While being seen, as well as being bullied and being told, often left participants feeling disconnected to others in their social world, being connected to others in regards to their weight was also an important part of their lives as a teen.

Being Positively Connected

While social interactions with teens were often problematic for the participants, many had positive connections with others which helped them deal with their excess weight. The participants described being connected to family, friends, and romantic partners.

Family

Most participants enjoyed positive connections with family members. The majority of participants had at least one family member, usually a mother or father, who was perceived as supportive in helping them live with excess weight. The family members of a 23-year-old Caucasian man let the participant know as a teen that he was important and valued. The participant felt that without their regard it would have been
“more daunting” living with excess weight. Some family members helped participants discover their strengths. For instance, a 19-year-old Caucasian woman stated,

My parents did a good job of helping us [her and her siblings] find what we were really good at, and what we were interested in, and what we cared about. They pushed us in a direction of what made us feel good. If it wasn’t for that, I would have really had a difficult time.

Other family members were advocates for participants and spoke on their behalf when needed. The father of a 16-year-old Caucasian girl, for instance, “cussed out” the principal for allowing the participant to be placed on a diet at school without parental consent.

Some family members helped participants with their weight. A few parents cooked healthier meals for the entire family or assisted participants with diet plans. Others encouraged participants to exercise with them. For example, a 16-year-old Caucasian boy’s uncle went to the YMCA to work out and always asked him to go along. The participant stated, “The way he does it is good. He will say he needs to go do something, go get moving, and he will ask me to go with him.”

Some parents fostered connections with participants by providing them with unconditional love and understanding. A 16-year-old Bi-racial girl described her mother:

She loves me for who I am. She is like my best friend… I feel like I can always talk to her… She is always there. She never says anything about the way I look, because she thinks I am beautiful and that is always nice to hear.
A 22-year-old Caucasian woman as a teen had been “through hell and back” living with excess weight. The love and care of her parents helped her through these difficult times. Some participants had overweight parents who could relate to what the participants were going through. A 13-year-old Bi-racial girl stated, “Mom knows how it feels because she is not small.” A 16-year-old Caucasian boy felt a strong connection to his father because he “grew up heavy” like him.

**Friends**

Almost all participants felt positively connected to at least one friend. The majority of participants had friends who shared common interests. Participants enjoyed shopping, watching movies, going to coffee shops, eating out, participating in sports and playing cards with friends. They “hung out,” laughed and joked with their friends. Some participants had a few “best” friends. Many of these relationships were established in early childhood. For instance, an 18-year-old Caucasian woman had the same best friend for fourteen years. A 16-year-old Caucasian boy had the same best friend since 1st grade. Other participants socialized with groups of friends. For instance, a 17-year-old Caucasian boy had many friends he established while playing football in middle school. He felt that without football he would have never connected to so many friends and high school would have been difficult because of his weight.

The majority of participants were friends with people who accepted them for who they were as a person and did not treat them differently because of their weight. Some friends never mentioned the participants’ weight, and other friends said it did not matter
what the participants weighed or looked like. A 16-year-old Bi-racial girl’s best friend since kindergarten had always accepted her. The participant stated,

She is my sister. She loves me for who I am. I can be myself around her. I think she is the only person that I am comfortable with, like I will take off my jacket. I will wear shorts. I will… I am free. I feel like I am free with her. She has seen me at my worst, and she loves me anyway.

Some participants felt their friends would always “be there” for them. This was especially evident during difficult times when the participants were being bullied. Some friends stood by participants and encouraged them to assert themselves, and other friends stepped in and defended the participants against the bullies. Two participants - a 16-year-old Caucasian boy and a 17-year-old Caucasian boy - both had friends who “got [their] back” when they were bullied. Several participants found power within a group of friends. A 22-year-old Caucasian woman was comforted as a teen when she was surrounded by a group of friends at school. If her friends were absent, she stated, “I would hold my breath, like, ‘Oh my God. What am I going to do?’”

Many participants were friends with other teens who were living with excess weight. Participants gravitated toward other overweight teens because they understood the participants’ experiences. For instance, several participants enjoyed joking with their overweight friends about being “bigger.” These jokes were funny because they were made by themselves, not average weight peers. A 13-year-old Bi-racial girl joked with her overweight friends about their “love handles.” This joking was acceptable because they both had “fat rolls.” A 21-year-old Caucasian woman as a teen joked with her
overweight friends about being able to fit into Abercrombie and Fitch clothing when they were at the mall. The participant had a friend that was not overweight, but was included in the participants’ peer group because her family members were obese and she understood what it was like to be overweight. The participant stated, “I can tell her my story and she will laugh… she can understand where I am coming from.”

Romantic Partners

Some participants had a romantic relationship with a peer of the opposite sex as a teen. A girlfriend of a 19-year-old Caucasian man as a teen did not care that he was overweight and informed the participant that there was just “more of him to like.” A few participants had been with their partner for several years. A 19-year-old African-American girl married her boyfriend when she became pregnant at seventeen. An 18-year-old Caucasian woman enjoyed a two-year relationship with an overweight boy who frequently complimented her and told her she was beautiful. A few participants were on their second romantic relationship. A 16-year-old Caucasian boy broke up with his first girlfriend because she constantly wanted him to text her. He stated, “I have other things in my life. I can’t just be texting.” A 16-year-old Bi-racial girl did “kid stuff” with her first boyfriend, such as sitting together at lunch and walking to class together. Her current connection to a boy is more intimate: “I love being with him. I love talking to him. I love communicating with him.”

In summary, many participants had positive connections with others in their social world, including family members, friends or romantic partners. For the most part,
positive connections were fostered through support, acceptance, and understanding of the participants and their situation of living with excess weight.

Ways of Managing Excess Weight

In addition to discussing physical and social experiences of living with excess weight, the participants described the ways in which they managed their weight. Most had attempted to lose weight, but several decided to abandon weight loss attempts and accept their excess weight. A few, especially the YA participants, spoke of moving beyond a focus on weight and focusing instead of their positive character and traits.

Weight Loss Attempts

All of the participants had tried to lose weight through diet and exercise. Many attempted non-structured weight-loss regimens on their own, such as eating less and moving more. Some joined commercial weight loss programs, such as Weight-Watchers and Adkins. Others met with HCPs, such as doctors and dieticians, who guided them in weight-loss. For the majority of the participants, diet and exercise did not work. Participants often lost weight, but quickly regained whatever weight they lost. For instance, a 17-year-old Caucasian boy tried many different diets. He stated, “It worked to an extent, but it always came back. I was still bigger.” Some participants lost all hope in their ability to lose weight and keep it off. A 22-year-old Caucasian woman stated, “I have been fat my whole life, I got skinny and I gained it back. You are always going to gain it back.”

Participants were unable to maintain their diet and exercise regimens for a number of reasons. Many could not sustain the lifestyle needed to maintain their weight-loss. For
instance, a 16-year-old Caucasian boy lost twenty-five pounds on Weight-Watchers, but
 gained back all the weight because he was not satisfied with the small portions of food.
A 22-year-old Caucasian woman lost 60 pounds as a teen by drastically limiting her food
intake and exercising three hours a day, but she re-gained the weight within a year
because she injured her back and could no longer exercise. Some participants felt that the
diet and exercise regimens were too restrictive and life-changing. A 19-year-old
Caucasian woman stated,

I am sure if I went on a super intense diet and worked out, like 1100
calories, I would lose weight. But I wouldn’t be happy, I like food and I
like enjoying myself. I would hate to have to live like that, just because I
felt like I had to look like that… I would rather be bigger.

An 18-year-old Caucasian woman shared similar thoughts: “I didn’t want to be one of
those girls that were not eating anything for three weeks so they could lose ten pounds to
fit into their favorite jeans.”

Some participants explored biologically-based therapies for weight-loss, but these
were not helpful. A few found that over-the-counter weight-loss pills did not work, and
prescription weight-loss medications were not prescribed by their HCPs due to concerns
that they were not safe. Surgical options for weight-loss were also limited. A 22-year-old
Caucasian woman spoke with her doctor about the Lap-Band surgery. Her doctor advised
against it because the procedure was too “life changing.” As a teen, a 21-year-old
Caucasian woman attended meetings to obtain gastric by-pass surgery, but decided
against it due to all of the restrictions. She explained:
I would follow it in the beginning. But I can’t make any promises five years down the line. I love chocolate cake… I don’t know why, I just do. I am not ready to make that kind of commitment… I can’t. I can’t live like that.

The participant also knew several people, including two of her aunts, who had gone through gastric by-pass surgery and lost weight but gained it back. One participant, a 17-year-old Caucasian boy, had Lap-Band surgery at 15 years of age. He lost 90 pounds, but within a few years re-gained all the weight. For him, the Lap-Band was very stressful because he could no longer go out to eat with his friends due to his strict eating regimen. Over time he stopped following the guidelines provided by his doctor and stopped going to his scheduled follow-up appointments. He stated, “I didn’t want the doctor to be disappointed in me… I didn’t want to go through them saying ‘What happened?’… So I just didn’t go back.”

The majority of participants had resigned themselves to living with excess weight. They were not happy about their weight, but they did not think there was anything they could do to change it. A 21-year-old Caucasian woman explained: “This is what I am. I came into the world fat and that is probably how I am going to go out.” A 22-year-old Caucasian woman reflected back on being an overweight teen: “That was who I was. That was my body and I was stuck with it.”

Moving Beyond a Focus on Weight

Some participants described the experience of moving beyond a focus on weight and weight-loss and concentrating instead on self-acceptance. Some stressed they did not
let their excess weight dominate their lives or sense of self. For instance, a 13-year-old Bi-racial girl explained:

> It’s not that big of a deal. It is just who we are… I really don’t pay attention to it. I do when I have to, but when I don’t, I don’t pay attention. I just sort of ignore it. I decided if I could fit a pair of jeans on, I’m fine.

A 16-year-old Caucasian girl stated, “I am a fat kid and I am okay with it.” A 16-year-old Bi-Racial girl considered herself a bold person with a strong personality. She loved who she was on “the inside,” and just strove to be more secure with how she looked on “the outside.”

Some participants, especially young adults, refused to base their sense of self on their weight. As adolescents, living with excess weight was a major challenge that often resulted in low self-esteem. Some became more comfortable with whom they were, and several, in fact, embraced their size. They came to accept that there was more to them than their weight. A 22-year-old Caucasian woman explained:

> As a teen it [living with excess weight] just seems hopeless. It seems like that is your life… In middle school that is what defined you, was being fat. I think now I can make fun of it… I might be fat, but it is not who I am. I am me first. Yes, I am overweight, but there is more to me than that. You can’t see past that in middle school. It is strictly, hi, I am fat. That was me. I was the fat girl and nothing else… Now it is not who I am.

According to a 19-year-old Caucasian woman, perspectives on living with excess weight change “when you come into your own.” As a young adult, she realized that weight was
not that important. She stated, “I have seen as my perception has changed, my whole world has changed.” As a young adult, she accepted her size and became more confident.

In summary, managing excess weight as a teen was difficult for participants. Many attempted, and failed, weight loss using a variety of strategies. Some became resigned to living with excess weight, whereas others moved beyond the focus on weight toward self-acceptance. Some, especially YAs, embraced their size and refused to be defined by it.

Health Care Experiences when Living with Excess Weight

The participants provided rich descriptions of how living with excess weight influenced their health care experiences. As described above, HCPs often played the role of “tellers” by informing participants they were overweight, although participants were quite cognizant of this, and giving them standard, but unhelpful, advice about weight loss. Participants often felt “gazed upon” by HCPs when examined. This section will further describe overweight adolescents’ encounters with HCPs. In addition, adolescents’ perspectives on how HCPs can best provide care for individuals living with excess weight will be presented.

Problematic Encounters with Health Care Providers

Participants described many encounters with health care providers, most of which were problematic. The most common complaint of participants was that HCPs often attributed all the participants’ healthcare problems to their excess weight. The HCPs of a 16-year-old Caucasian boy, for instance, told him that his respiratory symptoms were caused by his weight. The participant tried to tell his HCPs that his cough was completely
unrelated to his weight, but they did not listen: “It always comes back to my weight is


giving me a runny nose. It is frustrating.” A 14-year-old Caucasian boy laughed about his


encounters with HCPs. He stated, “If you get like a bruise or something, they always say,

‘Oh, it is just because you are fat.’ If you walk in with your arm cut off, ‘Yeah, my arm is

off,’ [they say] ‘Oh, you’re fat!’”

Some participants lost all trust in their HCPs ability to provide appropriate care


because they only focused on participants’ weight. A 16-year-old Caucasian girl

explained:

I just think that all doctors don’t know what they are talking about. It is


because… I could go in with an upset stomach, or an ear infection and

they are like ‘well you need to lose weight, you are too big.’ It is like, ‘ok,

like an ear infection with losing weight… How does that go hand and

hand?’ So I have given up all hope with doctors.

A 21-year-old Caucasian woman had so many negative experiences with her HCPs as a


teen that she avoided seeking care. Her HCPs never conducted diagnostic tests and

related all of her injuries and illnesses to her weight. A 16-year-old Caucasian boy

considered his HCPs to be “worthless.” One time he sought care for a knee injury and his

doctor informed him that his knee was probably hurting because of his weight. The

participant stated, “He didn’t even look at the x-ray. He glanced at it very quickly. We

paid him eight hundred dollars to tell me that I am overweight. He has got to be the

stupidiest doctor out there.”
For many participants, the medical scale epitomized their sense of disconnection from their HCPs. Participants felt embarrassed, resentful, depressed, anxious, frustrated, nervous, or self-conscious when weighed by HCPs. Some were humiliated when weighed publicly. In some cases, nurses “blurted out” their measurements. A 16-year-old Caucasian girl was subjected to weekly weigh-ins by her school nurse; if the participant lost weight it was announced to the entire class. Most participants were given no choice about whether to be weighed. A 21-year-old Caucasian woman as a teen did not want to be weighed at a routine doctors’ visit. Her mother tried to get her “out of it,” but the nurse insisted. The participant stated,

My mom is like “shit, take everything off. Take off your shoes. Take off your coat. Take off your jewelry.” The nurse just shakes her head. She doesn’t say anything, but I know what is coming next. I have to face the doctor. You know, they can say what ever they want, when ever they want.

Several participants, all males, did not like being weighed but recognized it was a part of their routine health care. A 23-year-old Caucasian man explained: “There is a lot of things you do in life you don’t like, things that you have to do… If you want to go there and get your medication, guess what, you need to get weighed.” A few used their humor to deal with being weighed. A 21-year-old Caucasian man, for instance, laughed about being weighed as a teen before every doctor’s visit. He stated, “It was just like this routine. I am fat, they are going to come in and tell me I am fat. The scale knows I am fat. I know I am fat. You just go through the motions.”
In summary, a common complaint of participants was that their weight was the focus of concern in every health care encounter, regardless of the reason for visit. Many of the participants were frustrated with HCPs who attributed every health care problem – be it the flu or a broken bone – to their excess weight. Some participants lost all trust in their HCPs ability to provide appropriate care because they focused only on their weight. Many participants were particularly troubled by having to be weighed. They were often embarrassed being asked to step on the scale and felt HCPs focused more on their obese bodies than on their medical concerns.

Advice to Health Care Providers

Participants were asked how HCPs can best provide care for teens living with excess weight, what role HCPs should have in helping teens manage or lose weight, and what advice they would have for HCPs who work with teens who live with excess weight. The participants advised HCPs to avoid telling teens they are overweight when it is obvious, provide teens with individualized weight-loss plans, provide teens with support and understanding, and refer teens to weight-loss specialists.

Avoid Telling Teens they are Overweight

Many participants felt that HCPs should avoid telling teens that they are overweight routinely and callously. Participants argued that teens are well aware of their excess weight and do not need to be reminded of their weight at each visit. A 14-year-old Caucasian boy stated, “Stop telling us what we already know.” A 14-year-old African-American girl stated, “I know that excess weight is not healthy… but just don’t keep enforcing it over and over again. Don’t be rude about it. Don’t use certain terms. Don’t
make the child feel bad.” According to participants, instead of telling teens they are overweight, HCPs need to focus on teens’ presenting complaints. A 16-year-old Caucasian girl stated, “They need to focus on what is broken, not go off topic.” A 14-year-old Caucasian boy stated, “Don’t go off subject… You are not getting paid to talk about me being fat.”

Provide Teens with an Individualized Weight loss Plan

Some participants suggested that HCPs provide teens with individualized weight loss plans with specific guidelines. According to participants, instead of advising teens to “eat less and move more,” HCPs need to take the time and effort to personalize the care they provide by finding what will or will not work for each person. A 19-year-old Caucasian woman stressed that overweight teens “need to be taught, not just told” about weight loss plans. Several participants felt that others should be included in this individualized weight loss plan. For instance, a 22-year-old Caucasian woman suggested that the entire family be involved in helping teens make small changes for weight-loss. A 23-year-old Caucasian man recommended a “coach” that could teach teens about weight-loss. He stated, “Knowledge is power.”

Provide Teens with Support and Understanding

Many participants recommended that HCPs provide overweight teens with support and understanding. To do this, they felt HCPs need to be sympathetic to the experiences of teens. According to a 21-year-old Caucasian woman, HCPs “really need to be there to listen. To try to understand what is going on. What it is like to be in my shoes.” Some wanted HCPs to recognize that there are many contributing factors that
lead to weight gain and not blame teens for being overweight. Some wanted HCPs to understand what a daunting task it is for teens to lose weight. According to a 23-year-old Caucasian man, “You have to have a long term mindset… you are not going to lose this weight over night.” Others wanted HCPs to recognize that there is more to overweight teens than their excess weight. An 18-year-old Caucasian woman explained: They [HCP] need to know you have a heart, you have a brain, and you can be the new Einstein, and you can be 300 pounds.” A 21-year-old Caucasian woman stated, “We have a name, a face, and dreams like everyone else.” Several participants recommended that HCPs take a positive approach when helping teens with weight-loss. A 23-year-old Caucasian man suggested that HCPs “empower” teens by instilling in them the belief that they could do anything. A 16-year-old Bi-racial girl stated, “I get motivated when I hear people tell me… you can do it. It is not easy, but you are going to do it.”

Refer Teens to an Obesity Specialist

Some participants suggested that HCPs refer teens to an obesity specialist. An 18-year-old Caucasian girl suggested referrals to several different types of obesity specialists:

Maybe referring them to somebody to talk about it [managing their weight], because maybe it is just not about the food… Maybe she has eaten five cookies because her boyfriend just broke up with her, and she is really sad, and she just wants to eat those five cookies because they are the five best friends that she’s got right now… Maybe they need to talk to a therapist, a psychologist. Maybe they need to see a dietician… Where
they can go and say, “Hey this is not working for me. I need help. I have tried everything. How can I fix this?”

Several participants recommended that one’s obesity specialist not be his or her primary HCP. A 16-year-old Caucasian boy explained: “Your doctor should not be your doctor for weight loss.”

In summary, participants described generally problematic encounters with HCPs. They resented being told that they were overweight, being given only standard weight loss advice, and being treated as “objects.” Based on their own experiences, they provided several pieces of advice for HCPs.

**Summary**

In conclusion, the participants’ narratives revealed what their day-to-day lives were like as adolescents living with excess weight. They focused on the physical and social aspects of their everyday lives that were colored by their weight. Descriptions of ways of managing excess weight, especially attempts to lose weight, were prominent in their narratives. Their interactions with their HCPs were almost exclusively problematic, particularly because healthcare encounters were focused on admonishments to lose weight, rather than on concerns for which they sought treatment.

**Phenomenological Interpretation of the Findings**

Several constructs were salient in the four broad areas described by the participants. The participants revealed themselves to be self-interpreting beings whose ways of being - or existence - were inseparable from their physical and social worlds. They often described living an inauthentic existence as public norms regarding excess
weight that were critical and dismissive. Yet, their bodies were the subjective ground of their experiences and the ways of engaging with their world – their practical dealings – were often influenced by an environment discordant with their size. They often felt objectified when “gazed” upon by others, especially HCPs. Yet, despite their challenges, they repeatedly revealed that they knew how to deal with these challenges in practical ways. The constructs of existence (being), authenticity, embodiment, modes of engagement, the medical gaze, and practical know-how (spielraum) – constructs that cut across the four topics – will be explored in-depth through phenomenological interpretations.

A phenomenological interpretation of these key constructs will follow based on the works of Heidegger, Merlau-Ponty, and Foucault. Using key ideas from several phenomenological scholars can illuminate, in a different or deeper way, the participants’ experiences of “being-in-the-world.” The participants’ narratives revealed several aspects of their being which resonated with concepts addressed in phenomenological scholars’ writings. By interpreting aspects of the participants’ descriptions of their experiences of living with excess weight through a phenomenological lens, a more nuanced and complex understanding of their ways of being will be put forth. This section thus represents a “fusion of horizons” between the participants’ texts and those of Heideggerian or phenomenological scholars. Key constructs and their relevance in increasing understanding of the experience of living with excess weight in adolescents are described below.

_Dasein’s Way of Being: Existence_
The participants’ understanding of living with excess weight as a teen can be understood in terms of Heidegger’s philosophical views on ‘the being’ of Dasein; it’s everyday human existence. Heidegger (1927/1962) rejected the Cartesian notion in which human beings are viewed as subjects disengaged from an objective world and practical activity. Instead, Heidegger viewed human beings as agents who are engaged and exist “with-in” a world that creates various possibilities of who a person can or cannot become (Benner, 1994; Dreyfus, 1991; Guignon, 1993). For Heidegger, “the everyday skills, discriminations, and practices into which we are socialized provide the conditions necessary for people to pick out objects, to understand themselves as subjects, and, generally, to make sense of the world and their lives” (Dreyfus, 1991, p. 4). What it means to be a person, an object and a society are intertwined. This understanding of being is held within one’s ability of knowing-how-to-cope in certain situations while being-in-the-world. According to Heidegger (1927/1962), “Dasein always understands itself in terms of its existence” (p. 33); the way in which it can “comport itself in one way or another, and always does comport itself somehow” (p. 32). Human beings gain an existential understanding of who they are in the world based on their entire existence. Heidegger refers to this as temporality, or the experience of lived time in which persons are constituted by their past, present, and future (Benner, 1994; King, 2001). Human existence is a life story that unfolds between life and death (Guignon, 1993).

For Heidegger (1962/1972), the essence of Dasein is grounded in its existence. Dasein is a self-interpreting being. Human beings are defined by their self understanding – the stand they take toward themselves (Benner, 1994). Their experiences and actions
proceed from their self-interpretation (Benner, 1994). Self-interpretation or human existence begins as soon as individuals are socialized into the public world – a world in which they become enmeshed in everyday social practices (Dreyfus, 1991). According to Heidegger, all human beings have physical characteristics - considered as *factuality* – to which each culture ascribes different meanings - considered as *facticity*. Human beings, for example, can be characterized as male or female based on their factuality, but characterized as masculine or feminine based on their facticity. Cultural interpretations vary on what it means to be a man or woman. In western culture, for example, males were traditionally ascribed masculine traits, such as being dominant and brave, whereas females were traditionally ascribed feminine traits, such as being passive and emotional. Persons, therefore, can redefine themselves regardless of their biologically determined sexual characteristics. It is possible, for instance, for a male to view himself as feminine and a female to view herself as masculine. Heidegger warns, however, that a human being is “inclined to fall back upon its world (the world to which it is) and to interpret itself in terms of the world by its reflected light” (p.42).

Consistent with Heidegger’s views on existence, the participants were actively engaged in a world that created various possibilities of who they could or could not become, and many of these possibilities were determined by their excess weight. Existing in the world, the participants had come to know themselves as “fat” individuals, and many of their experiences and actions followed from this self-interpretation. The participants shared the factuality of their lives; many described the physical challenges and limitations imposed by their excess weight. Yet, the narratives were primarily
centered on the facticity of their lives. The cultural meanings ascribed to being obese were viewed as problematic and stigmatizing. While some participants eventually rejected the negative social meanings ascribed to obesity in our culture, the majority were inclined to interpret themselves in terms of the world’s “reflected light.” They, therefore, struggled with being-in a world that defined their physical characteristics as unappealing and unacceptable. Considering the participants as Dasein, or self-interpreting beings, who exist within a world that creates various possibilities of who they can or cannot be, therefore, problematizes the limitations imposed by the reflected light of a culture that has ascribed negative meanings to excess weight.

*Being-with-Others: An Inauthentic versus Authentic Existence*

Participants social experiences can be understood by Heidegger’s views of ‘Being-with-Others’ in the world. According to Heidegger, Dasein understands itself in relation to other selves within a world that is shared. Within the shared world, human beings have been socialized by public norms that determine how a person should act and provide the basis for the judgment of others (Dreyfus, 1991; King, 2001). Heidegger (1921/1961) states, “The ‘they’ prescribes one’s state-of-mind, and determines what and how one ‘sees’” (p. 213). Societal norms are not determined by a conscious agreement, but are based on the background familiarity that a person has grown up with and into which they have been socialized. It is not until there is a breakdown of the norms that a person recognizes what he or she has been doing is what everyone normally does. If someone points out a person’s differences, for example, the person becomes embarrassed for not conforming to the established societal norms. Dreyfus (1991) notes that we are all
“norm following creatures” constantly worried about being different from others and are seeking social acceptance from the ‘they’ in the world (p. 153).

Consistent with Heidegger’s views on being-with-others, the participants understood themselves largely based on their relationship to ‘other’ selves – their family, peers, and the important others in their lives. They were acutely aware of public norms that determined what constituted normal weight. Many described a point in time when they become cognizant that they were overweight and therefore not normal. Many participants were given messages by others that they were not meeting societal expectations regarding weight and were subjected to judgmental attitudes in regards to their obesity. Three ways in which the participants described being-with-others – being bullied, being told and being seen – all stemmed from the participants not meeting social expectations. While some provided examples of being-with-others that involved messages of positive regard, in most instances being-with-others involved messages that the participants were deviant due to their weight.

While being-with-others in the social world, Heidegger (1921/1962) suggests that an individual can exist in an inauthentic and authentic way. Heidegger stressed that most individuals live an inauthentic or disowned existence in which they are captivated by the world (Guignon, 1993; King, 2001). In everyday being-together, inauthentic individuals forget their own being and understand themselves from trends and pressures of the social world (Guignon, 1993). Self-understanding comes from comparing oneself to others; noticing what they have achieved or failed to achieved. Individuals try to ‘keep up with the Jones’ who have prescribed and decided the possibilities of the individuals’ existence.
(King, 2001). Individuals are at risk for living unfulfilled lives if they follow the social norms of ‘they,’ fail to make decisions for themselves (Guignon, 1993) and allow others to choose who they can or can not become (King, 2001). Heidegger claims that in contrast, individuals who are living an authentic or owned existence have rejected the pursuit of social acceptance and embraced their “potentiality-for-Being a whole.” One may free oneself from the pressures of conforming to the social norms ‘they’ have prescribed and embrace a non-manipulative attitude towards being-with-others in the world (Guignon, 1993).

Heidegger (1921/1961) referred to an inauthentic existence as *verfallen* or “being-lost in the publicness of the ‘they’” (p.220) and as fallen away from oneself. At first glance, this inauthentic existence appears to be a mishap in which persons are no longer a part of the world. Heidegger makes it clear, however, that this inauthentic way of being or ‘fallness’ is an essential part of ones existence: “Not-Being-its-self functions as a positive possibility of that entity, which in its essential concern, is absorbed in a world” (p.220). This fallness drives Dasein into an exaggerated “self-dissection” (p. 222). As Dasein becomes more aware of its loss of self, it strives to regain its sense of self or authentic being (Dreyfus, 1991).

The participants, for the most part, lived an “inauthentic” rather than an “authentic” existence as described by Heidegger. While being-with-others, participants had become lost in the world in a disowned existence in which they came to know themselves not on their own terms, but from social trends and norms prescribed by others. Examples of their inauthentic existence included their attempts to remain hidden,
their feelings of low self-esteem, and their withdrawal from valued activities. Yet, some participants, especially older adolescents, had embraced an authentic existence in which they rejected society’s expectations of a perfect body and valued their bodies as they were. Thus, the participants struggled not just with stigma, but were confronted with living an inauthentic existence. The narratives of those participants who embraced their potentiality-for-being as a whole by rejecting social norms shed light on the value of an owned existence. Heidegger’s view of being-with-others, therefore, draws attention to the ramifications of living in a social world in which having excess weight is so highly stigmatized. Yet also highlights the possibilities of living authentically by rejecting stigmatizing norms.

**Embodiment**

The concept *embodiment* provides additional insight into the participants’ lived experiences. Unlike the Cartesian view in which a person is seen as possessing a body made up of various traits and characteristics, Heidegger (1927/1962) argued that the person is “not a thing, not a substance, not an object” (p. 73) and viewed humans as embodied. *Embodiment* has been defined as an “an existential condition in which the body is the subjective source or intersubjective ground of experience” (Weiss & Harbor, 1999, p.143). For Heidegger, embodiment is not an objective body or a physiological entity, but rather the phenomenal body - a body as one experiences it as being-in-the-world (Weiss & Harbor, 1999). According to Benner (1994), embodied understanding is made up of “skillful comportment and perceptual and emotional responses” (p. 104). It is the body that takes hold of the meaningful world and moves about with purpose. The way
one acts and moves within in public spaces projects the way one views oneself, such as being confident, timid or aggressive. The body has particular capabilities and any bodily changes, such as illness or injury, will change the meaning of one’s world. The more ill or disabled a person is, for instance, the more one will focus on the parts of one’s body as objects, and the more one’s life world will become restricted (Benner, 1994).

In *Phenomenology of Perception* (1962), Merleau-Ponty – who was influenced by Heidegger – rearticulated the relationship between the self and the world, emphasizing an *embodied* inherence of being-in-the-world. Merleau-Ponty focused on three ways that our body “opens up the world” and determines what is meaningful: innate structures, basic skills and cultural skills. *Innate structures* refer to the actual physical structure of one’s body, including its physical shape and innate capabilities (Dreyfus, 1986). He believed that individuals are not free to choose their bodies. Therefore, their ability to negotiate the physical world is not up to them, but to their embodied capabilities. Merleau-Ponty explained, “Insofar as I have hands, feet, a body, I sustain around me intentions which are not dependent on my decisions and which affect my surroundings in a way that I do not choose” (p. 440). Basic skills and cultural skills, however, are both acquired skills that individuals obtain by coping and dealing with things and situations they encounter. *Basic skills* are individuals’ bodily capacities and are acquired within the human world. *Cultural skills* are acquired in the cultural world. These embodied skills establish how things and situations show up as requiring one’s skillful response. Embodiment includes all three ways in which the body opens up the world (Dreyfus, 1996).
The participants’ experiences of living with obesity can be viewed in light of Heidegger’s and Merleau-Ponty’s ideas. Consistent with Heidegger’s views of humans as embodied beings, the participants described their embodied existence. The narratives revealed that their bodies served as an inter-subjective ground of experience. Many of their daily activities and social encounters were defined by their excess weight. The participants moved about with a purpose of negotiating their physical worlds, which was often difficult because of their physical size and limited capabilities. Although not disabled or ill, participants’ physical make-up, physical size and physical abilities - their innate structures - often restricted their lifeworld. Most believed they were not free to choose a different body because their excess weight was a genetic or intractable problem. Participants, however, did acquire basic and cultural skills to cope and deal with objects and situations that were problematic because of their weight by slowing their pace to avoid physical discomfort, findings ways to avoid or manipulate structures or objects that impeded their movements, and engaging in physical activities in which their physical size was an asset rather than a liability. Understanding the participants’ narratives in terms of Heidegger’s and Merleau-Ponty’s writings, therefore, foregrounds the embodied nature of their experiences as well as their bodily capacities and acquired skills. While sometimes viewed as lazy and awkward by those in their social world, the participants, in fact, revealed many examples of skillful embodied comportment.

Modes of Engagement: Ready-to-hand, Un-ready-to-hand and Present-to-hand

In order to gain an interpretive understanding of Dasein, Heidegger (1927/1962) stressed that it is essential to look at the individuals’ everyday practical activity or
dealings in the world. According to Heidegger, “The kind of dealings which is closest to us [of concern] is… not a bare perceptual cognition, but rather that kind of concern which manipulates things and puts them to use” (p. 95). Individuals do not usually encounter mere things, but deal with equipment that is essentially used for something in-order-to get things done (Dreyfus, 1991). The meaning one gives to being-in-the-world will vary depending on the everyday practical activities in which one is engaged (Dreyfus, 1991).

Heidegger distinguished three modes of engagement or involvement that take place while dealing with equipment or objects in ones day-to-day-life: ready-to-hand, un-ready-to-hand and present-to-hand (Benner, 1994). Participants’ phenomenological experiences of being-in the physical world with objects can be understood by applying these three Heideggerian constructs.

The ready-to-hand mode of engagement is the basic way of inhabiting or dwelling with things in the world in a practical or non-theoretical way (Heidegger, 1927/1962). A subject gives meaning to objects during practical embodied activity. Tools are used and manipulated in a meaningful way based on their established purpose in that culture. The relationship with things does not require mental activity, but directed activity in which we use things to get things done (Dreyfus, 1991). When one uses a hammer, for instance, little thought is given to the hammer’s abstract physical properties; instead one focuses on the hammer’s usability, which is understood through manipulation. When everything is functioning smoothly, the equipment that is encountered goes unnoticed (Heidegger, 1927/1962). Individuals spend much of their life getting around their environment without any explicit awareness of the things that surround them. These everyday coping
skills are learned from past experiences and are adapted to current situations so that everything works like it should (Dreyfus, 1991).

In the un-ready-to-hand mode of engagement, there is a temporary breakdown of equipment. Individuals discover the un-usability of the things they encounter and the equipment becomes conspicuous. If the hammer, for instance, is too heavy to pick up and use, then it becomes very clear that we are using the hammer to pound nails into a board to build a bookshelf. Because the hammer is unusable for building, the task has been disrupted and becomes explicit. The equipment fails to be available for use. During this mode of engagement, individuals are more aware of what they are doing and deliberately act to complete the activity at hand. If the activity remains blocked, the user of the equipment must take a step back and contemplate what is going on and what actions need to be taken. This is called deliberation and involves reflective planning (Dreyfus, 1991).

In the present-at-hand mode of engagement, everyday practical activity is stopped. Things that are missing become obtrusive and looked at in a new way. The equipment is transformed from the unavailable to something just occurring; becoming nothing more than an object. It is at this time that theoretical reflection, or a Cartesian mode of inquiry, takes place to attempt to explain objects and their physical properties and characteristics (Dreyfus, 1991). Heidegger (1927/1962) referred to the detached way we stand toward and reflect on the situation as a “deficient mode of concern” (p. 103).

Thus, from a Heideggerian viewpoint, what it means to be in the world with objects and how one gives meaning to things encountered will differ based on the practical dealings in which one is involved. We can speculate, for instance, that normal
weight teens will have little concerns with everyday equipment, such as doorways, chairs or desks. Most teens, for example, sit in their school desks without giving the desks little thought. They do not think about their lockers that are easily accessible or entry ways that do not create obstacles. Because these objects are sized for average weight teens, the objects are unnoticed.

The participants, however, experienced a breakdown in some equipment as the equipment was, for them, unusable. Like a hammer that is too heavy, equipment that was too small for their size became explicit. This equipment became un-ready-to-hand. They needed to deliberate on equipment that was too small for them and engage in reflective planning. For example, they carried their books to class so they will not have to squeeze into their lockers, figured out how to fit into desks that were too small, and sought out chairs more suited for their size. Because clothes in most stores were unusable as they did not fit, they became objects that were un-ready-to-hand and had to be approached deliberately. The participants had to purchase clothing from specialty stores that catered to individuals who are big and tall, order clothes on-line, or shop in departments that did not carry the styles they yearned to wear.

In some instances, the participants engaged with equipment in ways that were present-at-hand. They took a detached stand toward equipment and reflected on it in a theoretical way. Objects were not merely unusable or unavailable, but provoked reflection. Scales were not just equipment to obtain an objective measurement of weight, but a representation of their failings. A roller coaster was not just equipment used for
recreation, but a source of embarrassment and shame. A tank-top was not just an item of clothing worn by “skinny” girls, but a symbol of life’s injustice.

Consideration of the participants’ dealings with the equipment in their lifeworlds according to Heideggerian philosophy on modes of engagement renders an understanding of their experiences with objects that goes beyond mere inconvenience. Their basic modes of engagement with objects were strongly influenced by their excess weight. The unusability of things in their lifeworld and the provocation of reflection on common objects colored their being-in-the-world in ways average sized individuals may well fail to grasp.

**Philosophical Beliefs of Foucault: The Medical Gaze**

The philosophy of Foucault (1963/1973, 1975/1977), whose beliefs were influenced by Heidegger, provides particular insight into the participants’ experiences with HCPs. In Discipline and Punishment (1975), Focault compares modern society to Bentham’s “Panopticon” design for prisons. This was considered a gentler way of imprisonment in which a single guard, who remains unseen in a central tower, monitors each inmate. Power is achieved over individuals simply by watching over them with an “inspecting gaze.” Persons being gazed upon will eventually become their own overseer’s, maintaining surveillance over and against themselves. Individuals internalize the gaze and assume that they are under surveillance whether they are or not. All that is needed for this form of disciplinary power is hierarchical observation, normalizing judgment and examination. Disciplinary power also exists in institutions such as clinics, schools and hospitals.
According to Foucault, modern medicine is socially constructed (1963/1973, 1975/1977; 1980). In the *Birth of a Clinic* (1963/1973), he traced the historical emergence of the modern medical profession. He noted that in the 17th century, man rejected medieval myths such as witchcraft and embraced the clergy as men of wisdom. By the 18th century, scientists and doctors replaced the clergy as men of wisdom, but instead of saving souls they saved bodies. According to Foucault, medical scientists developed their own myths, such as their ability to eradicate disease and restore health. Doctors determined “truth” regarding individuals’ health and well-being (Foucault, 1963/1973).

Foucault (1980) believed that doctors obtained a social privilege by exhibiting both knowledge and power, which are so closely intertwined that he identified them as knowledge/power. Power is obtained from knowledge, but knowledge is also obtained from power. For instance, medical experts gain power by studying the anatomy and physiology of human beings, yet, knowledge can also be gained by observing or gazing at human beings (Foucault, 1963/1973; 1975/1977; 1980). Foucault (1963/1973) referred to this powerful gaze as a clinical gaze, or medical gaze. This observing gaze was not just the “gaze of any other observer, but that of a doctor endowed with the power of decision and intervention” (Foucault, 1963/1973, p. 89). The gaze is directed at an individual’s body which becomes an object to analyze, treat, and control through hierarchical observation, normalizing judgment and examination (Foucault, 1963/1973; 1975/1977). For instance, doctors examine and collect detailed information on one’s body and document the findings and outcomes of treatment. The medicalization and objectification
of bodies results in construction of norms about what is normal and abnormal. Abnormalities are marginalized by labels such as handicapped, mentally ill or physically impaired (Tremain, 2005).

Foucault believed that knowledge/power produces reality and regulates who one can or cannot be (1975/1977; 1980). Not only does knowledge/power control the way individuals see others, but knowledge/power also controls the way individuals see themselves. According to Foucault (1980), “Power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives” (p. 39). When individuals are objectified, they see themselves as objects and try to conform to the established norms. Thus, individuals are not only controlled by modern medicine as objects, but they are also controlled by self surveillance and transformed into subjects. Individuals become docile subjects who conform to the norms established, or rebellious subjects that resist the norms prescribed (Foucault, 1980; Tremain, 2005).

The health care encounters described by participants resonated with Foucault’s ideas of the inspecting gaze and his suggestion that control is enacted through hierarchical observation, normalizing judgments, and examination. Consistent with Foucault’s beliefs on the knowledge/power of doctors, the participants described being objectified by the HCPs they encountered. They were routinely gazed upon and constructed as abnormal due to their excess weight. The participants dreaded having their bodies seen by their HCPs, grew to hate being weighed, and felt HCPs could not see beyond their excess weight to know them as people. Many participants, after numerous
failed attempts at weight-loss, rebelled against the objectification they experienced. They rejected HCPs as men/women of wisdom and lost trust in their ability to provide appropriate care. In some instances, participants mocked or ridiculed the practices of the HCPs. Foucault’s ideas thus provide valuable insights that provide a foundation for a critique of health care practices with individuals living with excess weight.

*Know-how and Spielraum*

The participants’ abilities of knowing how to cope with their excess weight within various domains of their life can be interpreted with the Heideggerian concepts of *know-how* and *speilraum*. According to Heidegger (1927/1962) individuals thrown into a world with concrete possibilities have an inherent understanding of the possibilities and a know-how to work out the possibilities that exist for them. They are enmeshed in a particular culture that predefines what will make sense for them to do or try to do in a particular situation (Guignon, 2006). This know-how has been described by Dreyfus (1995) as everyday skillful coping that involves an understanding of one’s current situation regarding what it means to be a person, object, and a society (Dreyfus, 1995). According to Heidegger, an understanding of what it is to be a human being is held within our ability of knowing-how-to-cope in various situations, such as coping with things and coping with others. Understanding is therefore more than mastering a set of facts that have been cognitively interpreted (Dreyfus, 1995). Know-how is embedded in the background skills in which one has been socialized; it is more of a “knowing how” rather than a “knowing that” (Guignon, 2006, p. 212). Ontically speaking, when one uses the expression ‘understanding something’ it signifies “being able to manage something,” “being a match
for it,” and “being competent to do something” (Heidegger, 1921/1962, p. 183).

Everyday know-how takes place with little thought, and actions show up as making sense of what one should do to get by (Dreyfus, 1999; Guignon, 2006).

Heidegger (1927/1962) referred to human beings’ ability to understand what they can or can not do – based on their own existential possibilities in the world – as spielraum or leeway, which means a “space–or–room–for–playing” or “room-for-maneuver” (p. 185; 419). Room-for-maneuver, as explained by Dreyfus (1995), “Permits particular coping activities to show up as possible in the current world” (p. 186). It is a common sense understanding that allows a person to deal appropriately with situations encountered in everyday life – “the circumspection of concern is understanding as common sense” (Heidegger, 1927/1962, p. 187).

Consistent with Heidegger’s views on know-how and spielraum, the participants had an inherent understanding of the possibilities that existed for them and the ability to skillfully cope with situations into which they were thrown due to their excess weight. They were thrown into a world with objects unusable for those who were overweight, with social biases that were hurtful to them and with physical limitations that challenged them. Yet, despite their limited possibilities, they skillfully coped with their limitations and learned how to “live large.” They had an inherent understanding of how to cope with life situations rendered problematic by their excess weight. While the narratives were replete with examples of the limitations and challenges, the participants also provided robust examples of many ways in which they managed their excess weight in skillful ways. They knew what was feasible for them to do as an obese adolescent in their
particular situation. Leaving for class early to make it on time, avoiding places that they were likely to be gazed upon, and establishing supportive relationships were all examples of knowing-how-to-cope.

**Summary**

Participants shared rich descriptions of their day-to-day lives as adolescents living with excess weight and conveyed in-depth understandings of how excess weight affected their experiences. They described their experiences with health care encounters and provided insight on how health care providers can best provide care for adolescents living with excess weight. From their narratives, four broad topics emerged: the physical experiences of living with excess weight, the social experiences of living with excess weight, ways of managing excess weight, and health care experiences when living with excess weight. Key constructs that cut across the topics were interpreted through a phenomenological lens based on works by Heidegger, Merlau-Ponty, and Foucault. These interpretations provide an in-depth understanding of what it is like to live with excess weight as an adolescent. The next section will summarize the findings according to the study aims, examine the findings in light of other research, discuss the study limitations, present thoughts on future research, and address the clinical implications of the findings.
CHAPTER 5: DISCUSSION

Summary

The key findings of the study are summarized below according to the four main aims. The analysis revealed the day-to-day lives of adolescents living with excess weight are often profoundly affected by their weight. However, the analysis also revealed that adolescents living with excess weight face the same developmental challenges as their peers and crave to be treated as unique “whole” individuals.

The first two aims of the study were to (1) generate a rich description of the day-to-day lives of adolescents who are living with excess weight, and (2) explore adolescents’ understandings of how obesity affects their experiences. Because the aims are so highly interrelated, the findings that address them will be discussed together.

When the participants described their everyday experiences, it was evident that issues arising from their excess weight permeated their day-to-day lives. They described physical and social worlds that were problematic. In their physical world, they were burdened with carrying around their excess weight and were constrained by objects in their environment that often did not accommodate their size. In their social world, they felt essentially different from others and often experienced aversive social interactions. They also experienced difficulties adhering to weight loss treatments and struggled to manage their weight.

Despite their challenges, adolescents living with excess weight found innovative ways to help them manage their day-to-day lives. They often avoided situations that could be problematic and made adjustments to their routines to help with weight-related
challenges. Many had positive connections with others and sought out supportive relationships. Others who accepted them for who they were as “people” were essential to their well-being. Most participants had attempted to lose weight, but several decided to abandon weight loss attempts. Some, mostly those who were young adults, moved beyond a focus on weight and instead decided to maintain a positive sense of self regardless of their size.

For the most part, male and female participants reported common day-to-day experiences related to their weight. A few gender differences, however, were noted. Girls were more likely to be concerned about their physical appearance and distressed that they could not fit into stylish clothing, whereas boys were more likely to be concerned about their physical abilities. In addition, boys were more likely than girls to use physical force to retaliate against bullies. Also, several girls were sexually harassed, whereas no boys reported this experience.

The phenomenological analysis of the data drew attention to several aspects of the participants’ experiences. The construct of existence (being) positions the participants as self-interpreting beings who understand themselves through the reflected light of their social worlds. Heidegger’s ideas about authenticity provoke consideration of cultural interpretations of excess weight that restrict adolescents’ possibilities of living an owned existence. The construct of embodiment highlights how the participants’ bodies served as inter-subjective ground of experience. Heidegger’s philosophy on modes of engagement shed light on the meaning of the participants’ everyday practical dealings with objects in their environment, especially those as experienced as unready-to-hand because they call
for deliberate thought and reflective planning because they are too small. The
Heideggerian constructs of know-how and spielraum drew attention to how the
participants acquired basic and cultural skills to cope and deal with objects and situations
that were problematic.

The day-to-day experiences of adolescents living with excess weight, therefore,
are best described as a complex interplay between the physical and social challenges they
face and that skillful coping that they bring to their situations-at-hand. A focus only on
the stressors of living with excess weight or, conversely, only on the resilience displayed
by adolescents living with excess weight, would fail to capture the complexity of the
lived experience.

The last two aims of the study were to (3) describe how adolescents who are
obese experience their health care encounters, and (4) explore obese adolescents’
recommendations and thoughts regarding how HCPs can best care for them while they
are living with obesity. Again, because these two aims were so highly interrelated, the
findings that address them will be discussed together.

Health care encounters were primarily problematic for adolescents living with
obesity. There was a general dissatisfaction with care and treatment. Even the few
individuals who had positive encounters with HCPs also had some negative experiences
with HCPs. In other words, no participant reported exclusively positive healthcare
experiences. Adolescents resented being told routinely that they were overweight, being
provided with only standard weight loss advice, and being treated as objects. Some lost
trust in their HCP’s ability to provide appropriate care because they focused more on the
adolescents’ obese bodies than their medical concerns. Participants had many ideas about how HCPs can best care for them. They advised HCPs to avoid telling teens they are overweight when it was obvious, provide teens with an individualized weight-loss plan, provide teens with support and understanding, and refer teens to a weight-loss specialist.

The ideas of Foucault regarding the medical gaze provided insight into the participants’ experiences with HCPs. The participants were routinely gazed upon and medicalized and objectified as obese. HCPs constructed obesity as a problem that needed to be evaluated and treated before any other health care concerns or complaints could be discussed. The participants dreaded having their bodies seen and evaluated by HCPs and often rebelled against the objectification they received. They felt HCPs need to move beyond a focus on their excess weight and come to know them as people.

Understanding the health care needs of adolescents with excess weight must take into account their developmental needs related to autonomy and identity. The participants shared the same goals as average weight individuals and therefore rejected the help of anyone who failed to see them as individuals with unique needs and struggles, many of which were not related to their weight.

Findings Related to Extant Literature

The findings support and extend the extant literature on adolescent obesity. The findings, for example, support the assumptions of Broffrenbrenner’s Bio-ecological Systems Theory (1979, 2004). This theory suggest that the quality and contexts of adolescents’ interactions with others, their community, culture, and world, and their biological makeup, will contribute uniquely to their development and health and that
conflict or change in one area will influence other areas and present adolescents’ challenges, opportunities, and barriers. According to this theory, the environment is made up of five systems: the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Each system is comprised of roles, norms, and rules that shape development. In the current study, the participants’ experiences of living with excess weight influenced and were influenced by their interactions with others (peers, family), their community (schools, HCPs), and their culture.

The findings indicate that the participants were primarily concerned about interactions within their microsystem. They discussed many physical and social experiences that were problematic in their immediate environments. Interpersonal relationships with family members, peers, teachers, strangers, and health care providers were particularly difficult at times. However, the participants also had many positive connections within their microsystem. Some participants discussed connections between two or more microsystems that were reflective of the influences of the mesosystem. For example, some parents contacted teachers to put an end to the participants being bullied at school. Macrosystem influences were evident as participants described many instances of living in a culture that values thinness and stigmatize those who are obese. The influences of the chronosystem were evident as the participant moved beyond a focus on their excess weight and established a positive sense of self regardless of size as they transitioned into adulthood.

The findings of the current study that the experiences of being different, being bullied, being seen, and being told were salient issues for adolescents living with obesity
resonate with Goffman’s classic writings on stigma (1963). Goffman (1963) noted that stigma arises when individuals’ social identities do not meet societies’ normative expectations of the attributes they should possess. Individuals who are stigmatized are disqualified from full social acceptance and are given a devalued or deviant identity. Individuals with perceived flaws - observable or believed to be controllable - are at greatest risk for being stigmatized. In the current study, adolescents living with excess weight were unable to conform to society’s normative expectations related to ideal weight and were vulnerable to social rejection. Most felt devalued because of their excess weight. Because obesity is considered by many to be controllable, the participants felt they were stigmatized more than others deemed different by virtue of immutable characteristics such as race.

Not surprisingly, the findings of the current study are consistent with other studies on societal stigma, bias, and discrimination of obese individuals (Puhl & Brownell, 2001; Puhl & Latner, 2007; Puhl & Heur, 2009; Schwartz & Puhl, 2003). Researchers have confirmed that adolescents living with excess weight report being teased, bullied, and socially rejected by others (Berg, Simonsson, & Ringqvist, 2005; Janssen, Craig, Boyce, & Pickett, 2004; Neumark-Sztainer, Falkner et al., 2002; Strauss & Pollack, 2003). This study extends these findings, however, by providing an in-depth description of how these negative social interactions are perceived by adolescents who experience them in their day-to-day lives. For example, the experiences of being told and being seen, although provoked by stigma, have not been discussed extensively in the literature. Furthermore, while little is known about methods individuals use to cope with obesity stigma (Puhl &
Brownell, 2003b), the findings from the current study identify several strategies adolescents use to manage negative social interactions.

Most of the research on children living with excess weight address only negative interactions (Berg, Simonsson, & Ringqvist, 2005; Faulkner et al., 2001; Pearce, Boergers, & Prinstein, 202; Strauss & Pollack, 2003). In contrast, the current study revealed that adolescents, while experiencing social isolation and rejection, also frequently experienced interactions related to their weight that they experienced as positive. These positive connections were essential to participants’ well being. This finding resonates with the findings of a comprehensive review of the literature on the significance of social support or social networks in protecting individuals from numerous negative physical and psychological health outcomes (Uchino, 2004).

In regards to gender differences, the findings from the current study reveal few differences between boys and girls in regards to their day-to-day experiences of living with excess weight. While literature has often shown that girls are more likely than boys to suffer from social and psychological health effects of obesity (Eisenberg, Neumark-Sztainer, & Story, 2003; Erickson, Robinson, Haydel, & Killen, 2000; Faith et al., 2002; Needham & Crosnoe, 2005; Neumark-Sztainer, Falkner et al., 2001; 2002; Strauss, 2000), the current study revealed that boys experienced significant and poignant social and psychological effects. A few gender differences that were noted in the current study are consistent with the findings of other studies. For instance, like the findings in the current study, other researchers report that girls are more likely than boys to be concerned about their physical appearance and desire a thin body, whereas boys are more likely than
girls to be concerned about their physical abilities and desire a strong body (Alm et al., 2008; Hill, Draper, & Stack, 1993; Neumark-Sztainer, 2002; Presnell, Bearman, & Stice, 2004). Griffiths and colleagues (2006) reported that obese boys are more likely than obese girls to be perpetrators of physical bullying, such as hitting or beating up others. Likewise, the findings from the current study show that obese boys are more likely than obese girls to use physical force toward others. Researchers have speculated that obese children use physical force in an effort to maintain physical peer group dominance (Griffiths et al., 2006; Janssen et al., 2004). In the current study, however, obese adolescents used physical force or threatened to use physical force to defend themselves from being bullied. Jansen and colleagues (2004) also reported that excess weight in adolescence was not associated with sexual harassment in boys or girls. However, in the current study, sexual harassment was a major issue for several girls.

In the literature, health promotion and illness prevention messages regarding obesity tend to emphasize the risk for immediate or future physical health consequences such as type-2 diabetes or cardiovascular disease (Levi, Vinter, Laurent, & Segal, 2008; Simpson, Cooper, & Gunther, 2008; Towey & Fleming, 2004). In the current study, however, few participants mentioned health concerns; they were more concerned about the daily physical challenges they faced, such as getting “winded” and having low stamina. This finding is consistent with other studies that show decreased physical functioning in children living with obesity (Modi et al., 2008; Schwimmer, Burkweinkle, & Varni, 2003; Zeller & Modi, 2006). The current study extends these findings by revealing specific encounters within the physical world that were particularly problematic.
for adolescents, such as having difficulties participating in physical education classes and being constrained by objects such as desks and chairs.

Many challenges that HCPs face in the management of pediatric obesity have been identified within the literature (Cutler & Whitaker, 2003; Spear, Barlow et al., 2007), but this is the first known study that reveals the difficulties obese adolescents encounter during their health care encounters. The findings from the current study that adolescents often experience their health care encounters as problematic resonate with literature that indicates obese adult patients are subjected to multiple forms of weight bias in healthcare settings. This bias includes disrespectful treatment, inappropriate comments, and judgmental attitudes from HCPs (Puhl & Brownell, 2001; Puhl & Heur, 2009). The findings from the current study illuminate specific ways in which HCPs may unintentionally communicate subtle or overt forms of weight bias toward adolescents, such as routinely telling individuals they are overweight when it is obvious and attributing every medical concern or complaint to obesity.

Guidelines on how to care for children living with obesity have been widely disseminated (Barlow & the Expert Committee, 2007; Davis et al., 2007; Krebs et al., 2007; Spear et al., 2007). The findings of the current study, however, suggest that HCPs should also consider the perspectives of individuals who have lived with excess weight as a teen when developing a plan of care. The participants advocated for individualized plans for obesity treatment that considered their unique goals and needs. This is consistent with theories on adolescent development that emphasize the significance of
identity formation and the development of independence during adolescence (Erickson, 1968; Piaget, 1969).

Limitations of the Study

There are several limitations to this study. This group may not be representative of the population of obese adolescents’ health. Despite efforts to include adolescents who were in treatment for obesity, only one participant was recruited from a weight management program. This may have obscured the experiences of adolescents who were satisfied and thriving in weight loss programs and perhaps contributed to the finding that the participants’ health care experiences were almost exclusively negative. While the sample size allowed for some gender comparisons, it was not large or diverse enough for comparison of other factors, such as ethnicity and developmental stage, which might have influenced the participants’ experiences of living with excess weight. These may be important explanatory variables, but such comparisons were outside the scope of this study. In addition, although the participants came from a variety of socio-cultural and economic classes in the United States, they all lived in an environment in which food was readily accessible. The findings therefore would not be applicable in an environment such as a developing country, where food is scarce and excess weight may be viewed as a sign of beauty, health, and prosperity (Kuklick & Meneley, 2005).

Only one interview was conducted with each participant. While this might have led to some lack of trust, participants were generally forthcoming in sharing robust detail of their life experiences of living with obesity. Some interviews were conducted with young adults reflecting back on adolescence. While this may have introduced some
retrospective recall bias, the young adults’ stories of living with obesity were quite vivid and detailed. In addition, these participants were able to reflect over their adolescence in its entirety and provide the perspective of living with excess weight as one matures into adulthood.

Future Research

To extend these findings, several areas of future research are recommended. By replicating the study with a larger and more diverse group of participants, a variety of ethnic and developmental influences on the everyday experiences of living with excess weight could be explored. Studies with adolescents who are in specialized treatment programs are needed because their experiences may differ from routine encounters with HCPs. To add depth to the findings regarding health care encounters, a study which included the perspectives of both adolescents and their HCPs is needed so that interactional processes can be explicated. An observational study of actual healthcare encounters would further illuminate the dynamics that constitute these interactions. Also, a study that explores in greater depth the risk and resilience factors that affect the everyday experiences of adolescents living with excess weight is recommended.

In addition, longitudinal qualitative studies of everyday life and health care encounters of adolescents living with obesity are needed. A study with multiple interviews that begin in early adolescence and continue into adulthood would capture the nuances of living with excess weight as an adolescent develops overtime. During various developmental stages individuals may assign different meanings to their experiences and use unique strategies to cope with the situation at hand. Furthermore, individuals’
perceptions and experiences of health care encounters and issues that are important to them regarding their excess weight may change over time.

Quantitative studies are also needed to further explain adolescents’ day-to-day experiences and healthcare encounters. For instance, a prospective study of adolescents who are obese that measures the specific coping strategies used in early, middle, and late adolescence to predict health and quality of life outcomes is recommended. Likewise, a study with patient-centered measures of adolescents’ perceptions of their health care encounters and healthcare outcomes with a large randomly-selected sample is needed. Adding a qualitative component evaluating adolescents’ perspectives of obesity interventions would strengthen clinical trials.

Clinical Implications

The findings from this study call for a critique of several healthcare practices. First, this study raises concerns with policies regarding routine BMI screening. In recent years, 22% of states have adopted legislation to initiate school-based BMI-measurement programs for screening and surveillance of obesity among youth, and 73% of these states are required to notify the parents of the results and offer guidance for weight management (Brener, Wheeler, Wolfe, Vernon-Smiley, & Caldart-Olson, 2007). The use of BMI-measurement programs continue to be implemented and promoted in numerous school districts across the country (Nihiser et al., 2009). Likewise, the AMA recommends that HCPs perform a yearly assessment of weight status in all children that includes documentation of BMI (Barlow et al., 2007). The findings from the current study, however, indicate that being weighed can heighten obese adolescents’ vulnerability to
feelings of being different, being bullied, being seen, and being told. Practitioners therefore need to consider the risks versus benefits of routine BMI screening of adolescents and to take into account adolescents’ discomfort and distress in response to screening procedures, especially if they are conducted publicly.

Second, the findings from this study also call into question several guidelines regarding treatment of pediatric obesity. Researchers have mainly focused on behavioral and lifestyle interventions for pediatric weight loss, including the promotion of healthy dietary habits and increased physical activity (American Dietic Association, 2006; Summerbell et al., 2003; Whitlock et al., 2005). The findings of the current study, however, indicate that losing weight is difficult for adolescents and the “eat less and move more” advice provided by HCPs is often not helpful. The participants advocated for individualized plans for obesity treatment that considered their unique goals and needs. Some participants were receptive to referrals to a pediatric obesity specialist, believing such referrals would result in customized treatment plans. Yet, HCPs seldom made these referrals.

The findings of this study also suggest that communication between HCPs and adolescents need to be less judgmental and more affirming. HCPs need to approach conversations about body weight and obesity in a sensitive manner and recognize that obesity is caused by many factors. For instance, despite the evidence that the development of pediatric obesity involves a complex interaction of genetic, social, economic, behavioral, and environmental factors (NIH, 2004), the participants in this study were told in a “strict” or “forceful” way that they “needed to do something” about
their weight. This suggests that HCPs may unintentionally blame adolescents for their overweight condition and believe adolescents are capable of losing weight if they would only follow the standard guidelines provided. Similarly, HCPs need to attend to adolescents current medical concerns without dismissing them as due to obesity.

Motivational interviewing, an empirically supported counseling technique used to facilitate behavior change (Rubak, Sandboek, Lauritzen, & Christensen, 2005), may be one intervention that might be helpful for adolescents living with excess weight. Miller and Rollnick (2002) define motivational interviewing as “a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence” (p. 25). Implementation of motivational interviewing requires several key aspects, including collaborating with patients to develop a partnership that honors their experiences and views, exploring their knowledge of their health concerns and their perceptions of their unique situations, and respecting their autonomy by affirming their rights and capacities to make their own decisions regarding behavior change. The overall goal is to increase individuals’ intrinsic motivation so that they make changes that will improve the overall quality of their day-to-day lives. Although motivational interviewing has not been tested empirically for adolescent obesity, its tenets are consistent with what the participants yearn for in healthcare encounters and therefore should be considered as a possible approach.

Because several participants indicated that they had chosen to focus on self-acceptance and quality of life rather than weight loss, approaches that support these choices are needed. Health At Every Size (HAES), for example, a new approach to the
complex issues of weight and health, may be an alternative intervention to traditional behavioral weight loss interventions (Bacon, 2008). The goal of HAES is to encourage individuals to improve the quality of their lives regardless of their weight status. HAES supports a holistic view of health that promotes self-acceptance, pleasurable physical activity, and normalized eating for weight-related concerns. Self- and size-acceptance are the primary focus. According to Robinson (2006) self-acceptance is “an affirmation that, just as human worth is not based on race, color, or creed; it is also not dependant on body weight, shape or size” (p. 10). HCPs may be concerned that promoting self-acceptance in adolescents living with excess weight will deter efforts aimed to decrease the individuals BMI and improve their health outcomes. However, The National Task Force on the Prevention and Treatment of Obesity (2002) stresses that self-acceptance does not imply that an individual is apathetic with regard to the impact their weight can have on their health or that they will ignore well-intended advice provided to decrease the health risks of obesity. Instead, promoting self-acceptance and encouraging positive lifestyle changes can produce health benefits in individuals regardless of weight loss.

Nurses are in a unique position to care for adolescents living with excess weight. Care is a central concept of the discipline of nursing and is essential the nature and function of nursing (Benner, 1984; Swanson, 1993; Touhy & Boykin, 2008). The goal of nursing care is to preserve human dignity and enhance well-being for all individuals (Swanson, 1993). According to Noddings (1984), care involves “stepping out of one’s personal frame of reference into the other’s” (p. 30). The findings of this study indicated that such care was often lacking in healthcare encounters. The recommendations made by
the participants regarding improving healthcare of others in their situations are very consistent with the nursing ethic of care. The participants desired healthcare in which their obesity was understood from their own frame of reference and was based on their unique needs.

The International Consortium of Parse Scholars (ICPS) has suggested that “contemporary health care, oriented overwhelmingly toward diagnostic labeling and mechanistic fix-it strategies, fosters a dehumanizing regard for humans, an overly objectified, judgmental view of health, and a relationship between healthcare professional and the general population that is distrustful” (p. 347). According to Parse (1981, 1998), a problem-based diagnostic approach to healthcare fails to provide direction for nursing’s mandate to respect humankind. The participants’ narratives clearly suggest that nursing care for adolescent’s living with excess weight needs to go beyond the diagnoses and treatment of obesity. According to Boykin & Schoenhofer (2001), “The challenge for nursing is not to discover what is missing, weakened, or needed in another but to come to know the other as a caring person and to nurture the person in situation specific, creative ways (p.30).” Nursing theorists have noted that the quality of the nurse patient-relationship is essential to providing good care (Neuman, 1994; Peplau, 1952/1991, Watson, 1997). The findings of this study indicate that healthcare encounters for adolescents living with obesity could be enhanced if providers develop supportive and understanding relationships with adolescents challenged with obesity.

Conclusion
This qualitative study highlights the day-to-day experiences of living with obesity as an adolescent and provides an understanding of how adolescents experience their health care encounters. This qualitative method, based on the philosophical beliefs of Heidegger, revealed several everyday skills, practices, and concerns of adolescents who live with excess weight, many of which have not been addressed in the literature. The findings from this study also call for a critique of several healthcare practices such as routine BMI screening, obesity treatment, and communication between HCPs and adolescents. This information can assist HCPs to provide more empathetic care and show increased sensitivity for the many issues of adolescents living with excess weight.
APPENDICES
Appendix A
Flier/poster format (adolescent)

**Participants Needed for Study**
“The Experiences of Living with Excess Weight as an Adolescent: Everyday Life and Health Care Encounters”

Are you 13 to 18 years of age?
Do you live with a significant amount of excess weight?
Health care providers sometimes refer to this excess weight as obesity.
If so, you may be eligible to participate in this study.

**Participation Involves:**
- A 30 to 60 minute confidential, one-on-one interview
- $35.00 Target gift certificate for your time and travel
- Convenient interview locations
- Parental or Guardian consent will be needed if under 18 years of age

If you are interested in participating in this study please call the confidential, toll free number: **1-877-260-5645**
When you call the toll free line, the investigator will provide you with more information about the study and ask you a few questions to determine if you are eligible to participate.

**Your stories will help health care providers deliver better care.**
This is a dissertation study conducted by Robin Brian.
She is a pediatric nurse practitioner and doctoral student.
This study has been approved by the Kent State University Institutional Review Board.
Appendix B
Flier/poster format (young adult)

Participants Needed for Study
“The Experiences of Living with Excess Weight as an Adolescent: Everyday Life and Health Care Encounters”

Are you 18 to 24 years of age?
Did you live with a significant amount of excess weight as a teen?
Health care providers sometimes refer to this excess weight as obesity.
If so, you may be eligible to participate in this study.

Participation Involves:
- A 30 to 60 minute confidential, one-on-one interview
- You will be asked to describe your experiences of living with excess weight when you were between the ages of 13 and 18.
- $35.00 Target gift certificate for your time and travel
- Convenient interview locations

If you are interested in participating in this study please call the confidential, toll free number: 1-877-260-5645
When you call the toll free line, the investigator will provide you with more information about the study and ask you a few questions to determine if you are eligible to participate.

Your stories will help health care providers deliver better care.
This is a dissertation study conducted by Robin Brian.
She is a pediatric nurse practitioner and doctoral student.
This study has been approved by the Kent State University Institutional Review Board
Appendix C
Recruitment script

Study: The Experiences of Living with Excess Weight as an Adolescent

Robin Brian is a pediatric nurse practitioner and a doctoral student at Kent State University and the University of Akron. She is interested in understanding the everyday life and health care encounters of adolescents who are living with significant excess weight. You may be eligible to participate in this study because of your excess weight. This handout will provide you with some information about the study (give handout-Appendix B). If this sounds like something you may be interested in, you may call the toll free number provided to obtain more information or to sign up for the study.
Appendix D
Telephone Message

Study: Experiences of Living with Excess Weight as an Adolescent

Hello, my name is Robin Brian. I am a pediatric nurse practitioner and a doctoral student at Kent State University and the University of Akron. You have reached a confidential, toll free line.

Thank you for your interest in the study: “The Experiences of Living with Excess Weight as an Adolescent.” I am interested in understanding the everyday life and health care encounters of teens living with excess weight.

If you decide to participate, a confidential, one-on-one interview will be conducted at a location in your community that is safe and private. The interview will last about 30 to 60 minutes. I will ask you questions about yourself and how your excess weight affects or affected your day-to-day experiences and interactions with others. A series of questions will focus on your experiences with healthcare providers.

At the beep please leave your name, number, and the best time to reach you. I will return your call within the next few days to provide you with more information on the study. If you would like to participate I will need to ask a few questions to determine if you meet the study criteria. If you are under 18 years of age, I will also need to speak with a parent or guardian as they will need to give their permission to have you participated in this study. Therefore, leave a date and time when you will both be home. Thank you for considering participating in the study.
Appendix E1

Telephone interview/screening script

Participant # _____

Study: The Experiences of Living with Excess Weight as an Adolescent

Hello, my name is Robin Brian. I am a pediatric nurse practitioner and a doctoral student at Kent State University and the University of Akron. Thank you for your interest in the research study: “The Experiences of Living with Excess Weight as an Adolescent.” Is this a good time for you to talk with me for about 5 minutes regarding the study?

If “No”: Is there a better time for me to call back?____________________

If “Yes”: I will first provide you with some information regarding the study.

If you are under 18, is your parent or guardian at home?

“No”: what is a good time to call back to speak with both of you?_______

“Yes”: I will need to speak with them regarding the study.

Is that OK with you?

If “No”: Thank you for your interest.

If “Yes”: Let me first tell you about the study.

The purpose of this study is to understand the everyday life and healthcare encounters of adolescents living with excess weight. If you decide to participate, a confidential, one-on-one interview will be conducted at a location we can agree upon. The interview will last about 30 to 60 minutes. I will ask you questions about yourself and how your excess weight affects or affected your day-to-day experiences and interactions with others. A series of questions will focus on your experiences with healthcare providers.

The topic of excess weight can be sensitive and might bring up thoughts or feelings you could find upsetting. You may answer only those questions you wish to answer and may stop the interview at any time. The benefit to you would be the opportunity to share your experiences in order to assist healthcare professional in their work with adolescents living with excess weight.

Do you have any questions or concerns about the study? If “Yes”: [I will address]

Do you think you might be interested in participating in this study?

If “No”: Thank you for your time.

If “Yes” and 18 years of age or older: I will need to ask you a few questions to make sure you meet study criteria. Is that OK with you?

If “No”: Thank you for your time.

If “yes”: [skip Appendix E2 and proceed to Appendix E3]

If “Yes” and under 18 years of age: I will need to speak with your parent or guardian now about the study. If they give me permission, I will get back on the phone with you and ask a few questions to see if you meet the study requirements. Is that OK with you?

If “No”: Thank you for your time.

If “Yes”: [proceed to Appendix E2]
Appendix E2
Telephone interview/screening script

Participant # _____

Study: The Experiences of Living with Excess Weight as an Adolescent

Parent/Guardian Interview Script (for Adolescents under 18 years of Age).
Hello, my name is Robin Brian. I am a pediatric nurse practitioner and a doctoral student at Kent State University and the University of Akron. Your child has voiced interest in the research study: “Experiences of Living with Excess Weight as an Adolescent.” Is this a good time for you to talk with me for a few minutes regarding the study?
If “No”: Is there a better time for me to call back when you both are home?____
If “Yes”: I will first provide you with some information regarding the study.

The purpose of this study is to understand the everyday life and healthcare encounters of adolescents living with excess weight. If your child decides to participate, a confidential, one-on-one interview will be conducted at a location we can agree upon. The interview will last about 30 to 60 minutes. I will ask your child questions about his/her self and how his/her excess weight affects his/her day-to-day experiences and interactions with others. A series of questions will also focus on his/her experiences with healthcare providers.

The topic of excess weight can be sensitive and might bring up thoughts or feelings your child could find distressing. He/she may answer only those questions he/she wishes to answer and may stop the interview at any time. The benefit to your child would be to have the opportunity to share his/her experiences in order to assist health care professional in their work with adolescents living with excess weight.

Do you have any questions regarding the study? [If “yes,” I will address]
Do you think you might be interested in your adolescent participating in this study?
   If “No”: Thank you for your time. If “Yes”: Proceed with questions.

I will need to ask your adolescent a few questions to determine if they meet the study criteria. Is that OK with you?
   If “No”: Thank you for your time. If “Yes”: Proceed with questions.

If your adolescent meets the study criteria, I will also need to have an informed consent form and an audio-consent form signed by you. Is that OK?
   If “No”: Thank you for your time.
   If “Yes”: I will speak with your adolescent. I will then get back on the phone with you and let you know if your adolescent is eligible to participate and determine the best way to obtain the consent forms needed from you. [Proceed to Appendix E3]
Appendix E3

Telephone interview/screening script

Participant # ______

Study: The Experiences of Living with Excess Weight as an Adolescent

Adolescent/Young Adult Study Criteria Questions:

- Are you between 13 to 18 years of age? Yes___, No____
  o Do you live with a significant amount of excess weight? Yes___, No____

- Are you between 18 to 24 years of age? Yes___, No____
  o Did you live with a significant amount of excess weight between the ages of 13 to 18? Yes___, No____

- Will you be available to meet with me for about 30 to 60 minutes in a safe, public place to talk about your experiences of living with excess weight? Yes___, No____

Met Study Criteria: Yes_____, No______,
If “No”: I will thank them for their time.
If “Yes” and 18 years of age or older: You meet the study criteria [Skip parent/guardian section, proceed to scheduled interview place, date, and time.]
If “Yes” and under 18 years of age: You meet the study criteria. I will need to get your parent or guardian back on the phone, before we set up an interview.

Parent/Guardian Signed Consent Information (for Adolescents under 18 years of Age.)

Your adolescent meets the study criteria. We can now discuss the best way to obtain the informed consent form and an audio-consent form that you need to sign.

Will you accompany your child to the interview?
If “Yes”: You can sign the consent forms at that time [proceed to scheduled interview place, date, and time.]
If “No”: I will need your name and address to send the consent forms in the mail.
Name_____________________________________________________________
Address___________________________________________________________

You will need to return the signed forms A.S.A.P. in the stamped returned addressed envelope. When I receive the signed consent forms I will call back to set up an interview.
Is that OK? Yes ___, No____

Scheduled Interview Place, Date and Time. We can go ahead and schedule an interview. [Proceed to Appendix G, in upper half of contact sheet. I will collect this information from the adolescent. For adolescents under 18 years of age, I realize that parents may also need to be involved, therefore, I will include them in scheduling if needed.]
Appendix F
Contact information sheet

Participant # _____
Study: The Experiences of Living with Excess Weight as an Adolescent

Participant’s Name____________________________________________________ Age______

Address________________________________________________________________________

Phone Number____________________, Alternate Number________________________

Met Study Criteria: YES_____, NO_____

If under 18 years of age:
Parent/Guardian Name ____________________________, Phone________________________

_____Parent/Guardian will accompany child to interview:
*Parental consent forms will be signed before participant is interviewed.

_____Parent/Guardian will not accompany child to interview:
*Parental consent forms will be mailed.

Date Parental/Guardian Consent Forms Mailed _____________________________

Date Parental/Guardian Consent Forms Returned __________________________

Scheduled Interview: Site________________________________________________________

Date__________________, Time______________________________

**************************************************************************

Interview: Date________, Time Started___________, Time Completed__________

Received $35.00 Target gift certificate given for time and travel:

Participant’s signature obtained: Yes_____ , No______

Participant Agreed to a Follow-up Interview if Needed: Yes _____, No__________

**************************************************************************

Date and Time of Follow-up Interview:________________________________________

Unable to contact for Follow-up Interview______, Follow-up Interview not needed_____
Appendix G
Informed consent form (adolescent)

Study: The Experiences of Living with Excess Weight as an Adolescent
I am a pediatric nurse practitioner and a doctoral student in nursing at Kent State University and the University of Akron. I am conducting a dissertation research project to gain a better understanding of the everyday life and health care encounters of adolescents living with excess weight. The goal of this study is to obtain information that could assist health care providers in providing better care to adolescents who are overweight.

If you decide to do this, you will be asked to participate in an interview that will last approximately 30 minutes to 60 minutes. The interview will be conducted by Robin Brian, who is experienced in interviewing adolescents and young adults about sensitive topics. I will ask you questions about yourself and how your excess weight affects your day-to-day experiences and interactions with others. A series of questions will focus on your experiences with health care providers, including doctors and nurses. The interview will be audio-taped and later transcribed. The audio-tape will be destroyed after transcription and the tape is checked to make sure it is correct. I may contact you sometime after our initial interview to ask for more information or to ask about any additional thoughts you might have. You will also be asked to fill out a brief demographic data sheet that will include your date of birth and your estimated height and weight. You may answer only those questions you wish to answer and may stop the interview at any time.

The benefit to you would be the opportunity to share your experiences in order to help health care professional in their work with adolescents living with excess weight. Taking part in this study is entirely up to you and you may stop at any time without penalty. I will not tell anyone anything you tell me unless you tell me something that means you are in danger of being hurt or might hurt someone else.

Results will be reported for the group as a whole, although descriptions of your experiences and your quotes may be used as examples. In any reports from the research, no one will be able to tell who you are. You will be given a $35.00 Target or Wal-Mart gift card to thank you for your time and travel.

If you have any questions or concerns related to participation in this study, please call Robin Brian at 1-877-260-5645, or her advisor, Dr. Claire Draucker at 330-672-8805. The project has been approved by Kent State University. If you have questions about Kent State University’s rules for research, please call Dr. John West, Vice President for Research, telephone 330-672-0700. You will receive a copy of this consent form.

Consent: I agree to take part in this project. I know what I will be asked to do and that I can stop at any time.

Participants Signature ___________________________ Date__________
Appendix H
Informed consent form (parent/guardian)

Participant #_____

Study: The Experiences of Living with Excess Weight as an Adolescent
I am a pediatric nurse practitioner and a doctoral student in nursing at Kent State University and
the University of Akron. I am conducting a dissertation research project to gain a better
understanding of the everyday life and health care encounters of adolescent’s living with excess
weight. The goal of this study is to obtain information that could assist health care providers in
providing better care to adolescents who are overweight.

If your child decides to do this, he/she will be asked to participate in an interview that will last
approximately 30 minutes to 60 minutes. The interview will be conducted by Robin Brian, who is
experienced in interviewing adolescents and young adults about sensitive topics. I will ask your
child questions about his/her self and how his/her excess weight affects his/her day-to-day
experiences and interactions with others. A series of questions will focus on his/her experiences
with health care providers. The interview will be audio-taped and later transcribed. The audio-
tape will be destroyed after transcription and validation. I may contact your child sometime after
the initial interview to ask for clarification of some information that he/she provided or to inquire
about any additional thoughts he/she might have. He/she will also be asked to fill out a brief
demographic data sheet that will include his/her date of birth and his/her estimated height and
weight.

He/she may answer only those questions he/she wishes to answer and may stop the interview at
any time. The benefit to your child would be the opportunity to share his/her experiences in order
to assist health care professional in their work with adolescents living with excess weight. Taking
part in this study is entirely up to you and your child. He/she may stop at any time without
penalty. Information your child provides will be kept confidential within the limits of the law.
Exceptions include information related to the abuse of a child or indications of danger to self and
others.

Results will be reported for the group as a whole, although descriptions of your child’s
experiences and his/her quotes may be used as examples. Your child’s identity will be concealed
in any reports. He/she will be given a $35.00 Target or Wal-Mart gift card to compensate
him/her for his/her time and travel.

If you have any questions or concerns related to participation in this study, please call Robin
Brian at 1-877-260-5645, or her advisor, Dr. Claire Draucker at 330-672-8805. The project has
been approved by Kent State University. If you have questions about Kent State University’s
rules for research, please call Dr. John West, Vice President for Research, telephone 330-672-
0700. You will receive a copy of this consent form.

Consent: I agree to let my child take part it this project. I know what he/she will be asked to do
and that he/she can stop at any time.

Parental/Guardian Signature ________________________________ Date________
Appendix I
Informed consent form (young adult)

Participant #______

Study: The Experiences of Living with Excess Weight as an Adolescent
I am a pediatric nurse practitioner and a doctoral student in nursing at Kent State University and the University of Akron. I am conducting a dissertation research project to gain a better understanding of the everyday life and health care encounters of adolescents living with excess weight. The goal of this study is to obtain information that could assist health care providers in providing better care to adolescents who are overweight.

If you decide to do this, you will be asked to participate in an interview that will last approximately 30 minutes to 60 minutes. The interview will be conducted by Robin Brian, who is experienced in interviewing adolescents and young adults about sensitive topics. I will ask you questions about yourself and how your excess weight affected your day-to-day experiences and interactions with others as a teen. A series of questions will focus on your past experiences with health care providers, including doctors and nurses. The interview will be audio-taped and later transcribed. The audio-tape will be destroyed after transcription and the tape is checked to make sure it is correct. I may contact you sometime after our initial interview to ask for more information or to ask about any additional thoughts you might have. You will also be asked to fill out a brief demographic data sheet that will include your date of birth and your estimated height and weight. You may answer only those questions you wish to answer and may stop the interview at any time.

The benefit to you would be the opportunity to share your experiences in order to help health care professional in their work with adolescents living with excess weight. Taking part in this study is entirely up to you and you may stop at any time without penalty. I will not tell anyone anything you tell me unless you tell me something that means you are in danger of being hurt or might hurt someone else.

Results will be reported for the group as a whole, although descriptions of your experiences and your quotes may be used as examples. In any reports from the research, no one will be able to tell who you are. You will be given a $35.00 Target or Wal-Mart gift card to thank you for your time and travel.

If you have any questions or concerns related to participation in this study, please call Robin Brian at 1-877-260-5645, or her advisor, Dr. Claire Draucker at 330-672-8805. The project has been approved by Kent State University. If you have questions about Kent State University’s rules for research, please call Dr. John West, Vice President for Research, telephone 330-672-0700. You will receive a copy of this consent form.

Consent: I agree to take part it this project. I know what I will be asked to do and that I can stop at any time.

Participants Signature ___________________________________________ Date_________
Appendix J
Audio recording consent form (adolescent/young adult)

Participant # ______
Study: The Experiences of Living with Excess Weight as an Adolescent

I agree to audio recording at ________________on______________________.

The audio recording will be transcribed and erased. It will not be used in any manner after transcription.

Date__________   Participant Signature_________________________________
Appendix K
Audio recording consent form (parent/guardian)

Participant # ______
Study: The Experiences of Living with Excess Weight as an Adolescent

I agree to an audio recording of my child at _______________on_________________.

The audio recording will be transcribed and erased. It will not be used in any manner after transcription.

Date_________ Parental/Guardian Signature__________________________________
Appendix L
Parent/guardian instruction letter to obtain informed consent via mail

Participant # ______
Study: The Experiences of Living with Excess Weight as an Adolescent
(for Adolescents Under 18 Years of Age.)

Date

Dear Mr. or Ms. ______,;

My name is Robin L. Brian. I am a pediatric nurse practitioner and a doctoral student at Kent State University and the University of Akron. Thank you for your interest in the study: “The Experiences of Living with Excess Weight as an Adolescent”. I am interested in understanding the everyday life and health care encounters of teens living with excess weight.

As discussed, your child has voiced interest in participating in this study and meets the study criteria. Children under 18 years of age are required to have parental or guardian consent before they can participate. I have enclosed a “Parent/Guardian Informed Consent Form” and a “Parent/Guardian Audio Recording Consent Form.” You will also find enclosed a copy of each of these forms for you to keep. If you would still like your child to participate in this study, please sign the highlighted consent forms and return them to me as soon as possible in the stamped returned addressed envelope. When I receive the signed consent forms, I will call your child to set up an interview place, date, and time. I can also speak with you again at that time if you have any more questions or concerns.

I look forward to receiving the signed consent forms in the mail. Please do not hesitate to call me at the toll free number: 1-877-260-5645 at anytime. Just leave your name, number, a brief message, and the best time to reach you. I will return your call within a few days.

Sincerely,

Robin L. Brian, PhD(c), RN, PNP
Appendix M
Interview guide (adolescent)

Study: The Experiences of Living with Excess Weight as an Adolescent

“You have indicated that you live with excess weight. I am interested in finding out what that experience is like for you and how it affects your life.”

Daily Life
1. Tell me about your day-to-day life as a teen.
2. Does your excess weight affect your day-to-day experiences? If so how?
3. Tell me a story about an experience that you have had that will help me to understand how your excess weight affects your daily life.
4. Tell me about the time you became aware of or concerned about your excess weight.
5. Tell me about a time when you were aware that others noticed your weight.
6. Tell me about interactions you have had with family regarding your weight.
7. Tell me about interactions you have had with peers regarding your weight.
8. Tell me things that have been helpful to you in living with excess weight.
9. Tell me things that were not helpful or hurtful to you in living with excess weight.

Healthcare Experiences
1. Tell me about what your experiences with health care providers, such as doctors and nurses, have been like.
2. When you visit your health care provider, is your weight discussed? If so what is that like for you?
3. Has your health care provider worked with you to lose or manage your excess weight? If so, what is that like for you?
4. Does your health care provider obtain your weight measurements as part of your care? If so, what is that like for you?
5. What role do you think health care providers should have in helping you manage or lose weight?
6. What advice do you have for health care providers who work with teens who live with excess weight?

The interview will conclude with statements such as:
1. Tell me about your hopes and dreams for the future.
2. Are there other stories that you can share with me to help me understand what it is like for you to live with excess weight.
Appendix N
Interview guide (young adult)

Study: The Experiences of Living with Excess Weight as an Adolescent

“You have indicated that you have lived with excess weight as a teen. I am interested in finding out what that experience was like for you and how it affected your life.”

Daily Life
1. Tell me about what your day-to-day life was like as a teen.
2. Did your excess weight affect your day-to-day experiences? If so how?
3. Tell me a story about an experience that you have had that will help me to understand how your excess weight affected your daily life.
4. Tell me about the time you became aware of or concerned about your excess weight.
5. Tell me about a time when you were aware that others noticed your weight.
6. Tell me about interactions you have had with family regarding your weight.
7. Tell me about interactions you have had with peers regarding your weight.
8. Tell me things that have been helpful to you as a teen in living with excess weight.
9. Tell me things that were not helpful or hurtful to you as a teen in living with excess weight.

Healthcare Experiences
1. Tell me about what your experiences with health care providers, such as doctors and nurses, were like.
2. When you visited your health care provider, was your weight discussed? If so what is that like for you?
3. Did your health care provider work with you to lose or manage your excess weight? If so, what was that like for you?
4. Did your health care provider obtain your weight measurements as part of your care? If so, what was that like for you?
5. What role do you think health care providers should have in helping teens manage or lose weight?
6. What advice do you have for health care providers who work with teens who live with excess weight?

The interview will conclude with statements such as:
1. Tell me about what your hopes and dreams for the future were as a teen.
2. Tell me about your hopes and dreams know.
3. Are there other stories that you can share with me to help me understand what it was like for you to live with excess weight as a teen.
Appendix O1
Demographic data sheet

Participant #______

Demographic Data
Study: The Experiences of Living with Excess Weight as an Adolescent

_____ 1. Your age

_____ 2. Gender
   1-Male  2-Female

_____ 3. Ethnicity
   1-White
   2-Black
   3-Hispanic
   4-Asian
   5-Native American
   6-Other (please specify)____________________

_____ 4. Employment Status
   1-Employed  2-Not Employed

_____ 5. Current Level of Education:
   1-Fifth grade or earlier
   2-Sixth thru 8th grade
   3-Ninth thru 12th grade
   4-High school graduate
   5-College
   6-Technical/vocational school
   7-Not attending school at this time
   8-Dropped out of school: what grade?______

_____ 6. Current Physical Health Problems
   (circle all that apply)
   1-None
   2-High Blood Pressure
   3-Type 2 Diabetes
   4-Asthma
   5-Other ____________
Appendix O2
Demographic data sheet

Participant #____

Demographic Data
Study: The Experiences of Living with Excess Weight as an Adolescent

7. How many years have you lived with excess weight?
   1-one to two years
   2-three to four years
   3-five to six years
   4-seven to eight years
   5-nine to ten years
   6-more than ten years
   7-all my life

8. Diet and weight management techniques that I have tried (circle all that apply)
   1-increased exercise
   2-increased consumption of healthy foods
   3-decreased consumption of junk food
   4-fasting or skipping meals
   5-over the counter diet pills or speed
   6-prescribed weight loss medication (type)_________
   7-vomiting on purpose after eating
   8-smoking cigarettes

9. Diet and Weight management programs I have participated in (circle all that apply)
   1-Weight Watchers
   2-Nutra-system
   3-Jenny Craig
   4-Future fitness program at Akron Children’s
   5-Diet or exercise program guided by my parent/guardian
   6-Diet or exercise program guided by my primary doctor
   7-Other________________________________________

10. Your date of birth________________________________________

11. Your current estimated height_______________________________

12. Your current estimated weight_______________________________

13. If 18 years of age or older, your highest estimated weight when you were between the ages of 13 and 17. Age:___, Ht:___, Wt:___
I, (name)________________________, have participated in the study: “The Experiences of Living with Excess Weight as an Adolescent: Everyday Life and Health Care Encounters.” Upon completion of the interview, the investigator (Robin Brian) presented me with a $35.00 Target/Wal-Mart gift certificate for my time and travel.

Participant Signature:__________________________________________________
## Appendix Q
### Community agencies

**Study: The Experiences of Living with Excess Weight as an Adolescent**

### Suicide and Crises Hotlines

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<th>Hotline</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide</td>
<td>1-800-784-2433 (Suicide)</td>
</tr>
<tr>
<td>Talk</td>
<td>1-800-273-8255 (Talk)</td>
</tr>
</tbody>
</table>

### Serving Canton, Ohio

<table>
<thead>
<tr>
<th>Organization</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crises Intervention Center of Stark County</td>
<td>330-452-6000</td>
</tr>
<tr>
<td>Community Services of Stark County, Inc.</td>
<td>330-455-0374</td>
</tr>
<tr>
<td>Margaret B. Shipley Child Health Clinic</td>
<td>330-453-3386</td>
</tr>
<tr>
<td>Canton City Health Department</td>
<td>330-489-3231</td>
</tr>
<tr>
<td>Stark County Health Department</td>
<td>330-493-9904</td>
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### Serving Akron, Ohio

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<tr>
<td>Portage Path Community Mental Health Service</td>
<td>330-434-9144</td>
</tr>
<tr>
<td>Akron Health Department</td>
<td>330-375-2444</td>
</tr>
<tr>
<td>Akron City Health Department</td>
<td>330-375-2976</td>
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### Serving Brooklyn, Ohio

<table>
<thead>
<tr>
<th>Organization</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bridgeway, Inc.</td>
<td>216-281-2660</td>
</tr>
<tr>
<td>U.S. Department of Health and Human Services</td>
<td>216-802-1195</td>
</tr>
</tbody>
</table>
Appendix R

IRB approval letter

Study: The Experiences of Living with Excess Weight as an Adolescent

May 22, 2009

Robina L. Brain, RN, PNP
College of Nursing

Re: # 08-206: “The Experiences of Living with Obesity as an Adolescent: Everyday Life and Health Care Encounters”

Dear Ms. Brain,

I am pleased to inform you that the Kent State University Institutional Review Board has reviewed and approved your Application for Approval to Use Human Research Participants at the convened meeting on May 20, 2009. Approval is effective for a twelve-month period, May 20, 2009 through May 19, 2010.

Federal regulations and Kent State University IRB policy require that research be reviewed or reevaluated at least once during the term of the approval. The IRB has determined that this protocol requires an annual review of progress report. The IRB will forward an annual review reminder notice to you by email at a quarterly. Please note that it is the responsibility of the principal investigator to be aware of the study expiration date and submit the required materials. Please submit review materials (annual review form and copy of current consent form) one month prior to the expiration date.

HIPAA regulations and Kent State University Institutional Review Board guidelines require that any changes in research methodology, protocol design, or principal investigator have the prior approval of the IRB before implementation and continuation of the protocol. The IRB may also be informed of any adverse events associated with the study. The IRB further requests a final report at the conclusion of the study.

Kent State University has a Federal Wide Assurance on file with the Office for Human Research Protections (OHRP). OWA Number: 0001833.

If you have any questions or concerns, please contact me at 330-672-1704 or frederick@kent.edu.

Sincerely,

Chery P. Breckenridge

Tanya Prudential, R.N., B.S.N.
Research Compliance Administrator

CC: Dr. Claire Draeger

Division of Research and Graduate Studies
Office of Research Safety and Compliance
REFERENCES


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research. *Nursing Philosophy*, 1, 134-146.


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Stice, E., Cameron, R., Hayward, C., Killen, J., & Taylor, B. (2000). Body-Image and


