

Running Head: TEACHERS ATTITUDES ABOUT CHILDHOOD OBESITY

Teachers' Attitudes and Beliefs about Childhood Obesity  
In the Schools:

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Childhood obesity has become a national phenomenon. There is a concern among the public and school personnel, including teachers, school psychologists, and counselors as to the affects of childhood obesity. With the numbers of childhood obesity on the rise it is important to see how school personnel, teachers, as well as other students perceive obesity. In addition, this literature review will identify the lack of research that has recently been conducted on the attitudes about childhood obesity in schools and demonstrate that much of the research is becoming outdated. In these articles there is little consensus of just what childhood obesity is. This literature review will analyze what childhood obesity is and the attitudes that exist about childhood obesity by other children as well as adults, and discuss the limitations of the current research on this issue. Finally, it will provide suggestions for further research on the impact of teachers' attitudes about childhood obesity.

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## CHAPTER ONE

### INTRODUCTION

Obesity has become a national epidemic. In the last twenty years the number of people who suffer from obesity has steadily risen. Children as young as two and three are being classified as obese or overweight. According to the Centers of Disease Control (1994), the percentage of children that are defined as being overweight has more than doubled since the 1970's. There is approximately 13 % of children and adolescence who are seriously overweight. Recent surveys from the National Examination Survey (1999) show approximately 61 % of the adults in the United States are either overweight or obese.

Those individuals that suffer from obesity are often ridiculed. Pinkwater (1995) reports that in public; obese individuals are often subject to pointing and mockery. These behaviors send a powerful message to the children who suffer from obesity. Aronson (1997) found that if individuals have no experience with weight problems, than negative perceptions about obesity may be due to not encountering obese people in their daily lives. One negative perception that individuals may have is that obesity is something that people bring on themselves and should have the self-control to stop.

There are two terms that one must be familiar with before reading a review of literature. The first is the term literature. Literature refers to textbooks, journals, and other books by professionals in the fields related to which they write. The second term is articles. An article refers to opinions by writers and professional that has not necessarily done research on the subject.

In the current literature, the public has conducted research on the causes and treatment of childhood obesity, as well as attitudes toward obesity. This is the source for most of the information on teachers' attitudes toward obesity. There is limited literature specifically on teachers' attitudes of childhood obesity in the schools.

This review of literature will draw from the fields of Psychology as well as the Health Professions. A mixture of journal articles from the social sciences and medical field are included in this review. The authors of these articles are psychologists or other health professionals.

There have been few studies done on teachers' attitudes about childhood obesity. The majority of the research looks at students' perceptions and attitudes toward childhood obesity. Ideka (1995) reports that schools are the most important institution in a child's life. If this is the case shouldn't a child be able to go to school and feel accepted for who they are? However, Levine (1987) found that elementary school children are referring to obese individuals as fat, stupid, lazy, and ugly. Schroer (1985) found that teachers and counselors have many of the same biases as children do towards obesity. Therefore, it appears that although schools are so important to a child's life, those children that are obese may be suffering from ridicule from not only other students but teachers and other school staff as well.

It is important for school professionals working with children to be aware of their own biases about obesity and how those biases impact their relationships with students. Then with increased awareness school professionals can be focus on equal and fair treatment for all children in schools.

Definitions

Body Mass Index- (BMI) refers to a common measure expressing the relationship between weight and height. It is a mathematical formula where an individual's weight in kilograms is divided by the square of his or her height in meters.

Overweight- The Center for Disease Control (2000) defines overweight as an increased body weight in relation to height. Overweight may or may not be due to increased body fat.

Obesity- According to the Center for Disease Control (2000) obesity refers to an excessively high amount of body fat in relation to lean body mass.

The next chapter will include a review of literature and articles relating to attitudes and perceptions of childhood obesity. This literature review will focus on eight areas of research: definition of obesity, prevalence of obesity, causes of obesity, effects of obesity, stereotypes of obesity, treatment of childhood obesity, obesity in the schools, and discrimination laws against people with obesity.

## CHAPTER TWO

### Review of Literature

#### Introduction

This review of literature will elaborate on childhood obesity, and perception of childhood obesity. Topics to be covered include the definition of obesity, causes of obesity, effects of childhood obesity, stereotypes about childhood obesity, and childhood obesity in the schools.

Obesity has become a national epidemic. In the last twenty years the number of people who suffer from obesity has steadily risen. There is approximately 13 % of children and adolescence that are seriously overweight. Recent surveys from the National Examination Survey (1999) show approximately 61 % of the adults in the United States are either overweight or obese.

#### What is obesity?

Berg (1997) reports that obesity is not well understood in today's society. There are combinations of factors that come into play when defining obesity. These factors include genetics, food supply, physical activities, cultural factors, socioeconomic status, and psychological factors. These six factors combined have an effect on a person's appetite and how the calories are used and stored as fat.

Berman and Fromer (1997) defined overweight as being heavier than average. This could be attributed to bone structure, large muscles, and /or excess fat. Strauss and Miller (2001) have a more narrow description of being overweight, defining it as someone who is approximately 25 pounds above their ideal body weight. The Center for Disease Control (2000) defines overweight as an increased body weight in relation to



height. Overweight may or may not be due to increased body fat. It appears to be difficult to define what an overweight child is because unlike adults, children are still growing and developing, so they may grow out of that childhood or “baby fat,” where as adults are already developed and are not going to grow out of that “baby fat.” Despite this ambiguity, Birch and Fisher (1998) say there is still a great focus on overweight children because they can become an obese child or adult.

Lohman (1987) defined obesity as an excessive amount of body fat. Obesity is perceived when the Body Mass Index is more than 25 percent for males and 32 percent for females. Strauss and Miller (2001) say that obesity for a child refers to a child that is 40 to 50 pounds above their ideal body weight. According to them, obesity often follows when a child has a persistent overweight problem. According to the Center for Disease Control (2000) obesity refers to an excessively high amount of body fat in relation to lean body mass. The amount of body fat includes the distribution of the fat throughout the body as well as the tissue deposits of body fat. In sum, the term obese is quite hard to define accurately because of the subjectivity of everyone’s perception.

#### Prevalence

Childhood obesity is not a phenomenon that has taken place overnight; since, in the past 20 years there has been a significant increase in the number of people as well as children who are reportedly obese. Dietz (1983) reports that 5-25% of the children and teens in the United States are obese. Approximately 10 years later, the Centers for Disease Control (1994) report 21 % of children ranging in ages 12-19 years old as overweight. The Centers for Disease Control (1999) report that 13 % of children are seriously overweight and that the number is rising. Foyet and Goodrick (1995) found that

5-10% of preschoolers are obese. Mithers (2001) says that one out of every ten preschoolers is now overweight. Although it seems that obesity is starting at such a young age it continues to take an extreme rise at the age of 10 or during pre-puberty (Lassle, Wurmser, & Pirke, 1997). Mithers (2001) reports that the number of children who are overweight has more than tripled in a generation. In 1960 4% of children 6-11 were overweight, by 1980, 7%, and by 1999 13% of all children in the United State were seriously overweight.

Obesity is not just a problem in America. It appears to be spanning the globe. A survey of Australian students in a 1995 report the prevalence of girls who are overweight has risen from 11.8% in 1985 to 12.3% in 1995. A similar survey done in Britain shows children four years old and younger being classified as obese at a rate of 23.6 % in 1998 compared to just 14.7% in 1989. These numbers appear to be comparable to the United States. The former US Surgeon General, David Satcher, has declared youth obesity as “one of the top ten United States health priorities” (NEA, 2001, p. 34).

Obesity also crosses ethnic boundaries in varying ways. The Office of Maternal and Child Health (1989) report that 5-7% of Caucasian and African American children are obese while 12% of Hispanic boys and 19% of Hispanic girls are obese. Some research indicates that people of different ethnic backgrounds may also assume that a child may be obese when this is not the case at all. Berg (1997) found that it is common for preschoolers to carry their weight on their arms and legs, making those areas look chubby. An African American preschooler, on the other hand, often carries their excess weight in the middle of their body, giving them a fuller stomach area. This may cause one ethnic group to appear to be more obese than another, when this is not the case.

### Causes of Childhood Obesity

Jalong (1999) reports that most experts feel childhood obesity is affected by various factors such as: emotional factors, inappropriate interventions, heredity, and activity levels. Strauss and Miller (2001), however, feel that childhood obesity is the result of the interaction between psychological, familial, and physiological factors. As there is some dispute as to the causes of childhood obesity, it resounds that familial and emotional or psychological factors play a large part.

Birch and Fisher (1998) report that obesity shows a familial course; the risk of childhood obesity is significantly higher when both of the child's parents are obese themselves. This may point to a genetic component to childhood obesity, although it is not the only factor. "Heredity has recently been shown to influence fatness, regional fat distribution, and response to over feeding" (Bouchard, Tremblay, Despres, Lupien, Theriault, Dussault, Morrijani, Pinault, & Fournier 1990, p. 1480). Although there are some who use hereditary as part of this equation as to why today's children are so obese, not everyone is in agreement. Strauss and Miller (2001) report that over the past generations there is strong evidence that heredity was the most important determiner of a person's weight. However, genetics cannot explain why obesity has almost doubled in the past thirty years.

The activity level of a child may also play a part in obesity. Strauss and Miller (2001) report that the average American child spends several hours watching television each day. In previous years this time might have been devoted to physical pursuits and activities. Robinson, Hammer, Killen, Kraemer, Wilson, Hayward, and Taylor (1993) report that according to the Nielsen Company, 6-11 year old children in the United States

watch more than 23 hours of television per week and 12- 17 year olds watch an average of 21 hours per week. The American Psychological Association estimates that children and adolescents spend 22-28 hours per week watching television (Smith, 1993). They engage in television watching more than any other activity except sleeping. Smith (1993) reports that by the time an individual reaches the age of 70, they will have spent 7-10 years watching television. Ikeda (1995) states that the primary factor that contributes to childhood obesity is lack of physical activity, not overeating.

Another contributor could be the food and drinks being consumed by children. Mithers (2001) reports that school aged children are consuming more soft drinks and fruit juices than those of the children in the past two decades. Parents who give their child fruit juice could be contributing to their child's weight problem. Children should only have 4-6 ounces of fruit juice a day. Older children may be drinking soft drinks. Mithers (2001) reminds us that fruit juices and soft drinks should be a once-in-awhile treat.

#### Effects of Childhood Obesity

There are two major areas in a child's life that are affected when obesity is an issue, that of their health and of their emotional well-being. Summerfield (1990) reports that childhood obesity increases the risk of adult obesity. In addition, childhood obesity is also the leading cause of pediatric hypertension, type II diabetes, the increased risk of coronary failure at a very young age, as well as excess pressure on the child's joints. Berenson, Bonura, Hunter, Webber, Myers, and Johnson (1997) report that obesity is a cardiovascular risk factor that is related to blood pressure. Mithers (2001) reports that overweight children reach puberty sooner, for females this could mean a longer exposure to estrogen, which could lead to a higher risk of breast cancer. She also reports that

obesity is a chronic disease that kills approximately 300, 000 Americans each year.

Stunkard (1993) gave 19 physical ailments that are an increased risk for those individuals who are overweight or obese.

- High blood Pressure
- High blood cholesterol
- Type 2 Diabetes
- Insulin resistance
- Hyperinsulinemia
- Coronary Heart Disease
- Angina pectoris
- Congestive heart failure
- Stroke
- Gallstones
- Cholecystitis and cholelithiasis
- Gout
- Osteoarthritis
- Obstructive sleep apnea and respiratory problems
- Some types of Cancer (breast, prostate and colon)
- Complications during pregnancy
- Poor female reproductive health
- Bladder control problems
- Uric acid nephrolithiasis

Childhood obesity can also have negative effects on a child's emotional well being as well. A study done by Strauss and Forehand (1985) found that obese children often reported that they suffer from depression more often than non obese children, as well as have lower self-esteem than those children who do not suffer from obesity. Most experts appear to believe that childhood obesity is much more of a social and psychological problem than a health risk (Berman & Fromer 1997). They state that being fat can be damaging to a child's self-concept. A negative body image may cause children to feel embarrassed about participating in physical activities or may even contribute to eating disorders later in life.

Berenson et. al (1997) reported that children who suffer from obesity may also develop learned helplessness behavior. This behavior is characterized by lack of motivation and passivity in a performance task. They report that this learned helplessness behavior could contribute to lower academic scores for these children, and possibly lower self-esteem.

#### Stereotypes about Childhood Obesity

Powers (1996) reports that attitudes toward obesity vary from culture to culture, and in the United States being thin is very important. He goes on to report that attitudes about obesity have changed dramatically over the years. In the early nineteenth century most societies equated weight with wealth; the heavier one was the wealthier they were. This view changed during the twentieth century, where thin was in for most developed countries. Most people in less-developed countries still today believe that heaviness is better and more prestigious (Powers, 1996).

Negative attitudes about obesity and obese children permeate throughout society. These negative thoughts, beliefs, and attitudes held by society are then filtered down through the news, other television, books, and magazines. Farrington (1997) reports that our views on prejudice, racism, and discrimination are affected not only by the good and bad news on the television, radio, and print media, but people are more affected by family and friends. Neumark-Sztainer (1999) reported that physicians, medical students, and nurses have negative attitudes toward obese individuals. Many negative attitudes and bias are overlooked. Brown (1994) reports that harsh statements about those who are overweight are often tolerated because it is assumed that this type of diversity is the result of character flaws, such as being lazy. However, most individuals' hostile reaction is

fear. For example, Ikeda (1995) says that for individuals who are overweight it “may seem like the worst possible fate. However, it isn’t. A worse fate is feeling rejected and unloved because one is overweight”(p.109).

Obese children are the target of ridicule, prejudice, teasing, and disgust by their peers and possibly adults in their lives, including parents and teachers. Obesity has such a negative connotation that many people do not even realize that they harbor bias against obese people. They may have hidden feelings. “Fat has become the “bogeyman” -the monster that terrorizes our children” (Ikeda, 1995, p 110). Pinkwater (1995) reports that in public, obese individuals, especially women, are often subjected to vile remarks, pointing and mockery. He goes on to say that it is at least six times harder to get hired if you are overweight. This is because of the beliefs that overweight people are greedy, lustful, stupid, lazy, dishonest, and weak.

A child’s biggest source of support is through his/her family, mainly his/her parents. Ikeda (1995) reports that many parents are aware of the social stigmatism that goes along with being overweight because many of them themselves have experienced this discrimination themselves. Parents of overweight or obese children often subject their children to common weight loss programs and strategies that are often used by adults. Benett and Gurin (1982) found that most of these weight loss attempts resulted in short-term success. Lowey (1998) stressed that it is important for parents to deal with their own dissatisfaction with their bodies, rather than projecting that dissatisfaction on to their children.

Once a child goes to school the obesity issue shifts from being a home issue to being a social one. Rothblum (1992) found that children as young as preschool age had

biases against obesity. When they were given a chance to play with an average looking doll and an obese doll, all of the children, regardless of their body size, chose the average looking doll. A year later, Rothblum (1993) replicated the study using pictures. The pictures were of children in a wheel chair, missing a limb, on crutches, facially disfigured, and obese. The least likely child to get played with was the obese child. According to Rothblum (1993) childhood obesity bias starts at a young age, but then the bias increases, as children get older.

Levine (1987) found that by elementary school, children are referring to obese individuals as fat, stupid, lazy, and ugly. Staffieri (1967) reported that boys aged 6-10 report that fat children are the most likely to be teased in school. These feelings about obesity do not improve over time, but appear to intensify each year.

#### Treatment of Childhood Obesity

Ikeda (1995) reports that families that have children who suffer from obesity need extra time from health professionals. Ikeda (1995) reports that one of the most common actions parents take when their children are becoming overweight restricting the child's food. Parents of overweight children may have their children go into therapy. Ikeda (1995) says that often therapists who are seeing overweight children report that if that child's food is being restricted those children are often begging, scavenging, and stealing food to rid themselves of the hunger. The children may also feel guilty for eating.

Ikeda (1995) reports that health professionals should assist parents in having realistic weight goals for their children. A daughter that is born of a tall father and a short mother may not look like the short mother but the father. Health professions have to help parents see this, and accept their children for who they are.



Garrow (1992) reports that many doctors feel that the treatment of obesity is unsatisfactory. Astwood (1962) report that nothing can be done for people who are born fat. Others believe that there is a diet out there that could work. Garrow (1992) reports that many more women than men seek help for being overweight; a five to one ratio.

Garrow (1992) states that taller patients can achieve more rapid weight loss than shorter ones, and younger individuals can lose weight more quickly than older individuals. He goes on to discuss three principles to weight reducing diets. The first is that one must provide less energy than that required to maintain the body weight of the individual. The second component is consuming low fat foods rather than high fat foods. The third component is the diet needs to be agreed on by the patient. If the individual does not want to lose weight or agree to the plan then the plan will fail.

Another treatment that is being talked about more readily in weight loss circles is drugs. Garrow (1992) reports that drugs in the treatment of obesity are designed to do three things. First they inhibit absorption of nutrients into the stomach. Next, the drugs are to increase the energy expenditure of the individual. Finally, the drugs reduce hunger of the individual. Smith (1995) reports that weight loss gimmicks have been around since the 1800s but recently it has become a multi-billion dollar industry.

Other options for an obese person to lose weight are jaw wiring and gastric stapling. This is when the jaw is wired shut so that the person cannot open their mouth, making it impossible for individual to consume solid foods. A person may also opt for gastric stapling; this is when the stomach is stapled to making the stomach smaller. Garrow (1992) says that jaw wiring and gastric stapling are options for obese individuals who choose to reduce their weight.

Once a person is obese there are numerous possible treatments available.

However there are fewer treatments for children who are obese than there are for adults.

Summerfield (1990) lays out the three major forms of treatment for obesity.

1. Physical Activity. This could include a formal exercise program or it could be just increasing activity a small amount each day.
2. Diet management. Where adults may be able to fast or eliminate foods out of their diets this method is not recommended for children. Parents should teach their children “normal” eating habits using food groups. Children should also consume fewer carbohydrates because they produce fat.
3. Behavior Modification. This technique can be used with older children and they can keep a journal as to how they are doing on their food intake and exercise routine. This helps the child see exactly what they are doing to their bodies, and hopefully they will want to make some changes in their lives.

#### Childhood Obesity on the Schools

For a child, the school is supposed to be a happy and safe place to learn and explore their identities. Ideka (1995) reports that schools are the most important institution in a child’s life. Schroer (1985) found that teachers and counselors have many of the same biases as parents and children do towards obesity and children who are obese. He found in a study of 200 pre-service and in-service teachers that characteristics such as attractiveness, energy level, self-esteem, and sociability were perceived more negatively in obese or overweight children than that of an average child. In a study by Neumark-Sztainer (1999) school staff reported that obesity is largely behavioral; however they also reportedly that obesity had some genetic component as well. As teachers hold these

conflicting, often-negative views, they often filter down to the students. The National Education Association (1995) found that at the Elementary level children are learning that it is acceptable to dislike fatness.

From nursery school through college, fat students experience ostracism, discouragement, and sometimes violence. Often ridiculed by their peers and discouraged by well-meaning education employees, fat students develop low self-esteem and have limited horizons. They are deprived of places on honor rolls, sports teams, and cheerleading squads and are denied letters of recommendation (Healthy Weight Journal, 1995, p. 113).

Ideka (1995) reports that school staff and teachers can take an active role in establishing a positive environment that supports size diversity. She goes on to say that rules can be put into place for both students and teachers so to establish a bias-free school. In order for this to take place it is important that teachers look at their own bias about weight, so that they do not model discrimination and size bias.

### Summary

Obesity in childhood as well as in adults is rising at an alarming rate. The causes of obesity are genetic factors, activity levels, emotional factors, and inappropriate interventions. The treatment for childhood obesity is difficult because most treatments are for adults. The physical effects of childhood obesity are numerous and often times negative. In addition the emotional effects of childhood obesity are negative due to the beliefs about obesity form society. It is not clear however, what teachers' attitudes and perceptions of obesity are. It appears however that attitudes about obesity are negative whether those attitudes are coming from other students or teachers.

In the final section of this paper, a critical analysis of the previously reviewed literature will be presented. Criticisms of the research connecting of treatments, and perceptions of childhood obesity will be discussed. Finally, implications for school psychologists and counselors will be provided.

## CHAPTER THREE

### Critical Analysis

This chapter provides a critical analysis of the literature pertaining to childhood obesity, specifically perceptions about childhood obesity by teachers and other school personnel. This critical analysis will focus on three areas: (1) treatments for childhood obesity, (2) stereotypes about childhood obesity, and (3) childhood obesity in the schools.

It has been shown that obesity is a national epidemic, with staggering numbers that are growing. It is important that as a society individuals are aware of their biases toward individuals who are obese. This is especially important in the schools, where children are to be educated without bias.

Additional research needs to be conducted on childhood obesity in the schools because there is limited number of studies on this population. The majority of research has shown that other children view obesity negatively. Levine (1987) found that by elementary school, children are referring to obese individuals as fat, stupid, lazy, and ugly. Staffieri (1967) reported that boys aged 6-10 report that fat children are the most likely to be teased in school.

Teachers' perceptions about obesity need to be critically examined as these individuals shape children's lives. It is the belief of this author that schools and the interactions in the schools are vital to a student's success; this is why it is so important for the teachers and other school staff to understand obesity. Teachers need to realize that bias and prejudices exist toward individuals that are obese, and they themselves may have these bias. It is imperative that teachers and other school staff teach acceptance for

differences so that all students can receive a fair education as well as be in a school where they feel accepted.

#### Implications for Further Research

As previously mentioned, much additional research is needed in current perceptions about childhood obesity. Research on childhood obesity in the schools must be conducted as well. More specifically, one focus of new research must be in the area of teachers' attitudes and perceptions of childhood obesity in the schools. Due to the increase of obesity in childhood, there needs to be increased research in this area to provide children with the best education possible. This research would provide teachers knowledge about their own beliefs and attitudes about obesity, so that they would be aware of any negative beliefs. If school staff and teachers are aware of these beliefs they could change those negative thoughts and provide a positive atmosphere for the students in the schools.

#### Implications for School Psychologists and Counselors

School psychologists and counselors need to be aware of the rising numbers of children classified as obese as well as attitudes about childhood obesity. Childhood obesity has become a national health concern for everyone, not just psychologists and other mental health professionals. School psychologists and other helping professionals should realize that much of the information on childhood obesity is becoming outdated. Teachers' perceptions about childhood obesity are yet to be studied. However, they should be aware that as a society many perceptions about obesity are negative and this is often the case in schools as well. School psychologists need to develop good intervention strategies toward dealing with self-image and acceptance throughout the school.

## Conclusion

In conclusion, obesity is growing in today's society. As the years go on, more and more individuals will be classified as obese or overweight. There is no defining reason as to what causes obesity, or why it is on the rise; however, we do know that it is on the rise and something has to be done about the negative views about obesity.

Schools play a vital part of a child's life. Because of this it is important that school officials and teachers know how to work with the issue of obesity. It is the belief of this author that school staff and teachers can take an active role in establishing a positive environment for students to learn. In order to do this school staff teachers and need to promote a bias free and safe schools to do this teaching about diversity is a must. This should be the goal of every school for every area of diversity, and with this new issue of diversity emerging, at this alarming rate, it is important that school staff and teachers know how to work with and understand obesity the best they can, to provide the best education possible.

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