

THE EFFECTS OF CHILDHOOD OBESITY ON SELF-ESTEEM

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## ABSTRACT

### “THE EFFECTS OF CHILDHOOD OBESITY ON SELF-ESTEEM”

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Obesity is a growing health problem affecting children in the United States. The prevalence of obesity has increased dramatically over the past 10 years across virtually all populations and age groups. Recent data suggest that 15 percent of U.S. children are severely overweight or obese (National Center for Health Statistics, 2002) . Obese children are at risk for significant health problems, but also face many psychological and social consequences, including low self-esteem. Children who are obese face an increased risk of emotional problems lasting well into adulthood. Factors such as peer rejection, weight-related teasing, and internalized social standards play a major role in diminishing an obese child’s self-esteem. Self-esteem affects numerous aspects of health and behavior including social adjustment, activity engagement, goal direction, and the presence of anxiety. Furthermore, low self-esteem has been associated with depression and suicidal ideas (Harter & Marold, 1994). The purpose of this study is to examine the effect obesity has on children’s self-esteem, as rated by the Piers-Harris Children’s Self-Concept Scale, 2<sup>nd</sup> Edition.

## The Effects of Childhood Obesity on Self-Esteem

### *Self-Esteem Defined*

Throughout the past one hundred years, a vast amount of theory and research has been devoted to the construct and manifestation of self-esteem. There has also been a great deal of difficulty in trying to reach an agreement on the nature of self-esteem, due to the fact that it has been approached from several different theoretical perspectives. Some have seen it as a psychodynamic, developmental process while others have approached it from the perspective of the cognitive-behaviorist in terms of various coping strategies. Self-esteem has also been viewed from the position of a social psychologist in terms of attitudes, while others have focused on the experiential dimensions of self-esteem as a humanistic psychologist. Since self-esteem has both psychological and sociological dimensions, this has made it difficult to determine a comprehensive definition (Leary, 1999).

Nevertheless, theorists and psychologists from various orientations agree on the importance self-esteem holds in regards to psychological adjustment. There is also a general agreement that the term 'self-esteem' includes cognitive, affective, and behavioral elements. It is cognitive as the individual consciously thinks about him or herself and considers the discrepancy between his/her ideal self, the person he/she wishes to be, and the perceived self or the realistic appraisal of how he or she sees him or herself. The affective element refers to the feelings or emotions that the individual has when considering that discrepancy. The behavioral aspects of self-esteem are manifested in such behaviors as assertiveness, resilience, being decisive, and being respectful of others (Leary, Schreindorfer, & Haupt, 1995). Thus, self-esteem is difficult to define because of these multiple dimensions.

Nathaniel Branden, Ph.D. defined self-esteem as “The disposition to experience oneself as being competent to cope with the basic challenges of life and of being worthy of happiness (1969, p. 35).” As defined by Bednar, Wells, and Peterson (1989), self-esteem is “A subjective and realistic self approval (p. 4).” They suggest that self-esteem “reflects how the individual views and values the self at the most fundamental levels of psychological experiencing (p. 4)” and that different aspects of the self create a “profile of emotions associated with the various roles in which the person operates...and that self-esteem is an enduring and affective sense of personal value based on accurate self perceptions (p. 4).”

### *Self-Esteem Theories*

The influential contributions of humanistic psychologists Abraham Maslow and Carl Rogers have also been key in understanding the concept of self-esteem. Maslow is credited for establishing the theory of a *hierarchy of needs*. Maslow’s theory proposes that human beings are motivated by unmet needs, and that certain lower order needs must be met before higher order ones can be satisfied (Maslow, 1956).

#### **Self-Actualization**

**Esteem**

**Love**

**Safety**

**Physiological**

The high position of esteem in Maslow’s hierarchy of needs reflects the importance self-esteem plays in an individual’s quality of life. According to Maslow, there are two types of esteem needs. First is self-esteem which results from competence or mastery of a task. Next, there’s the attention

and recognition that comes from others. Humans have a need for a stable, firmly based, high level of self-respect, and respect from others. When these needs are satisfied, the person feels self-confident and valuable as a person in the world. On the other hand, when these esteem needs are frustrated, the person feels inferior, weak, helpless, and often worthless (Maslow, 1970). This concept is founded on the premise that self-esteem is strongly connected to a sense of competence and worthiness and the relationship between the two throughout life's experiences.

Similar to Maslow's viewpoints, Carl Rogers also gave credence to the idea that human beings had a fundamental need for positive regard. Rogers' principle is based on his premise that people are basically good/healthy and that mental illness, criminality, and other human problems are distortions of that natural tendency (Rogers, 1980). Rogers' theory was built on what he coined the *actualizing tendency*. The actualizing tendency can be defined as the natural motivation found within every living thing that guides us to reach our full potential (Rogers, 1959). This fundamental process, as viewed by Rogers, governs all motivations and leads to differentiation, independence, and social responsibility. This subconscious guide evaluates experiences for growth potential by drawing an individual toward growth experiences and away from growth-inhibiting experiences (Shapiro, 1987). Because Rogers believed that all living things need unconditional positive regard, his client-centered therapy techniques allowed for exploration of all of an individual's potentials (Rogers, 1951). Rogers proposed that this unconditional positive regard offers feelings of acceptance and love regardless of the child's behavior. Furthermore, Rogers believed that humans instinctively value positive self-regard, that is, self-esteem, self-worth, and a positive self-image. People achieve this unconditional positive

self-regard by experiencing the positive regard others show them throughout development (Rogers, 1959). When this positive regard is given only on a “conditional” basis (i.e. when we show we are “worthy”), Rogers pointed out that over time, this conditioning leads individuals to have conditional positive self-regard, as well. In other words, Rogers theorized that individuals begin to like themselves only if they meet the standards others have applied to them, rather than if they are truly actualizing their potentials (Rogers, 1980).

### *Self-Esteem in Children*

Self-esteem serves a crucial function in the health and behavior of developing children. Social adjustment, activity engagement, goal direction and self-confidence, and the presence of anxiety are all elements in a child’s development and functioning that are influenced by his/her self-esteem (Bandura, 1986). Furthermore, low self-esteem has been associated with depression and suicidal ideas (Harter & Marold, 1994). Research has also shown that low self-esteem is related to a variety of psychological difficulties and personal problems, such as substance abuse, loneliness, academic failure, teenage pregnancy, and criminal behavior (Leary, 1999). While *high* self-esteem is often associated with a mood of cheerfulness, feelings of optimism, and relatively high energy, *low* self-esteem is accompanied by feelings of doubt about one’s worth and acceptability. Such feelings are often followed by relatively low energy and weak motivation, invariably resulting in low effort (Bean, 1991). People with low self-esteem tend to attribute any successes they have to luck rather than to their own abilities. Those with high self-esteem will tend to attribute their successes to qualities within themselves (Covey, 1989). Self-esteem not only affects behavior, but it also influences the individual’s understanding of how the world

works and how/where he or she fits into it.

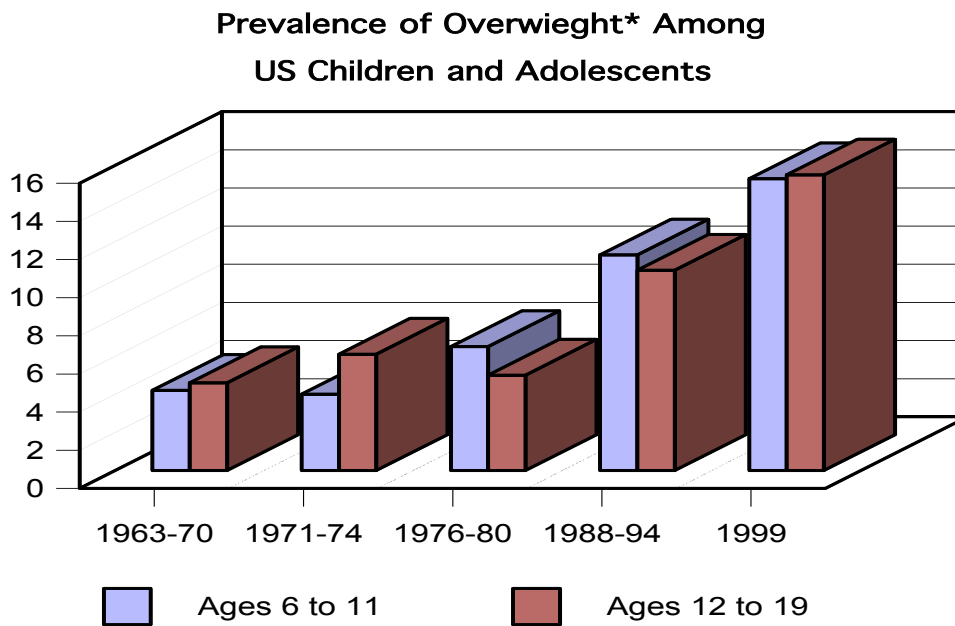
An individual's knowledge of who they are, to a very large extent, comes from the feedback gained from others. Individuals are often selective from whom they receive feedback, seeking those who give the feedback they want, and avoiding those who do not. Bednar, Wells, and Peterson theorized that all individuals must experience some negative feedback from their social environment in order to develop appropriate coping mechanisms crucial to self-esteem maintenance (1989). They also suggest that, if individuals avoid negative feedback, they must devote significant effort in order to "gain the approval of others by *impression management*, that is, pretending to be what we believe is most acceptable to others (p. 13)." According to the *Sociometer* theory, an individual's self-esteem is inherently sensitive to the perceived standards and reactions of others. Leary (1999) had this to say:

Most often, self-esteem is lowered by failure, criticism, rejection, and other events that have negative implications for relational evaluation; self-esteem rises when a person succeeds, is praised, or experiences another's love—events that are associated with relational appreciation. Even the mere possibility of rejection can lower self-esteem, a finding that makes sense if the function of the self-esteem system is to warn the person of possible relational devaluation in time to take corrective action. The attributes on which people's self-esteem is based are precisely the characteristics that determine the degree to which people are valued and accepted by others. Specifically, high trait self-esteem is associated with believing that one possesses socially desirable attributes such as competence, personal likability, and physical attractiveness. Furthermore, self-esteem is

related most strongly to one's standing on attributes that one believes are valued by significant others, a finding that is also consistent with sociometer theory. (p. 34)

*Childhood Obesity*

Between the late 1970's and 2000, the percentage of school-age children, ages 6-11, that are overweight have more than doubled. The percentage of overweight adolescents ages 12-19 tripled from 5.0% to 15.5% during the same time margin (National Center for Health Statistics, 2002).



*Gender and age-specific BMI > the 95<sup>th</sup> percentile*

*Source: National Center for Health Statistics. Health, United States, 2002. Table 71.*

The number of overweight children in the United States continues to soar, having almost tripled in 25 years, according to a new government survey on the health of the nation's 72 million children (National Center for Health Statistics, 2002). Many experts agree that obesity is one of the most pressing health problems facing our nation today. Following are some interesting signs that obesity rates are going up:

- Because of safety concerns, the Federal Aviation Administration has instructed airlines to add ten pounds to approved passenger weights (Phillips, 2003).
- When administering vaccines and drawing blood, doctors now need longer needles to penetrate thicker layers of fat on Americans' bodies (Nagourney, 2000).
- Liposuction is the most commonly performed cosmetic surgical procedure in the U.S., increasing 118% between 1997 and 2001 (American Society for Aesthetic Plastic Surgery, 2002).
- Over the last decade, diabetes rates rose 60% in the U.S. (Mokdad, 2001).
- Today's size 10 was sold as a women's size 14 in the 1940's (Nifong, 1999).
- One of the reasons that the Boston Red Sox decided to rebuild Fenway Park was that the seats were too narrow for today's baseball fans. The seats in the new ballpark are four inches wider (Patton, 1999).

### *Childhood Obesity and Self-Esteem*

In 1975, Hilde Bruche wrote, "There is no doubt that obesity is an undesirable state of existence for a child. It is even more undesirable for an adolescent, for whom even mild degrees of overweight may act as a damaging barrier in a society obsessed with slimness (p. 92)."

Not only does childhood obesity have long-term health implications, it may also be

detrimental to a developing child's social, psychological, and motivational well-being as well. As pointed out by Bruche, we live in a world driven by stereotypical views based on what is beautiful is good. The obsession with appearance is certainly not new to this day and age. However, the advancements in technology, particularly with the media, have increased the degree to which individuals concern themselves with appearance. Thanks to the media, an extremely rigid and austere gauge of beauty has been ingrained within the cultural and personal standards. Television, billboards, and magazines provide that people see "beautiful people" all of the time, making exceptionally good looks seem real, normal, and attainable. As pointed out by Crandall (1994), it has also been found that attractive people have distinct advantages in our society:

- Attractive children are more popular, both with classmates and teachers.
- Teachers often have higher expectations of attractive children.
- Attractive applicants have a better chance of getting jobs and receiving higher salaries.
- In court, attractive people are found guilty less often. When found guilty, they receive less severe sentences.
- We often believe in the "what is beautiful must be good" stereotype. We believe physically attractive people possess other desirable characteristics, such as intelligence, moral virtue, competence, etc.

As children develop, they construct an identity and a concept of themselves. As discussed previously, part of this construction involves monitoring how family, friends, and peers respond to them, along with the value judgments that accompany those perceptions. Most children will

become aware of the socially negative stigma associated with obesity at an early age. There is also a great amount of research suggesting that being overweight is associated with a wide variety of negative characteristics. Overweight people are often seen as unattractive, aesthetically displeasing, morally and emotionally impaired, and discontent with themselves (Harris, Harris, & Bochner, 1982). According to Crocker, Major, and Steele (1998), overweight individuals have a socially devalued identity. Children who are overweight become aware of others' negative views on obesity, which in turn, diminishes their self-esteem. Because others devalue them, children who are obese may devalue themselves. These children may also devalue themselves because they fall short of internalized social standards for acceptable weight and appearance. Furthermore, those who are obese may expect others to judge them based on their weight, which in turn may affect their own behavior in ways that produce negative social interactions (Feingold, 1992).

Children who are obese also endure negative attention in the forms of teasing, rejection, and harsh treatment that also contribute to the reduction of their self-esteem. In a 1960s study, researchers used pictures to determine children's perceptions of varying disabilities. Six pictures were used representing children: with crutches, in a wheelchair, with an amputated hand, with a facial disfigurement, and an overweight child. The overweight child was chosen as the least desirable friend by a majority of school children examining the pictures (Richardson, Goodman, Hastorf, & Dornbusch, 1961). A 1994 National Education Association Report on Discrimination Due to Physical Size stated, "For fat students, the school experience is one of ongoing prejudice, unnoticed discrimination, and almost constant harassment."

A recent University of Minnesota study reveals that children who were teased about being

overweight were more likely to have poor body image, low self-esteem, and symptoms of depression. The study found that 26 percent of teens who were teased at school and at home reported they had considered suicide, and 9 percent had attempted it (Archives of Pediatrics and Adolescent Medicine, 2003). Children who are obese not only experience lowered self-esteem as a result of peer taunting, they also show significantly elevated levels of loneliness, sadness, and nervousness (Strauss, 2000). Because approval from peers is particularly important within the adolescent years, such negative experiences can be detrimental to the development of self-esteem. In contrast, during the preadolescent years, self-esteem is more related to family interactions and support (Strauss, 2000).

#### *Variables to Consider*

The variable that is perhaps most frequently assumed to moderate how weight affects self-esteem is gender. The standards for thinness are both more extreme and more rigid for females than for males, despite the fact that females are biologically predisposed to have more body fat than the opposite gender (Brenner & Cunningham, 1992). Females are judged on their appearance more and standards of female beauty are considerably higher and more inflexible than those of males. The ideals for female weight and the importance of appearance in female interactions makes being overweight a greater burden for females. Due to these high standards, dissatisfaction with their appearance begins at a very early age for females. Furthermore, these ideals lead many females to believe they are overweight, when, in fact, they are not. According to Friedman and Brownell (1995), adult females are far more likely than males to seek psychotherapy and other interventions to control their body weight or to cope with the adverse psychological effects of

being heavier than they think they should be.

Although these elements are significant to the self-esteem of females, being overweight has shown a startling level of despair in children as a whole, with many rating their quality of life as low. In a study published by the Journal of the American Medical Association, 106 children ages 5 to 18 were asked to rate their well-being on physical, emotional, and social measures. Lead researcher, Dr. Jeffrey Schiwimmer (2000), noted, "The likelihood of significant quality-of-life impairment was profound for obese children." He also pointed out that obese children were more likely to miss school, perhaps due to weight-related teasing and physical ailments.

Another significant variable affecting the association between obesity and self-esteem is ethnicity and cultural background. Black and Asian women generally have a more positive body-image than Caucasian women, although this depends on the degree to which they have accepted the standards of the dominant culture (Crandall & Martinez, 1996). A study of Mexican immigrants in America found that those who had immigrated after the age of 17 were less affected by the prevailing super-thin ideal than those who were 16 or younger (Hall, Cousins, & Power, 1991). In one study, black women with high self-esteem and a strong sense of racial identity actually rated themselves more attractive than pictures of supposedly 'beautiful' white fashion models (Crandall & Martinez, 1996). In another study, about 40% of moderately and severely overweight black women rated their figures to be attractive or very attractive (Hebl & Heatherton, 1998). Other research indicates that this may be because African-American women are more flexible in their concepts of beauty than their white counterparts, who express rigid ideals and greater dissatisfaction with their own body-shape (Hebl, et. al., 1998).

*Tomorrow*

When discussing children who suffer from obesity and the negative aspects associated, the issue of self-esteem and its affects on those children's future (adult) lives must also be considered. Overall, a person who has low self-esteem will tend to feel that what happens to them is beyond their control, including their successes. As discussed previously, low self-esteem affects many areas of life including relationships, performance in school and work, social interactions, and the ability to set and work toward goals.

By way of their seven-year follow-up research, Gortmaker, Must, and Perrin (1993) found that women who were overweight as adolescents completed fewer years of school, had higher rates of household poverty, and were less likely to be married than their average weight peers. Research pertaining to women with obesity has indicated a relationship between frequent teasing during childhood and negative self-perceptions/greater body dissatisfaction in adulthood (Grilo, Wilfey, Brownell, & Rodin, 1994). Results from another study revealed that normal weight students received more financial support for college than did overweight students who were in greater need of financial aid and jobs. This was especially notable among women and differences in financial aid remained after controlling for the parent's education, income, family size, and ethnicity (Crandall, 1991).

Those with low self-esteem often communicate less than those with high self-esteem. They are often unwilling to take risks in social encounters and are unlikely to appear confident, persuasive, and convincing. As stated by Miller and Downey (1999), "Heavyweight people's expectations that others are likely to be prejudiced against them could affect their own behavior in

ways that produce negative interaction outcomes, which in turn could have consequences for self-evaluation (p. 70).” When considering the effects of obesity on self-esteem, it has been found that obese children with falling self-esteem are also more likely to engage in high-risk behaviors such as smoking and alcohol consumption. As reported by Jackson (1997), low levels of self-esteem were correlated with initiation of tobacco and alcohol use among 4<sup>th</sup> to 6<sup>th</sup> grade students. These findings are of particular interest to the subject of obesity due to the research of Ryan, Gibney, and Flynn (1998). These researchers found that adolescent girls often use smoking as a means to control their weight.

### *Hypothesis*

The purpose of this study was to further examine the effects of and extent to which obesity has on childhood self-esteem. As discussed in the literature review, self-esteem plays a crucial role in the development and behavior of children. A great deal of research has shown that children suffering from obesity experience deficits in their self-esteem, not only during their early years, but in adulthood, as well. This study is designed to analyze obese children’s individual perceptions, as related to physical appearance. It is hypothesized that a correlation between obesity and low self-esteem will be found.

### *Procedure*

For the purposes of this study, body mass index (BMI) according to age was used to assess and label overweight children. BMI was calculated from the children’s height and weight in order to obtain an index of the degree of obesity. Overweight was defined as BMI-for-age > 95<sup>th</sup> percentile for age and gender (based on growth charts for age and gender). Participants were

selected from a middle school, consisting of approximately 710 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup>-grade students. This study population was comprised of 332 females and 378 males. Each student received a consent form, which was signed by the parent or legal guardian before participation was allowed in this study. On this form, parents/guardians were asked to give written consent for their child's participation, and the weight, height, and gender of their child. This information was used in the selection of random children who qualify under the BMI formula as overweight. From the remaining students with parental consent, children who did not qualify as overweight were randomly chosen for research (control) purposes. Researchers attempted to control for learning disability in the 120 children chosen to participate in the obesity/self-esteem research.

Students with written consent to participate were given the Piers-Harris Children's Self-Concept Scale, 2<sup>nd</sup> Edition to complete during the first 15 minutes of their homeroom class. This instrument is comprised of 60 items and is designed to reflect a child's overall self-concept, plus subscale scores (Behavioral Adjustment, Freedom from Anxiety, Happiness and Satisfaction, Intellectual and School Status, Physical Appearance and Attributes, and Popularity) that permit more detailed interpretation. The scale is composed of items written at the 2<sup>nd</sup>-grade reading level, each of which the child indicated whether or not the question pertained to them by circling yes or no. Each child with written consent received a Piers-Harris scale and a numbered index card on which they were asked to write their name and corresponding number on their Piers-Harris scale. After each student was finished, he or she was asked to leave the index card and scale face-down on his or her desk and proceed to his/her next class. These cards and scales were collected by the researchers or participating teacher.

## *Results*

A total self-concept score was computed for each participant. The differences in the average scores for the study and control groups were analyzed using a one-way, two group ANOVA, between and within groups. Each subscale was examined to reveal any concentration areas that might be specifically impacted by obesity.

- *The self-concept scores of children with average BMI were compared to the self-concept scores of those found to be obese, according to their BMI.*

For the purposes of this study, subjects who were found to have a Body Mass Index of 26 and greater were labeled “obese”. Subjects found to have a BMI of 25 and less were labeled “not obese”. The self-concept total scores of those labeled “obese” were then compared to those of the subjects who were labeled “not obese”. Within this study, 14 subjects were found to qualify as “obese” with a BMI of 26 and greater. Seventy of the remaining subjects were labeled “not obese”, according to their BMI of 25 and below. A univariate analysis of variance between the two groups was used to compare means. It was discovered that the mean for the obese subjects was 43.286 while the not obese mean was 54.186. According to the pairwise comparisons, the mean difference between the two groups was 10.900, which was significant at the .001 level. Levene’s Test of Equality of Error Variance was found to be significant at the .100 level, which suggests the error variance of the dependent variable is equal across groups in testing the null hypothesis.

According to these findings, a significant difference was indeed discovered between the global esteem scores of subjects who are obese to those who are not obese. The total self-concept score

of obese subjects was significantly lower than the total scores of the not obese subjects. These findings support the hypothesis that children who are obese have significantly lower self-esteem than those who are not obese.

- *The self-concept scores of females who are obese were compared to the self-concept scores of males who are obese.*

For the purposes of this study, subjects who were found to have a Body Mass Index of 26 and greater were labeled “obese”. Within this study, 14 subjects were found to qualify as “obese” with a BMI of 26 and greater, six females and 8 males. A univariate analysis of variance within the obesity group was used to compare means between genders. It was discovered through this analysis that the mean score for female subjects was 40.50 while the male group had a mean score of 45.38. According to the pairwise comparisons, the mean difference between the two groups was 4.875, which was significant at the .264 level. Although a small difference was found, the discrepancy between the two groups was not statistically significant. According to these findings, there is not a significant difference between the self-esteem of obese female children and the self-esteem of obese male children in the current study. However a larger sample size might have impacted these results.

### *Discussion*

Research indicates the prevalence of obesity in children is escalating at a rapid pace. Obesity impacts young people in a variety of ways and to a marked degree. Additionally, self-esteem affects numerous aspects of health and behavior, as well. Children who face obesity are not only at-risk for physically-related health problems, but also for problems associated with low

self-esteem. The purpose of this study was to examine the affect childhood obesity has on self-esteem. When comparing the self-esteem of male students to that of female students, little to no difference was found. However, due to the small sample size used in data comparison, this must be considered a limitation of the study. Based on the literature review, females have a tendency to endure greater pressure to maintain a physical appearance which is acceptable to society.

Furthermore, the data obtained in this study indicated that children labeled as “obese” do indeed suffer from lower self-esteem than do their average BMI peers. Accordingly, children who are obese allow feelings of inadequacy to impact their lives as a whole. The implications of this research are crucial in understanding the needs of children suffering from low self-esteem related to physical appearance. Children who are unable to achieve a positive self-image are at-risk for depression, withdrawal, and fear of social interaction. Furthermore, these children encounter problems related to academics, learning, and school involvement. Understanding the factors related to self-esteem and what affects it will assist parents, educators, and child advocates in ensuring success and happiness for all children.

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