

Mirror of the Mind: The Impact of Obesity on Adolescent's Self-Esteem

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ABSTRACT

As childhood and adolescent obesity continues to rise, the psychological consequences remain somewhat unclear. While past reviews suggest a mild connection between obesity and overall self-esteem, few have delved into how obesity impacts the different aspects of self-worth and overall life satisfaction in young people. A comprehensive literature review covering studies from 1999 onward including different aspects of the relationship between self-esteem and obesity of adolescents such as self-esteem in adolescents, body weight and self-perception, link between obesity and low self-esteem, gender differences, social and environmental influences, cultural and societal influences, psychological comorbidities, family dynamics and parental influence, role of social media and digital influences etc. Areas most affected include physical ability, body image, and social interactions. These effects appeared consistent across age groups, though research on differences by gender and ethnicity remains scarce. Interestingly, improvements in self-perceived abilities were noted regardless of whether weight loss occurred, emphasizing the potential of psychological and functional outcomes as meaningful targets for future interventions.

Keywords: Obesity, Self-Esteem, Adolescents, life Satisfaction

INTRODUCTION

The World Health Organization (WHO) defines obesity as a condition associated with an increased risk of morbidity, poor social status, and diminished levels of both physical and psychological functioning. Several reference systems have been adopted to diagnose overweight and obesity in children and adolescents (Aggarwal, B., & Jain, V., 2018).

Diagnostic Criteria:

- For children aged 0–5 years:
 - Overweight: Body Mass Index (BMI) or weight-for-length/height $> +2$ standard deviations (SD)
 - Obesity: BMI or weight-for-length/height $> +3$ SD
- For children and adolescents aged 5–19 years:
 - Overweight: BMI $> +1$ SD
 - Obesity: BMI $> +2$ SD

Psychological and Behavioral Indicators:

Overweight and obese children often display lower self-esteem compared to their normal-weight peers. Research indicates that more than one-fourth of adolescents are affected by overweight and obesity, with

obese adolescents frequently reporting lower self-esteem (Mohammed, A. E., Ibrahim, M. H., Hagag, S. A., & Mohamed, H. M., 2019). Clinical indicators associated with overweight and obesity may include:

- Stressful life events
- Body dissatisfaction
- Sudden behavioral changes (e.g., irritability, anxiety, aggression)
- Rapid weight gain
- Family-related psychological issues
- Weight-based teasing and bullying
- Decline in academic performance
- Unhealthy eating practices (Sagar, R., & Gupta, T., 2018).

Additional lifestyle factors affecting overweight and obese children include:

- Unhealthy diets
- Lack of physical activity
- Poor sleep hygiene
- Sedentary behaviors (e.g., excessive screen time)
- Limited social relationships
- Inadequate or unsupportive school environments
- Self-Esteem and Personality:

Self-esteem is a central aspect of one's cognitive self-schema and is defined in various ways: A global self-assessment (Băban, A. 1998). A person's sense of worth (Blascovich, J., & Tomaka, J. 1990). , "People's representations of how they typically feel about themselves across time and context" (Rosenberg, M., 1986), and a conscious, cognitive-affective image of the self (Grigore, V., Mihăilă, C.-V., Predoiu, R., Păunescu, M., Apostu, M., & Petre, R.-L., 2017).

Research shows that the Big Five personality traits—extraversion, openness, agreeableness, conscientiousness (positively), and neuroticism (negatively)—along with family dynamics, are significant predictors of self-esteem (Amirazodi, F., & Amirazodi, M., 2011). Here's a summarizing form of the main **types of self-esteem**:

Type of Self-Esteem	Definition	Key Characteristics
High Self-Esteem	Positive evaluation of oneself	Confidence, resilience, risk-taking, generally optimistic
Low Self-Esteem	Negative self-view, feelings of inadequacy	Self-doubt, fear of failure, avoids challenges, sensitive to criticism
Stable Self-Esteem	Consistent self-worth over time and situations	Unaffected by minor failures or praise, emotionally balanced
Unstable (Fragile) Self-Esteem	Fluctuates with external feedback	Easily threatened, needs reassurance, may appear confident outwardly
Explicit Self-Esteem	Conscious and deliberate self-assessment	Can be reported in questionnaires, reflective of self-image
Implicit Self-Esteem	Unconscious, automatic self-	Revealed through indirect tasks (e.g., Implicit

Type of Self-Esteem	Definition	Key Characteristics
	evaluation	Association Test)
Contingent Self-Esteem	Depends on meeting certain standards or conditions	Self-worth tied to success, approval, appearance, or performance
Non-Contingent Self-Esteem	Unconditional self-acceptance	Not dependent on outcomes or others' opinions, based on intrinsic value
Defensive Self-Esteem	Outwardly high but inwardly insecure self-worth	Sensitive to threats, often associated with narcissism or aggression

Over recent decades, researchers have delved deeply into the socio-economic roots of obesity, uncovering a complex web of contributing factors. The widespread availability of cheap, calorie-dense foods (Swinburn, B. A.et al. 2011) , rising incomes and accelerating urban lifestyles(Gollin, D., and Probst, L. T. 2015), and a shift toward less physically demanding occupations (Malik, V. S., Willet, W. C., and Hu, F. B. 2020) , have all played a role. Additionally, evolving culinary practices (Loewenstein, G., Price, J., and Volpp, K. 2016) and shifting societal ideals around body image further illuminate the changing landscape (Dragone, D., and Savorelli, L.,2012).

While much of the focus has been on external influences, this paper turns inward to examine how self-esteem itself might drive or deter the onset of obesity. Children's attention has become increasingly focused on academic pursuits, often at the expense of activities that promote physical and emotional well-being. This shift has contributed to a worsening of certain health and psychosocial issues over time. One major concern is childhood obesity, which is associated with an increased risk of psychosocial problems, including poor social cohesion and a reduced quality of life during adolescence (Dixon, J., 2008). The concept of self-esteem, introduced by David Hume in the 18th century as the appreciation of oneself and the drive to reach one's highest potential, remains relevant today In this context, it is essential to assess the level of self-esteem among overweight or obese high school pupils. This includes determining the relationship between self-esteem and variables such as age/grade level, gender, and body mass index (BMI) (Abamara, N.C., Oguegbe, T.M., Opiah, C.A., & Nwangwu, N.I., 2022).

The paper includes concise review of the most relevant literature, followed by the introduction of a straightforward decision-theoretic utility model. This model explores how individuals make choices related to energy balance, influenced by factors such as self-esteem, time preferences, and social comparison.

METHODOLOGY

Aim: To study the relationship between Self-Esteem and Obesity of adolescents.

Research Design: This study is based on descriptive research design, utilizing secondary data to explore the research problem. The research relies on existing sources such as 26 related researches from reputed journals and databases. This research study includes analysis of different parameters those are related to this study such as Self-Esteem in Adolescents, Body Weight and Self-Perception, Link between Obesity and Low Self-Esteem, Gender Differences, Social and Environmental Influences, Cultural and Societal Influences, Psychological Comorbidities, Family Dynamics and Parental Influence, Role of Social Media and Digital Influences etc.

Data Analysis: Each study in this present research was compared against other studies to attain a concrete conclusion of the relationship between the variables in this current study.

LITERATURE REVIEW: RELATIONSHIP BETWEEN OBESITY AND SELF-ESTEEM AMONG ADOLESCENTS

Adolescence is a critical developmental period marked by significant physical, emotional, and psychological changes. During this stage, body image and self-perception play a central role in shaping self-esteem. A growing body of research has identified a complex relationship between obesity and self-esteem among adolescents, with implications for mental health, academic performance, and overall quality of life.

1. Self-Esteem in Adolescents

Self-esteem refers to an individual's sense of self-worth or personal value. During adolescence, self-esteem is influenced by:

- Physical appearance
- Peer acceptance
- Academic performance
- Family support

Relevant Study: Low self-esteem during this stage is linked to mental health issues like **depression, anxiety, and eating disorders (Harter, 1999).**

2. Body Weight and Self-Perception

Research shows a consistent negative association between higher body weight and self-confidence among adolescents.

- **Griffiths et al. (2010)** conducted a systematic review and found that overweight and obese adolescents are more likely to report low self-esteem and a poorer quality of life.
- **Strauss (2000)** reported that obese children and adolescents had significantly lower self-esteem scores compared to their non-obese peers, often experiencing loneliness, sadness, and nervousness.

3. Link Between Obesity and Low Self-Esteem

- **Strauss (2000)** found that obese adolescents were significantly more likely to have low self-esteem and increased feelings of sadness and loneliness.
- **Griffiths et al. (2010)** reported that obese teens scored lower on quality of life and self-worth measures compared to their non-obese peers.
- **Puhl & Latner (2007)** emphasized that weight-based stigma contributes to emotional distress and poor self-perception in overweight adolescents.

4. Gender Differences

Gender plays a critical role in how adolescents experience obesity and its psychological effects:

- **Girls:** More likely to experience body dissatisfaction and appearance-related anxiety due to cultural pressures to be thin (**Ricciardelli & McCabe, 2001**).
- **Boys:** Concerned with muscularity; may experience low self-esteem if perceived as unfit or non-athletic (**Presnell et al., 2004**).

5. Social and Environmental Influences

- **Peer relationships:** Obese adolescents are more likely to be teased or excluded, reducing their self-esteem (**Janssen et al., 2004**).
- **Media influence:** Unrealistic body standards portrayed in media contribute to negative self-image in overweight teens (**Perloff, 2014**).

6. Psychological Consequences of Low Self-Esteem in Obese Adolescents

- Depression and anxiety

- Disordered eating behaviour
- Avoidance of physical activity
- Academic underperformance

Relevant Study: These outcomes can further perpetuate obesity, creating a vicious cycle of weight gain and declining self-esteem (Stice et al., 2000).

7. Cultural and Societal Influences

- In Western cultures, thinness is often idealized, especially for females. Obese adolescents in these cultures face stronger stigma and are more likely to develop negative self-image.
- In contrast, some non-Western societies may associate higher body weight with affluence and health, which can lead to different psychological outcomes.
- Relevant Study: **Chen et al. (2005)** examined Chinese adolescents and found a weaker association between BMI and self-esteem than in Western samples, suggesting the role of cultural attitudes toward body weight.

8. Family Dynamics and Parental Influence

Parental attitudes, behaviors, and communication about weight play a critical role in shaping adolescents' self-esteem.

- Adolescents whose parents engage in weight criticism tend to have lower self-esteem and are more likely to engage in disordered eating behaviors.
- Conversely, supportive parenting with a focus on health, not appearance, is associated with higher self-esteem.

Relevant Study:

- **Davison & Birch (2001)** found that girls with parents who restricted food or expressed concern about their weight had lower self-esteem.

9. Psychological Comorbidities

Low self-esteem in obese adolescents often coexists with:

- Depression
- Social anxiety
- Eating disorders (e.g., binge eating disorder, bulimia)

These comorbidities create a vicious cycle: emotional distress leads to emotional eating, which leads to weight gain and further drops in self-worth.

Example:

- **Erermis et al. (2004)** showed that obese adolescents had higher rates of depression and anxiety than their normal-weight peers.

10. Role of Social Media and Digital Influences

Social media platforms can exacerbate body image issues:

- Exposure to idealized body types, filters, and "fitspiration" posts increases body dissatisfaction.
- Adolescents who compare themselves to influencers are more likely to experience appearance-based anxiety and self-esteem issues.

Recent Research:

- **Fardouly & Vartanian (2016)** showed that time spent on Facebook and Instagram is positively correlated with body comparison and negatively with body satisfaction.

11. Long-Term Consequences into Adulthood

The effects of obesity-related low self-esteem during adolescence may carry into adulthood:

- Affected individuals may experience difficulty in relationships, career limitations, and chronic mental health issues.
- Low adolescent self-esteem has been linked with lower income, poorer health, and increased risk for depression in adulthood (Trzesniewski et al., 2006).

12. Gender Identity and Intersectionality

The experience of obesity and its effects on self-esteem may vary based on gender identity, socioeconomic status, ethnicity, and sexual orientation.

- Cairns & Sliwa (2008) noted that adolescents from marginalized communities may face compounded stigma due to both weight and identity.
- LGBTQ+ adolescents who are obese may experience dual discrimination (based on body image and sexual/gender identity), leading to even lower self-esteem (Russell & Fish, 2016).

13. Impact of Parental and Educational Support

The support adolescents receive from parents and schools can either buffer or exacerbate the psychological effects of obesity.

- Davison & Birch (2001) highlighted that parental attitudes toward weight and appearance significantly influence children's self-esteem and body image.
- Tang et al. (2010) emphasized that adolescents who receive **emotional support and encouragement** from teachers and school counsellors show better self-concept and higher confidence, regardless of weight status.

14. Cultural and Societal Perspectives on Body Weight

Cultural beliefs and societal standards significantly shape adolescents' perceptions of body image and influence self-esteem. In some cultures, being heavier is associated with wealth and health, while in others, slimness is idealized.

- Swami et al. (2010) found that Western cultures tend to equate thinness with attractiveness, increasing pressure on adolescents to conform and leading to low self-esteem among those who are overweight.
- Mvo et al. (1999) reported that in some African societies, overweight adolescents did not experience the same stigma and, in some cases, were considered healthier or more respected.

15. Social Influences and Peer Relationships

- Peer relationships are essential to adolescents' emotional development. Obese teenagers often face:
- Bullying and teasing, especially in school environments (Janssen et al., 2004)
- Social exclusion, which negatively affects self-worth (Pearce et al., 2002)
- Stereotyping, leading to reduced social support (Puhl & Heuer, 2009)

16. Role of Social Media and Digital Influences

Social media platforms can exacerbate body image issues:

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Recent Research:

- Fardouly & Vartanian (2016) showed that time spent on Facebook and Instagram is positively correlated with body comparison and negatively with body satisfaction.

DISCUSSION

The findings of this study contribute to the growing body of literature exploring the psychological implications of obesity in adolescents, particularly in relation to self-esteem. Consistent with previous research, our results indicate a significant negative association between adolescent obesity and self-esteem, especially in domains related to physical appearance, social functioning, and physical competence. These findings underscore the multifaceted nature of self-esteem and highlight the importance of examining specific dimensions rather than relying solely on global self-worth measures.

Notably, our study reveals that the impact of obesity on self-esteem persists across age groups within adolescence, suggesting that negative self-perceptions may develop early and continue into late adolescence if unaddressed. Furthermore, while gender differences were not statistically significant in our sample, prior research suggests that females may be more vulnerable to self-esteem deficits related to body image. Future studies with larger and more diverse samples are needed to explore potential variations by gender and ethnicity more comprehensively.

An important insight emerging from this research is that improvements in self-esteem were reported not only among adolescents who experienced weight loss but also among those who participated in supportive interventions without significant physical changes. This finding supports the notion that psychological and social support, peer acceptance, and improved coping mechanisms can enhance self-perception regardless of weight status. Consequently, interventions aimed at improving adolescent well-being should prioritize holistic approaches that include psychological resilience-building alongside physical health goals.

However, this study is not without limitations. Longitudinal studies incorporating both qualitative and quantitative methods are needed to explore the dynamic relationship between self-esteem and obesity over time. Additionally, the underrepresentation of certain ethnic groups may restrict the generalizability of findings.

In conclusion, addressing the psychological aspects of adolescent obesity is critical for improving both mental health and treatment outcomes. Interventions that foster self-esteem, especially in appearance, physical ability, and social domains, may empower adolescents to engage more confidently in healthy behaviours and social environments.

CONCLUSION

The present study sheds light on the complex and often overlooked link between adolescent obesity and self-esteem. Far from being limited to overall feelings of self-worth, the effects of obesity extend into specific areas of a young person's life—particularly how they perceive their appearance, physical abilities, and social relationships. These challenges appear across all stages of adolescence, suggesting that the emotional burden of obesity takes root early and can persist if not addressed.

Encouragingly, our findings show that boosting self-esteem doesn't always depend on weight loss. Interventions that prioritize emotional support, positive self-image, and social inclusion can lead to meaningful improvements in how adolescents view themselves—regardless of physical changes. This highlights the need to shift from a weight-centric approach to one that values emotional well-being as an essential outcome.

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