

**The Relationship between Physical and Mental Health in Black Teenage Girls**

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## **Introduction**

Across the United States, Americans are having more physical health problems over time. Obesity rates have risen in the last twenty years in the US. Among children aged 2-19, the obesity rate has risen to 18.5% in 2016 from 13.9% in 2000 (Sanyaolu et al p.2). Although this has impacted all Americans, this rate is significantly higher among black girls. In 2016, 25% of black girls in the US were identified as being obese (Sanyaolu et al p.2). However, the rising rates of obesity are not just concerning for people's physical health, but also for their mental health. Rates of depression have also increased significantly among people in the U.S. from 2005 to 2015, from 6.6 percent to 7.3 percent (Columbia University 2017). Notably, the rise was the largest among those children and teens ages 12 to 17, increasing from 8.7 percent in 2005 to 12.7 percent in 2015 (Columbia University 2017). This is concerning because these two things, a decline in physical health and mental health, are connected to each other.

Obesity, a sign of poor physical health, can lead to low self-esteem, a sign of poor mental health. Although schools have attempted to treat obesity among their students, these programs have not helped, and in some cases have even harmed students' mental well being. However, there are steps that can be taken that can help improve all students, and especially black girls', physical and mental health. Improving doctor patient relationships in order to build more trust, promoting mindfulness of following celebrities who display body positivity on social media, and investing in more sports opportunities for girls are positive first steps in improving overall wellness for young women.

The first section of this paper will outline the impact poor physical health has on a person's mental health. It will also talk about how obesity has especially affected young children and adolescents. Next, the paper will describe how obesity has a particularly negative affect on black girls due to a lack of access to quality healthcare, healthy foods, and opportunities for physical activity. It will argue that schools have not come up with helpful ways to help stop obesity in girls, despite some efforts. Finally, the paper will advocate for other programs that will be helpful for improving the overall wellness for girls.

## **Impacts of Poor Physical Health on Mental Health**

It has been known among researchers that obesity has a poor impact on mental health. Even as early as 1985, the National Institute of Health called obesity, "an enormous psychological burden" (Wardle & Cook, p. 421). Obesity is known to lower people's self-esteem, which can lead to poor mental health. This can be especially harmful for younger people. Wardle and Cook argue that teasing a person about their weight can lead to depression (Wardle

& Cook, p. 421). Teasing is common over the internet, which most young people are using today, and therefore they are exposed to these messages. Girls in particular are vulnerable, as many are on social media sites where they post pictures of themselves. As they see negative statements about obesity, this leads to lower body image and emotional wellbeing (Wardle & Cook, p. 423). Wardle and Cook believe that this is especially harmful to girls because the ideal vision of a girl is skinny, while the ideal version of boys is often muscular (Wardle & Cook, p. 424). Therefore, obesity not only leads to physical health problems, but also mental health challenges.

Negative messages about obesity are not just spread to adolescents, but also to children. Wang et al.'s longitudinal study found that obesity leads to lower self-esteem among 10-12 year olds (Wang et al., p. 25). The researchers used a four-item self-esteem assessment to measure children's self-esteem. During the assessments, kids were given statements and had to rate them as false, mostly false, sometimes false/sometimes true, mostly true, or true. Some of the statements included were, "In general, I like the way I am," "Overall I have a lot to be proud of," "A lot of things about me are good," and, "When I do something, I do it well." (Wang et al., p. 21). Through these statements, Wang et al. attempted to measure the children's self-esteem. They found that overweight children reported significantly lower self-esteem than their peers (Wang et al. p. 23). This is important because self-esteem impacts, "children's social, emotional, behavioral, and mental development" (Wang et al., p. 21). Having a good sense of self-esteem is important because it is how one views themselves, and if they do not have a strong self-esteem, children may start to view themselves as worthless and treat themselves as such. Because obesity seems to be linked to poor self-esteem, it appears that if people improve their physical health, it could have great impacts on their mental health as well.

Positive self-esteem is important because it gives a person a positive mindset to accomplish other goals in their lives. Without that mindset, people may tend to view themselves as weak. It is important to build positive self-esteem in children because it sets a pattern for the rest of their lives. Wang et al. found that kids aged 10-12 who reported low self-esteem were over three times as likely to report low self-esteem 2-4 years later compared to their peers who reported normal or high levels of self-esteem (Wang et al., p. 23). If kids have low self-esteem, it tends to build and grow over the years, causing other negative effects in their lives. Low self-esteem can lead to underachievement in school, drug and alcohol abuse, and destructive behaviors in adolescence and young adulthood (Wang et al., p. 25). Therefore, low self-esteem in childhood could be linked to that person's success professionally and that person's overall physical health in adulthood.

One building block of self-esteem is a person's perception of their own health. Self-perception of health is a little different than other health measures; someone can be relatively healthy, and still believe that they are not. It is important for a person's self-esteem to perceive themselves as being in good health. Students who perceive their health as good are more likely to achieve in school and less likely to stress out about their school work and progress (Piko, p. 2). During this period, adolescents aged 14-21 reported higher levels of stress than other age groups, and some of this stress may be due to a poor perception of their health (Piko, p. 2). Teenage girls in particular are more likely to report low self-esteem and self-perception of health (Piko, p. 1; Wang et al., p. 21). Boys are more likely to report high self-perceptions of their health. This may be because participating in sports is linked to positively perceiving one's own health, and according to Piko, Jackson, and Wang et al., boys will be more likely to participate in sports when they are stressed because it is a coping mechanism for them (Piko, p. 2). Wang et al. found that kids who participated in physical activity 5-7 times per week reported higher self-esteem than those who participated less than two times per week (Wang et al., p. 23). Encouraging more physical activity among teenage girls, especially through sports, may help increase their self-perception of their health, and therefore boost their self-esteem.

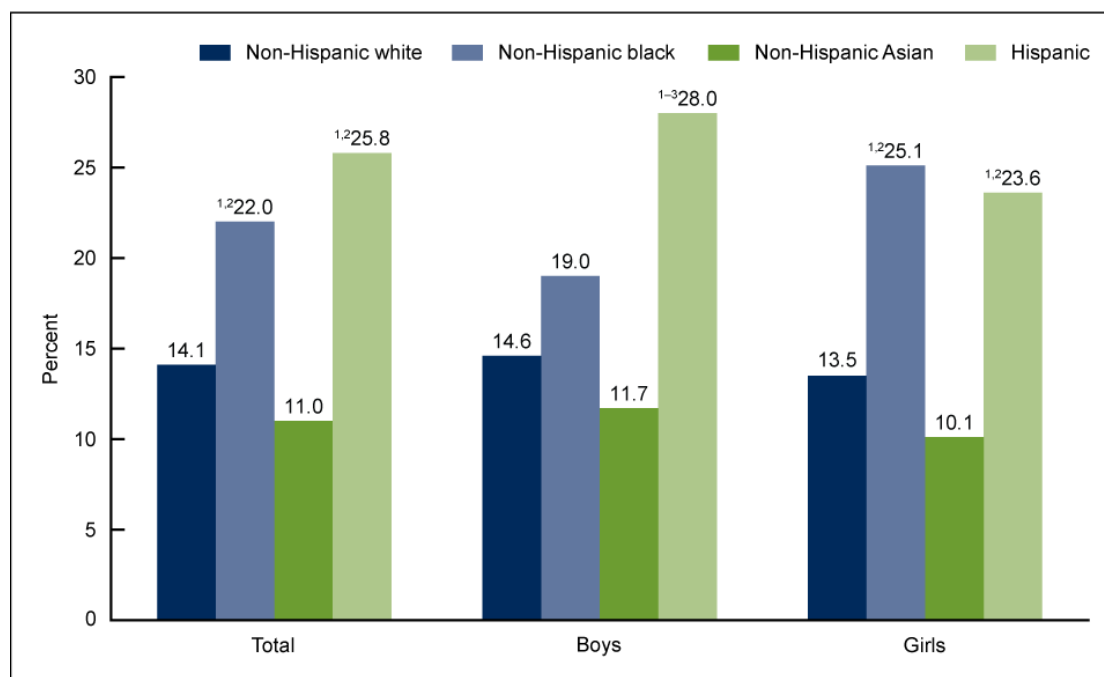
There are other factors that can also impact self-perception about weight. In a study by Wardle and Cook, they found that African American girls reported a higher ideal weight than white girls did (Wardle & Cook, p. 425). This may be because of the role models and images that girls see through the media. In movies, magazines, and toys, images of white women and girls tend to idealize extremely skinny women. In part because black women have been excluded from popular media, black girls are more likely to look towards real life women like their mothers or sisters to look up to for guidance. In part because of the range of black female role models, black girls have higher self-esteem surrounding weight than similarly aged white girls (Wardle & Cook, p. 426).

### **Causes of High Obesity Rates Among Black Girls**

Obesity is a national issue, however, it impacts some groups of people more than others. In the years 2015-16, 25.1% of black girls in the United States were obese according to CDC standards (See Image 1) (Hales et al p.4). This is a higher percentage than girls from all other racial backgrounds. For example, among white girls aged 2-19, 13.5% were considered obese (Hales et al p.4). Black girls also had a disproportionately high rate of obesity when compared to black boys; 19% of black boys were labeled obese in the same year. The high rate of obesity

among black girls could be because of distrust of medical doctors, unhealthy coping strategies for chronic stress, lack of participation in sports, and a lack of access to healthy foods.

Figure 4. Prevalence of obesity among youth aged 2–19 years, by sex and race and Hispanic origin: United States, 2015–2016



<sup>1</sup>Significantly different from non-Hispanic Asian persons.

<sup>2</sup>Significantly different from non-Hispanic white persons.

<sup>3</sup>Significantly different from non-Hispanic black persons.

NOTE: Access data table for Figure 4 at: [https://www.cdc.gov/nchs/data/databriefs/db288\\_table.pdf#4](https://www.cdc.gov/nchs/data/databriefs/db288_table.pdf#4).

SOURCE: NCHS, National Health and Nutrition Examination Survey, 2015–2016.

Image 1. Prevalence of obesity among youth aged 2-19 years, by sex and race origin. 2015-16. CDC.

Even though doctors have to take an oath called the Hippocratic Oath while becoming a doctor, many doctors still have implicit bias when it comes to their patients. The Hippocratic Oath is that physicians are supposed to treat their patients equally and respectfully. In the oath physicians also promise to treat them to the best of their ability (Chapman et al. p. 1504). However, many physicians do not know that they have implicit biases. Multiple studies found that medical residents had a pro-White bias (Chapman et al. p. 1505). This can have negative impacts on Black girls in particular. Chapman et al. found that black female patients who went to a doctor with a pro-White bias reported being less happy with their visits, and they were less likely to go back to the doctor (p. 1506). This is important because they feel that doctors will not give them their proper check up or diagnostics. This idea has some truth behind it. Studies have shown that doctors prescribe less pain medication to black patients because they assume black people are overreacting their pain, so they will under-diagnose them (Chapman et al.). If black women do not feel comfortable going to their doctor, they may not get treatment for preventable

diseases. This means that they could get sicker when they did not have to. It is especially important that black women and girls feel comfortable going to a doctor because they may have more physical problems due to chronic stress.

Chronic stress has a disproportionate impact on black girls. Jackson et al. found that although Black Americans face more stress on average than White Americans, they do not have higher reported rates of depression (p. 933). However, adolescent females did self-report higher rates of depression than teenage boys (Piko, p. 7). Jackson et al. hypothesized that this was because Black Americans, especially Black women, cope with their stress using unhealthy behaviors. Black women have the highest rates of obesity at young ages. Jackson et al. believe that this is because Black boys are more likely to cope with stress by playing sports, while girls do not have as many opportunities to play sports (p. 937).

Another factor that may lead Black Americans to have higher obesity rates is a lack of access to healthy foods. Walker et al. stated that, “people tend to make food choices based on the food outlets that are available in their immediate neighborhood” (p. 877). Low-income neighborhoods have more fast-food restaurants and corner stores, which do not offer as many fresh produce or healthy options (Walker et al., p. 877). Additionally, large supermarkets that carry a wide variety of healthy options have done most of their expansion in suburbs (Walker et al., p. 876). These are available to people living in the suburbs, who are disproportionately white. If not, cars are needed to access them, which could limit people living in urban areas, who are disproportionately black (Walker et al., p. 877). Even when there are supermarkets selling healthy food in urban areas, the food is generally more expensive. One reason for this is an increase in theft and crime, which causes stores to raise their prices (Walker et al., p. 880). Another is because there is a high demand for healthy food, but not a lot of supply, which means there’s not much competition for the stores. If supermarkets know that they are people’s only option, they can increase their prices (Walker et al., p. 881).

### **What Has Been Done to Address Obesity Among Kids and Adolescents**

Schools have taken some steps to address obesity, however, these efforts have generally not been successful. One example of this is school-mandated Body Mass index screenings. Body Mass Index (BMI) is a way that some schools measure whether a child is a healthy weight or not. To get a person’s BMI score, doctors simply compare a child’s height to their weight, and categorize them as being underweight, healthy, overweight, or obese. Seven states require that schools send home BMI screenings for all students (Kaczmariski et al., p. 797). In Florida, these are required as early as first grade (Kaczmariski et al., p. 798). The

purpose of BMI screenings is to be a call-to-action for parents to help their kids maintain a healthy weight. However, BMI screenings have not worked out the way school officials planned them to.

## BMI Chart

WEIGHT lbs	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	
kgs	45.5	47.7	50.0	52.3	54.5	56.8	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75.0	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5	97.7	
HEIGHT in/cm	Underweight					Healthy					Overweight					Obese					Extremely obese				
5'0" - 152.4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
5'1" - 154.9	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	36	37	38	39	40	
5'2" - 157.4	18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	33	34	35	36	37	38	39	
5'3" - 160.0	17	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	32	33	34	35	36	37	38	
5'4" - 162.5	17	18	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	31	32	33	34	35	36	37	
5'5" - 165.1	16	17	18	19	20	20	21	22	23	24	25	25	26	27	28	29	30	30	31	32	33	34	35	35	
5'6" - 167.6	16	17	17	18	19	20	21	21	22	23	24	25	25	26	27	28	29	29	30	31	32	33	34	34	
5'7" - 170.1	15	16	17	18	18	19	20	21	22	22	23	24	25	25	26	27	28	29	29	30	31	32	33	33	
5'8" - 172.7	15	16	16	17	18	19	19	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	32	32	
5'9" - 175.2	14	15	16	17	17	18	19	20	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	31	
5'10" - 177.8	14	15	15	16	17	18	18	19	20	20	21	22	23	23	24	25	25	26	27	28	28	29	30	30	
5'11" - 180.3	14	14	15	16	16	17	18	18	19	20	21	21	22	23	23	24	25	25	26	27	28	28	29	30	
6'0" - 182.8	13	14	14	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	29	
6'1" - 185.4	13	13	14	15	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	
6'2" - 187.9	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	
6'3" - 190.5	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	26	
6'4" - 193.0	12	12	13	14	14	15	15	16	17	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	

Image 2. Body Mass Index Chart.(Brodwin p.1)

A study by Kaczmariski et al. explored whether or not these screenings had positive effects. They argued that the screenings turned out to be a really bad idea because the children’s parents ended up overreacting to the results. Parents of normal weight children were more likely to take their child to the doctor to monitor their weight, which caused some kids to think negatively about their own weight which could affect their self-esteem (Kaczmariski et al., p. 800). Additionally, the screenings caused parents of overweight children to push their kids to start dieting, restrict their children’s diets, or negatively comment on their child’s weight. These things can cause children to have poor relationships with food and their bodies, and lowers children’s self-esteem (Kaczmariski et al., p. 800). Finally, it has not been proven that these

notifications do anything to lower obesity rates among children (Kaczmarski et al., p. 798). Instead, the screenings seem to just lower children's self-esteem. Teenagers in particular record lower self-esteem when presented with their BMIs than adults do (Wardle & Cook, p. 425). This is true even among kids who fall into a normal weight category (Wardle & Cook, p. 426). This indicates that teenagers' mental health is impacted by BMI screenings. Finally, BMI is not a good measure of whether or not a person is healthy. It is not good because a muscular person's BMI may say that they are overweight simply because of their muscle mass, not because they are overweight (Brodwin p.3).

### **Recommended Programs to Promote Positive Physical and Mental Health**

In order to promote healthier children and teenagers, it is important that communities consider the ways in which mental and physical health are related to one another. There are promising steps that everyone in communities can take to improve both the physical and mental health of all kids, and especially black girls.

One way to improve black girls' physical health is to address implicit bias in the medical system. Doctor and patient relationships are important because if a doctor has a rude opinion about their patient, that said patient will be reluctant to go back to the doctor because of how they were being treated. An implicit bias is when a doctor may hold an opinion of a patient without actually recognizing that they have. This disproportionately hurts black patients. Patients feel more anxious and confused if they see evidence of doctors' implicit biases (DeAngelis, 2019). To help address this, medical schools should require diversity training (DeAngelis, 2019). People are also trying to make medical students aware of how common racial biases are, and try to combat their own biases by making them less important. Doctors should also focus on seeing patients as individuals rather than stereotypical members of a group (DeAngelis, 2019). Doing all of these things are important because if a doctor can a patient feel welcome when they are coming in for a check up, or a medical problem, they will feel more comfortable and not feel like they are being targeted because of their race, which may lead them to receiving more routine check-ups.

In addition to improving medical care, it is also important that teenage girls develop a healthy idea of what normal, strong bodies look like. Body positivity is so important because it gives people confidence in themselves and keeps them from believing in negative things others have to say. One way that girls form ideas about their bodies is through famous influencers who give people motivation, which can be positive or negative. More celebrities and models are trying to show people what normal looks like, and this gives a new hope that society is leaning



away from solely embracing skinny girls (Baker 1). Especially on social media, it is important that girls see body diversity and what a range of healthy and normal can look like (Baker 2). Baker argues that, “repeated exposure to images of larger bodies can help break our fixation on the singular skinny idea. A UK study found that showing participants a “visual diet” with more images of larger figures made them view these bodies more favorably” (Baker 2). This means that simply seeing more images of diverse body types makes young people feel better about a wide range of bodies (Baker 2).

Some people may say that obesity should not be celebrated because it is viewed as an unhealthy lifestyle. However, obesity does not always mean unhealthy. BMI is a flawed way of measuring health, and those labeled obese may simply be more muscular or built in a different way. Additionally, by showing a wide variety of body types, girls can have a more realistic vision of what healthy looks like. This could have a positive impact and reduce eating disorders, which are harmful for a person’s body and mind. In a study by Wardle and Cook, they highlighted that black girls actually already have some more diverse examples of bodies in their social media pages than white girls tend to have. Black girls were more likely to follow celebrities and athletes with larger bodies, and some who would be considered plus-size, whereas many white girls followed exclusively skinny models or celebrities (Wardle & Cook). Seeing different role models impacted their ideas on what their ideal weight should be (Wardle & Cook). Finally, shaming people does not make them healthier, and in fact hurts their mental health. If people have better self-perception of their health, they actually end up with better mental health and physical health (Walker).

Another way that the community could help improve the physical and mental health of black girls and teens is by making athletic opportunities more available to them. Girls and women of color have less access to organized sports than others do. 51% of African American parents and 49% of Hispanic parents report that they see more opportunities for boys to be involved in sports than girls (Women’s Sports Foundation). Consequences of not getting the proper amount of exercise include greater rates of chronic illnesses, higher prevalence of heart attack, high blood pressure, stroke, and finally, higher chance of obesity and diabetes. One reason that girls may not have as much access to sports as boys is because of unsupportive neighborhood environments. This could be because of families who do not encourage their girls to play sports, but studies have also shown that girls in urban environments may be more likely to take on caretaking roles for younger family members or get jobs to supplement their family’s income (Slater 1). This would limit girls’ ability to play sports themselves. Unsuitable neighborhoods for girls’ sports could also refer to unsafe neighborhoods (Slater 1). Girls may

not want to go out and be active because they are scared of their neighborhood not being safe enough for them. In these environments, boys were more likely to participate in physical activities than girls were (Slater).

Black women like Serena Williams becoming more prominent in the sports world helps show that girls can be anything, especially great athletes. Black female athletes can also be a good role model for girls to look up to; they show that healthy bodies can look different from each other. It is critical that there are more options for black girls to get involved in sports at a young age. This could be at the neighborhood level so that kids have easy access to facilities by them being close to their homes. Neighborhoods could also invest in staffed or patrolled community centers, which may make girls feel safer than outdoor, open courts. Schools, where all students attend, can also help promote physical education. For example gym class should have some kind of activity where girls will feel comfortable playing and get their exercise done at the same time.

## **Conclusion**

Poor physical health can lead to poor mental health, and this can have particularly negative impacts on teenage girls. Having poor physical health is likely to lead to lower self-esteem, and this low self-esteem not only negatively impacts mental health, but also leads to even worse physical health outcomes. Black girls and teens are particularly at-risk for poor physical health for several reasons. This could be due to multiple reasons, including engaging in unhealthy coping mechanisms to address chronic stress they face, a lack of participation in organized sports, and less access to health insurance and therefore less access to quality medical care. Schools have unsuccessfully tried to address physical problems through BMI screenings, but they need to change their strategies in order to promote both better physical and mental health. Instead, a community effort is needed. Providing better sports options for girls in all neighborhoods, promoting body positivity, and improving doctor patient relationships are all positive steps that could benefit the overall health of teenage girls.

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