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STUDENT NAME __IRMA OROZCO__

SEMESTER ENROLLED __SPRING 2006__

TITLE OF PROJECT __THE RELATIONSHIP BETWEEN PERCEIVED AND IDEAL BODY SIZE AND BODY MASS INDEX AMONG 9th GRADE STUDENTS IN AN URBAN HIGH SCHOOL.__

NAME OF JOURNAL __THE JOURNAL OF SCHOOL NURSING__

The project and manuscript have been successfully completed and meet the standards of the School of Nursing at San Jose State University. The project demonstrates the application of professional knowledge, clinical expertise, and scholarly thinking. An abstract of the project and two copies of the manuscript are attached.

Virginia Young Cureton   __5/17/2006__

ADVISOR'S SIGNATURE   **DATE**

Mercy Wee   __5/17/2006__

ADVISOR'S SIGNATURE   **DATE**

Please submit this form to the Graduate Coordinator. Attach abstract, two copies of the manuscript, and documentation of submission to the journal (i.e., postal receipt).

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THE RELATIONSHIP BETWEEN PERCEIVED AND IDEAL BODY SIZE AND

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SCHOOL

A Research Project

Presented to the Faculty of the School of Nursing

San Jose State University

In Partial Fulfillment

Of the Requirements for

The Degree of Master of Science

By

Irma Orozco, RN, BS

Virginia Young-Cureton, RN, DPH

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May 17, 2006

THE RELATIONSHIP BETWEEN PERCEIVED AND IDEAL BODY SIZE AND BODY MASS INDEX AMONG 9th GRADE STUDENTS IN AN URBAN HIGH SCHOOL

ABSTRACT: This study examined the perceptions of actual and ideal body size and how it related to body mass index in 82 ethnically and socioeconomically diverse 9th-graders from an urban high school. The height and weight were measured, and BMI was calculated for each of the 82 participants. Using the Childress Silhouette Scale (CSS), each student self-reported Perceived Actual Self Image (PASI) and Perceived Ideal Self Image (PISI). The CSS was modified to offer 7 figure drawings that illustrated various examples of underweight, healthy weight, overweight, and obese. Results showed that 54% of the students had a healthy weight, 21% were overweight, and 15% were obese. The students' PASI and PISI showed a small positive correlation. Students with a higher BMI had a greater tendency to choose a higher PASI and PISI. The main difference between boys and girls regarding perceived ideal self-image (PISI) was that girls chose an underweight figure whereas boys chose a healthy weight figure.

Introduction

Juvenile obesity is a serious health problem in the United States today because so many overweight children are presenting to doctors' offices with secondary health problems related to obesity (Holcomb, 2004). According to Holcomb (2004), some of these health problems include hypertension, diabetes, left ventricular hypertrophy, metabolic syndrome, asthma, obstructive sleep apnea, orthopedic problems with weight bearing joints, and psychosocial problems due to poor self-esteem. The American Obesity Association identifies that approximately 30.3% of children ages 6 to 11 years are overweight and 15.3% are obese. As for adolescents ages 12 to 19 years, 30.4% are overweight and 15.5% are obese (Ogden, Flegal, Carroll, & Johnson, 2002).

When body mass index (BMI) results of children from the 1988-1994 National Health and Nutrition Examination Survey (NHANES) were compared to the 1999-2002 NHANES, they showed a 45% increase in overweight children in the United States. This significant information has proved that obesity among children is not decreasing or even slowing down, but increasing at an alarmingly steady rate. In addition, data from the 1999-2002 NHANES bring to attention that the number of overweight adolescents is at a dangerously high risk of becoming overweight adults. Furthermore, Dalton and Watts (2002) agree that the accelerating rate of childhood obesity in the United States indicates that the current generation of children will grow into the most overweight generation of adults in history.

Body dissatisfaction is defined as the difference between perceived actual and perceived ideal body size (Robinson, Chang, Haydel & Killen, 2001). According to Jones (2004), body image satisfaction during adolescence has received attention because

of its significant role as a risk factor in predicting depression, eating disorders, and low self-esteem. With past studies, it has been found that Latina and African American girls had equal or greater concerns regarding body dissatisfaction compared to White and Asian American girls (Robinson, et al., 2001). In regards to the male population, adolescent boys in general are less concerned about body dissatisfaction than girls. However, the primary issue in regards to body dissatisfaction in boys is muscularity or the need to look "buff" (Jones, 2004). Overall, "these findings suggest that body dissatisfaction is prevalent across sex, ethnicity, and socioeconomic class" (Fisher, Lange, Young-Cureton & Canham, 2005).

With juvenile obesity on the rise, results from a systematic review of controlled trials are showing that interventions utilized to prevent juvenile obesity are displaying unsuccessful outcomes in maintained weight loss (Tyler, 2004). This may be due largely in part to differences in perceived health status among the different ethnic groups and diverse economic levels. Dalton and Watts (2002), state that mothers who are unable to recognize that their overweight child is overweight have less education than mothers who are able to recognize that their overweight child is overweight. Mothers with overweight children may believe that their child will outgrow his/her weight or that a bigger child represents good health and parental competence. Low income mothers who describe their child as "thick" or "solid" show little concern for the risk of obesity as long as their child has a good appetite, is active, and eats well. As a result, body dissatisfaction among the different ethnic groups and socioeconomic classes should be investigated to encourage successful interventions in juvenile weight loss and to promote the outcome of a healthy weight.

differences in perceptions of body size, weight concerns, and weight control practices between 4th-grade and 7th-grade students in South Carolina. The sample included a total of 1,597 children, 53% were white, 52% were female, and 45% were 4th-graders. Findings indicated that grade level, gender, race, and SES are influential factors early in a child's sociocultural development. Children had perceptions of what the ideal adult body size should be and what the ideal body size for the opposite gender should be. For ideal adult body size, males chose a larger body image than females. Males compared to females, exhibited less concern for weight, family/peer concerns for weight, and the perception for the need to have to lose weight. Females with high SES chose a smaller ideal male body size image than females with low SES. More females with high SES, were more prone to wanting to lose weight than females with low SES. The findings strengthened the importance of beginning health and wellness education efforts early in childhood as well as taking racial, gender, age, and SES disparities into account.

Robinson, et al. (2001) examined the influences of sex, ethnicity, and socioeconomic status on overweight concerns, body dissatisfaction, desired body shape, and weight control behaviors in a large, ethnically, and socioeconomically diverse school-based sample of 3rd-grade children. Results indicated that 26% of boys and 35% of girls wished to lose weight while 17% of boys and 24% of girls admitted to dieting to lose weight. In regards to girls, Latinas and African Americans had more overweight concerns than Asian Americans and Filipinas, and Latinas displayed more concern in being overweight than whites. Greater body dissatisfaction was reported more among white and Latina girls compared to Asian American girls. As for socioeconomic status (SES), higher SES African American girls reported more overweight concerns than lower

SES African American girls; however, higher SES white girls reported less overweight concerns than lower SES white girls.

Tyler (2004) assessed actual and perceived health status of overweight Mexican American children between the ages of 7 and 12 years in a school-based health center located in Texas. She also wanted to explore their interests in making positive lifestyle changes in order to promote a healthier weight. The results of this descriptive non-experimental design study showed that a majority of the children were able to admit that they were overweight and that they wanted to make changes in their body size along with the assistance of family members. However, a significant finding was that a majority of the children who were in the 97th BMI percentile believed that they were healthy or even healthier than other children. The findings of this study indicated that cultural values and beliefs of weight and health may explain the children's perceptions that a large body size is consistent with health. Because conditions such as increased weight, elevated blood pressure and cholesterol, and acanthosis nigricans do not cause functional limitations in daily activities, the children may not view them as problems.

A study conducted by Fisher, et al. (2005) examined the relationship between perceived actual and perceived ideal body size image along with body mass index among 43 Hispanic children in the 3rd-grade who came from low socioeconomic backgrounds. The students' BMI's were calculated along with the students' responses to their perceived ideal and perceived actual body size using Collins' (1991) Pictorial Instrument Scale of seven child silhouettes that ranged from emaciated to overweight. Fisher's study found that a majority of the students chose a healthy body weight for both their perceived actual and ideal body sizes. Surprisingly, more boys than girls chose a thinner body size to

represent their perceived ideal weight. There was a small positive correlation between the perceived actual self-image and body mass index. The most significant finding from this quantitative non-experimental design study was that Hispanic children were at a much greater risk for obesity than previously believed.

Methodology

The study employed a quantitative non-experimental design. The school site administrator, the assistant superintendent of the high school district, and the San Jose State University Human Subjects - Institutional Review Board approved the study. A detailed description of the study with an attached consent form was distributed to both the 9th-grade students and their parents in English. The researcher was available by phone or electronic mail to answer any questions or concerns from the parents about the study. Student participation required a signed consent from the parents and a consent signed by the student that was returned to the researcher prior to the study. The study took place at one urban high school in central California during school hours. The setting was attractive because of the diverse ethnic and socioeconomic backgrounds among the student population.

Participants

The accessible population consisted of 134 9th-grade males and females. Criteria for involvement in this study were: (a) enrolled in the 9th-grade in the central California high school, (b) students' desire to participate, and (c) parental permission. Of the 134 possible participants, 84 students returned signed consent forms that met the criteria. Of the 84 returned signed consent forms, only 82 students actually participated because 2

students were absent the day data were collected. The gender breakdown of the 82 participants included 41 males (50%) and 41 females (50%).

Instruments

A digital scale was used to measure the weight of each participant in pounds to the nearest whole number and a tape measure attached to a wall was used to measure the height of each participant in inches to the nearest whole number. Using the information on height and weight, the BMI was calculated. The BMI can be calculated by weight in pounds divided by height in inches squared and then multiplied by 703. The Centers for Disease Control and Prevention (CDC) define BMI for older children and teens (2000) as follows:

1. Underweight: BMI < 18.5
2. Healthy Weight: BMI = 18.5 – 24.9
3. Overweight: BMI = 25 – 29.9
4. Obesity: BMI of 30 or greater

The third instrument was the Childress Silhouette Scale (CSS). According to Childress, Brewerton, Hodges, and Jarrell (1993), the CSS is a scale designed for children. It consists of eight female and eight male figure drawings. The figure drawings were labeled one through eight with figure one being the most skinny and figure eight being the most obese. Childress, et al. did not specify the figure drawings as underweight, healthy weight, or overweight. Permission to use the CSS was granted (Childress, Brewerton, Hodges, & Jarrell, 1993). For the purposes of this study, a slight modification was made by deleting figure six from the original eight figures in order to simplify the decision making process for the participants and to provide a shorter

response time. Therefore, 2 versions of the CSS were used. One version had each of the 7 female figures numbered 1 through 7 with figures 1 – 3 being underweight, figures 4 – 5 being healthy weight, figure 6 being overweight, and figure 7 being obese. The second version had each of the 7 male figures numbered 1 through 7 with figures 1 – 3 being underweight, figures 4 – 5 being healthy weight, figure 6 being overweight, and figure 7 being obese (See Figure 1).

Data Collection

The researcher worked closely with the high school nurse and the health education instructor. Data were collected over a period of two designated days arranged by the school nurse during school hours in the health education classroom. In a confidential area, the same digital scale was used to measure each participant's weight in pounds to the nearest whole number. Participants were weighed fully clothed. Excess outerwear such as a thick, heavy jacket was removed. However, the removal of shoes was an option for the participants due to personal preference. Also in a confidential area, the same tape measure was used to measure each participant's height in inches to the nearest whole number. After recording weights and heights, each participant's individual BMI was calculated.

The last activity for data collection involved determining the participants' Perceived Actual Self Image (PASI) and Perceived Ideal Self Image (PISI) using the revised 7 figure Childress Silhouette Scale (CSS). There were two versions made of the CSS. One version was copied on pink paper and had each of the 7 female figure drawings numbered 1 through 7 with figure drawing 1 being the most skinny and figure drawing 7 being the most obese. The second version was copied on blue paper and had

each of the 7 male figure drawings numbered 1 through 7 with figure drawing 1 being the most skinny and figure drawing 7 being the most obese. Each participant met with the researcher in a private area and was asked two questions. The first question was: Which figure most looks like you? Depending upon the gender of the participant, the researcher placed the gender appropriate version in front of the participant and he/she circled the number under the chosen figure with a provided red marker. The second question was: Which figure do you wish you looked like? With the same gender appropriate version, the participant circled the number under the chosen figure with a provided blue marker.

Each participant was assigned a random number thus protecting confidentiality. The collected data (height, weight, BMI, PASI and PISI) were kept in a locked cabinet in the researcher's home. The only people who had access to the data were the researcher, the school nurse, and the statistician.

Results

For the purposes of this study, all results were rounded to the nearest whole number. The mean BMI for boys was 24 and the mean BMI for girls was 25. Fifty-four percent of boys and girls were in the healthy BMI range, 11% were underweight, 21% were overweight, and 15% were obese (Table 1). When students were asked to choose their actual self image, 12% chose underweight, 62% chose healthy weight, and 26% chose overweight (Table 2). With the exception of the underweight category, the perceived actual self image (PASI) results did not correlate with the BMI results. The mean perceived actual self-image (PASI) for both boys and girls was around 5. When students were asked to choose their perceived ideal self-image (PISI), 35% chose underweight, 62% chose healthy weight, and 2% chose overweight (Table 3).

Calculation of a Pearson Product Moment Correlation Coefficient showed significance in the relationship among the PISI, PASI, and BMI. *P* values of less than 0.01 were set as significant. The students' PASI and PISI showed a small positive correlation ($r = 0.54$, $p < 0.01$). In other words, students with a higher BMI had the tendency to choose a higher PASI and PISI. There was also a small positive correlation between the PASI and BMI ($r = 0.62$, $p < 0.01$). There was no significant correlation between BMI and PISI (Table 4). In order to determine if there were any differences between boys and girls in choosing their perceived ideal self image, the results of the t-tests did show a statistical significance in PISI ($t = 3.097$, $df = 80$, $p < 0.01$). Girls had a higher tendency to choose a PISI that was underweight (mean = 3.54) compared to boys who chose a healthy weight (mean = 4.10) for their perceived ideal self image (PISI).

Discussion

The major findings of this study suggest that obesity among children continues to increase at an alarmingly steady rate. According to the 2003 – 2004 National Health and Nutrition Examination Survey (NHANES), 17% of children and adolescents ages 2 – 19 years are overweight. Results of this study showed that 21% of the 9th-grade participants were overweight and 15% were obese. Not only was there a 4% increase in overweight status in this study compared to that of the 2003 – 2004 NHANES result, but children were also in the obese status category. A disturbing revelation in this study was that 5% of boys chose an overweight figure for their PISI. This result could be a startling indication that students are slowly starting to develop the notion that being overweight is acceptable. On the other hand, it is surprising to note that with the growing prevalence of

obesity in today's society, 11% of the students were in the underweight BMI category and 12% of students chose an underweight figure for their PASI.

Although only 54% of the students met the healthy weight BMI category, 62% of the students chose a healthy weight figure drawing as their PASI. This result demonstrates that a majority of the students thought that they had a healthy body weight. A similar finding was expressed in Tyler's (2004) study that children in the 97th BMI percentile, which is considered overweight, perceived themselves as healthy or even healthier than most other children. It was surprising to note that only 10% of girls met the underweight BMI category, but 51% of girls chose an underweight figure drawing as their PISI. This result reinforces the notion for females to maintain a slim body type. Gardner, et al. (1999), also reports that girls want to be smaller than their perceived size. The major difference in this study between the boys and girls with regards to PISI is that girls had a higher tendency to choose an underweight figure drawing as their PISI whereas boys chose a healthy weight figure drawing. Based on the CSS, the mean PISI for girls was 3.54 and the mean PISI for boys was 4.10.

There was a significant correlation between the students' PASI and PISI in that 62% of students chose a healthy weight figure drawing for both their actual and ideal self-images. The mean PASI for both boys and girls was around 5 which is representative of a healthy weight figure. The mean BMI for boys was 23.5 and the mean BMI for girls was 24.6 which falls within the healthy weight BMI category of 18.5 – 24.9 (CDC, 2000).

In comparison with the study done by Fisher, et al. (2000), there were more differences than similarities. Fisher's sample population focused primarily on Hispanic

3rd-grade children. Her sample population had 0% in the underweight category. This study, which was comprised of a diverse ethnic mix of 9th-grade students, categorized 11% of the participants as underweight based on BMI. Fisher's study results had 30% of participants as overweight while this study revealed that 21% were overweight and 15% were obese. With regards to PISI, girls had a greater tendency to choose an underweight figure drawing for their PISI while in Fisher's study, it was the boys who had a greater tendency to choose an underweight figure drawing for their PISI.

Although this study included an ethnically and socioeconomically diverse student population, the methodology of the research was unable to show the prevalence of juvenile obesity towards one specific ethnic population or one specific socioeconomic group. In the study by Gardner, et al. (1999), results showed that there were no differences in PASI and PISI between the white and Hispanic children. However, Gardner, et al. did not have equal numbers of white and Hispanic participants in the sample size. The breakdown of the 189 children included 44 Hispanic and 145 white children. Furthermore, socioeconomic status was not considered. The Hispanic children who participated in this study could have come from a high socioeconomic background or come from the same level socioeconomic background as the white children. Just as in study done by Robinson, et al. (2001), it would have been interesting to have examined in this study how sex, ethnicity, and socioeconomic status influenced overweight concerns, body dissatisfaction, body mass index, perceived actual self image, and perceived ideal self image.

Limitations

Study limitations include: (a) a convenience sample rather than a random sample, (b) a small sample size, (c) a possible language barrier, (d) the figure scale used to measure PASI and PISI, and (e) outside influences. Convenience sampling was used for this specific study and can not be generalized for other samples or populations. Although the participant population was ethnically and socioeconomically diverse, the small sample size of only 82 students may have resulted in less generalizable estimates of the relationship between the PASI, PISI, and BMI. The participants spoke English, but their fluency in English as well as their parents' fluency in English was not determined. One possible reason for only having had 84 consent forms returned to the researcher out of 134 distributed was that the participants' parents may not have understood the description of the study. In addition, participants who may not be as fluent in English may not have fully understood the PASI and PISI questions. The CSS had no facial characteristics except for a nose in the female figure drawings and a nose and eyes for the male figure drawings. The participants may have had difficulty in choosing an accurate figure drawing to determine their PASI and PISI because the figures did not resemble life-like humans. Another factor that may have influenced results was that the participants may have answered as they believed the researchers, their parents, or their peers wanted them to, rather than how they actually perceived their own actual and ideal selves. Other aspects that may have affected study results are the time of day students were weighed and the amount of clothing worn. The students were weighed in the morning and some students may have just eaten breakfast or may not even had anything to eat so early in the day. Some students had on more articles of clothing than others and some students chose

to take off their shoes while others were adamant about keeping them on while stepping onto the scale.

Possible suggestions for future research include accommodating students and parents who are not fluent in English by providing information in their native language, utilizing a figure assessment tool that is more representative of the physical traits of the students' age group, and using a four figure drawing assessment tool that best represents the underweight, healthy weight, overweight, and obese figure categories. Another recommendation would be to work with more than one school with student populations that are also diverse socioeconomically and ethnically to obtain a greater sample population.

Implications For School Nurse Practice

Juvenile obesity is on the rise and continues to climb at a steady rate. The school environment is the perfect atmosphere in which children will benefit most from interactions of healthier eating choices and increased physical activity. The reason the school setting is ideal is because children are at school 30 to 40 waking hours each week; it is more time than in any other setting. Education regarding healthier eating habits, limiting the intake of high fat and sugar foods, ideal weight and BMI, physical activity, and the importance of less time spent watching television and playing video games can be incorporated into the school curriculum. In health or physical education classes, students can be screened for their weight, height, and have their BMI calculated. This important piece of information can then be sent home to parents along with appropriate healthy weight standards for height and healthy BMI categories so that they are informed of their child's health status.

Not only is it crucial to educate children on obesity prevention, but to also dissuade children, especially young females, on the importance of trying to be "model-thin" which is just as unhealthy as being overweight. Most importantly, culturally appropriate and specific interventions should be implemented. Increasingly overweight children may be related to cultural differences in perceived health status and cultural health practices as well as socioeconomic status. For instance, past research studies prove that the Hispanic population is one of the most vulnerable cultural groups for juvenile obesity. Some Hispanic children, such as the sample population studied in Texas, believe that being overweight was representative of good health. With the collaboration of school administrators, school nurses have significant roles to help these children and their families learn to live healthier lifestyles by training other school personnel in teaching health education classes, starting workshops or support groups, or by organizing after school activities, such as sports programs or dance programs.

References

Adams, K., Sargent, R. G., Thompson, S. H., Richter, D., Corwin, S. J., & Rogan, T. J.

(2000). A study of weight concerns and weight control practices of 4th and 7th

grade adolescents. *Ethnicity & Health, 5*, 79-94.

American Obesity Association (AOA). (2005). AOA fact sheets. Retrieved December 8,

2005, from the World Wide Web: http://www.obesity.org/subs/fastfacts/

obesity_youth.shtml

Centers for Disease Control and Prevention (CDC). (2000). BMI for children and teens.

Retrieved December 7, 2005, from the World Wide Web: http://www.cdc.gov/

nccdphp/dnpa/bmi-for-age.htm

Centers for Disease Control and Prevention (CDC). (2004). Overweight and obesity:

Obesity trends. Retrieved December 7, 2005, from the World Wide Web:

http://www. cdc.gov/nccdphp/dnpa/obesity/trend/index.htm

Childress, A. C., Brewerton, T. D., Hodges, E. L., & Jarrell, M. P. (1993). The kids'

eating disorders survey (KEDS): A study of middle school students. *Journal of*

the American Academy of Child and Adolescent Psychiatry, 32, 843 – 850.

Collins, M. E. (1991). Body figure perceptions and preferences among preadolescent

children. *International Journal of Eating Disorders, 10*, 199-208.

Dalton, S. & Watts, S. O. (2002). Defining childhood obesity: Revised 2000 growth

charts, body mass index, and public perceptions. *Top Clinical Nutrition, 17*, 7-20.

Fisher, A., Lange, M. A., Young-Cureton, V., & Canham, D. (2005). The relationship

between perceived and ideal body size and body mass index in 3rd grade low

socioeconomic hispanic children. *The Journal of School Nursing, 21*, 224-228.

Gardner, R. M., Friedman, B. N., & Jackson, N. A. (1999). Hispanic and white children's judgments of perceived and ideal body size in self and others. *The Psychological Record, 49*, 555-564.

Holcomb, S. (2004). Obesity in children and adolescents: Guidelines for prevention and management. *The Nurse Practitioner, 29*, 9-15.

Jones, D. C. (2004). Body image among adolescent girls and boys: A longitudinal study. *Developmental Psychology, 40*, 823-835.

National Center for Health Statistics (NCHS). (2002). Prevalence of overweight among children and adolescents: United States, 1999-2002. Retrieved December 8, 2005, from the World Wide Web: http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm

Ogden, C. L., Flegal, K. M., Carroll, M. D., & Johnson, C. L. (2002). Prevalence and trends in overweight among U.S. children and adolescents, 1999-2000. *The Journal of the American Medical Association, 288*, 1728 – 1732.

Robinson, T. N., Chang, J. Y., Haydel, K. F., & Killen, J. (2001). Overweight concerns and body dissatisfaction among third grade children: The impacts of ethnicity and socioeconomic status. *Journal of Pediatrics, 138*, 181-187.

Tyler, D. (2004). Overweight and perceived health in Mexican American children: A pilot study in a central Texas community. *The Journal of School Nursing, 20*, 285-292.

Table 1. Body Mass Index for Children and Teens (Centers for Disease Control and Prevention, 2000)

	Boys % (n = 41)	Girls % (n = 41)	All Students % (n = 82)
Underweight	12 (n = 5)	10 (n = 4)	11 (n = 9)
Healthy Weight	56 (n = 23)	51 (n = 21)	54 (n = 44)
Overweight	20 (n = 8)	22 (n = 9)	21 (n = 17)
Obese	12 (n = 5)	17 (n = 7)	15 (n = 12)

Note: Percentages may not equal 100% due to rounding.

Table 2. Perceived Actual Self Image (PASI)

	Boys % (n = 41)	Girls % (n = 41)	All Students % (n = 82)
Underweight	12 (n = 5)	12 (n = 5)	12 (n = 10)
Healthy Weight	66 (n = 27)	59 (n = 24)	62 (n = 51)
Overweight	22 (n = 9)	29 (n = 12)	26 (n = 21)

Table 3. Perceived Ideal Self Image (PISI)

	Boys % (n = 41)	Girls % (n = 41)	All Students % (n = 82)
Underweight	20 (n = 8)	51 (n = 21)	35 (n = 29)
Healthy Weight	76 (n = 31)	49 (n = 20)	62 (n = 51)
Overweight	5 (n = 2)	0 (n = 0)	2 (n = 2)

Note: Percentages may not equal 100% due to rounding.

Table 4. Correlation – Raw Body Mass Index (BMI) with Perceived and Ideal Self Image (n = 82)

	BMI Raw Score	Perceived Ideal Self Image
Perceived Ideal Self Image	.48*	
Perceived Actual Self Image	.62*	.54*

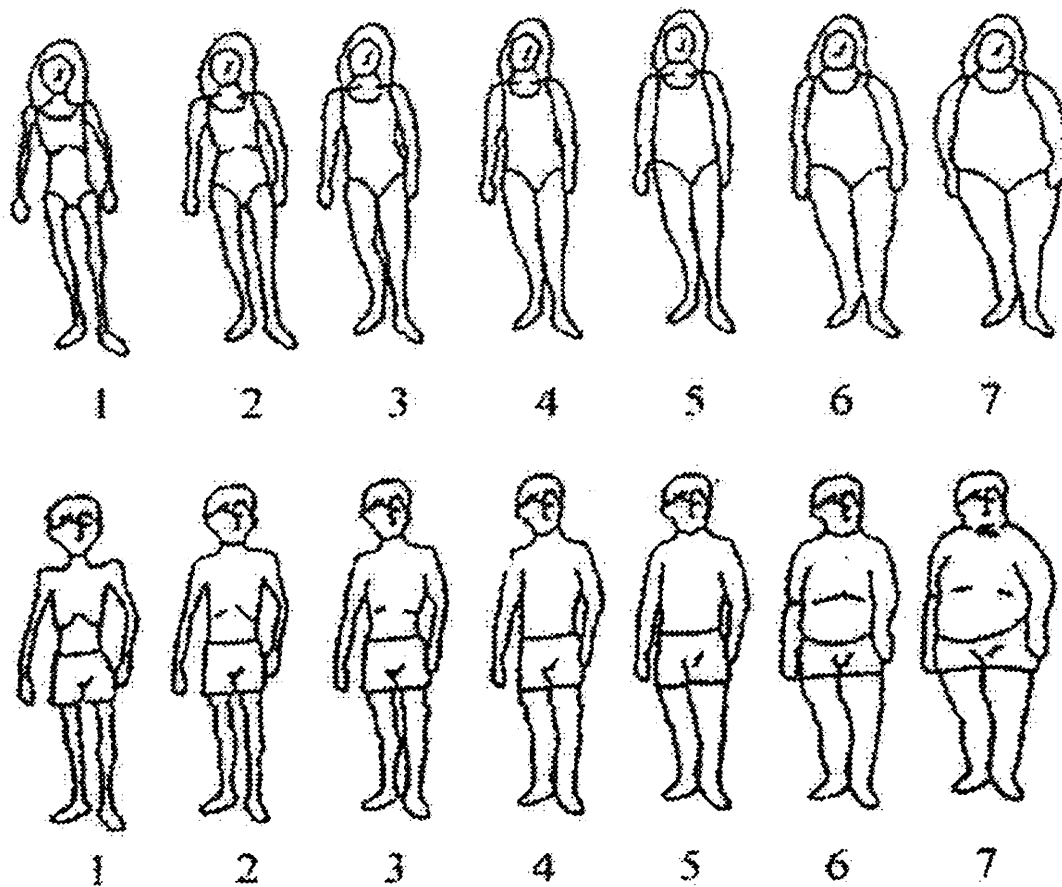* Significant at the .01 level (two-tailed)

Figure 1. Childress Silhouette Scale (CSS). Numbers for figure drawings 1, 2, and 3 are underweight; 4 and 5 are healthy weight; 6 is overweight; and 7 is obese (Childress, Brewerton, Hodges, and Jarrell, 1993; used with permission)