



Academic Sports Scholars

"A COMPARATIVE STUDY OF SELF CONCEPT BETWEEN NORMAL AND OBESE GRADUATES"

¹Ashwin.R and ²Namita. Sarang

¹Asst Prof. Dept of Physical Education and sports .Gogte college of commerce, Belgaum.

²Namita. Sarang Physical Education Director, Gogte Institute of Technology, Belgaum.



Ashwin.R

ABSTRACT

Teenage , the transitional period between childhood and adulthood, is marked by changes in the body, mind and social relationships. As teenagers confront these challenging years, they establish a self-concept; that is, some sense of who they are. Two important elements of self-concept are self-esteem, an

assessment of one's own worth, and mastery, the extent to which one feels in control of important aspects of one's life. Numerous studies have revealed that self-esteem and mastery are buffers against a variety of stressors. As well, a positive self-concept has been associated with self-care, compliance with medical advice, and involvement in activities. Thus, a positive self-concept during TEENAGE can influence not only mental, but also physical health. Obesity is one of the main factors that is worrying the medical fraternity as it is becoming one of the most serious medical conditions both among adults and teenagers. Studies show that obesity too is a cause of worry taking into consideration the self esteem and self concept level of such individuals those who are over weight and obese.



KEYWORDS : Obesity, Self Concept, Self Esteem, BMI.

INTRODUCTION :

The purpose of this study was to compare the self concept between the normal and obese teenagers. For the purpose of this study, body mass index (BMI) according to age was used to assess and label overweight (obese) children. BMI was calculated from the children's height and weight in order to obtain an index of the degree of obesity. Age of the subject was obtained from the school records.

METHODOLOGY

Participants were selected from various Colleges in Belgaum city consisting of Graduate level students. Each student received a consent form, before participation was allowed in this study. On this form, students were asked to give written consent for their participation.. Students with written consent to participate were given the Piers-Harris Children's Self- Concept Scale. This instrument is comprised of 80 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 weight of the students was weighed using a electronic weighing machine to the nearest hundredth gram. The students were asked to give their weight wearing only t shirts and shorts / skirts.

The height of the students was checked using a stadiometer.

The age of the students was collected from the respective college records .

SCORING – Score of the subjects for the piers self concept questionnaire was done by giving 1 point to every positive answer given to the questions asked.

STATISTICAL TECHNIQUE-

to investigate the self concept of normal and obese teenagers the 't' test was used and to examine the type of variance structure Levene's Test for Equality of Variance is used. To know if the self concept is dependent on the type of individual the pearsons chi square test was used.

ANALYSIS OF DATA AND RESULTS OF THE STUDY

Statistical analysis of test data collected from sixty students 30 normal and 30 obese teenagers on the scores of self concept.

OBJECTIVE 1)

The objective of the study is to examine weather there is any significant difference in the levels of self concept with respect to normal and obese teenagers.

Here our Null Hypothesis was

H_0 : There is no significant difference in self concept score with respect to normal and obese student.

And the corresponding Alternative Hypothesis was

H^1 : There is a significant difference in self concept score with respect to normal and obese student.

Here in order to test the above null hypothesis, we use the

TEST FOR SINGLE MEAN(T TEST) AT 5% LEVEL

Table no 1

Group Statistics

Respondent Type	N	Mean	Std. Deviation	Std. Error Mean
Self Concept Score Normal	30	48.67	9.86	1.80
Obese	30	37.63	9.79	1.79

Finding – At 5% level of significance with df 29 the critical value is 2.045. Here the calculated values are less than the critical value therefore the hypothesis is accepted. There is no significant difference in self concept score with respect to normal and obese student.

TABLE NO 2

Independent Samples Test

		Levene's Test for Equality of Variance		t-test for Equality of Means						
		F	Sig.	t	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Self Concept Score	Equal variances assumed	.259	.612	4.348	58	.000	11.03	2.54	5.95	16.11
	Equal variances not assumed			4.348	57.997	.000	11.03	2.54	5.95	16.11

Before we apply the t test we have to examine what type of variance structure should be applied, we apply the Levene's Test for Equality of Variance.

Under this test ,the null hypothesis is :

H₀: The two samples assume equal variance.

And therefore the alternative hypothesis is:

H₁: The two samples assume unequal variance.

Now at 5% level of significance value, we observe that the p-value is greater than the level of significance value i.e. (0.612 > 0.05), thus we can Accept H₀.

This means we have to assume that two samples assume equal variance.

Under this assumption we observe the p-value for t test is less than the level of significance (5%), i.e. 0.000 < 0.05, thus we can reject H₀ at 5% level of significance.

CONCLUSION:

There is a significant difference in self concept score with respect to normal and obese student.

OBJECTIVE 2:

To study if there exists a relationship between Self Concept Score and Types of Individuals (Normal and Obese).

Here our Null Hypothesis will be,

H_0 : Self Concept Score is Independent of type of respondent.

And the corresponding Alternative Hypothesis will be,

H_1 : Self Concept Score is Dependent of type of respondent.

Here in order to test the above null hypothesis, we would use the Chi-Square test.

Table no 3

Respondent Type * Level of Self Concept Score Crosstabulation

Count		Level of Self Concept Score			Total
		Low	Medium	High	
Respondent Type	Normal	1	28	1	30
	Obese	6	23	1	30
Total		7	51	2	60

Table no 4

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.062 ^a	2	.131
Likelihood Ratio	4.453	2	.108
Linear-by-Linear Association	2.864	1	.091
N of Valid Cases	60		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.00.

Here the Chi-Square test is a one tailed test , hence the p-value for the data will be $0.131/2=0.0655$.

Now we observe that the p-value is greater than the level of significance (5%), i.e. $0.0655 > 0.05$, hence we can accept H_0 at 5% level of significance.

Conclusion:

Self Concept Score is Independent of type of respondent.

But at 10% level of significance we observe that the p-value is less than the level of significance, i.e.

$0.0655 < 0.10$, hence we can reject H_0 at 5% level of significance.

CONCLUSION:

Self Concept Score is Dependent of type of respondent

DISCUSSION OF FINDINGS

The result of the study showed that there is a significant difference between the self concept level of normal teenagers to that of obese teenagers at .05 level of confidence. The result also showed that the self concept is dependent on the type of respondent. The results of this study are in keeping with those of previous studies that have separately examined the effect of gender (Marsh, 1989; Harter, 1988), puberty (Blyth et al., 1981; Brooks-Gunn, 1984; Alsaker, 1992; Folk, Pedersen, & Cullari, 1993), and body weight (O'Dea & Clampett, 1995; Mendelson & White, 1982; Drake, 1988; Mendelson, White, & Mendelson, 1995). Male students in general have greater self-esteem than do female students.

The relationship of body weight to aspects of self-concept warrants further attention. Overweight students considered their athletic abilities to be poor. The introduction into schools of exercise programs suitable for post pubertal students of higher body weight may help this group improve their self-concept in addition to their general health and fitness. Female students with higher body weight considered athletic ability to be more important than did other students. This suggests that they may also benefit psychologically and physically from an appropriate fitness program.

FINDINGS

- 1)As per table no 1 we found that there is no significant difference in self concept score with respect to normal and obese student.
- 2)As per table no 2 there is a significant difference in self concept score with respect to normal and obese student.
- 3)As per table no 3, at 5 % level we found that Self Concept Score is Independent of type of respondent. But at 10% level of significance we observe that the p-value is less than the level of significance, i.e. $0.0655 < 0.10$, hence we can reject H_0 at 5% level of significance. Hence at 10% level Self Concept Score is Dependent of type of respondent

RECOMMENDATIONS

On the basis of the result and conclusion of the study the following recommendations are made-

- 1)Since the study did not divide the subjects as girls and boys there is a scope to test if there is any change in the self concept of obese girls and obese boys.
- 2)As the result revealed that the obese have a low level of self concept a study can be undertaken to plan a 6 weeks exercise programme for the obese children and see if there is any change in their weight and their level of self concept.
- 3)As this study did not differentiate the children on the basis of economic status there is a scope for conducting a research on finding if differences exist between obese children coming from an economically low class family and economically high family on the levels of self concept.

CONCLUSIONS

In view of the limitations this study states that the following conclusion may be drawn from the

result presented in the previous chapter.

The self concept level of the normal children is higher than those of the obese children and it is dependent on the type of respondent.

SUMMARY

The purpose of the study was to compare the level of self concept of normal and obese teenagers who volunteered to the study. The students selected to the study were graduates from various colleges. BMI calculations were done using the formula and the BMI for age chart to differentiate the students into normal and obese teenagers. The Piers Harris self concept questionnaire was administered to all the students to know the level of self concept they had. The data was treated by "t" test procedure for each of the measure at .05 level of confidence. The result of the study showed that the mean score of self concept of normal teenagers is higher than that of obese teenagers. The result also showed that the self concept is dependent on the type of respondent.

REFERENCES –

- 1)www.consumer.gov/weightloss - Partnership for Healthy Weight Management
- 2)Erickson SJ, Robinson TN, Haydel KF, Killen JD. Are overweight children unhappy?: Body mass index, depressive symptoms, and overweight concerns in elementary school children. *Arch Pediatr Adol Med.* 2000;154:931–935
- 3)Strauss RS, Pollack HA. Social marginalization of overweight children. *Arch Pediatr Adolesc Med.* 2003;
- 4)Schwimmer JB, Burwinkle TM, Varni JW. Health-related quality of life of severely obese children and teenagers. *JAMA.* 2003
- 5)Phillips RG, Hill AJ. Fat, plain, but not friendless: Self-esteem and peer acceptance of obese pre-teenage stage girls. *Int J Obes (Lond).* 1998;