



ORIGINAL RESEARCH PAPER

Physical Education

IMPACTS OF SEPARATELY DESIGNED DIFFERENT TYPES OF TRAINING ON SELF-CONFIDENCE OF COLLEGE LEVEL STUDENTS

KEY WORDS: Overweight, weight training, aerobics, graded circuit training, Self Confidence.

Dr. Dilip Biswas

Assistant Professor & Head, Department of Physical Education, Bajkul Milani Mahavidyalaya

ABSTRACT

Overweight as one of the today's most important public health issues, which is escalating as a global epidemic. The purpose of the present study was an endeavor to the best method of handling overweight. Out of ninety six selected participants from fluvio coastal zone of west Bengal, India on the basis of BMI, eighty overweight girls (average age:20) were consider for the study. The subjects were divided into four groups (20 for each group) randomly namely Weight Training Group (WTG), Aerobic Training Group (ATG), Graded Circuit Training Group (GCTG) and Control Group (CG). Separately designed 12 weeks training programme for WTG, ATG and GCTG was applied on the subjects at morning between 8.00 am to 9.15am for three alternative days per week. After every four weeks, total load was increased. Pre and post test on the groups were conducted to measure the training effect on Self Confidence of the subjects. The collected data were statistically analyzed by using the analysis of Co-variance ($p < 0.05$) to determine differences, the LSD test was applied as a post hoc test to find out the paired mean differences. From the obtaining result, it was concluded that weight training, aerobics and graded circuit training are found to be effective for improvement of Self-confidence of overweight college girls.

INTRODUCTION

Body Weight of a college student is a remarkable feature of his personality. some expert says that losing weight may increase confidence level of a student who is already overweight. He or she may think that the other people's concept about him or her may change if his or her weight changes its dimension. On the other hand, some time it may occur that the lack of self-confidence may lead a person to be overweight. Studies show weight loss helps individuals in troubled relationships finally make the decision to leave. Students may internalize society's stigma against overweight, which causes them to feel embarrassed about their weight and dissatisfied with their appearance. People who struggle with excess weight may also experience anxiety over being judged for how they look. Self-confidence of an overweight student may affect in his or her daily life college days through the eye of others or the mirror before which he/she may rebuke himself or herself every day. in the present study the author want to examine the effects of organised training programme for the overweight students and how this weight losing programme can affects the self confidence level of an overweight students.

Statement OfThe Problem

The intention of the research work was to find out the effects of 12 weeks separately designed three different types of training- i) Weight Training ii) Aerobics Training and iii) Graded Circuit Training on **Self Confidence** and compare the results to identify the impacts of those training on Overweight college girls.

MATERIALS AND METHOD

96 overweight female students of "Fluvio-Coastal morphological zone" at Purba Medinipur district of West

Bengal, India, were chosen randomly from Bajkul Milani Mahavidyalaya, Kadmbini Women's College of Education, Vivekananda College of Education, and Sri Ramkrishna College of Education. 18 - 22 years old subjects were selected using B.M.I of the subjects. Out of 96 chosen overweight students eighty were finalised as "selected subject" and their average age was 20 years. 4 groups namely - WTG, ATG , GCTG and CG were formed at random and there have 20 girls in each group. Students underwent Weight Training (WT), Aerobics (AT) and Graded Circuit Training (GCT). All the tests of **self-confidence** were conducted in the gymnasium of Bajkul Milani Mahavidyalaya before the beginning of the training (Pre-Training), after every four weeks to assess and determine the rate of increment of load and at the end of training (Post Training). The training programmed was scheduled at 8.00 A.M to 9.15 A.M including warm up and cool down in order to minimize the effect of diurnal variation. Separately designed 12 weeks training programmes for all the independent variables were applied on subjects for three alternative days per week. **Self-confidence Inventory (ASCI) Questionnaire by Rekha Agnihotry was used for testing the variables.** After every 4 weeks of the experimental period, further load was increased by considering individual ability through test-retest method for all the experimental groups. After end of 12 weeks' training programme, **self-confidence** data was collected. Co-variance (ANCOVA) was used to analyse the collected data to determine the differences (if any) among the groups of dependent variables. LSD test is applied for post hoc test to identify difference between paired mean. 0.05 level of confidence was set as the level of significance.

RESULT OF THE STUDY

Table No. 1 Analysis of co-variance on self confidence of overweight college girl students

TEST		WTG	ATG	GCTG	CG	Source of Variance	Sum of Square	Degree of Freedom	Mean Square	F
PRE TEST	Ms	31.75	29.1	28.6	27.7	AMG	181.837	(K-1)=3 (N-K) =76	60.6125	1.1707
	SD	± 7.6356	±8.2327	±6.5806	±6.1396	WI	3934.55		51.7703	
POST TEST	Ms	22.2	22.15	22.1	25.9	AMG	211.037	(K-1)=3 (N-K-1) =75	70.3458	1.4366
	SD	± 8.1408	±6.3434	±6.5526	±6.8125	WI	3721.35		48.9651	
ADJUSTED POST TEST		20.6037	22.271	22.5439	26.9251	AMG	423.355	(K-1)=3 (N-K-1) =75	141.118	5.087
	Ms					WI	2080.4576		27.7394	

* Significant table value: $F_{0.05} (3, 76) = 2.72$; $N = 80$ ($N =$ subjects' number); $F = 'F'$ ratio; $Ms =$ Means; $SD =$ Standard Deviation; $AMG =$ Among; $WI =$ Within.

Above table presented the evidence that the Pre-Test **F ratio 1.1707** was found lower than table value [$1.5142 < tab_{0.05}(3,76)=2.72$]. The Post Test **F ratio 1.4366** was lesser

than table value $[7.6034 > \text{tab}_{0.05}(3,76)=2.72]$. The calculated adjusted post test mean "F" value (5.0872) was found to be statistically significant $[F_{0.05}(3, 75) < 5.0872]$ at 0.05 level of confidence. To identify the critical difference of Adjusted Post Test Means, the LSD test has been used and it has been analysed in Table no. 2.

Table No. 2 Analysis of critical difference of adjusted post test means of self confidence on overweight college girl students

WTG	ATG	GCTG	CG	MD	CD (5%)
20.6097	22.2710			1.6613NS	3.2977
20.6097		22.5439		1.9342 NS	
20.6097			26.9251	6.3154*	
	22.2710	22.5439		0.2729 NS	
	22.2710		26.9251	4.6541*	
		22.5439	26.9251	4.3812*	

Significant level: 0.05; NS=Not Significant; MD= Mean Difference; CD=Critical Difference

It was evident from the Table no-5 there was significant difference between weight training group and Control Group, aerobic dance training group and control group, graded circuit training group and control group. It also reflects that mean difference between weight training group and control group has showed higher significant result than any other groups.

DISCUSSION OF THE FINDINGS

Self-confidence of overweight girls on different training groups was significantly improved when comparing with control group data. It also reflects that (Table no-2) weight training group showed higher significant result. Similar findings were also corroborated with some researchers (Yu CC et al. 2008 Alfermann Det al., 2000 Daley, A. J., 2006). It indicated that if systematic training is applied, the level of self-confidence also improved. Significant improved of mean self-confidence of overweight girl who participate in weight - exercise training programs may have an increased awareness of physical conditioning and muscular strength (Weiss M et al., 2013). The effect of 12-week weight training on physical self-perceptions in overweight adolescents resulted in increased ratings of physical and general self-worth (Velez A et al., 2010). According to Ismael Rozbahani et al., 2015 Aerobic circuit Exercise increases self-esteem and self-sufficiency. According to some reports increased self-esteem may be related to endocrine regulation, catecholamines and internal opioid system that happens in the body after exercise (Peluso and Andrade, 2005). Psychological mechanisms of the beneficial effects Aerobic circuit of exercise on quality of life include increased self-esteem, increased self-satisfaction, increased confidence, improved turmoil and physiological mechanisms including increased central norepinephrine, changes in hypothalamic adrenocortical system, and changes in the synthesis and metabolism of serotonin and endorphin. (Seyed Reza Mousavi Gilani and Abdurrashid Khazaei Feizabad 2019) However, after a three months training, there was a significant improvement in psychic ability compared to the control group (improved self-esteem). Thus, the results of Tremblay M.S., Inman J.W. & Willms J.D. study are showing that regular exercise for obese or overweight subjects are positively associated with improved physical health and self-esteem (Tremblay M.S., Inman J.W. & Willms J.D., 2000). The weight loss phase is a time perceived by the person as particularly beneficial as he/she feels very quickly a decrease in anxiety, feelings of depression and dissatisfaction with the body, and an increase in self-esteem (Cooper, Z., & Fairburn, C. G. ;2001 Foster, G. D., & Wadden, T. A., 1994; O'Neil, P. M., & Jarrell, M. P., 1992;).

decrease the self-confidence of the Overweight college girl students.

CONCLUSION

From the obtaining result, it was concluded that weight training, aerobics and graded circuit training are found to be effective for improvement of Self-confidence of overweight college girls.

REFERENCES

1. Alfermann D, Stoll O. Effects of physical exercise on self-concept and well-being. Int J Sport Psychol. 2000;31(1):47-65
2. Cooper, Z., & Fairburn, C. G. (2001). A new cognitive behavioural approach to the treatment of obesity. Behaviour Research and Therapy, 39, 499-511.
3. Daley, A. J., Copeland, R. J., Wright, N. P., Roalfe, A., & Wales, J. K. (2006). Exercise therapy as a treatment for psychopathologic conditions in obese and morbidly obese adolescents: A randomized, controlled trial. Pediatrics, 118, 2126-2134.
4. Foster, G. D., & Wadden, T. A. (1994). The psychology of obesity, weight loss, and weight regain: Research and clinical findings. Dans G. L. Blackburn et B. S. Kanders (Éds.), Obesity: Pathophysiology, psychology and treatment (p. 140-166). New York : Chapman & Hall.
5. Ismael Rozbahani*, Mehdi Kohandel* and Abdolali Banaifar** The effect of 8-Week Aerobic Exercise upon Self-concept on 16 -17 years old Nonathletic Students. Biological Forum – An International Journal 7(1):1915-1918(2015)
6. O'Neil, P. M., & Jarrell, M. P. (1992). Psychological aspects of obesity and dieting. Dans T. A. Wadden and T. B. Vanitallie (Éds.), Treatment of the seriously obese patient (p. 252-270). New York: Guilford
7. Peluso M.A.M., de Andrade L.H.S.G. (2005). Physical activity and mental health: the association between exercise and mood. Clinics, 60(1): 61-70. [PubMed] [Google Scholar]
8. Seyed Reza Mousavi Gilani and Abdurrashid Khazaei Feizabad. The effects of aerobic exercise training on mental health and self-esteem of type 2 overweight diabetes mellitus patients. Health Psychol Res. 2019 Mar 11; 7(1): 6576. doi:10.4081/hpr.2019.6576
9. Tremblay M.S., Inman J.W. & Willms J.D., 2000. The relationship between physical activity, self-esteem and academic achievement in 12-year-old children. Pediatric Exercise Science, 12, p.312-323.
10. Velez A, Golem DL, Arent SM. The impact of a 12-week resistance training program on strength, body composition, and self-concept of Hispanic adolescents. J Strength Cond Res. 2010; 24(4):1065-73.
11. Weiss M. Back to the Future: Research trends in youth motivation and physical activity. Pediatr Exerc Sci. 2013; 25(4):561-72.
12. Yu CC, Sung RY, Hau KT, Lam PK, Nelson EA, So RC. The effect of diet and strength training on obese children's physical self-concept. J Sports Med Phys Fitness. 2008; 48(1):76-82.

Here, in this present study, the self-confidence of all the training groups have improved significantly. Therefore, different types of specific training plans may be enough to