



AN INTEGRATED APPROACH OF MASSAGE MANIPULATION FOR WEIGHT CONTROL: A 12 WEEKS PROSPECTIVE STUDY

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ABSTRACT

Aim of this study was to analyze the Massage Manipulation for weight control for college women. The study was conducted on thirty two college women who were studying Alagappa University College of Physical Education, Karaikudi, Tamilnadu, India. Subjects were randomly assigned equally into two groups, Group –I underwent Massage Manipulation Group (n = 16) and Group II (n=16) acted as control Group.). Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin fold were selected as dependent variables. The data was collected from the experimental and control groups were statistically examined with Analysis of covariance (ANCOVA). Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin fold showed significant difference between the groups.

KEYWORDS : Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold, Triceps Skin fold

INTRODUCTION

Massage is the systematic manipulation of the body's tissue. It is one of the oldest healing techniques still used in modern medicine. Massage is a very effective treatment method for promoting local and systematic relaxation, increasing local blood flow and encouraging venous return (Arabaci, 2008).

In all types of massage, the therapist has specific aims in mind, and in sport we focus on the individual needs of the athlete. With the ever growing number of people taking part in sport, combined with the increasing competitiveness and intensity of physical exercise, the demand for sports massage is also increasing and becoming more and more recognized as a skill which may aid recovery and enhance performance (Barlow 2004).

Excess weight gain has become a phenomenon in today's age, when lifestyles have become sedentary, and food more liberal with extra calories. Today our children prefer T.V. (any medal) over their friends and play, merely a reflection of their parents who also somewhere prefer T.V. over socializing or even over spending time with their children (if they spend some time surely some running around will help burn some calories). These are only a few factors, which have resulted in increasing amount of people with the problem of excess weight or obesity.

Stress, wrong food habits (i.e. irregular timings for food, unhealthy (junk) food), lack of exercise, thyroid problem etc. could be some of the reasons resulting in weight gain.

It is always advisable to study the reasons and symptoms of obesity before shedding sweats for loosing them. It provides an advantage, to a person, of having better understanding of his body and avoids him repeating the mistakes as he did earlier. The reasons of obesity lies in the lack of workouts corrupted eating habits (junk food, fats coated food, eating between 2 meals), psychological pressures (depression, frustration, and anxiety), and hereditary tendency and endocrine glands problems.

METHODOLOGY

The study was conducted on thirty two college women who were studying Alagappa University College of Physical Education, Karaikudi, Tamilnadu, India. Subjects were randomly assigned equally into two groups, Group –I underwent Massage Manipulation Group (n = 16) and Group II (n=16) acted as control Group. The training period was limited to 12 weeks. All the two groups were tested on selected criterion variables such as Body Weight, Forearm

Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin fold prior to and immediately after the training programme. Body Weight was assessed by weighting machine, Forearm Circumference and Thigh Circumference were assessed by Steel Measuring tape, and Biceps and Triceps were assessed by Skin fold caliper.

Results and Discussion

The data collected from the experimental group and control group prior and after experimentation on selected variables were statistically examined by analysis of covariance (ANCOVA) was used to determine differences, if any among the adjusted post test means on selected criterion variables separately. The level of significance was fixed at .05 level of confidence to test the 'f' ratio obtained by analysis of covariance on selected criterion variables.

Table – I THE SUMMARY OF MEAN FOR THE PRE AND POST TEST DATA ON SELECTED VARIABLES OF MASSAGE MANIPULATION GROUP AND CONTROL GROUP

Criterion variables	Mean	Massage Manipulation Group	Control group
Body Weight	Pre test mean	40.21	40.13
	Post test mean	39.71	40.11
Forearm Circumference	Pre test mean	17.5	17.88
	Post test mean	16.94	17.92
Thigh Circumference	Pre test mean	34.43	34.56
	Post test mean	34.27	34.68
Biceps Skin fold	Pre test mean	4.01	4.02
	Post test mean	3.90	4.03
Triceps Skin fold	Pre test mean	6.92	6.92
	Post test mean	6.89	6.93

Table – I shows that mean, of Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin between the pre and post tests means of Massage Manipulation Group were greater than the Control Group. It was concluded that Massage Manipulation Group had significant improvement in the performance of Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin. However control group had no significant improvement in the performance of selected variables.

The analysis of covariance of Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin of Massage

Manipulation Group and control group have been analyzed and presented in Table – II.

Table – II ANALYSIS OF COVARIANCE ON CRITERION VARIABLES OF EXPERIMENTAL AND CONTROL GROUPS

Criterion Variable	Adjusted Post Test means		Source of variance	Sum of square	df	Mean squares	'f' - ratio
	Mass-age Manipulation Group	Control group					
Body Weight	39.66	40.15	B	1.89	1	1.89	10.02*
			W	5.47	29	0.19	
Forearm Circumference	17.13	17.73	B	2.84	1	2.84	11.94 *
			W	6.9	29	0.24	
Thigh Circumference	34.02	34.5	B	1.82	1	1.82	15.00*
			W	3.52	29	0.12	
Biceps Skin fold	3.91	4.02	B	0.09	1	0.09	182.1*
			W	0.02	29	0.01	
Triceps Skin fold	6.89	6.93	B	0.02	1	0.02	42.29*
			W	0.01	29	0.01	

* Significant at .05 level of confident.

Table value required for significance at .05 level with df 1 and 29 is 4.18

From table – II, the obtained value of 'f' - ratio for Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin, for adjusted post test means were more than the table value of 4.18 for df 1 and 29 required for significant at 0.05 level of confidence. The results of the study indicated that significant differences exist among the adjusted post test means of experimental and control groups on the development of Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin.

Conclusion

From the analysis of the data, the following conclusions were drawn. The Massage Manipulation Group showed significantly decrease on Body Weight, Forearm Circumference, Thigh Circumference, Biceps Skin fold and Triceps Skin, when compared to the control group.

References

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