

Effects of Yoga Circuit Training and Combined Training on Potassium Status among Mild Intellectually Challenged Persons

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Abstract

The purpose of the study was to facilitate the effects of yoga, Circuit Training and Combined Training on Potassium status among mild intellectually challenged persons. For this study sixty (N=60) male mild intellectually challenged persons were randomly selected in AGAPE and DEEBAM Special Schools in Chennai and their age ranged between 18-30 years. They were randomly divided into four equal groups of fifteen subjects each. Experimental Group I underwent yogic practices, Experimental Group II underwent Circuit Training, Experimental Group III Combined Training and group IV was Control Group which was not given any training for the period of twelve weeks. Potassium was selected as dependent variables and independent variables are Yoga, Circuit Training and Combined Training. The data was collected before and after the experimental treatment periods. Analysis of Covariance (ANCOVA) and Scheffe's post hoc test was used in this study. It was concluded that Potassium level significantly decreases due to the influence of twelve weeks practices of Yoga, Circuit Training and Combined Training to comparing the Control Group.

Key words: Mild intellectually challenged Persons, lipid profile, Yoga, Circuit and Combined Training.

Introduction

Yoga is a systematic practice for the realization of higher perceptions. It is the science of life and an ideal way of living, providing rhythm to the body, melody to the mind, harmony to soul and thereby symphony of life. In short, Yoga is a way to achieve total health, peace, bliss and wisdom. Physical, mental and spiritual aspects of yoga help to make one's life purposeful, useful and noble.

Intellectually Challenged Persons

Intellectually challenged is a common disorder among the children, characterized by significantly impaired cognitive functioning and deficits in two or more adaptive behaviors. It has been historically defined as an intelligence quotient score under 70. Mild Intellectually Challenged people's intellectual development will be slow. But they are having potential to learn within the regular classroom given appropriate modification or accommodations. Some mild intellectually challenged students will require greater support from other persons.

Circuit Training

Circuit training involves a number of carefully selected exercise station that

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are arranged in a specific pattern around a gymnasium or field, enabling one to perform them from one station to another.

Combined Training

Combined training is the combination of two different training both yoga and circuit training.

Methodology

For this study sixty (N=60) male mild intellectually challenged persons were randomly selected in AGAPE and DEEBAM special school in Chennai. Their age ranged between 18 and 30. They were divided in to four equal groups and each group consists of fifteen subjects. Experimental group I underwent yogic practices, Experimental group II underwent circuit training, Experimental group III combined training and group IV was control for the period of twelve weeks. Potassium was selected as dependent variables and independent variables are Yoga, Circuit training and combined training. The training programme was scheduled between 7 and 10 a.m in Morning, weekly five days from Monday to Friday. Analysis of Covariance (ANCOVA) and scheffe's post hoc test was used in this research.

Range of Potassium

Normal required level is 3.5 to 5.5 mmol/L. Risk above normal: 5.5 mmol/L. Risk below normal: 3.5 mmol/L.

Potassium: The following tables illustrate the statistical results potassium of Mild Intellectually Challenged Persons.

Table- I

**Computation of Analysis of Covariance for Pre and Post Test
Means on the Potassium
(Scores in mmol/L)**

Means	Exp.G-I	Exp.G-II	Exp.G-III	Con.G	S.V	S.S	D.f	M.S	F
Pre Test Mean	4.56	4.56	4.55	4.45	B	0.13	3	0.05	0.22
					W	10.49	56	0.19	
Post Test	3.96	3.92	3.88	4.4	B	3.013	3	1.05	8.79*
					W	6.39	56	0.12	
Adjusted Post	3.95	3.91	3.87	4.48	B	3.68	3	1.23	21.16*
					W	3.19	55	0.06	

Table F - ratio at 0.05 level of confidence for 3 and 56 (df) = 2.7, 3 and 55(df) = 2.72.*significant

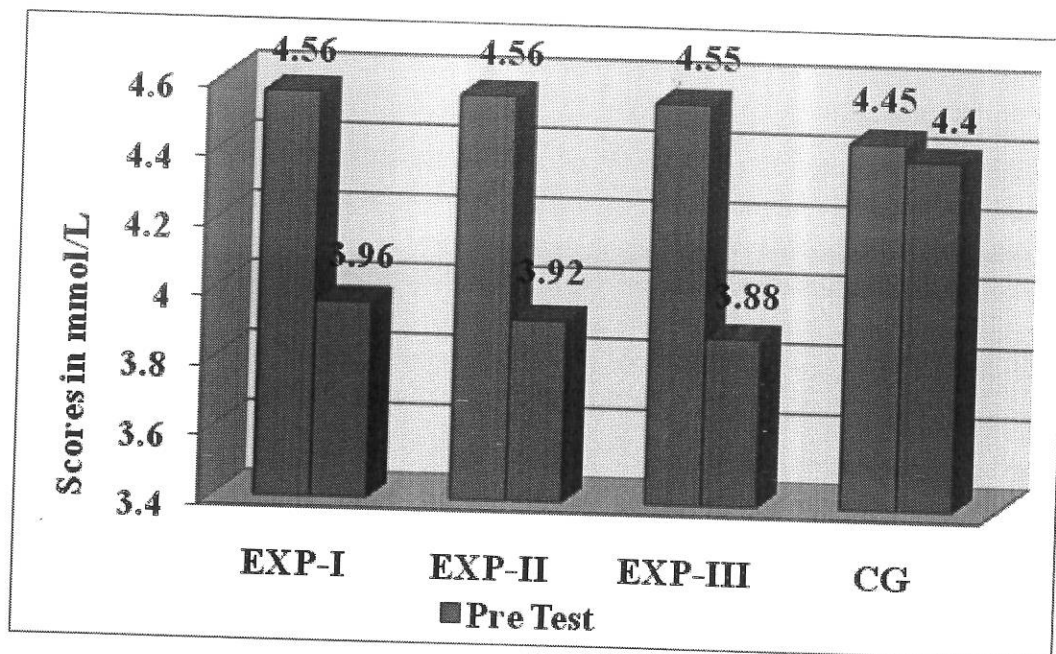
Table- I (a)

Computation of Scheffe's Post Hoc Test Ordered Adjusted Final Mean Difference of Potassium

Control Group	Experimental Group -I	Experimental Group -II	Experimental Group -III	Mean Difference	Confidential Interval
4.48	3.94	-	-	0.53	0.25
4.48	-	3.90	-	0.57	0.25
4.48	-	-	3.87	0.61	0.25
-	3.94	3.90	-	0.04	0.25
-	3.94	-	3.87	0.08	0.25
-	-	3.90	3.87	0.04	0.25

Figure-1

Bar Diagram Showing the Mean Differences among the Groups on Potassium



Discussion on the Findings of Potassium

The analysis of co-variance of potassium indicated that experimental group I (yoga), experimental group II (circuit training), experimental group III (Combination of yoga and circuit training), were significantly decreased than the control group on potassium. It is due to the effects of yoga, circuit training and combined training.

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The finding of the study showed that the experimental group III (combination of yoga and circuit training) had decreased potassium more than the experimental group I and II. Yoga, circuit training and combined training have its own value toward a healthy life style. We can use yoga, circuit training and combined training not only as part of a programme to decrease potassium, but also as a way to assist in attending other goals Medved, et. al, (2004) and Marcos E and Ribas J. (1995).

Conclusions

Within the limitation of this study, the following conclusions were drawn. It was concluded that Mild Intellectually Challenged Person's Potassium level was statistically decreased from its higher normal level to lower normal level it was due to the influence of twelve weeks practices of Yoga, Circuit Training and Combined Training to comparing the Control Group.

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