



Research article

INFLUENCE OF ADAPTED YOGA WITH RECREATIONAL GAMES PRACTICE ON SOCIABILITY OF INTELLECTUALLY CHALLENGED CHILDREN

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Received 15th July 2016, Accepted 24th July 2016

Abstract

The purpose of this study was to find out the influence of adapted yoga with recreational games practice on sociability of intellectually challenged children. For this study, 20 male intellectually challenged children were selected from Faculty of Disability Management Special and Education unit and TAT Kalanilayam Middle School, Coimbatore. The selected subjects were divided into two groups, 10 subjects in each group. TAT Kalanilayam Middle School boys treated as experimental group. These 10 subjects under gone adapted yoga with recreational games training designed by the researcher, five days a week for eight weeks. Faculty of Disability Management Special Education unit boys treated as control group, they did not participate any specific training programme; they did their daily routine activities. The following variable was selected for the study such as sociability. The training period was for eight weeks except Saturday and Sunday of every week. All the subjects were tested prior to training and after completion of eight weeks of training on the selected variable. To analyze the collected data investigator used dependent 't' ratio to find out the significant difference between the mean of pretest and posttest of the group. Analysis of covariance (ANCOVA) was applied to determine the significance of mean difference between the two groups. The experimental group showed significant difference than the control group after eight weeks adapted yoga with recreational games training in the selected variable.

Key words: Adapted yoga, recreational games, sociability and intellectually challenged children.

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INTRODUCTION

Intellectual disability is a generalized disorder. It is characterized by significantly impaired cognitive

functioning and deficits in two or more adaptive behaviors that onset before the age of 18. Generally such a person has

intelligence quotient (IQ) score of under 70. Once focused almost entirely on cognition, the definition of the intellectual disability now includes both a component relating to mental functioning and one relating to individual's function skills in his/her environment. Intellectual disabilities mean a diversity of abilities and potential among the disabled, which the educators must be ready to accept as such. Intellectual disability presents a substantial disadvantage to an individual for functioning in any society. Intellectual disability includes cognitive limitations as well as functional limitations in such areas as daily living skills, social skills and communication

METHODS AND MATERIALS

SELECTION OF SUBJECTS

For this study 20 mild category intellectually challenged boys with IQ Level 50 to 69 were selected by random sampling technique from Faculty of Disability Management and Special Education unit, Ramakrishna Mission Vivekananda University and TAT Kalanilayam Middle School, Coimbatore. The subject's age ranged from 11 to 14 years.

SELECTION OF VARIABLES

Independent Variable

- ❖ Adapted yoga with recreational games practice.

List of asana and pranayama

Padmasana
Vajrasana
Yoga Mudra
Paschimotasana
Matsyasana
Shalabasana
Bhujangasana
Dhanurasana
Halasana

Traditional and esoteric aspects of yoga are introduced throughout the on-going development of the physical practice to honour the yogic tradition. Though much of this process is achieved through yogic postures, many other traditional yogic tools are used whenever they may be to the student's maximum benefit. In Adapted Yoga, the classical poses are adapted for individuals of all needs and abilities using modifications and sequencing of poses for maximal physical, physiological, organic, mental, and energetic effects (Lisa & Kaleay Isley).

Dependent Variable

Sociability

SELECTION OF TESTS

As per the available literature, the following standardized test was used to collect the relevant data on the selected variable.

Table- I

CRITERION MEASURES

S. No	Variable	Test	Unit of measurement
1.	Sociability	Collis, Olliver & moss questionnaire	In score

List of recreational games

Cat and Rat
King in the circle
Fire on the mountain run, Yoga Mudra
Simon says
Running relay
Hopping relay
Kangaroo relay
Ball roll relay
Tunnel ball relay
Knock the club relay

Pathahasthasana
Tadasana
Shashangasana
Bhramri Pranayama
Meditation

Ball bounces into the bucket off a wall
Knock down Indian clubs

STATISTICAL TECHNIQUE

The following statistical procedures were employed to estimate the influence of adapted yoga with recreational games practice on sociability of intellectually challenged children. Dependent 't' ratio was used to find out the significant difference between the mean of pre and post test.

Analysis of covariance (ANCOVA) was applied to determine the significance of mean difference between the two groups namely adapted yoga with recreational games practice group and control group. In all cases, the criterion for statistical significance was set at 0.05 level of confident (P 0.05).

RESULTS AND DISCUSSION

COMPUTATION OF 't' TEST

The objective of the paired 't' ratio was to describe the differences between the

pre-test and post-test mean of adapted yoga with recreational games practice group and control group on sociability of intellectually challenged children.

TABLE – II
SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF ADAPTED YOGA GROUP

S.No	Variables	Pre-Test Mean	Post-Test Mean	Std. Dev (±)	DM	't' Ratio
1	Sociability	35.700	38.500	0.4216	0.1333	21.000*

(Table value for 0.05 level for df (1, 9) = 2.262)

An examination of Table - II indicates that the obtained 't' ratios is 21.000 for sociability. The obtained 't' ratios on sociability is found to be higher than the required table value of 2.262 at

0.05 level of significance for 1, 9 degrees of freedom. So, it is found to be significant. The results show that the adapted yoga with recreational training group is statistically significant.

FIGURE-1
BAR DIAGRAM SHOWING PRE AND POST TEST MEAN DIFFERENCES OF
ADAPTED YOGA WITH RECREATIONAL
GAMES PRACTICE GROUP ON SOCIABILITY

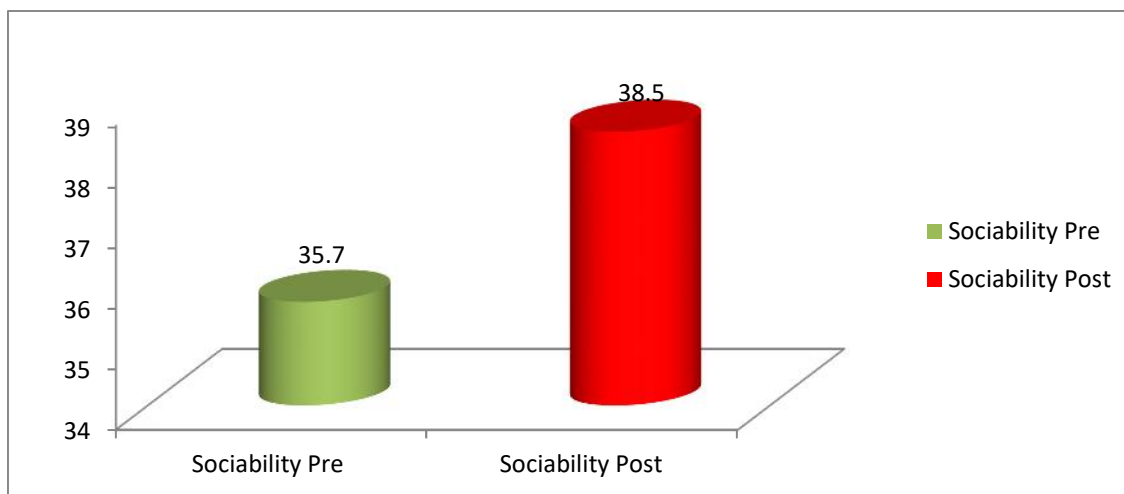


TABLE – III
SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST
SCORES ON SELECTED VARIABLES OF
CONTROL GROUP

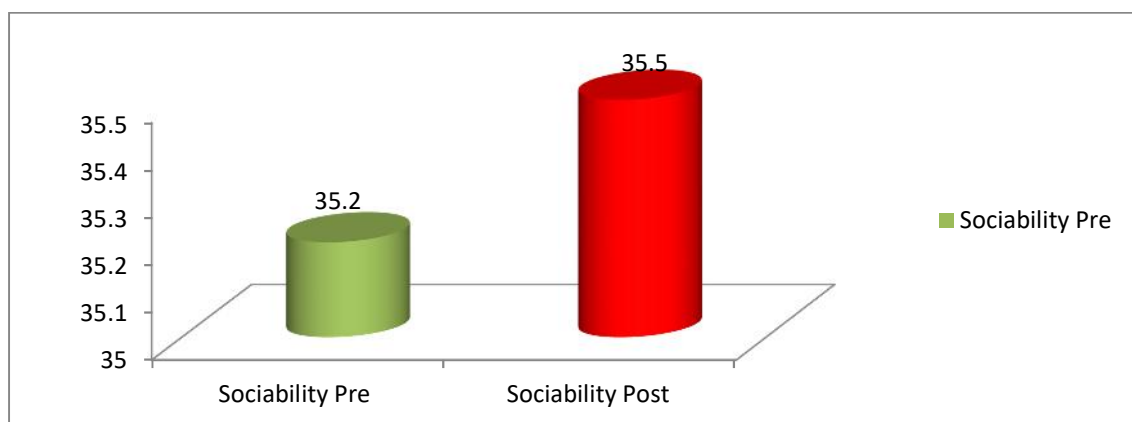
S.No	Variables	Pre-Test Mean	Post-Test Mean	Std. Dev (±)	DM	't' Ratio
1	Sociability	35.2000	35.5000	0.67495	.21344	1.406

(Table value for 0.05 level for df (1, 9) = 2.262)

An examination of Table-III indicates that the obtained 't' ratios is 1.406 for sociability. The obtained 't' ratios on sociability is found to be lesser than the required table value of 2.262 at 0.05 level

of significance for 1, 9 degrees of freedom. So, it is found to be not significant. The results show that the control group is not significant.

FIGURE 2
BAR DIAGRAM SHOWING PRE AND POST-TEST MEAN DIFFERENCES ON
SOCIABILITY OF CONTROL GROUP



COMPUTATION OF ANALYSIS OF COVARIANCE

The objective of the ANCOVA was to describe the statistical results of the influence of adapted yoga with recreational

games practice on sociability of intellectually challenged children.

TABLE-IV

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF ADAPTED YOGA AND CONTROL GROUPS ON SOCIABILITY

	Adapted Yoga	Control group	Source of Variance	Sum of Squares	df	Mean Square	'F' ratio
Pre - Test Mean	35.700	35.200	B	1.250	1	1.250	0.039
			W	577.700	18	32.094	
Post - Test Mean	38.500	35.500	B	45.000	1	45.000	1.348
			W	601.000	18	33.389	
Adjusted Post -Test Mean	38.246 ^a	35.754 ^a	B	30.993	1	30.993	94.661*
			W	5.566	17	0.327	

B- Between Group Means

* - Significant

W- Within Group Means (Table Value for 0.05 Level for df 1 & 18 = 4.413)

df- Degrees of Freedom (Table Value for 0.05 Level for df 1 & 17 = 4.415)

RESULTS ON SOCIABILITY

An examination of Table – IV indicates the results of ANCOVA for pre-test scores of the experimental group and control group. The obtained F-ratio for the

pre-test is 0.039 ($P > 0.05$) indicating that the random sampling is successful and the required table F-ratio is 4.413. Hence the pre-test mean F-ratio is insignificant at 0.05

level of confidence for the degree of freedom 1 and 18.

The obtained F-ratio for the post-test is 1.348($P < 0.05$) and the required table F-ratio is 4.413. Hence the post-test mean F-ratio is significant at 0.05 level of confidence for the degree of freedom 1 and 18.

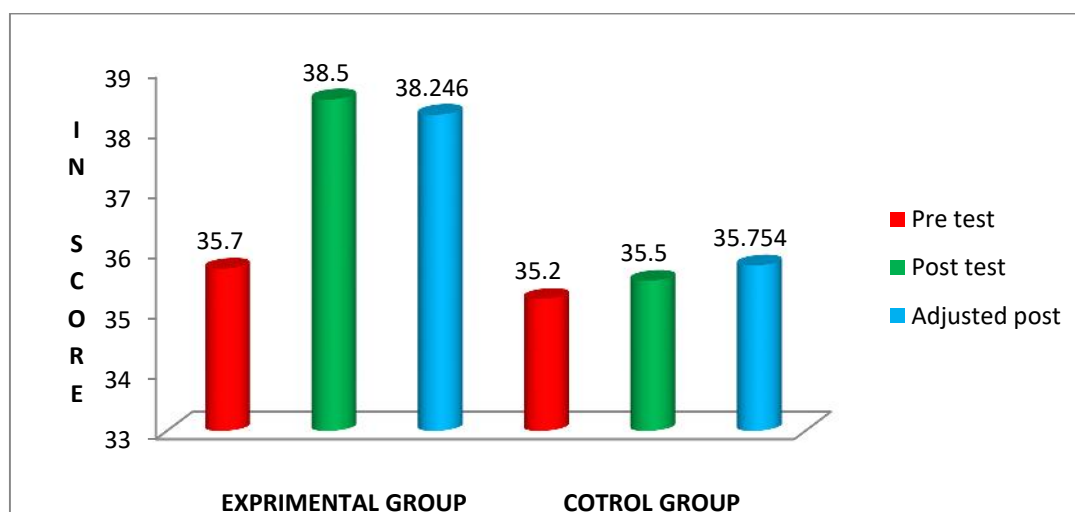
The adjusted post-test means of experimental and control group are 38.246 and 35.754 respectively. The obtained F-

ratio for the adjusted post-test means is 94.661($P < 0.05$) and the required table F-ratio is 4.415. Hence the F-ratio for the adjusted posttest means on sociability is significant at 0.05 level of confidence for the degree of freedom 1 and 17.

Pre-test, post-test and adjusted post-test mean difference of the experimental and control group on sociability is presented in Figure 3.

FIGURE - 3

BAR DIAGRAM SHOWING PRE-TEST, POST-TEST AND ADJUSTED POST-TEST MEAN DIFFERENCES OF ADAPTED YOGA GROUP AND CONTROL GROUP ON SOCIABILITY



DISCUSSION ON FINDINGS

The ultimate goal of the researcher was to examine the significant differences between the adapted yoga with recreational games practice group and control group on sociability of intellectually challenged children. The theme behind this study was to observe the influence of adapted yoga with recreational games practice group and control group on sociability of intellectually challenged children. To achieve this, two different groups were designed as adapted yoga with recreational games practice group and control group.

The study indicated that the adapted yoga with recreational games practice group significantly shows changes on sociability but control group did not shows significant changes on sociability. It was found that the adapted yoga with recreational games practice group was significantly greater when compared to control group in sociability for a period of eight weeks.

SOCIABILITY

The result on sociability showed that there was significant effect due to the adapted yoga with recreational games practice. Further it showed that the mean value of adapted yoga with recreational games practice group had better improvement in sociability than control group. The results of the study are conformity with the findings the following authors.

Bhatia, Kabra and Sapra (2007) suggested that there is higher prevalence of psychiatric disorders in children with Down's syndrome and their siblings.

Sigman, Spence and Wang (2006) suggested social interactions of young autistic children and their caregivers were contacted for interactions involving normal and mentally retarded controls..

Raju et al. (2005) suggested that there is a role of socioeconomic status on lung functions and to suggest prediction equations for Indian children.

Baker, McIntyre and Blucher(2003) stated high parenting stress contributed to a worsening in child behaviour problems overtime, and high child behaviour problems contributed to a worsening in parenting stress. Findings for mothers and fathers were quite similar.

Kavale (2001) remarked that increased attention has been directed social skills and their relationship to learning disabilities. Using the methods of meta-analysis the investigation explored the nature of social skill deficits among students with learning disabilities.

Pierce and Schreibman (1994) investigated the efficacy of pictorial self-management to teach daily living skills to 3low-functioning children with autism. The picture order was manipulated in stimulus control probes; the children followed the new picture sequence, suggesting that the pictures were controlling their behavior.

CONCLUSION

Based on the results of the study the following conclusions were drawn.

1. Within the limitations and on the basis of the findings of the study, it was very clear that eight weeks of adapted yoga with recreational games practice produced significant changes in sociability of intellectually challenged children

2. It was also concluded that the control group did not show any significant difference in sociability of intellectually challenged children.
3. Further, it was inferred that adapted yoga with recreational games practice appears to be a safe and practical intervention tool for improving sociability of intellectually challenged children.

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Site this article:

Anandha Ghosh., and Srinivasan, M. (2016). Influence of adapted yoga with recreational games practice on sociability of intellectually challenged children. *International Journal of Adapted Physical Education & Yoga*, Vol. 1, No. 6, pp. 1 to 7.