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IMPACT OF YOGA PRACTICES IN IMPROVING THE QUALITY OF LIFE AMONG INSTITUTIONALIZED MENTALLY RETARDED CHILDREN

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ABSTRACT

The present study was undertaken to investigate the impact of yoga practices in improving the quality of life among institutionalized mentally retarded children. The sample of the study comprised purposive sample of 60 mentally retarded children between 50-70 I.Q., who were taken from Government Institute for mentally retarded children, Sec.-32, Chandigarh. There were given a one month training of various yoga practices. Assessment of various parameters was done before and after these yogic practices and were significantly modulated and statistically analyzed by using standardized W.H.O. scale of quality of life. The findings of the study reveal that there was a significant improvement in the wellbeing of mentally retarded children in respect of Physical, mental, social and environmental aspects.

Keywords: Yoga Practices, Quality of life, Institutionalized Mentally Retarded Children.

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INTRODUCTION

Yoga has a message for the human body, mind, soul and complete message for humanity. Yoga training may help the mentally retarded children to improve their quality of life. Concept and practice of yoga originated in India several thousand years ago. Its founders were great saints and sages. The great yogis gave rational interpretation to their experience of yoga and brought about a practical and scientifically sound method within everyone's reach.

For holistic personality development (physical, mental, emotional) yoga plays an important role to improve the Quality Of Life (QOL). The W.H.O. has recommended yogic system of exercises in diabetes acidity, hypertension etc. The various research projects have been conducted for their benefits in various medical problems.

Mental retardation is a multi-dimensional phenomenon that involves overlapping of psychological, educational and social aspects of human functioning and behaviour. It is not a disease like cancer or tuberculosis: It is a term used when a person has certain limitations in mental functioning and in skills such as communicating, taking care of him/herself, social skills etc. Children with mental retardation may take longer to learn, to speak, walk and take care of their personal needs such as dressing or eating.

In India, unfortunately we have not been able to accord priority to mental retardation. Nearly 20 million people are affected with mental retardation; it is a tremendous wastage of life and resources. Mental retardation is a significant public health problem. Many mentally retarded individuals are capable of looking after themselves if they are given the opportunity, help and proper guidance then there can be improvement in their quality of life and feeling of wellbeing. However, most children with mental retardation can learn to do many things. It just takes them more time and effort than other children.

It is the need of the hour to launch a nationwide research based programme, to provide mentally retarded people the opportunities to do better in life so that their physical energies can be diverted for meaningful changes. In the context, the important function of monitoring the mentally retarded children in their day-to-day life must be analyzed in relation to their physical, social, environmental and psychological parameters. Various yogic practices including asanas, pranayama and meditation have been recognized, on the basis of

traditional claims, to effect learning, memory, personality traits, effective way of expression to learn abilities etc. Therefore, the investigator got interested in the present selected field of research.

REVIEW OF RELATED LITERATURE

Mental retardation is a problem of socio-cultural origin where the educational and social performance is marked by a lower level than would be expected from what is known as their intellectual abilities.

Mentally defective, where mental capacities themselves are diminished as a result of pathological causes as opposed to environmental causes leads to mental retardation.

Retardation may be described as "Lagging behind those, who are of one's own age group. It may be due to purely mental reasons or many psycho-social reasons. Mental retardation or developmental defects, which manifests itself in below average intellectual functioning and difficulty is in learning social behaviour."

Recognizing the need to achieve greater uniformity in the definition of mental retardation, the American Association of Mental Deficiency (AAMD) has developed the following interdisciplinary definition :-

"Mental retardation refers to sub-average general intellectual functioning which originates during the developmental period and is associated with impairment of adaptive behaviour (Heber, 1959; 1960)."

The Hathayoga and Rajayoga involve Asana, Pranayama, Shatkriyas and Meditative practices. According to Hath Yoga Pradipika, as translated by Singh (1975), prior to everything, asana is spoken of as the first part of hatha yoga. Having done Asana, one attains steadiness of body and mind, freedom from disease and lightness of the limits.

Ray, Hegde & Selvarmurthy (1986) and Sahay et al (1982) concluded that the practice of hath-yogic exercises could improve the muscular endurance and a shift in the autonomic balance towards para-sympathetic dominance. Swami Karmananda (1980), Kuvalyananda & Vinekar (1968), Bhole & Karambelkar (1968) and Pratap Vijyendra (1973) stressed that the yogic texts have postulated a close relationship between the breathing and the mental state.

By conducting training programme for teaching various activities of daily regime, viz. bathing, dressing, cleaning floors, brushing teeth, attending natural calls etc. Sarit & yalon-Chamovitz (2000) in their pilot study titled as "Every day wisdom in people with mental retardation: Role of experience and practical intelligence" have proved that the quality of life in mentally retarded subjects can also be improved efficiently by experiences of their day to day life and practical intelligence in comparison to academic intelligence.

By conducting various vocational programs to teach communication skill/speech therapy etc., Jackson (2000) developed low-tech communication tools and applied them in a pilot study, on 3 students, aged between 10-12 years, with multiple disabilities including mental retarders, to teach monetary transactions of a cashier for earning livelihood. The goal of this study was to increase the independent functional life skills of students with multiple disabilities within their communities using simple teacher made communication tools. Thus, the latest audio-visual tools, based on modern technology, are a boon for improving quality of life.

OBJECTIVES OF THE STUDY

The objectives of the present study include:

1. To identify and select yogic practices suitable to Mentally Handicapped (M.R.) children.
2. To design a standardized schedule of yogic practices for M.R. children.
3. To give systematic training in yogic practices to M.R. children.
4. To examine the effect of selected yogic practices on physical parameters of quality of life for mentally retarded children in respect of activities of daily living, mobility, work capacity.
5. To examine the effect of selected yogic practices on psychological parameters of quality of life of mentally retarded children, in respect of intelligence, learning capacity, memory or reaction time.
6. To examine the effect of selected yogic practices on quality of life of M.R. children in respect of social adjustment.
7. To examine the effect of selected yogic practices on environment of quality of life of M.R. children in respect of freedom, physical safety and security, health and social care, financial resources etc.

HYPOTHESES

In the light of the objectives of the present study, the following hypotheses were framed:

1. The Yogic practices result in significant improvement of quality of Life in respect of physical capacity such as activities of daily living, mobility, work capacity etc.
2. Psychological parameters of quality of life namely intelligence, learning capacity, memory or reaction time etc. significantly increased as a resulting of yoga practices.
3. There is significant increase in social adjustment of mentally retarded children on account of practice of yoga.
4. The yogic practices result in significant improvement of quality of life in respect of environment such as freedom, physical safety and security, health and social care, financial resources etc.

SAMPLE

In the present study, a purposive sample of Sixty mentally retarded children between 50-70 I.Q. were taken from Govt. Institute for Mentally Retarded Children, Sector-32, Chandigarh.

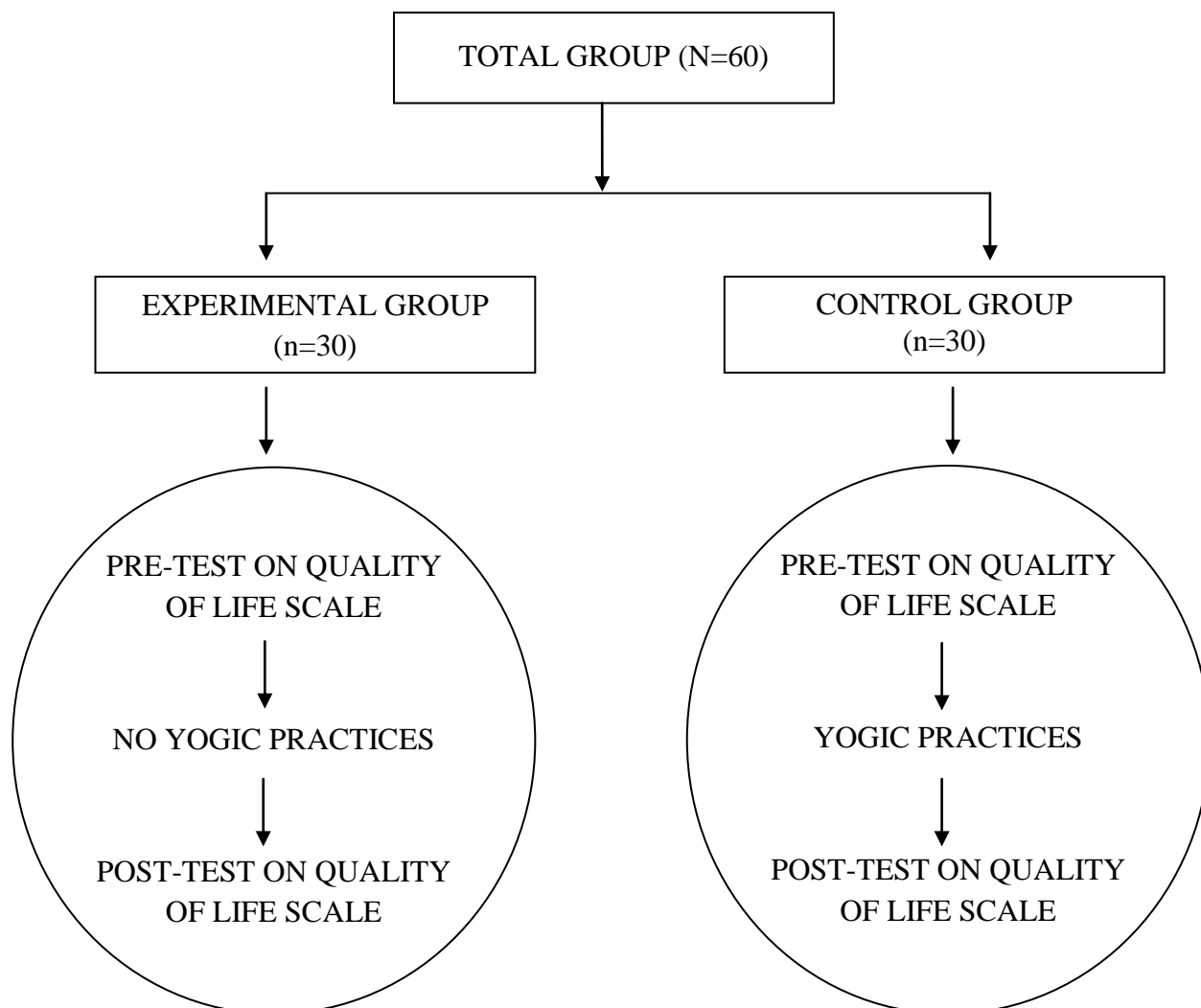
TOOLS USED

1. Quality of life scale (QOL) constructed by W.H.O., QOL-BREF, World Health Organization (1996) published by Psychiatry Department, All India Institute of Medical Education and Sciences, New Delhi.
2. Yogic Practices (Schedule developed by the investigator herself).

DESIGN OF THE STUDY

The study was conducted with the help of pre-tests, post-tests control group design. The design of this experimental study consisted of two groups, namely Experimental and Control groups. Each group had 30 subjects. Before the experimental treatment, both the groups were given pre-test on Quality of Life Scale (QOL) constructed by WHO (1996). The experimental group underwent the training of yoga practices for duration of 4 weeks. Controlgroup was not given this training. They remained busy in their institution's routine activities. At the end of this period, a post-test on Quality of Life Scale (QOL) constructed by WHO (1996) was again administered. The difference between the pre-tests and post-test scores of both the groups was taken as the criterion variable for measuring the effects of yogic practices. These scores (Post-test minus Pre-test) of both the groups were compared to find out the significance of differences between the two groups. The diagrammatic layout of the design is given in diagram.

DIAGRAM SHOWING DIAGRAMMATIC LAYOUT OF THE DESIGN



ANALYSIS OF DATA AND INTERPRETATION

The Yogic practices result in significant improvement of Quality of Life in respect of physical capacity such as activities of daily living, mobility, work capacity etc.

TABLE 1 – SHOWING T-RATIO BETWEEN MEAN GAIN SCORES OF EXPERIMENTAL AND CONTROL GROUP ON PHYSICAL CAPACITY

Groups	Mean	S.D.	Degree of freedom	t-ratio	Significant at 0.05 level	Significant at 0.01 level
Experimental	1.60	.93	58	6.10	Significant	Significant
Control	0.30	.70				

Value significant at 0.05 level for 58 degree of freedom = 2.00

Value significant at 0.01 level for 58 degree of freedom = 2.66

(Garret, 1981)

The t-ratio, as entered in Table 1, indicates that the mean gain score between experimental and control groups in respect of Physical capacity is 6.10. In

the present study, calculated t-value 6.10 is greater than probable t-value of 2.66 and hence significant at 0.01 level.

It shows that there is significant difference in mean gain scores of the two groups. The difference is real and no due to any chance factor.

Psychological parameters of quality of life, namely intelligence, learning capacity, memory or reaction time etc. are significantly increased as a resulting of yoga practices.

TABLE 2: SHOWING T-RATIO BETWEEN MEAN GAIN SCORES OF EXPERIMENTAL AND CONTROL GROUP ON PSYCHOLOGICAL PARAMETERS

Groups	Mean	S.D.	Degree of freedom	t-ratio	Significant at 0.05 level	Significant at 0.01 level
Experimental	2.20	1.03	58	7.67	Significant	Significant
Control	0.43	.73				

Value significant at 0.05 level for 58 degree of freedom = 2.00

Value significant at 0.01 level for 58 degree of freedom = 2.66

(Garret, 1981)

Table 2 indicates that the t-ratio between mean gain scores of experimental and control group on psychological parameters is 7.67. In the present study, calculated t-value 7.67 is greater than probable t-value 2.66 and hence significant 0.01 level.

It shows that there is significant difference in mean gain scores of the two groups. The difference is real and not due to any chance factor.

There will be significant increase in social adjustment of mentally retarded children on account of practice of yoga.

TABLE 3: SHOWING T-RATIO BETWEEN MEAN GAIN SCORES OF EXPERIMENTAL AND CONTROL GROUP ON SOCIAL RELATIONSHIP

Groups	Mean	S.D.	Degree of freedom	t-ratio	Significant at 0.05 level	Significant at 0.01 level
Experimental	1.61	.29	58	7.31	Significant	Significant
Control	1.10	.20				

Value significant at 0.05 level for 58 degree of freedom = 2.00

Value significant at 0.01 level for 58 degree of freedom = 2.66

(Garret, 1981)

The t-ratio, as entered in Table 3, between mean gainin scores of experimental and control group of social adjustment is 7.31. It is greater than 2.66 and hence significant at 0.01 level.

It shows that there is significant difference in mean gain scores of the two groups. The difference is real and not due to any chance factor.

The Yogic practices result in significant improvement of quality of life in respect of environment such as freedom, physical safety and security, health and social care, financial resources etc.

TABLE 4: SHOWING T-RATIO BETWEEN MEAN GAIN SCORES OF EXPERIMENTAL AND CONTROL GROUP ON ENVIRONMENT

Groups	Mean	S.D.	Degree of freedom	t-ratio	Significant at 0.05 level	Significant at 0.01 level
Experimental	1.90	.71	58	9.45	Significant	Significant
Control	0.40	.50				

Value significant at 0.05 level for 58 degree of freedom = 2.00

Value significant at 0.01 level for 58 degree of freedom = 2.66

(Garret, 1981)

As entered in Table 4, the t-ratio between mean gain scores of experimental and control groups on the environment is 9.45. It is greater than probable t-score of 2.66 and hence significant at 0.01 level. It shows that there is significant difference in mean gain scores of the two groups. The difference is real and not due to any chance factor.

CONCLUSIONS

On the basis of results of analysis of data, following conclusion are drawn:

1. The yogic practices result in significant improvement of quality of life in respect of physical capacity such as activities of daily living, mobility, work capacity etc.
2. Psychological parameters of quality of life namely intelligence, learning capacity, memory or reaction time etc. are significantly increased as resulting of yoga practices.
3. There is significant increase in social adjustment of mentally retarded children on account of practice of yoga.
4. The yogic practices result in significant improvement of quality of life in respect of environment such as freedom, physical safety and security, health and social care, financial resources etc.

1. Copeland, Susan, R. (2000): Using self-management to improve study skills performance of high school students with mental retardation in general education classrooms; Eds. Dissertation Abstracts, Vanderbilt University.
2. Gharote, M.L. (1971): Energy expenditure during deep meditative state. *Yoga Mimamsa* 14, (1 & 2) 57-62.
3. Gharote, M.L. (1973): Effect of yogic training on physical fitness. *Yoga Mimamsa* 15, 4, 31-35.
4. Gharote, M.L. (1976 a): Physical fitness in relation to the practice of selected yogic exercises. *Yoga Mimamsa* 18, 1, 14-23.
5. Gharote, M.L. (1976 b): Contribution of yoga to the field of physical education. *Yoga Mimamsa* 18, 2, 45-62.
6. Gharote, M.K., Ganguly, S.K. Anadmoorthy, A.M. (1976-77): Effect of yogic training on minimum muscular fitness. *Yoga Mimamsa* 18, 3, 1-20.
7. Karamabelkar, P.V. (1969): Effect of yogic asana on Uropepsin excretion; *Indian J. Med. Res.* 57(5): 944.
8. SaritShira and Yalon-Chamovitz (2000): Everyday wisdom in people with mental retardation: Role of Experience and practical intelligence; Eds. Dissertation Abstracts. The University of Connecticut.
9. Sharma, Sonia (2001): Effect of yoga exercises on mental health and anxiety at B.Ed. level; M.Ed. Dissertation (Un-Published), Panjab University, Chandigarh.
10. Sheshardi, Mala (1984): Development and evaluation of parent training for the care of mentally retarded child, Chandigarh, PGIMER Ph.D. Unpublished Thesis, 616.8992. Sc. 71D.
11. Sunita (2002): Effect of yoga exercises on self-concept and mental health of secondary school students; M.Ed. Dissertation (Un-Published), Panjab University, Chandigarh.
12. Yadav, Habir Singh (1994): A Study of Hath Yoga Practices in treatment of anxiety and pain in cancer patients, Chandigarh; PGIMER. Ph.D. unpublished thesis. 616.994.

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