

4. AIM AND OBJECTIVES

This study evaluates if yoga can add some quality of life among intellectually disabled children. To accomplish the purpose, the following aim and objectives have been considered.

4.1 AIM

The yoga intervention will lead to an improvement of health-related physical fitness and psycho- motor abilities in intellectually disabled children.

4.2 OBJECTIVES OF THE STUDY

1. To find the status of health-related physical fitness and psycho-motor abilities of intellectually disabled children
 - 1.1 To assess a status of cardiovascular efficiency of intellectually disabled children
 - 1.2 To find out a status of flexibility of intellectually disabled children
 - 1.3 To assess a strength and endurance of abdominal muscles of intellectually disabled children
 - 1.4 To find a status of body fat percentage of intellectually disabled children
 - 1.5 To assess a status of static balance of intellectually disabled children
 - 1.6 To find a status of eye hand coordination of intellectually disabled children

- 1.7 To assess a status of agility of intellectually disabled children
- 1.8 To assess reaction time of intellectually disabled children
2. To design a suitable schedule of yogic practices for the children with intellectual disability
 - 2.1 To prepare a preliminary yoga training intervention on the basis of a review of the relevant literature
 - 2.2 To verify a preliminary form of yoga intervention from a panel of yoga experts
 - 2.3 To finalize a yoga intervention after the first, second and third tries out on a small sample of intellectually disabled children
3. To evaluate the impact of a yogic training schedule on health-related physical fitness and motor ability of intellectually disabled children
 - 3.1 To assess an impact of a yoga intervention on cardiovascular efficiency of intellectually disabled children
 - 3.2 To assess effects of yoga intervention on flexibility of intellectually disabled children
 - 3.3 To assess effects of yoga intervention on strength and endurance of abdominal muscles of intellectually disabled children

- 3.4 To find effects of yoga intervention on body fat percentage of intellectually disabled children
- 3.5 To assess an impact of yoga intervention on static balance of intellectually disabled children
- 3.6 To find effects of yoga intervention on eye-hand co-ordination of intellectually disabled children
- 3.7 To assess effects of yoga intervention on agility of intellectually disabled children
- 3.8 To assess effects of yoga intervention on reaction time of intellectually disabled children

4.3 JUSTIFICATION OF THE STUDY

Children with intellectual disability have been found by many researchers to be the population with deficient physical fitness measures, which may be due to an inactive lifestyle. In fact, these children typically exhibit lower levels of cardiovascular fitness than non-disabled peers.

These findings were interpreted to suggest that adolescents with mild intellectual disability have a difficulty in making an optimal use of their working memory when new or complex situations tax their abilities.

Physical fitness of persons who are developmentally disabled has received relatively lesser attention in the special education literature when compared to intellectual functioning (e.g., learning, memory, and language) and to acquisition of functional

skills (e.g., self-care, community, and vocational). Despite an increased interest in recreational programming stimulated by the concept of functional curricula, teachers may still be reluctant to include physical fitness activities in their students' schedules. Perhaps, physical fitness programming for those with developmental disabilities would have a wider appeal and application.

In fact, individuals with intellectual and developmental disabilities need effective and motivating physical fitness training programmes. Nevertheless, there are many studies conducted which indicate that physical activity positively affected balance, muscle strength, and quality of life in individuals with intellectual disability. Further, various physical training programmes were devised to achieve greater physical fitness for handicapped children who otherwise exercise insufficiently. Such training may also facilitate socializing and play at school. The results showed that the children receiving functionally focused activities achieved the greatest improvements in independence while performing movement activities.

However, there seems to be a gap in the literature with respect to comparative studies exploring the efficacy of yoga training programme on health-related physical fitness, cognitive motor development and execution abilities in intellectually disabled children. Although there are many studies indicating benefits of yoga across a host of normal population, a very few studies are conducted for intellectually disabled children. Therefore, this study seems to be justified and logical.

4.4 HYPOTHESES

After reviewing the relevant literature, it was hypothesized that-

H₁: The yoga training intervention contributes to improve health related physical fitness of intellectually disabled children.

H₂: The stimulus of yoga training is significantly effective in improving psycho-motor ability of intellectually disabled children.

4.5 OPERATIONAL DEFINITIONS OF THE TERMS USED

Intellectual Disability

Intellectual disability, once called mental retardation, is characterized by below-average intelligence or mental ability and a lack of skills necessary for day-to-day living. People with intellectual disabilities can and do learn new skills, but they learn them very slowly. There are varying degrees of intellectual disability from mild to profound.

Health Related Physical Fitness

The World Health Organization has defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” This definition indicates that in the field of sports, a wrestler having more strength may be fit for wrestling but may not be healthy, because to attend the state of real healths, he must be psychosocially well balanced. Thus, health related fitness operationally means a level of fitness which is psychophysically as well socially and spiritually sound and has a significant relation with one’s health as defined by AAHPERD (American Alliance for Health, Physical Education, Recreation and Dance). According to AAHPERD, there are four major factors of health-related fitness viz. cardio vascular

efficiency, flexibility, strength and endurance of abdominal muscles and body fat percentage.

Yoga

Yoga is a system that benefits the body, mind and spirit by teaching self-control. It is a series of postures and exercises through breathing, relaxation and mediation.