

## **CHAPTER 4**

### **AIMS & OBJECTIVES**

The findings from different sources of the literature review were collated together and considered to establish the study's aims and objectives. The following aims and objectives were selected to study the effect of *yoga* on various aspects of autism in special school environments.

#### **4.1 AIM OF THE STUDY**

To evaluate the feasibility of conducting a regular *yoga* intervention for children with ASD in special school environments in terms of their participation and performance responses. To assess the effect of *yoga* on the behavioral and physiological variables in children with ASD in special school environments.

#### **4.2 OBJECTIVES OF THE STUDY**

- a) To assess the autism severity in children with ASD across four special schools
- b) To develop twelve structured *yoga* modules based on Integrated Approach to *Yoga* Therapy (IAYT) of S-VYASA university
- c) To develop the *yoga* teacher's curriculum and train *yoga* teachers to teach *yoga* to children with ASD
- d) To evaluate the feasibility of conducting a regular group *yoga* intervention for children with ASD in special school environments in terms of their participation and performance
- e) To compare the effect of *yoga* on the following variables
  - i) Autism Severity
  - ii) Social Skills Deficits
  - iii) Problem Behaviors
  - iv) Motor Proficiency
  - v) Food and Digestion problems
  - vi) Sleep Disorders

#### **4.3 JUSTIFICATION OF THE STUDY**

Children with ASD face many issues, struggle to communicate needs, limited social interaction, and

poor motor skills. Further, these are worsened by physiological symptoms like food and digestion problems and disrupted sleep. These manifest in the form of maladaptive behaviors, which further limit their peer interaction, causing social skills deficits. Children with ASD often undergo many expensive therapies to provide relief from various symptoms of autism. Many children exhausted from long hours at school are taken to multiple therapies, which can be expensive and ill affordable, by anxious parents seeking solutions for their children. Under such conditions, the child may or may not cooperate, thereby restricting any beneficial effects of expensive therapies despite their proven efficacies.

The present research scenario has witnessed the emergence of various studies with different interventions to alleviate various autistic symptoms of children with autism. *Yoga* is increasingly emerging as an effective non-invasive holistic therapy that benefits children with ASD. *Yoga* is recognized as a mind-body intervention that promotes physical, physiological, and psychological well-being in children with ASD and aids in reducing many autistic symptoms (Satoodeh et al., 2017). *Yoga* classes as group intervention for children with ASD within the familiar and conducive school environment benefit all children, is cost-effective and provides a consistent opportunity to all students to participate. *Yoga* practices conducive to the unique needs of children with ASD are known to improve student's learning skills in a school environment by creating more focus, attention, and calmness (Koenig et al., 2012). However, few studies on *yoga* for children with ASD in special schools explore its therapeutic effects on the unique challenges faced by children with ASD. Special schools provide various functional and academic skills, equipping children to lead independent lives. A school environment is thus an essential part of the children's life where they spend many hours learning and developing different skills. The schoolteachers' role is very crucial for the overall development of the child.

There are limited studies on *yoga* in special schools for children with ASD independent of parental support in the *yoga* intervention. Most of the studies have relied more on the parents' participation and feedback for measuring the effectiveness of *yoga* intervention. Few studies measure the effect of *yoga* intervention based on the teachers' assessments facilitated by their daily interactions with the child in the classrooms or school environments. This study includes the assessments of teachers and parents who play essential roles in a child's life on the effects of a consistent *yoga* program in special schools without parental support. Children with ASD often find it difficult to follow and

respond to instructions compounded further with various problem behaviors and social skills deficits affecting their participation and performances in intervention. However, no studies are available on the feasibility of conducting *yoga* for children with ASD in terms of their participation and performance responses in a *yoga* intervention.

The current study is justified as it tracked the feasibility of conducting a group *yoga* program in special school environments for children with ASD in terms of their participation and performance responses (PPR). It also explores the holistic effects of *yoga* in special school environments on various aspects of autism. Hence, the study attempts to find the effect of a daily *yoga* intervention program in special school environments on its feasibility based on participation and performance responses and various behavioral and physiological aspects of autism in children with ASD.

#### **4.3 HYPOTHESIS**

- a) A regular group *yoga* intervention in special school environments is feasible for children with ASD.
- b) *Yoga* intervention in special school environments improves the autism severity, problem behaviors, social skills deficits, motor proficiency, food and digestion problems and sleep disorders in children with ASD.

#### **4.4 NULL HYPOTHESIS**

- a) A regular group *yoga* intervention in special school environments is not feasible for children with ASD.
- b) *Yoga* intervention in special school environments does not improve the autism severity, problem behaviors, social skills deficits, motor proficiency, food and digestion problems and sleep disorders in children with ASD.