

## Inclusion of Children with Autism in the Physical Education Setting

Fabio Fontana

---

---

---

---

---

---

---

---

## Benefits of physical activity

- Physiological
- Psychological

---

---

---

---

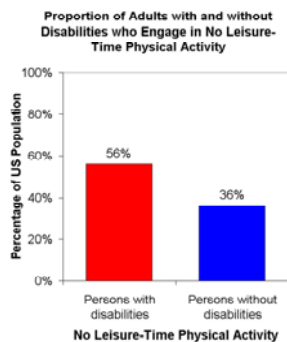
---

---

---

---

## Is physical activity also critical to individuals With Disabilities?



---

---

---

---

---

---

---

---

**Autism**

- **What is Autism?**
  - ▶ Inability to understand how to interact socially
  - ▶ Communication impairment
  - ▶ Repetitive behavior and routines

Autism Spectrum Disorder (ASD)

**OR**

Pervasive Developmental Disorders (PDDs)

- **Spectrum disorder**

---

---

---

---

---

---

---

---

**Autism Spectrum Disorder**

- **Five Conditions**
  - ▶ Autism
    - Social, Communication, Repetitive behaviors
  - ▶ Asperger
    - Intelligence and language
  - ▶ Rett Syndrome and Childhood Disintegrative Disorder
    - Gender and Regression
  - ▶ Pervasive developmental disorder not otherwise specified (PDD-NOS)

---

---

---

---

---

---

---

---

**Symptoms**

**Diagnose:**

- impairments in communication
- impairments in social interaction
- repetitive behavior and routine

**Additional symptoms:**

- **Coordination**
- **Sensory overload**
- **IQ**

---

---

---

---

---

---

---

---

## Communication Impairments

Non-verbal

Verbal



Echolalia

Single world

---

---

---

---

---

---

---

---

## Social impairments

Name and eye contact

Holding



Prefer playing alone

Interested in people

---

---

---

---

---

---

---

---

## Repetitive Behavior or Routine

Self-Stimulatory behavior

Flapping hands

Rocking



Consistency

Emotionally vulnerable

Rage reactions

Obsessive attachment to objects

---

---

---

---

---

---

---

---

## Prevalence

- 1 in 166 births (1.5 million Americans)
- All racial, ethnic, and social groups
- Boys 4X more likely

---

---

---

---

---

---

---

---

## Is there a cure for autism?

- No
- Prognosis:
  - ▶ Lifelong care
  - ▶ Live Independently



▶ What factors determine the prognosis?

Severity

Stimulation

Early Intervention

---

---

---

---

---

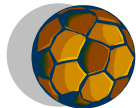
---

---

---

## PE and autism

- Benefits
- Self-stimulatory behavior:
  - ▶ attention span, on-task behavior
  - ▶ learning
- Kern (1982), Elliott (1994), Fraser (2003)



---

---

---

---

---

---

---

---

## Repetitive Routines

- Overwhelmed by minimal change
- What to do?
  - Consistent daily routines
  - Prepare the child for change
  - Public school teacher example
  - Picture Schedule

---

---

---

---

---

---

---

---

## Impairment in Social Interaction

- Subject and cannot judge social distance...
- What to do?
  - ▶ Protect the child from bullying and teasing
  - ▶ Buddy system: "special friend"
    - Overload

---

---

---

---

---

---

---

---

## Sensory Overload

- Poor concentration
- What to do?
  - ▶ Consistency
  - ▶ Seat the child in front of the class and direct questions to him or her
  - ▶ Avoid verbal overload

---

---

---

---

---

---

---

---

## Sensory Overload

- **What to do (cont.)?**
  - ▶ Actions such as covering windows, closing doors, storing unused equipment, turning off radios, and removing colorful posters may be beneficial.

---

---

---

---

---

---

---

---

## Poor motor coordination

- **Clumsy and awkward**
- **What to do?**
  - ▶ Health Related Fitness Curriculum
  - ▶ Competition
  - ▶ Sports

---

---

---

---

---

---

---

---

## Extra tip

- **Build in flexibility**

---

---

---

---

---

---

---

---

## Adaptations

- Are the children with disability participating successfully?
  - Being challenged and enjoying
  
- Are the children without disability participating successfully?

---

---

---

---

---

---

---

---

## Inclusion

- Should children with autism be always integrated with children without?
  - No
  - Why not?
  - There are times that are nearly impossible because of severity of condition
  - Appropriate physical structure, ratio teacher/students, and trained personnel

---

---

---

---

---

---

---

---

## Conclusion

- Strategies
  
- Adaptations
  
- Inclusion

---

---

---

---

---

---

---

---