



SPORTS AND RECREATION FOR PERVASIVE DEVELOPMENT DISORDER (PDD)

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ABSTRACT

Aim

The aim of the study was to observe the value of sports and recreation for pervasive development disorder (PDD)

Methods

Thirty children with pervasive development disorder (PDD) for both male and female children were selected for this study. All the children were screened by Gross Motor Functional Measure scale (GMFMs) were used for the objective measurement of children gross motor skill. The pre and post therapy values were statistically analyzed on the effect of sports and recreation for children with pervasive development disorder (PDD)

Result

The Statistical analysis of Gross Motor Functional Measure scale (GMFMs) pre-assessment mean value is 59.49, S.D is 5.442 and post-treatment mean value is 113.75, S.D 6.5912, t-test value of GMFMs is -8.0431 and P value is < .00001.

Conclusion

Sports and recreation can be used successfully as one of the instruction to improve gross motor skills and to alleviate psychological distress for children with pervasive development disorder (PDD)

Key Words: Sports, Recreation, Gross Motor Functional Measure scale (GMFMs), Pervasive Development Disorder (PDD), Attention Deficit Hyperactive Disorder (ADHD), and Autism Spectrum Disorder (ASD)

I. INTRODUCTION

1.1 Pervasive development disorder (PDD) is largely a social-communication disorder. Children with autism find it extremely difficult to relate to others in typical ways, sports and recreation is wonderful tool for helping children (and sometimes even adults) to move beyond PDD self-absorption into real, shared interaction. Properly used, sports and recreation can also allow youngsters to explore their feelings, their environment, and their relationships with parents, siblings, and peers. ¹⁻⁴

Pervasive development disorder (**PDD**) symptoms range in presentation and severity. Children with PDD frequently have an intellectual disability, but some children with PDD will have normal intelligence. Children with Pervasive development disorder may also have seizures, motor abnormalities, anxiety, sleep cycle disturbances, gastrointestinal problems, immune dysfunction and sensory disturbances. Not all the features are present in every child. Instead, a subset of features underlies autism in each individual. ¹⁻⁷

Children with Pervasive development disorder may play differently than other kids. Sports and recreation may improve their social and emotional skills, help them think in different ways, increase their language or communication skills, and expand the ways they play with recreational toys and relate to other people ^{5 & 6}

Incredibly frequently, too, sports and recreation can allow parents to take an active role in their PDD child's growth and development. Sports and recreation may be taught to parents, and, over time, parents can become their child's therapist while also building a stronger, more meaningful relationship.

1.2 Sports and Recreation are often used to help children process stressful life events such as relocation, hospitalization, physical and sexual abuse, domestic violence, and natural disasters. It can also be used to treat mental illness or behavioral problems. Here are some of the most common issues addressed in Sports and Recreation: ^{4, 5 & 8}

- Anxiety disorders
- Anger
- Aggression
- ADHD
- Autism spectrum disorder
- School-related problems
- Social issues
- Physical and learning disability

1.3 Common Tools and Approaches

Many Recreational therapists have a dedicated play room that is filled with items that help with the therapeutic process. Some common sports and recreational activities include both indoor and outdoor activities.

- Carom, Ball, include ring ball volleyball, basket ball,
- Table tennis, foot ball, Blocks, Action figures
- Therapeutic games, like The Talking, Feeling, and Doing Board Game or The Stop, Relax, and Think Board Game
- Dollhouse with dolls
- Skate board
- Sand tray with figurines
- Animal figurines
- Toy cars
- Play handcuffs
- Musical toys
- Kitchen with pretend food

1.4 Directive and Non-Directive Approach

Sports and recreational activities come in two basic forms: non-directive (or child-centered) and directive. ³⁻⁷

In child-centered play therapy, children are given toys and creative tools and they're allowed to choose how to spend their time. They aren't given any direction or guidance about what they should do or how they should solve their problems. ³⁻⁷

The non-directive approach is a type of psychodynamic therapy. The basic premise is that when allowed to do so, children will find solutions to their problems. The entire session is usually unstructured. The therapist may observe the child quietly or may comment on what the child is doing. ³⁻⁷

1.5. Gross Motor Functional Measure scale (GMFMs) and as a Standardized screening tool to assess gross motor function for children with Pervasive development disorder (**PDD**). Sports and recreational activities

help organizing sensory systems and increase body awareness as well as to promote or improve physical and functional outcomes for children with Pervasive development disorder. ⁷⁻¹¹

Literatures recommended that, Sports and recreational activities help to improve gross motor skills for children with Pervasive development disorder. Therefore, in this study, evaluations done on the value of gross motor skills in Sports and recreational for children with Pervasive development disorder ¹⁰⁻¹³

II. METHODOLOGY

2.1 Participants: Participants of this study were a convenience sample of children diagnosed with pervasive development disorder (**PDD**). All children were between ages **4-10** [Mean] age **8.166** and attended **5** week Play therapy.

A total of **20** children included, **12** Male Children and **8** Female Children diagnosed with Autism Spectrum Disorder were participated in this study. All children were attended play therapy.

2.2 Procedure: The children were randomly assigned for play therapy, pre and post test were done in front of parents / care givers. Standardized assessment tool, include (**GMFMs**) to assess Gross Motor function for children with pervasive development disorder (**PDD**) and intervention were provided for the duration of **5** weeks training program with appropriate play therapy management such as puppets, blocks, ball play, peg-board activities, and puzzles for children with Autism Spectrum Disorder. The entire children received intervention of **40 min** each over a **5 week period**, for Sports and recreational training.

2.3 Criteria for selection: Children with pervasive development disorder (**PDD**) for both male and female, those who are poor gross motor skills were selected for this study.

III. NEED FOR THE STUDY

To create awareness among parents of children with pervasive development disorder (**PDD**) and other health Care Professional

IV. RESULT

The Statistical analysis of **Gross Motor Functional Measure scale (GMFMs)** pre-treatment **mean** value is **59.49**, **S.D** is **5.442** and post-treatment **mean** value is **113.75**, **S.D** **6.5912**, **t-test** value of **GMFMs** is **-8.0431** and **P** value is **< .00001**.

Table: 1

This table shows Mean and SD value of Pre and Post-therapy Management of Gross Motor Functional Measure scale (GMFMs) for Children with pervasive development disorder (PDD)

	Mean value	SD
Pre -Therapy Value	59.49	5.442
Post-Therapy Value	113.75	6.5912

Table: 2

This table shows T and P value of Pre and Post-therapy Management of GMFM score for Children with pervasive development disorder (PDD).

t-value	p-value
--8.0431	< .00001.

This statistical analysis shows that, there is significant difference between pre and post-therapy values of **GMFM** score. Hence, it is recommended that, the gross motor skills were improved with Sports and recreational activities for children with pervasive development disorder.

V. CONCLUSION

Through this study, it is concluded that, Sports and recreational activities can be used effectively as one of the interventions to improve gross motor skills for children with pervasive development disorder.

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