



EFFECT OF RECREATIONAL ACTIVITIES FOR IMPROVING STEREOTYPICAL BEHAVIOR OF AUTISTIC CHILDREN

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Abstract

The present study was aimed to investigate the effect of recreational activities on stereotypical behavior of autistic children. Autistic children suffer greatly from stereotypical behavior as compared to their peer group. For conducting experiment ten (10) autistic children five (5) in experimental and five (5) in control group from Mini Bright Future Mentally Challenged Scholl Gosianpur Punjab (India) were taken from random sampling technique. All subjects were between the age group of 8-14 years of age. After the suggestions of expert a programme of recreational activities were prepared, this was based on the interest of samples. In order to analyze experimental effects, analysis of covariance (ANCOVA) was applied and tested at 0.05 significant levels. Training was given up to ninety (90) weeks to experimental group only. Training of selected recreational activities was imparted to the subjects six days in a week. Recreational activities inculcated to the subjects were i.e. Bowling, Thambola, Rapid Fire, Crazy Eight, Hit on the goal, On the spot jump, Hide & Seek, Arrange the circle, Musical Chair, Match the colors of balloons, Singing, Dancing, Blowing the Balloons, Soft Ball throw etc. Pre and post stereotype behavior status were checked by self made Scale which was standardized with the suggestion of national and international experts.

Keywords: Activities, Stereotypical behavior and Autistic Children

Introduction

Autism is a developmental disorder of biological origin which appears during the first three years and caused by brain dysfunction. Individual with autism suffers greatly from poor communication skill, unusual activities, repeated behavior and social impairment. "There are three main clinical conditions in Autism Spectrum Disorder ie qualitative impairment in social interaction, qualitative impairment in communication and qualitative impairment in restricted, repetitive and stereotyped behavior interest and activities" (Wing, 1988, Wing, 1997). "Child shows signs in the first two years which is easily too noticed by parents" (Myers S, Johnson C (2007). "Autism is derivative of Greek word Autos denotation Self" (Hirari, 1968). Autism creates situation in which a person is detached from social relations, hence, an isolated self. Stereotype behavior is one component of maladaptive behavior among individual with autism spectrum disorder. "Stereotyped restricted and repetitive patterns of behavior are one of three core diagnostic features of autistic disorder and are a frequent target of behavioral interventions for children with autism" (American Psychiatric Association, 2000). "The need to do something for recreation is an essential element of human biology and psychology" (Bruce C. Daniels, 1995) Recreational activities are often done for enjoyment, amusement, or pleasure and



are considered to be fun. Normal children necessitate recreation in their lives.

Objective of the Study:

To observe the effect of recreational activities on Stereotypical behavior of autistic children.

Method and Procedure

Sampling

Ten (10) autistic children between the age group of 8 to 14 years from Mini Bright Future Mentally Challenged Scholl Gosianpur, Punjab, India, their parents and teachers were participant for the study. Prior Permission was taken from school Authorities to conduct the experiment. Autistic children their teachers and parents were signed an informed concerned form for their true, honest and active participation in the study. The involvement in this was emphasized on voluntary basis.

Training Design

After the suggestions given by the expert a recreational activity programme was prepared on the basis of the interest of the subjects. Training of selected recreational activities was imparted to the subjects six days in a week for ninety (90) weeks. There were two session in a day i.e morning (7 to 9 am approx) and evening (5:30 to 7:30 approx). Recreational activities includes: Bowling, Thambola, Rapid Fire, Crazy Eight, Hit on the goal, On the spot jump, Hide & Seek, Arrange the circle, Musical Chair, Match the colors of balloons, Singing, Dancing, Blowing the Balloons, Soft Ball throw.

Tool

Self made scale was prepared by the investigator to find out the effect of recreational activities on aggression and self injurious behavior of autistic children. The scale was constructing and standardized by the investigator by means of sending or with personnel interaction to more than 100 national and international professional and 10 psychiatrists for validity of the scale.

Statistical Design

Analysis of covariance (ANCOVA) along with descriptive statistics was used as the statistical technique on SPSS at 0.05 levels of significance.

Findings

TABLE NO. 1
DESCRIPTIVE STATISTICS OF RECREATIONAL ACTIVITIES OF EXPERIMENTAL AND CONTROL GROUP PRETEST POST TEST OF STEREOTYPICAL BEHAVIOUR OF AUTISTIC CHILDREN

S. No.	Descriptive Statistics	Groups			
		Experimental Group		Control Group	
		Pre Test	Post Test	Pre Test	Post Test
1	Mean	446.40	293.40	447.80	367.80
2	SE Mean	2.20	2.82	2.71	1.43
3	Std. Dev.	4.93	6.31	6.06	3.19
4	Variance	24.30	39.80	36.70	10.20
5	Skewness	0.56	0.19	0.30	0.30
6	SE Skewness	0.913	0.91	0.91	0.91
7	Kurtosis	-2.03	-2.51	-1.23	-1.34
8	SE Kurtosis	2.00	2.00	2.00	2.00
9	Range	11.00	14.00	15.00	8.00
10	Minimum	442.00	286.00	441.00	364.00
11	Maximum	453.00	300.00	456.00	372.00

TABLE NO 2
ANALYSIS OF COVARIANCE OF COMPARISON OF POST TEST MEANS OF EXPERIMENTAL GROUP AND CONTROL GROUP OF AUTISTIC CHILDREN IN RELATION TO RECREATIONAL ACTIVITIES

Source of Variance	Sum of Squares	df	Mean Square	F ratio
Contrast	13616.23	1	13616.23	482.26
Error	197.64	7	28.23	

*Significant at 0.05 level f = 5.59

In Table no. 2 the Sig value was found .000, which is less than 0.05 and the calculated f-value = 482.260 was found to be greater than tabulated value = 5.59 at 1, 7 df, therefore it shows significance difference.

India is home to about 10 million people with autism and the disability has shown an increase over the last few years. According to statistics by the Centers for Disease Control and Prevention (CDC), one in every 88 children today is born with autism spectrum disorder (ASD) against a ratio of one in 110



few years back (Uttam 2012.) In the present study the investigator examined the effect of recreational activities on stereotype behavior of autistic children. Result of the present study shows significant difference in both experimental and control group on the variable stereotype behavior of autistic children. Experimental group found more significant as compared to control group. Recreational activities are associated with positive reinforcement in general. Role of recreational activities has not been rigorously examined with regard to autistic children treatment. Recreational activities provide an opportunity to become physically active and provide some therapeutic benefit also. Results of the present study also in line with Christopher et.al (2008) suggest that “exercise provides short-term reductions of stereotypic behaviours in children with autism. Future research with stronger evidence levels, greater rigour, and longer-term outcome assessment is required to determine specific exercise parameters”. Despite limitations of systematic experiment the study suggests that recreational activities are beneficial, in reducing stereotypical behaviours in children with autism.

Conclusion

The obtained or calculated f-value = 482.260 was found to be greater than the tabulated value = 5.59 at 0.05 level of significance. The results showed that there was significant ($p < .05$) effect of recreational activities on Stereotypical behavior of autistic children.

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