# EFFECT OF RECREATIONAL ACTIVITIES FOR IMPROVING AGGRESSION AND SELF INJURIOUS BEHAVIOUR OF AUTISTIC CHILDREN

### <u>Nidhi Sharma<sup>\*</sup></u>

#### ABSTRACT:

To facilitate this study and reach up to the valid conclusion ten (10) autistic children from Mini Bright Future Mentally Challenged Scholl Gosianpur Punjab (India) were selected as subjects for this study randomly. All the subjects were divided into two equal groups namely Experimental Group (Recreational Training) and Control Group. All subjects were between the age group of 8-14 years of age. Ninety weeks' selected recreational activity training programme, based on the interest of samples was given to the autistic children. Before administration of recreational activity training programmepre test data were obtain through self made standardized scale filled by teachers and parents of autistic children. Post test data were collected by imparted recreational activity training programme to the subjects six days in a week in two session in a day i.e. morning (7 to 9 am) and in evening (5:30 to 7:30). Recreational activities inculcated to the subjects were i.e. Bowling, Tambola, 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. No experimental treatment given to control group. Pretest and posttest was recorded for the statistical analysis. Pre and post aggression and self injuriousbehaviour status were checked by self made Scale which was standardized with the suggestion of national and international experts. To compare pre and post test of experimental and control group, analysis of covariance ANCOVA was applied. The results were significant at 0.05% level of significance. The outcomes of the investigation show that there are positive effects of recreational activities over the various dimensions of aggression and self injurious behaviour.

Key Words: Activities, Aggression behaviour, Self injurious behaviour, Autistic Children

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#### **Introduction:**

Autism, a situation in which an individual is not involved in any social activity hence, an isolated self. In recent scenario, Autism term is not new, review of studies shows that, this disorder was customary in the books more than 100 years. "Eugen Bleuler a Swiss psychiatrist was former of the word autism in 1908" (Hirari, 1968). Autism spectrum disorder (ASD) has been seen before the age of 3 and last throughout a person's life, although symptoms may improve over time. Some autistic children give an idea about hints of upcoming problems within the first few months of life. People with autism spectrum disorder (ASD), the impairments make life very challenging. These impairments related to social skill, communication and Unusual Interests and repetitive Behaviors.

Aggressive behavior is commonly seen in autistic children and it depends on severity of a child's autistic symptoms (Jang et al., 2011). Aggressive behavior in autism spectrum disorder imports harmful effects on care givers and are known to increase family stress. Prevalence estimated aggressive behaviors in children with autism spectrum disorder (ASD) vary widely, ranging from 8% to 68% (Mazurek et al., 2013) and seen higher with male sex as compared to female sex.

Self-harm present in every individual to some extent or other. There are many secret actions that can individual do to themselves in intentionally, which are harmful or injurious to the self (Camelot Foundation/Mental Health Foundation, 2004), self injury as a range of inside behaviour. Behavioral complication, personality disorders, and depression are three common situations of autism in which self injurious behaviour occurs. Level self injury increased in autistic children due to poorer expressive functional language and more severe impairment on the communication, socialization and daily living (Baghdadliet al., 2003).

Every one noticed autistic individual have higher levels of isolation and social dissatisfaction than normal children and recreation make a path to contact people with each other and form a relationship. Individuals with autism can display a range of challenging behaviors. Behaviors, such as physical aggression, self-abuse have been found to decrease when individuals are engaged in appropriate recreation activities. Participation in recreation activities also can enhance self-control and help calm and relax during times of anxiety. Recreational activities are associated with positive reinforcement in general. Role of recreational activities has not been

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rigorously examined with regard to autistic children treatment. Recreational activities provide an opportunity to become physically active and provide some therapeutic benefit also.

#### **Objective of the Study:**

- 1. To observe the effect of recreational activities on aggression behavior of autistic children.
- 2. To examine the effect of recreational activities on self injurious 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

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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. Apart from this, the researcher gone through review of related literature, various test and books for self observation. The suggestions of 40 experts were incorporated for the better 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.

#### **Results:**

#### Table no. 1

## Descriptive statistics of Recreational activities of Experimental and Control Group Pretest Post test of aggression behaviour of autistic children

		Different Groups				
<mark>S.N</mark> o.	<b>Descriptive Statistics</b>	Experimental Group		Control	Group	
	-	Pre Test	Post Test	Pre Test	Post Test	
1	N	5	5	5	5	
2	Mean	31.2000	25.6000	30.6000	30.8000	
3	Std. Error of Mean	.20000	.67823	.24495	.37417	
4	Std. Deviation	.44721	1.51 <mark>6</mark> 58	.54772	.83666	
5	Variance	.200	2.300	.300	.700	
6	Skewness	2.236	1.118	609	.512	
7	Std. Error of Skewness	.913	.913	.913	.913	
8	Kurtosis	5.000	1.456	-3.333	612	
9	Std. Error of Kurtosis	2.000	2.000	2.000	2.000	
10	Range	1.00	4.00	1.00	2.00	
11	Minimum	31.00	24.00	30.00	30.00	
12	Maximum	32.00	28.00	31.00	32.00	

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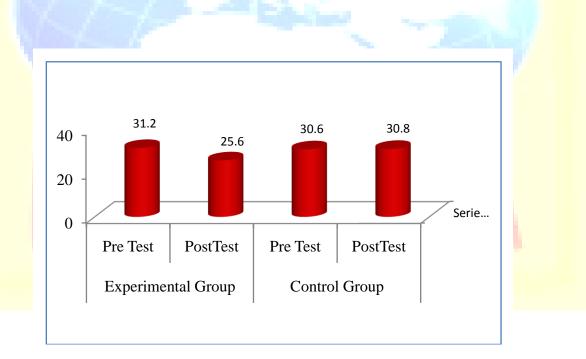
#### Table no 2

## Analysis of covariance of comparison of post test means of Experimental group and Control group of autistic children in relation to Recreational activities

	Sum of	df	Mean Square	F	Sig.
	Squares				
Contrast	58.000	1	58.000	40.600	.000
Error	10.000	7	1.429		

\*Significant at 0.05 level  $_{(1, 7)}$ df = 5.59

In Table no. 2 the Sig value was found .000, which is less than 0.05 and the calculated f-value = 40.600 was found to be greater than tabulated value = 5.59 at 1, 7 df, therefore it shows significance difference.



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Table 3

## Descriptive statistics of Recreational activities of Experimental and Control Group Pretest Post test of self injurious behaviour of autistic children

		Different Groups				
S.No	<b>Descriptive Statistics</b>	Experimental Group		Control Group		
•		Pre Test	Post Test	Pre Test	Post Test	
1	N	5	5	5	5	
2	Mean	47.6000	38.000	48.0 <mark>000</mark>	48.6000	
3	Std. Error of Mean	.50990	.83666	1.51658	.92736	
4	Std. Deviation	1.14018	1.87083	3.39116	2.07364	
5	Variance	1.300	3.500	11.500	4. <mark>300</mark>	
6	Skewness	405	1.145	.577	23 <mark>6</mark>	
7	Std. Error of Skewness	.913	.913	.913	.913	
8	Kurtosis	178	2.000	.488	-1. <mark>963</mark>	
9	Std. Error of Kurtosis	2.000	2.000	2.000	2.000	
10	Range	3.00	5.00	9.00	5.00	
11	Minimum	46.00	36.00	44.00	46.00	
12	Maximum	49.00	41.00	53.00	51.00	

Table 4

Analysis of covariance of comparison of post test means of Experimental group and Control group of autistic children in relation to Recreational activities

	Sum of	df	Mean Square	F	Sig.
	Squares				
Contrast	271.782	1	271.782	74.445	.000
Error	25.555	7	3.651		

\*Significant at 0.05 level  $_{(1, 7)}$ df = 5.59

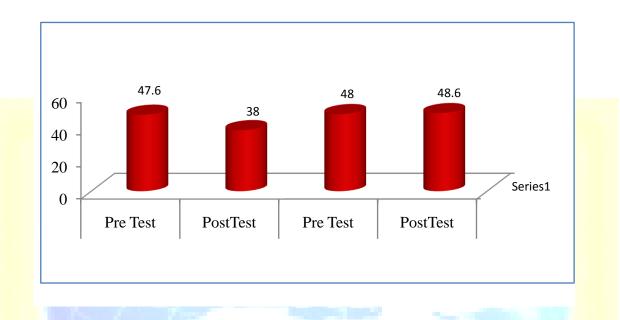
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In table no. 4 the Sig value was found .000, which is less than 0.05 and the calculated f-value = 74.445 was found to be greater than tabulated value = 5.59 at 1, 7 df, therefore it shows significance difference.

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#### **Conclusion:**

- The obtained or calculated f-value = 40.600 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 aggression behavior of autistic children.</li>
- The obtained or calculated f-value = 74.445 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 self injurious behavior of autistic children.</li>

#### **References:**

- Baghdadli., A., Pascal, C., Grisi, S., &Aussilloux, C, 2003, Risk factors for self-injurious behaviours among 222 young children with autistic disorders, Journal of Intellectual Disability Research, 47, pp 622.
- Bartak, L.,&Rutter,M, 1976, Differences between mentally retarded and normally intelligent autistic children, Journal of Autism and Childhood Schizophrenia, 6, pp 109– 120.
- Camelot Foundation/Mental Health Foundation, 2004, Launch of Inquiry into self-harm among 11-25 year olds: 30<sup>th</sup> March, House of Commons, Westminster
- Centers for Disease Control and Prevention, 2012, Prevalence of autism spectrum disorders—Autism and Developmental Disabilities Monitoring Network, United States, 2008. MMWR, 61(SS3), 1–19.
- Hirari, N, 1968, Childhood autism, Tokyo: Nihon-Shoni-Iji (In Japnese)
- Jang, J., Dixon, D. R., Tarbox, J., &Granpeesheh, D, 2011, Symptom severity and challenging behavior in children with ASD. Research in Autism Spectrum Disorders, 5(3), pp 1028–1032.
- Lecavalier, L. 2006, Behavioral and emotional problems in young people with pervasive developmental disorders: Relative prevalence, effects of subject characteristics, and empirical classification. Journal of Autism and Developmental Disorders, 36(8), pp 1101–1114
- Mazurek., M. O, Kanne, S. M., &Wodka, E. L, 2013, Physical aggression in children and adolescents with autism spectrum disorders. Research in Autism Spectrum Disorders, pp 455–465.
- Tureck, K., Matson, J. L., Turygin, N., & Macmillan, K, 2013, Rates of psychotropic medication use in children with ASD compared to presence and severity of problem behaviors. Research in Autism Spectrum Disorders, 7(11) pp 1377–1382.
- Witwer, A., &Lecavalier, L, 2005, Treatment incidence and patterns in children and adolescents with autism spectrum disorders. Journal of Child & Adolescent Psychopharmacology, 15(4) pp 671–681.

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