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## A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO-MODELING ON SOCIAL SKILLS AMONG CHILDREN WITH AUTISM IN SELECTED SCHOOLS, COIMBATORE

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### ABSTRACT

**Method:** The research design adopted for this study is Pre-test post-test control group. The modified autism social skills profile tool was used for this study. Stratified random sampling technique was adopted. Data collected from parents or family members using interview method. Observation method was used for the Pre-test. Intervention was given for the experimental group for the period of five weeks. Post-test for the control group was done using the same tool. **Result:** The result shows that, Z value of mean and standard deviation of the experimental group, are 14.9 and 2.95 and in the control group are 11.1 and 2.22. With regard to the social skills, the calculated value of Z is greater in experimental group at 5% level of significance, there is a significant difference in social skills between experimental and control group.

### KEYWORDS

Assess, Effectiveness, Autism, Video-modeling and Social skills.

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### INTRODUCTION

Children are in continuous process of growth and development. Impaired social interaction, verbal and non-verbal communication, and restricted and repetitive behaviour are the triad of symptoms. A deficiency in social functioning is one of the defining features of autism. Video-modeling has been an effective teaching strategy in facilitating generalization of social skills among children with autism.

### Statement

A study to assess the effectiveness of video-modeling on social skills among children with autism in selected schools, Coimbatore.

## **Objectives**

To assess the level of social skills among children with autism in experimental and control group.

To evaluate the effectiveness of video-modeling on social skills among children with autism in experimental group.

To compare the social skills among children with autism between experimental and control group after video-modeling.

To associate the findings with selected demographic variables.

## **Hypothesis**

Children with autism who receive video-modeling will show a significant improvement in social skills among experimental group than control group.

## **Research approach**

In this study the researcher had adopted Quantitative research design.

## **Research design**

The Pre-test post-test control group design

## **Setting of the study**

The study was conducted in three schools, the schools are located 15kms from K G Hospital, Coimbatore.

## **Variables**

### **Independent variable**

Independent variable: Video-modeling regarding social skills

### **Dependent variable**

Dependent variable: Social skills among children with autism

### **Influencing variables**

The influencing variables in this study are age of the child, birth order of the child, age of admission in school, type of family and residential area.

### **Confounding variable**

Confounding variable - regular schedule followed in the school.

## **Population**

The target populations were 130 children with autism from three selected schools in which 70 children were the accessible population who met the inclusion and exclusion criteria, among them 40 samples were selected randomly for the study.

## **Sample size**

The sample size was determined by using sample size determination formula. Sample size taken for the study is 40.

## **Sampling technique**

The investigator used stratified random sampling technique.

## **Criteria for sample selection**

### **Inclusion criteria**

Children with autism between age group of 6 and 12 yrs.

Children who are willing to participate.

Children who are able to sit in a place for at least 30 minutes for watching videos.

Children who can understand Tamil and English.

### **Exclusion criteria**

Children with other associated disorders like learning disabilities and Attention deficit hyperactive disorder.

Children with visual acuity problem such as low vision and refractive error.

Children with Asperger's syndrome.

Children who are sick during the study.

## **Description of tool**

The tool consists of two sections

### **Section A: Demographic Data**

It consists of Age of the child, Gender, Birth order of the child, Number of siblings, History of autism among siblings, Age during admission in school, Age of the mother during child birth, Nature of parents marriage, Type of family, Care taker of the child, Education of father, Occupation of father, Education of mother, Occupation of mother, Family income per month and Place of residence.

### **Section B: Modified Autism Social Skills Profile**

It comprises of 20 items in a checklist. By observation method the social skills of children with autism are assessed. Each positive response carries 1mark and negative response carries 0. The maximum possible score is 20 and the minimum score is 0.

## **Plan for data analysis**

Data was analyzed on the basis of objectives and testing of hypothesis by using descriptive and inferential statistics.

## RESULTS AND DISCUSSION

### **To assess the level of social skills among children with autism in experimental and control group**

The distribution of social skills among children with autism in experimental group. Figure No.1 In pre-test, 14(70%) children had average social skills and 6(30%) had below average social skills and none of them had above average social skills.

The distribution of social skills among children with autism in control group. Figure No.2 In pre-test, 9(45%) children had average social skills and 11(55%) had below average social skills and none of them had above average social skills.

### **To evaluate the effectiveness of video-modeling on social skills among children with autism in experimental group**

Comparison of social skills among children with autism in pre-test and post-test-I in the experimental group. During the pre-test, the mean and standard deviation are 12.05 and 2.4 and during post-test-I the mean and standard deviation are 12.35 and 2.13. With regard to the social skills the calculated value of t is less than the tabulated value of t at 5% level of significance. So, the null hypothesis is accepted. Therefore, there is no significance difference between pre-test and post-test-I social skills scores.

Comparison of social skills among children with autism in pre-test and post-test-II in the experimental group. During the pre-test, the mean and standard deviation are 12.05 and 2.4 and during post-test-II the mean and standard deviation are 14.9 and 2.95. With regard to the social skills, the calculated value of t is greater than the tabulated value of t at 5% level of significance. So, the null hypothesis is rejected. Therefore, there is a significance difference between pre-test and post-test-II social skills scores. Hence, we conclude that video-modeling is effective intervention in improving social skills among children with autism.

Figure No.1 In the experimental group, during the pre-test, 14(70%) children had average social skills and 6(30%) had below average social skills and none of them had above average social skills. During post test-I, 1(5%) child had above average social skills, 15(75%) children had average social skills and 4(20%) children had below average social skills.

During post test-II 11(55%) children had above average social skills, 7(35%) children had average social skills and 2(10%) children had below average social skills.

Figure No.2 In the control group, during the pre-test, 9(45%) children had average social skills and 11(55%) had below average social skills and none of them had above average social skills. During post-test-I, none of them had above average social skills, 11 (55%) children had average social skills and 9(45%) children had below average social skills. During post test-II, none of them had above average social skills, 13(65%) children had average social skills and 7(35%) children had below average social skill.

### **To compare the social skills among children with autism between experimental and control group after video-modeling**

Comparison of post-test I social skills between experimental and control group. In the experimental group, the mean and standard deviation are 12.35 and 2.13 and in the control group the mean and standard deviation are 10.55 and 2.04. With regard to the social skills, the calculated value of Z is greater than the tabulated value of Z at 5% level of significance. So, the null hypothesis is rejected. Therefore, there is a significant difference in social skills between experimental and control group. It shows that video modeling is effective in improving social skills among children with autism in the experimental group.

Comparison of post-test II social skills between experimental and control group. In the experimental group, the mean and standard deviation are 14.9 and 2.95 and in the control group the mean and standard deviation are 11.1 and 2.22. With regard to the social skills, the calculated value of Z is greater than the 58 tabulated value of Z at 5% level of significance. So, the null hypothesis is rejected. Therefore, there is a significant difference in social skills between experimental and control group. It shows that video-modeling is effective in improving social skills among children with autism in the experimental group.

**To associate the findings with selected demographic variables**

Chi square test was used to identify the association with selected demographic variables like age of the child, age during admission in school, age of mother during child birth, nature of parent’s marriage, type of family, education of father and type of residence. Association between pre test score of social skills and the selected demographic variables. The result shows that the calculated value of chi square is greater than the tabulated value at 5% level of significance. Therefore, there is an association between the birth order of child and social skills among children with autism in experimental group.

Association between pre test score of social skills and the selected demographic variables. The result shows that the calculated value of chi square is greater than the tabulated value at 5% level of significance. Therefore, there is an association between the birth order of child and social skills among children with autism in control group.

The association between post-test-II score of social skills of experimental and control group and selected demographic variables. The results showed that the calculated value of chi square is lesser than the tabulated value at 5% level of significance. It is concluded that there is no association between post test scores and selected demographic variables.

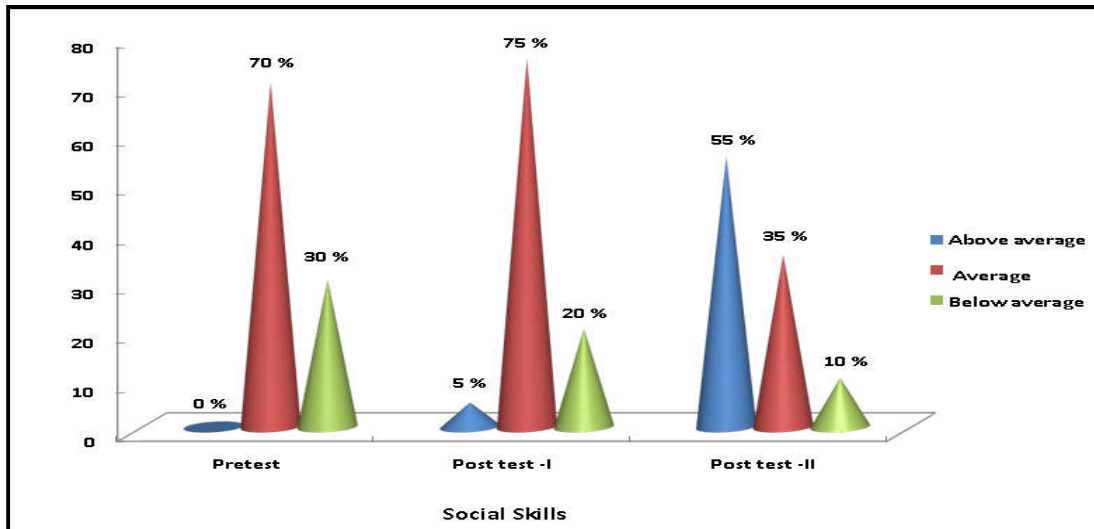


Figure No.1: Distribution of social skills among children with autism in experimental group

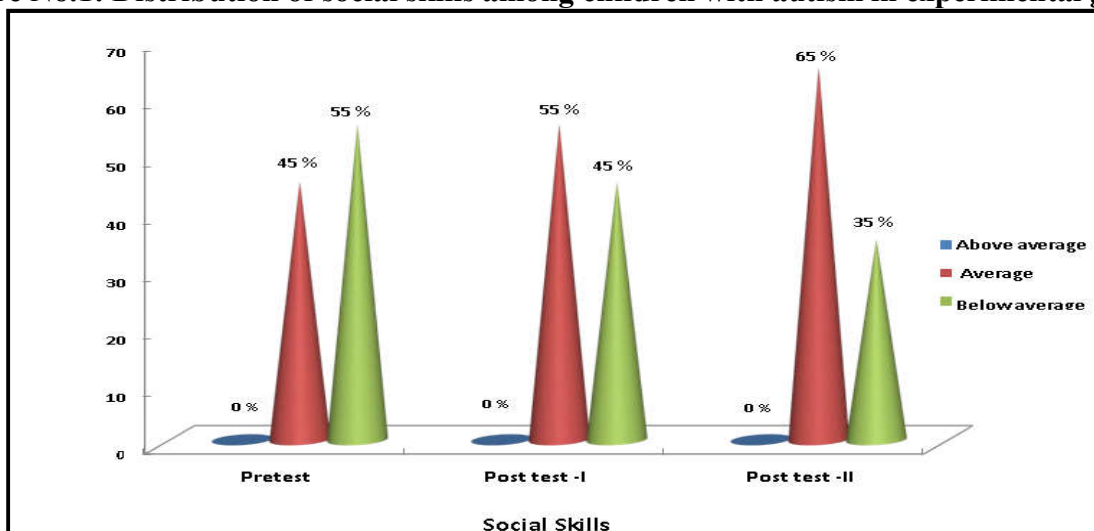


Figure No.2: Distribution of social skills among children with autism in Control group

## CONCLUSION

Good health of children are the prime importance in all countries. Future of children with autism should be with adequate social skills that are necessary to have successful social interactions. The present study has been supported by various series of other studies which confirmed that video-modeling is effective in improving social skills among children with autism. From analysis and results, it was concluded that video-modeling on social skills is an effective intervention in improving social skills among children with autism.

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## CONFLICT OF INTEREST

We declare that we have no conflict of interest.

## BIBLIOGRAPHY

1. Assuma B. Text book of pediatric nursing, *Mosby Publications, New Delhi*, 1<sup>st</sup> Edition, 2009, 760.
2. Basavanthappa B T. Nursing research, *Jaypee Brothers Publications, New Delhi*, 1<sup>st</sup> Edition, 2010, 400.
3. Basavanthappa B T. Nursing theories, *Jaypee Brothers Publications, New Delhi*, 1<sup>st</sup> Edition, 2007, 406.
4. Cockburn F. Children medicine and surgery, *Great Britain Publications*, 1<sup>st</sup> Edition, 1996.
5. Donna L W. Essentials of pediatric nursing, *Mosby Publication, New York*, 5<sup>th</sup> Edition, 2004.
6. Dehart G B. Child development its nature and course, *Mc Graw Hill Publications, New York*, 1<sup>st</sup> Edition, 2000.
7. Ghai O P. Essential pediatric nursing, *CBS Publications and Distributors, Bangalore*, 7<sup>th</sup> Edition, 2012, 1551.
8. Gupta P. Essential pediatric nursing, *CBS Publications, New Delhi*, 3<sup>th</sup> Edition, 2011, 572.
9. Gupta S P. Book of statistical methods, *Sultan Chand and Sons Publications, New Delhi*, 1<sup>st</sup> Edition, 1969.
10. Hockenberry W. Wong's nursing care of infants and children, *Canada Missouri: Mosby Publications*, 10<sup>th</sup> Edition, 2015, 1734.
11. Akullian J, Bellini S. A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with autism spectrum disorders, *Exceptional Children*, 73(3), 2007, 264-287.
12. Alzyoudi Mohammed. The impact of video modeling on improving social skills in children with autism, *British Journal of Special Education*, 42(1), 2014, 1-16.
13. Amanda S. Day. Social skills intervention for students with autism spectrum disorders: A survey of school psychologists, *Utah State University*, 2011, 1-93.
14. Suresh A. Poovathinal, Ayyappan Anitha. Prevalence of autism spectrum disorders in a semi urban community in south India, *Annals of Epidemiology*, 26(9), 2016, 663-665.
15. Brian Reichow. Social skills groups for people aged 6 to 21 with autism spectrum disorders (ASD), *The Campbell Collaboration*, 8(1), 2012, 1-75.
16. Bagaiolo L F. Procedures and compliance of a video modeling applied behaviour analysis interventions for Brazilian parents of children with autism spectrum disorders, *Randomized Controlled Trial Autism*, 21(5), 2017, 603-610.
17. Charlop-Christy M H. A comparison of video modeling with *in vivo* modeling for teaching children with Autism, *Jour of Auti and Develop Dis*, 30(6), 2000, 537-550.
18. Christopher Sheil. Social skills in children with Autism, *Indian Journal of Applied Research*, 5(1), 2015, 1-3.
19. Cohen Baron Simon. Prevalence of autism spectrum disease, UK school based population study British, *Journal of Psychiatry*, 194(6), 2009, 500-510.
20. Erin Rotheram-Fuller. Social skills assessments for children with autism spectrum disorders, *Rotheram-Fuller E*, 3(3), 2013, 1-8.

21. <http://www.watchmelearn.com/video-modeling/what-is-video-modeling>.
22. [https://en.wikipedia.org/wiki/Video\\_modeling](https://en.wikipedia.org/wiki/Video_modeling).
23. [https://en.wikipedia.org/wiki/Implementation and Effectiveness of Using Video Self-Modeling with Students with ASD](https://en.wikipedia.org/wiki/Implementation_and_Effectiveness_of_Using_Video_Self-Modeling_with_Students_with_ASD).
24. <https://www.iidc.indiana.edu//index.php/page1d-video-self-modeling>.
25. <http://autismpdc.fpg.unc.edu/content/video-modeling>.
26. [www.autisminternetmodules.org](http://www.autisminternetmodules.org).
27. <http://dx.doi.org/10.4172/2165-7890.1000122>.
28. [sagepub.com/journalsPermissions.nav](http://sagepub.com/journalsPermissions.nav).
29. <https://www.ncbi.nlm.nih.gov/pubmed/1586346>.
30. [www.sciencedirect.com/science/article/pii/S1047279716301995](http://www.sciencedirect.com/science/article/pii/S1047279716301995).
31. <http://dx.doi.org/10.1155/2014/514026>,  
Increasing prevalence, changes in diagnostic criteria and nutritional risk factors for autism spectrum disorders.

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