

Effectiveness of Multimedia Package on Solving the Problems of Caregivers with Autism Spectrum Disorder Children

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Abstract: This paper vivifies the effectiveness of Multimedia package on solving the problems of Caregivers of Autism Spectrum Disorder Children in Special schools at Primary level. Researcher tried to reduce the distress of Caregivers of ASD children at Primary level. . .

Objectives of the study: 1.To find out the distress of Caregivers. 2. To find out whether there is any significant difference between Pre-test of control group and Post-test of control group caregivers of ASD children related to reducing the distress of Caregivers by using Multimedia package.3. To find out whether there is any significant difference between Pre-test of Experimental group and Post-test of Experimental group caregivers of ASD children related to reducing the distress of Caregivers by using Multimedia package.

Methodology: Experimental method was adopted in the study.

Sample: Thirty caregivers those who were looking after the ASD children, Coimbatore were taken as sample for the study.

Tool: Researcher's self-made tool was used as a tool for the study.

Validity of the tool was established by the opinion of the juries.

Reliability of the tool was established by the test-retest method. Statistical technique: 't' test was used to analyze the study.

Findings Multimedia Package was more effective in reducing the distress of Caregivers.

Educational implications: It can be implemented all the Special schools.

Keywords: Multimedia Package, Conventional method and Caregivers of Autism Spectrum Disorder Children

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I. Introduction

Role of Caregivers has unique place in fostering Children of Autism Spectrum Disorder. Caregivers are backbone of developing of Caregivers of Autism Spectrum Disorder Children. . Even if many trainings were using among Caregivers of Autism Spectrum Disorder Children. They were not fruitful to Caregivers of Autism Spectrum Disorder Children The researcher endeavored to use Multimedia package on solving problems of Caregivers of Autism Spectrum Disorder Children in Special schools. The study enlightens the effectiveness of Multimedia package on solving the problems of Caregivers of Autism Spectrum Disorder Children in Special schools

Need and Significance of the study

The Multimedia package includes assuaging distress of Caregivers of ASD children on problems of psychological distress, Mental agony, Social problems and Financial supports. It supports Caregivers to learn about social platforms and contacts details through online. Multimedia package develops the autonomy and confidence of Caregivers of ASD children. By this package, Caregivers of ASD children can face the unknown situations and tasks in a real context. Problems of Caregivers of ASD children can be reduced by using the package and enhancing knowledge how to live stress free life. Hence the researcher developed the Multimedia package.

II. Review of Related Studies

Kendra E. Guinness¹; Edward G. Feil (2025) show that caregivers of children with autism can be taught a variety of behavioral strategies, but there is little research on teaching caregivers to prioritize rapport building over skill acquisition during play. The current study evaluated the effects of a digital training package on the rapport-building skills of four caregivers of children with autism. Target skills were derived from parent-child interaction therapy with specific adaptations for children with limited communication and play skills. The

intervention package included asynchronous online modules with video models, active response opportunities, and automated feedback as well as synchronous feedback via video chat. All four caregivers demonstrated increases in rapport building skills, and three of four dyads showed increases in interactive play post intervention. Caregivers also rated the intervention favorably. Data on participant and interventionist time to complete the intervention guide a discussion of the efficiency of combining asynchronous and synchronous strategies.

Paquet Croteau, Natalie; Moore, Colleen; Griffith, Annette; Franco, Erica (2023) enlightens Toileting skills are a milestone typically achieved by the age of four. For many caregivers, particularly those who have children diagnosed with autism spectrum disorder or other developmental disabilities, teaching toileting is a challenge resulting in delayed implementation. Delaying toileting increases the risk of challenges to acquiring this skill. Caregivers are fundamental and research shows that their involvement supports the maintenance and sustainability of this skill. Four caregivers were taught a 24-step toilet training program to teach toileting. Behaviors measured included urination success, urine accident frequency, and child requests for the bathroom. All caregivers learned the 24-step procedure and the toilet training package was effective in teaching three of the four children daytime urine continence.

Objectives of the study: 1.To find out the problems of Caregivers of ASD children.2.To find out the significant difference in mean score between the pre test of control group and the post test of control group.3.To find out the significant difference in mean score between the pre test of Experimental group and the post test of Experimental group.4.To find out the impact Multimedia package on solving problems of Caregivers of Autism Spectrum Disorder Children in Special schools.

Hypotheses of the study: 1. Caregivers of ASD children had problems in fostering ASD children .2. There is no significant difference in mean score between the pre test of control group and the post test of control group. 3. There is no significant difference in mean score between the pre test of Experimental group and the post test of Experimental group. 4. Multimedia package is more effective than conventional training in solving problems of Caregivers of Autism Spectrum Disorder Children.

Methodology: Parallel group Experimental method was adopted in the study.

Sample: Thirty Caregivers of ASD children from Gowmaran special school and W.V.S special school were selected as sample for the study. Fifteen Caregivers of ASD children were considered as Controlled group and another Fifteen were considered as Experimental group.

Tool: Researcher's self-made Effectiveness of Multimedia Package was used as a tool for the study. The tool consisted of twenty questionnaires.

Construction of tools:

The investigator's self made Effectiveness of Multimedia Package was used for the pretests and post tests of both control groups and experimental groups. The same question was used for both pre and post tests to evaluate the Caregivers of ASD children through three-point rating scale which carried Developed-2, Medium Development-1, No Development-0.

Reliability of the tool

A test is reliable if it can be repeated with a similar data set and yields a similar outcome. The expectation of a good research is that it would be reliable. It refers to the trustworthiness or consistency of measurement of a tool whatever it measures. Under this study the reliability had been computed using Test-retest method and the calculated value comes to 0.80. The value is quite significant and implies that the tools adopted were reliable. Hence the reliability was established for the study.

Validity of the tool

The concept of validity is fundamental to a research result. A result is internally valid if an appropriate methodology has been followed in order to yield that result. A test is said to be valid if it measures what it intends to measure. The expert opinion of the co staff was obtained before freezing the design of the tools. Subject experts and experienced teachers were requested to analyse the tool. Their opinions indicated that the tool had content validity.

Procedure of the study: 1.Identification of the problem by administering pre-test to the both groups. 2. Planning. 3. Developed Multimedia package. 4. Execution of Multimedia package .5.Administering post-test.

Data collection:

The researcher administered pretest to the Caregivers of ASD children with the help of Special Teachers. The tool and response sheets were given to the individual Caregivers of ASD children and collected and evaluated facing obstacles of the Caregivers were identified by the pretest. The causes and problems of Caregivers were found out. Multimedia package was used in the special schools. The posttest was administered to find out the effectiveness of Multimedia package in reducing the problems of Caregivers were found.

Data analysis

Statistical technique **t** test was applied for the study.

HYPOTHESIS TESTING

Hypothesis 1:

Caregivers of ASD children had problems in fostering ASD children.

In the pre-test, Caregivers of ASD children scored 27% points in reducing problems in existing conditions and the Experimental group Caregivers of ASD children 73% points. It shows that Caregivers of ASD children had problems in conventional training.

Hypothesis 2:

There is no significant difference in mean score between the Pre test of control group and the Post test of control group in reducing problems of Caregivers of ASD children.

Table -1

Stages	N	Mean	S.D.	df	t- value	Level of significance
Pretest control group	15	46.50	4.45	28	0.4907	P<0.05
Post test control group	15	47.30	4.48			

The table showing mean scores between Pre test of Control group and Posttest of Control group.

The calculated 't' value is (0.4907) greater than table value (2.00). Hence null hypothesis is accepted at 0.05 levels. Hence there is no significant difference between the pre test of control group and post test of control group in mean scores of the caregivers in reducing the problems of Caregivers of ASD children.

Hypothesis 3:

There is no significant difference in mean score between the Pre test of Experimental group and the Post test of Experimental group in reducing the problems of Caregivers of ASD children.

Table-2

Stages	N	Mean	S.D.	df	t- value	Level of significance
Pretest Experimental group	15	48.20	5.07	28	3.515	P>0.05
Post test Experimental group	15	55.40	6.10			

The table showing mean scores between pretest of Experimental group and posttest of Experimental group.

The calculated 't' value is (3.515) greater than table value (2.00). Hence null hypothesis is rejected at 0.05 levels. Hence there is no significant difference between the pre test of Experimental group and Post test Experimental group in reducing the problems of Caregivers of ASD children.

Hypothesis 4.

Multimedia package is more effective than conventional training in solving the problems of Caregivers of Autism Spectrum Disorder Children

Mean scores of the Caregivers of ASD children in post-test of control group is 47.30 and the mean scores of the Caregivers of ASD children in post test of Experimental group is 55.40. Scoring of the post test of Experimental group (55.40) is greater than Pre test of Experimental group (48.20). It shows that Multimedia package is more effective than conventional training in solving problems of Caregivers of Autism Spectrum Disorder Children.

Findings:

1. In the pre-test, Caregivers of ASD children scored 27% points in reducing problems in existing conditions and the Experimental group Caregivers of ASD children 73% points. It shows that Caregivers of ASD children had problems in conventional training.

2. The calculated 't' value is (0.4907) greater than table value (2.00). Hence null hypothesis is accepted at 0.05 levels. Hence there is no significant difference between the pre test of control group and post test of control group in mean scores of the caregivers in reducing the problems of Caregivers of ASD children.
3. The calculated 't' value is (3.515) greater than table value (2.00). Hence null hypothesis is rejected at 0.05 levels. Hence there is no significant difference between the pre test of Experimental group and Post test Experimental group in reducing the problems of Caregivers of ASD children.
4. Mean Score of the post test of Experimental group(55.40) is greater than Pre test of Experimental group(48.20) It shows that Multimedia package is more effective than Conventional training in solving the problems of Caregivers of Autism Spectrum Disorder Children.

EDUCATIONAL IMPLICATIONS

1. Using the Multimedia package among caregivers of all special schools.
2. It can be encouraged to implement to use among school teachers of special schools.
3. It may be implemented in all the districts of Tamilnadu.
4. It may be implemented in special schools of all over India
5. It may be more supportive to promote NEP 2020.

III. Conclusion

The study reveals that Caregivers of Autism Spectrum Disorder Children in Special Education had problems by adopting conventional training. Multimedia package is more effective than conventional trainings. Hence it may be more supportive to reduce the problems of Caregivers in nurturing the Autism Spectrum Disorder Children in Special schools.

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