

To Compare The Effectiveness of Simplified Teaching Method on Improving Pre Writing Skills In Kindergarten And Mild Intellectual Disability Children

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Abstract

Background: The prewriting skills are important prior to writing which is the predominant task for the elementary school children. Intervention in prewriting skills help in acquiring legible handwriting. This study compared the improvement in pre writing skills between the kindergarten children and the mild Intellectual Disability through simplified teaching method done by the Educational Assistant/Teacher. The method of teaching which focused on improving prewriting skills was taught by the Occupational Therapist to the Assistant/Teacher. This comparison showed that there was significant difference in improvement of prewriting skills between Kindergarten children and mild Intellectual disability children.

Aim: To compare the learning prewriting skills between the kindergarten and the mild Intellectual Disability children through simplified teaching method.

Objectives: To assess the level of prewriting skills. To set the realistic goals to improve the next level of prewriting skills. To facilitate to get through simplified teaching technique. To re-assess prewriting skills. To reinforce newly learnt prewriting skills.

Methodology: 40 subjects (20 mild Intellectual Disability + 20 kindergarten children) who fitted inclusion criteria were selected for this study. Prewriting skills assessment was done at baseline for all the subjects. The subjects were taught to attain goals through simplification learning method by Occupational therapist or Educational Assistant/Teacher. Repetition was encouraged to enhance learning skill. The session was for 25 minutes per day for the Intellectual Disability and 10 to 15 minutes for the Kindergarten children. So, children underwent 3 sessions per week for 15 days initially. The progress was monitored in every 15 days.

Result: Pretest mean value of Kindergarten is 1.80 and posttest Mean value is 2.95. Pretest Mean value of Intellectual Disability is 1.60 and posttest Mean value of Intellectual Disability is 1.55 if P value is 0.000. Result showed that there was significant improvement in prewriting skill in both subjects after intervention and the improvement were statistically more than Intellectual Disability children.

Conclusion: The prewriting skills were improved through simplified teaching technique on both (Kindergarten and Mild Intellectual Disability) children but in Kindergarten school children showed better improvement than Intellectual Disability children in terms of time and accuracy.

Key Words: Kindergarten, Mild Intellectual Disability, Prewriting Skills.

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I. Introduction

Learning to write legibly is a critical skill for children to convey to their parents, teachers, and peers knowledge and information and for children to accomplish a variety of sophisticated academic tasks.¹ As for letter copying acquisition, one study by Tan-Lin (1981) examined the sequential stages of letter acquisition of 110 children between the ages of 3 and 5 years.¹

Readiness for writing on the basis of a child's ability to copy geometric form, instruction in handwriting to be postponed until after the child is able to master the first nine figures in the Developmental Test of Visual-Motor Integration.¹ The nine figures are a vertical line, a horizontal line, a circle, a cross, a right oblique line, a square, a left oblique line, an oblique cross, and a triangle. Intellectual Disability is defined as impairment in intelligence from early life and inadequate mental development leading to impaired learning ability.¹

1.1 Aim

To compare the learning prewriting skills between the kindergarten and the mild Intellectual Disability children through simplified teaching method.

1.2 Objectives

To assess the level of prewriting skills. To set the realistic goals to improve the next level of Prewriting skills. To facilitate to get through simplified teaching technique. To re-assess prewriting skills. To reinforce newly learnt prewriting skills.

II. Methodology

A prewriting skill assessment form was prepared. Permission was taken from the authorities of the school where the study was carried out. Also the same was done from the normal kindergarten school.

2.1 Inclusion Criteria

Kindergarten children between 3 to 5 years. Kindergarten children of both sexes. Children with Mild Intellectual Disability whose Intelligent Quotient was assessed by Clinical Psychologist in the center. Children with Mild Intellectual Disability of both sexes.

2.2 Exclusion Criteria

Children with visual impairment and auditory loss.

After getting permission from the Principal of the school, the purpose of the study was explained to the Principal, Teachers and parents. After obtaining base line data from all the subjects, were given intervention and the post intervention data were collected at the end of the session.

Before the intervention, the class room environment was observed and the teaching methods were taught to the Educational assistant /Teacher by the Therapist. Then these methods were implemented on normal children in the class room. Simple connecting dot-to-dot lines method was taught to the children. The progress was monitored after two weeks then once in a month for 4 months.

This Pilot study was concluded with two subjects (Intellectual Disability), so the researcher would be familiar with the assessment form. A quiet room was preferred and care was taken to remove the destructible stimuli. And each subject was seen individually at a time. A blank white sheet was given and was asked to draw free hand with no specific theme given to them for 15 minutes. Then these drawing (prewriting) were estimated with the developmental age was identified and then realistic goals were set. Subjects were taught and helped to attain these goals, through simplification. The Completing the simple dot-to-dot pictures and mazes in the task.

Repetition was encouraged for to enhance learning skill. Primary goal was to encourage and motivate learning and developmental interest. These techniques or method of drawing were too implemented for the involving twenty minutes per day per student. After a week, the subjects were re-assessed with the same form which showed improvement in these prewriting skills.

Development of Prewriting and Handwriting in young children: Performance tasks/Items

Scribbles	1 Year
Copy of Horizontal line	2 Years
Copy of Vertical line & Circle	3 Years
Copy of Cross	4 Years
Copy of Square	5 Years
Copy of Triangle	6 Years
Copy of Diamond	7 Years

III. Results

Pre intervention mean value, SD of Kindergarten is 1.80, 0.410 respectively, Post intervention mean value, SD of Kindergarten is 2.95, 0.224 respectively, Pre intervention mean value, SD of Mild Intellectual Disability is 0.60, 0.503 respectively, Post intervention mean value, SD of Mild Intellectual Disability is 1.55, 0.510 respectively. From these two results, it showed that there was significant improvement.

IV. Discussion

The Occupational Therapist role is under service delivery systems of i) direct, ii) monitoring, iii) consultation. Supply the specific written and oral direction of the program, provide container (Basket) with full of materials such as Thera band & clay and white sheets, sometimes give suggestion to the service providers and make easier the process in the class room settings.¹

To promote prewriting skills in children, the following activities may be tried: (1) drawing lines and copying shapes using shaving cream, sand trays, or finger paints: (2) drawing lines and shapes to complete a picture story on chalk-boards: (3) drawing pictures of people, houses, trees, cars or animals with visual and verbal cues from the practitioner: and (4) completing simple dot-to-dot pictures and mazes¹. Activities for children of preschool and kindergarten age to enhance right-left discrimination include (1) playing “hockey-pokey”; (2) maneuvering through obstacles and focusing on the concept of turning right or left; and (3) connecting dots at the chalkboard with left to right strokes. The study is aimed at compare the improving

prewriting skills between the mild Intellectual Disability and the kindergarten children through simplified teaching methods.

Weiland Amundson (1994) supports the opinions of Beery (1982) and Benbow et al. (1992). They conduct the study on 60 typically developing kindergarten children aged (54 to 64 months) and their abilities to copy letter forms on VMI, ^{9, 10} these subjects are selected based on the IQ test. All are mild level. All the subjects are well in draw a line both horizontal and vertical and also the circle by copying the given pictures. Most of the subjects are finding difficult in copy a cross and they are not go for the further item which are shown in the table. (The children who can adequately draw the oblique cross can copy a significantly higher number of letters than little ones who cannot).

Staff or the therapist introduces the simplified teaching technique of learning the copy a cross with completion. The intervention period of each child is approximately around 15- 20 minutes. The cross item is performed in many times by using the pencil or wax crayon after the intervention. This practice took for each child is around two to three months. There is no time limit period in the intervention for Intellectual Disability. All the subjects are encouraged through giving positive reinforcement immediately after successful completion of the given item. Here the subjects are doing the same of copying the cross in many times. After completion of the study the therapist suggest this technique to the institutional staff to teach the same to the children. Finally the study found that the pretest mean value of both is 47 and the posttest mean value of both is 89. Hence, this can be seemed that there is definitely significant improvement.

V. Conclusion

The results conclude that the prewriting skills were improved through simplified teaching technique on both (Kindergarten and Mild Intellectual Disability) children but in Kindergarten school children showed better improvement than Intellectual Disability children in the sense of time and accuracy.

VI. Limitation

1. Small sample size.
2. Minimal number of items

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Table 1. Comparison of Mean, SD, SE and the 't' Value of the Kindergarten Children and Mild Intellectual Disability

Children	Test	Participants	Mean	SD	SE	T-Value	P-Value
Kindergarten	Pre	20	1.80	0.410	0.092	-10.510	0.000
	Post	20	2.95	0.224	0.050		

Intellectual Disability	Pre	20	1.60	0.503	0.112	-7.025	0.000
	Post	20	1.55	0.510	0.114		

Table 2. Group Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Change Score	S	20	.9500	.60481	.13524
	Sub	20	1.1500	.48936	.10942
Change DA	S	20	.9500	.48395	.10822
	Sub	20	.9000	.64072	.14327
Pre Test	S	20	.60	.503	.112
	Sub	20	1.80	.410	.092
Developments Age	S	20	3.35	.813	.182
	Sub	20	3.95	1.050	.235
Post Test	S	20	1.55	.510	.114
	Sub	20	2.95	.224	.050
Development Age	S	20	4.300	.7504	.1678
	Sub	20	4.850	.8127	.1817

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