



EFFECT OF PLAY ACTIVITIES IN LEARNING PRE-READING SKILLS AMONG CHILDREN WITH MILD INTELLECTUAL DISABILITY

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ABSTRACT

Pre-reading skills are very much important for child's success in school by developing reading ability and in day to day life for being independent in the society. The children with Intellectual Disability (CWID) experience difficulties in the complex task of reading. Since there is an apparent deficit in acquisition and learning reading skills among CWID, it will reflect on the academic performance and daily living skills. Before beginning the complex process of reading, CWID have to be helped to develop the reading readiness skills, which in turn be helpful for developing reading ability. The play activities when systematically implemented in the class by the special educator, it has a positive effect in learning pre-reading skills among CWID. It is possible for the CWID to learn pre-reading skills through play activities. In the present study, researchers had tried to find out the "Effect of play activities in learning Pre-reading skills among children with mild intellectual disability". To serve the purpose of the research ten samples with mild intellectual disability belonging to the age range of 4-9 years were selected through purposive sampling technique and an intervention package including six play activities for teaching Pre reading skills namely Color, Shape, Sound Recognition, Print Awareness, Numbers and Alphabets, was developed by the researchers. An intervention program was conducted for a month followed by Post test. Collected data were analyzed both quantitatively and qualitatively. Paired Samples Wilcoxon Signed Rank Test was applied for the study. The result of statistical analysis showed that play activities had significant effect in learning pre-reading skills among CWMID ($p < 0.05$ level).

Key Words: *Play activities, Pre-Reading skills and Children with Mild Intellectual Disability (CWMID).*

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INTRODUCTION

Intellectual disability (ID) means substantial limitations in age-appropriate intellectual and adaptive behavior. It is seldom a time-limited condition. Although many individuals with intellectual disability make tremendous advancements in adaptive skills (some to the point of functioning independently and no longer being considered under any disability category), most are affected throughout their life span (Hawkins, Eklund, James & Foose, 2003). The deficits in intelligence and adaptive behaviour in Children with Intellectual Disability effect in many domains of the life. (Schalock et.al.2007),(Pratt & Greydanus 2007) elaborated the definitions by stating that individuals with Intellectual Disability have limitations in developmental skills in several domains of functioning including cognitive, motor, auditory, language, psychosocial, moral judgement and specific integrative adaptive activities of daily living. According to the American Association of Intellectual and Developmental Disabilities (AAIDD), IQ levels for students with intellectual disabilities are significantly lower than those of their typically developed peers, this low level in IQ clarifies the link with the difficulties they encounter during the process of learning to read. Students who are identified with mild intellectual disabilities lag significantly behind grade-level peers in developing academic skills. Thus, students with mild intellectual disabilities are likely to be significantly delayed in learning to read and learning basic math skills (Taylor, Richards, & Brady, 2005).

Reading is a complex task (Thomas, 1996), which makes learning to read a difficult process for students with intellectual disabilities. It is noteworthy that delayed language development, which is characteristic of students with mild intellectual disabilities, also has a negative influence on academic

achievement. The academic area in which language delay has the most detrimental effect is reading (Torgersen, 2000). While students who are mildly intellectually disabled and who are poor readers share a deficit in phonological language skills similar to other students with disabilities such as students with learning disability (Fletcher, Scott, Blair, & Bolger, 2004), students with intellectual disabilities are also often significantly delayed in general oral language skills. The initiation of the reading skill is done by developing child's ability to differentiate and discriminate between one letter from other (and associating a sound with it). The important thing to teach is how to differentiate or discriminate. Teaching visual discrimination is the first step in this direction. That is, the child should be able to identify and tell the difference between similar looking objects, forms etc. Once the child is able to differentiate between shapes, size, colours, textures and forms etc. the child can be introduced alphabets followed by combination of alphabets to make a simple word.(Sindhu, 2009).

Play may be defined as a state of being in which an individual experiences increased energy focusing on activity, cheerfulness and joy which is accompanied by smiles and laughter, feeling an essence an ease of burden resulting from non-literality, renewed sense of optimism, and the beginning of new possibilities (Children's Play information service, 2002; Johnson et al.,2005). By characteristics children with intellectual disability have short attention span, limited memory, poor eye-hand coordination and low concentration. If play activities are used in teaching where children are physically involved using other senses the learning is found to be effective, long lasting and with more understanding. Due to the nature of

disability, CWID are generally inactive. Through play activities teaching becomes more alive. CWID are generally uninterested. Hence, whatever a teacher wants the child to learn should be made interesting. There are endless ways of getting initial interest; however we have to be imaginative enough to think of different ways to stimulate the children. Through enjoyable and rewarding activities we can help these children to concentrate and be absorbed in whatever they are doing. While playing there is no fear of comparison. They are free to make mistakes and they learn by making mistakes. So there is no inhibition and hence they participate. There is no fear of right or wrong, so child is allowed to explore and experiment. CWID have the limited ability to express feelings verbally. Through play activities the child is able to express inner feelings. It helps in child's intellectual development; it also fosters the development of manipulative and motor skills and serves as an effective tool. Children naturally enjoy to play any sort of a game with the spirit of enthusiasm. It serves as a perfect frame of mind for learning new concepts and ideas. Play creates a natural context for communication hence they provide opportunities to learn, practice language skill.

NEED AND SIGNIFICANCE OF THE STUDY

Play is intrinsically motivating, flexible, spontaneous and voluntary, allowing children to use their natural environment to promote learning and socialization. Play is essential to development because it contributes to the cognitive, physical, social, and emotional well-being of children and youth (Goldstein 2012). Play also has been regarded as an important strategy for educators to facilitate children's development in cognitive, social/emotional, motor, and language areas. Children with intellectual disability have

difficulties in reading which has negative influence on academic achievement. (Torgersen, 2000). Reading is a complex task (Thomas, 1996), which makes learning to read a difficult process for students with intellectual disabilities.

Before the child learns the complex task of reading, he should be helped to develop reading readiness skill. Before beginning the word reading to the person with intellectual disability, the training should be started with indirect preparation for reading. These are called the pre-requisite skills for the functional reading or pre-reading concepts which should be started from pre-school stage. This study is an attempt to find out effectiveness of play activities on learning pre reading skills among Children with Mild Intellectual Disability (CWMID). This study may be helpful for teachers, parents to improve the reading skill among CWMID.

OBJECTIVES OF THE STUDY

1. To find out the effect of play activities in learning pre reading skills among children with mild intellectual disability.
2. To find out the effect of play activities in learning pre reading skills with reference to domains among children with mild intellectual disability.

HYPOTHESIS

1. There is no significant difference between overall pre-test and post-test scores in learning pre reading skills through play activities.
2. There is no significant difference between pre-test and post-test scores with respect to domains in learning pre reading skills through play activities.

METHODOLOGY

Research Design

This study employs single group pre-test and post-test design under experimental research method.

Sample Design

Ten CWMID, ranging from 4 to 9 years were selected to serve the purpose of the study using purposive sampling technique.

Selection of Variables

Independent Variable- Play Activities

Dependent Variable- Pre-Reading skills (Color, Shape, Sound Recognition, Print Awareness, Numbers and Alphabets)of CWMID.

Development of Tool

An informal checklist consists of 47 items divided into six domains such as; (1) Colour (8 items), (2) Shapes (8 items),(3)sound

recognition (5 items),(4)print awareness (5 items), (5) Number (8 items), (6) alphabets (13 items)was developed by the researchers to assess the current level of the selected concepts before and after intervention programme is conducted.

Establishment of Validity and Reliability

The validity of the informal checklist was ensured through item validity. The researchers circulated the tool to 7 well qualified and experienced professionals in the respective and on the basis of their suggestions and comments the informal checklist had been modified. The reliability of the tool of pre-reading skills was established by using Pearson coefficient of correlation formula. The reliability of the tool was found as 0.91.

Indices and Scoring Criteria

The indices and scoring criteria are as given below:

Indices Used	Marks/Mark
➤ '+' for performing an item independently.	5 Marks
➤ 'C' for performing an item with clue.	4 Marks
➤ 'VP' for performing an item with verbal prompt.	3 Marks
➤ 'PP' for performing an item with physical prompt	2 Marks
➤ '-' for not able to perform an item.	1 Mark

DATA GATHERING PROCEDURE

- Permission was sought from the Principals of Special Schools to start data collection.
- Ten samples including male and female both in the age range of 4-9 years were identified.
- A pre-test was conducted to measure the current level of the sample individually using an informal check list developed by the researcher for a week.

- Play activities included in the intervention programme were given to the sample for a specific period of a month.
- At the end of the intervention post test was conducted using the same informal checklist to measure the progress of the sample individually in a week.

DATA ANALYSIS

The collected data were carefully tabulated and organized for the purpose of statistical analysis. The collected data were analyzed

both quantitatively and qualitatively. Since the selected sample size was small (10) and heterogeneous in nature and the difference between the means score of two related or paired sample had to be studied, Non-Parametric *Paired Sample Wilcoxon Signed Rank Test* was applied for analyzing the collected data.

Results and Discussion with Reference to Hypothesis and Objectives

Hypothesis 1: There is no significant difference between overall pre-test and post-test scores in learning pre reading skills through play activities.

Table No. –1: Comparison of pre and post-test mean scores of effect of play activities on Pre-reading Skills

Tests	N	Minimum	Maximum	Mean	Std. Deviation
Pre test	10	102	157	123.50	16.03642
Post test	10	150	194	170.50	11.83451

***Significant at 0.05level.*

The objective No.1 was to find out the effect of play activities in learning pre reading skills among children with mild intellectual disability. The pre-test mean score of learning pre-reading skill is 123.50 whereas the Post tests mean score of the same group is 170.50. Result shows that there is significant

difference between pre-test and post-test scores of learning pre-reading skills. Therefore, the null hypothesis is rejected.

Hypothesis 2: There is no significant difference between pre-test and post-test scores with respect to domains in learning pre reading skills through play activities.

Table No. –2: Comparison of pre and post test mean scores of effect of play activities on Color, Shape, Sound recognition, Print awareness, Numbers, Alphabets domain

S.No	Domains	Tests	N	Minimum	Maximum	Mean	Std. Deviation
1.	Colour	Pre test	10	15	35	27	5.925463
		Post test	10	35	40	37.9	2.13177
2.	Shape	Pre test	10	24	32	27.8	3.259175
		Post test	10	35	40	36.5	2.635231
3.	Sound Recognition	Pre test	10	15	19	17.2	1.229273
		Post test	10	19	25	21.7	1.9496507

4.	Print Awareness	Pre test	10	14	21	17.5	2.2236
		Post test	10	21	25	23.5	1.43372
5.	Numbers	Pre test	10	11	21	19.5	6.0598863
		Post test	10	31	36	37.9	4.812021
1.	Alphabets	Pre test	10	13	19	14.5	1.7159383
		Post test	10	18	28	21.5	2.8771127

***Significant at 0.05 level.*

The objective No. 2 was to find out the effect of play activities in learning pre reading skills with reference to domains among children with mild intellectual disability. The pre-test mean score of color, shape, sound recognition, print awareness, numbers and alphabets domains are 27.0, 27.8, 17.2, 17.5, 19.5, 14.5 whereas the Post tests mean scores of the same group are 37.9, 36.5, 21.7, 23.5, 37.9, 21.5 respectively. Result shows that there is significant difference between pre-test and post-test scores of learning color, shape, sound recognition, print awareness, numbers and alphabets. Therefore, the null hypothesis is rejected.

DISCUSSION

The results coincide with the result of Bratton and Ray (2000), who analyzed the results of more than 100 case studies, documenting the effectiveness of play therapy as intervention. The researchers found that these studies provided support for the efficacy of play therapy as a treatment modality for children with the following issue: social maladjustment, anxiety/fear, negative self-concept, mental challenges or physical or learning disabilities. In 2016, Osei et al.,

assessed the relationship(s) between pre-reading activities (consisting of games, puzzle solving, match making) and reading skills achievement. Jitendra (2011) studied the effect of organized play activities on learning readiness among children with Autism spectrum disorder of age 5-12 years. The researcher tried to study the learning readiness under domain like eye-contact, imitation, turn taking, following simple instruction and joint attention. The results indicate that there is a significant difference in learning readiness due to the play activities given by the researcher. In the present study the researcher analyzed the effect of play activities to improve learning pre-reading skills among CWMID. The results show that it has a significant effect on learning pre reading skills among CWMID.

EDUCATIONAL IMPLICATIONS

- Play is an integral part of the academic environment, to enhance children's learning readiness, learning behaviours and problem-solving skills. Training in play activities has an implication for everyone, in the life of CWMID, parents &

family members, special educators and also researchers.

- **For Special Educators**

Play has been proven effective in teaching various skills and behaviours for Children with Intellectual Disability. This study revealed that play activities, when systematically implemented in the class, it has a positive effect in learning pre-reading skills among CWID. They can make use of these play activities as an instructional strategy to teach various concepts in pre-reading skills.

- **For Parents and family members**

Parents can take initiative to learn the play activities and implement them at home and community settings. By involving themselves in the play activities will help the child to learn the skills very easily and effectively.

- **For the Child with Intellectual Disability**

The present study showed that it is possible for the CWID to learn pre-reading skills through play activities. Pre-reading provides a strong foundation for developing reading ability and also it will be helpful for the CWID to be independent.

LIMITATIONS OF THE PRESENT STUDY

The present study has some limitations, Such as -

- In the present study, the sample size was very small. Only ten samples were selected.
- The children with mild intellectual disability were selected by the researchers, the other categories were not included like moderate, severe & profound. The children

who have comorbid condition along with ID were also not included.

- The sample was selected from only one special school.
- Few play activities were selected to teach the domains in learning pre –reading skills.

CONCLUSION

The researchers have attempted to bring in to light the effectiveness of play activities in learning pre-reading skills among Children with Mild Intellectual Disability. The findings of the study reveal that play activities have an important effect in learning pre-reading skills among CWMID. Children with mild Intellectual Disability have lot of difficulties in reading through traditional methods of teaching given in the classroom. These include lack of motivation, fear, complex instruction, limited attention span and concentration, difficulty in problem solving, cognitive delays and inactive participation in teaching learning process. Play allows children to use their creativity while developing their imagination, dexterity, and physical, cognitive, and emotional strength. Play is important to healthy brain development. It is through play that children at a very early age engage and interact in the world around them. An attempt has been made in this study to learn pre-reading skills among CWMID through play activities. Play activities were chosen by the researcher to develop colour, shape, sound recognition, print awareness, number and alphabets as reading readiness skill. Play activities not only helped in learning pre –reading skills but also helped in developing social skills, communication skills, discipline, sharing, group living, leading and helping, which in turn help children with mild intellectual disability to lead an independent community life.

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