



GCTE JOURNAL OF RESEARCH AND EXTENSION IN EDUCATION



DEVELOPING PLAY ACTIVITIES TO ENHANCE FINE MOTOR SKILLS OF VISUALLY IMPAIRED CHILDREN

SAMBATH RANI.K. & DIVYAPRIYA.A

The play activity kit serves as a best tool for the special educators/resource teachers and parents in developing fine motor skills among their visually impaired children. Play is recognized as an important part of a child's development. During the early childhood, play is valuable in assessing a child's level of development and in providing intervention. The study was experimental in nature focussed on the designing of an activity kit for the development of fine motor skills for visually impaired children.

Play is recognized as an important device to achieve proper development. In the field of early childhood special education, play is valuable in assessing a child's level of development and in providing intervention. In psychology, therapists often watch children play to develop an understanding of children's problems to help them deal with their emotions. The universal nature of play provides professionals working with children a basis for comparing typical and a typical development and behavior. The normal individual observes 83% of the environment through his vision, and the remaining 17% through the other sense organs. If the child has problem in vision, their visual perception also becomes difficult. All sensory organs are working together to get an wholisitc perception of their environment. If any organ, especially sight is defected, then the child is in trouble, to comprehend the information from the environment. Some delays in fine-motor development have been observed among children with visual impairments. Fine-motor skill is crucial for accessing Braille and for keyboard technology; therefore, the possibility of delays in fine-motor

development is a major concern. Development of fine motor skills is essential in Daily Living Skills such as eating, dressing, toileting and grooming also. Proper practice in fine motor skills is needed for avoiding delay in skill development. Adequate support mechanisms including strategies and materials are required in this juncture.

METHODOLOGY

The sample for the investigation included 30 students in the age group of 6-11. The investigator used purposive sampling technique to

select the sample. The study was experimental in nature. Interview schedule prepared by the investigator elicited information on age, gender, nature of disability and background information of selected visually impaired children. A checklist was prepared to assess the fine motor skill development among them. Based on the assessment the investigator developed a play activity kit in such a way that each play covers variety of fine motor skills such as passing, clapping, cutting, pasting, folding, drawing, turning.

ANALYSIS AND INTERPRETATION

Table 1 - Pre and post mean scores on Motor Skills with respect to Fine and Gross Motor Skills

Variable	Testing	N	df	Mean	S.D	t- Value
Fine Motor Skills	Pretest	30	29	8.77	4.71	17.835**
	Posttest			14.03	3.92	

** Significant at 0.01 level

The table 1 brings out the t – value for Fine Motor Skills (t = 17.835) showing significant difference between pre and post test mean scores at 0.01 level. Therefore, the null hypothesis stated as "There is no significant difference in the Fine Motor Skills of Visually Impaired

Children before and after intervention' is rejected stating that the play activities made a significant influence on Fine Motor Skills of children with Visual Impairment. This result coincides with the results of Burlingham, 1975; Ervin, 1993; Ferrell, 1986; Skellenger & Hill, 1994.

Table 2 - Pre and post test mean scores on Fine motor skills with respect to Age

Variables	Levels	Testing	N	df	Mean	S.D	t- Value
Age (In Years)	6-8 years	Pretest	18	17	6.11	3.18	14.21**
		Posttest			11.83	2.43	
	9-11 years	Pretest	12	11	12.75	3.74	12.80**
		Posttest			17.33	3.39	

** Significant at 0.01 level

The table 2 reveals that the pre and post mean scores for Fine Motor Skills differ significantly at 0.01 level for the sub samples on the basis of age. Therefore, the null hypothesis stated as 'There is no significant difference in the Fine Motor Skills of Visually Impaired Children before and after intervention with respect to Age' is rejected stating that the play activities made a significant influence on Fine Motor Skills of children with different age group.

Table 3 - Pre and post test mean scores on Fine motor skills with respect to Gender

Variables	Levels	Testing	N	df	Mean	S.D	t- Value
Gender	Boys	Pretest	18	17	8.78	4.67	16.49**
		Posttest			14.11	4.23	
	Girls	Pretest	12	11	8.75	4.97	8.98**
		Posttest			13.92	3.58	

** Significant at 0.01 level

While considering the pre and post test mean scores the t- values show that boys and girls differ significantly at 0.01 level. Therefore, the null hypothesis stated as 'There is no significant difference in the Fine Motor Skills of Visually Impaired Children before and after intervention with respect to Gender' is rejected stating that the play activities made a significant influence on Fine Motor Skills of boys and girls.

Table 4 - Pre and post test mean scores on Fine motor skills with respect to Nature of disability

Variables	Levels	Testing	N	df	Mean	S.D	t- Value
Nature of disability	Totally Blind	Pretest	18	17	6.94	4.02	12.57**
		Posttest			12.44	3.11	
	Low Vision	Pretest	12	11	11.50	4.46	14.62**
		Posttest			16.42	3.9	

** Significant at 0.01 level

It is clear that there is significant difference in the pre and post test mean scores of the sub samples as the t – values shows significance at 0.01 level. Therefore, the null hypothesis stated as ‘There is no significant difference in the Fine

Motor Skills of Visually Impaired Children before and after intervention with respect to Nature of disability’ is rejected stating that the play activities made a significant influence on Fine Motor Skills of children with different nature of disability.

Table 5 - Pre and post test mean scores on Fine Motor Skills with respect to Educational status of parents

Variables	Levels	Testing	N	df	Mean	S.D	t- Value
Educational status of parents	Literate	Pretest	17	16	9.76	5.04	12.17**
		Posttest			14.65	4.12	
	Illiterate	Pretest	13	12	7.46	4.05	14.04**
		Posttest			13.23	3.63	

** Significant at 0.01 level

There exists significant difference in the pre and post test mean scores with respect to educational status of parents i.e. literate and illiterate at 0.01 level of significance. Therefore, the null hypothesis stated as ‘There is no significant

difference in the Fine Motor Skills of Visually Impaired Children before and after intervention with respect to Educational status of parents’ is rejected stating that the play activities made a significant influence on Fine Motor Skills of children with Visual Impairment.

Table 6 - Pre and post test mean scores on Fine motor skills with respect to Income of parents

Variables	Levels	Testing	N	df	Mean	S.D	t- Value
Income of parents	Low	Pretest	5	4	8.80	3.03	7.90**
		Posttest			13.80	3.19	
	Middle	Pretest	8	7	8.13	3.91	9.97**
		Posttest			13.38	3.89	
	High	Pretest	17	16	9.06	5.56	12.25**
		Posttest			14.41	4.27	

** Significant at 0.01 level

The t-value of the samples indicate the significant difference between the pre and post test mean scores of samples belong to various income status of parents namely Low, Middle and High at 0.01 level. Therefore, the null hypothesis stated as 'There is no significant difference in the Fine Motor Skills of Visually Impaired Children before and after intervention with respect to Income of parents' is rejected stating that the play activities made a significant influence on fine motor skills of children with different Income status of parents.

CONCLUSION

Child play is an effective mechanism for learning as a fun activity, rather than a coerced or forced one. During play time, a child can usually maximize his creativity and focus on a specific activity or thought process, rather

than having his time and cognitive activity strictly monitored and directed. This research endeavors have been under taken with the aim of enhancing fine motor skills among visually impaired children through play. The results reveal positive impact in the attainment of fine motor skills through play by the visually impaired children. The play activity kit serves as a best tool for parents and teachers in developing motor skills among visually impaired children.

REFERENCES

- Bouchard, D., and Tetreault, S., (2000), "The Motor Development of Sighted and Children with Mild Low Vision Aged 8-13", *Journal of Visual Impairment and Blindness*, 94: 564-573.
- Gallahul, D., (1982), *Understanding Motor Development in Children*, UK-Welsey Publishing Company, pp. 134-254, 378-87,385-93.
- Sandra, A., (2000), *Early Motor Development of Blind Children*, *Journal of Paediatrics and Child Health*, 36: 226-38.

Dr. K.Sambath Rani, *Asst. Professor, Dept. of Special Education, Avinashilingam Deemed University for Women, Coimbatore*
A.Divyapriya, *Resource Teacher, Avinashilingam University for Women, Coimbatore*