



Impact Of Training On Learning Of Behavioral Skills Among Children With Intellectual Disability

Dr. P. Neeraja¹, Academic Consultant, Department of Home Science, S.V. University, Tirupati

Dr. M. Reena², Academic Consultant, Department of Population Studies and Social Work, S.V. University, Tirupati

Abstract

Children in India rely on family, joint family, caste, and community for support. However, weakening social structures mean outside agencies must step in when families can't provide care. Mental retardation, not a disease but a condition of delayed mental development, affects both physical and mental abilities. It slows learning, reduces understanding, and impacts speech, language, hearing, vision, and coordination. The American Association of Mental Retardation (AAMR, 1992) defines it as below-average intellectual functioning with deficits in adaptive behavior, evident from childhood. Addressing mental retardation requires holistic support to improve overall functioning and quality of life. The aim of the study is to assess the performance skills of mentally retarded children. The study was conducted with the children (30) those who were received more than 2 years training. Boys made up 70% of the sample, indicating more boys in these institutions possibly because parents were reluctant to send their daughters. The health status of other family members of mentally retarded children was examined, on paternal side 94% were found to be normal and 6% were found to be mentally retarded and on maternal side 86% were found to be normal and 14% were found to be mentally retarded. Mentally retarded children often struggle with cognitive skills, affecting their reading. The study concludes that teachers need to concentrate more on the moderately retarded children and need to introduce new parent training programs with appropriate schedule through implementation of effective mass media approach.

Key words: Children, Mental Retardation, Intellectual ability, Behavioural Assessment, Performance Skill

INTRODUCTION

A child is a young individual, who can either refer to someone who has not yet reached adulthood or someone who has not yet reached puberty, depending on the context. In India, when a family is unable to take care of a child within their own household, the joint family, caste system, and community provide substantial support for the child. However, due to the weakening of these social institutions, external agencies have to step in to provide the necessary care for children. In every society, there are children who have physical and mental disabilities. Mental retardation is not a disease or a single condition, but rather a term used to describe a condition of delayed mental development that is present at birth or in early childhood. It is primarily characterized by limited intelligence and difficulties in adaptation. Mental retardation refers to an impaired mental ability. A child with mental retardation learns at a slower pace, and their capacity to understand will be significantly lower than that of a normal child when they reach maturity. Mental retardation does not only affect intellectual abilities; it can also impact various aspects of human functioning, including speech, language development, hearing, visual functioning, and muscular coordination. According to the American Association of Mental Retardation (AAMR, 1992), mental retardation is defined as significantly below-average general intellectual functioning, accompanied by deficits in adaptive behavior, and manifested during the developmental period. Alfred Binet (1905) developed tests to measure intelligence based on reasoning and problem-solving abilities, rather than motor skills.

According to the Binet test, mentally retarded children's IQ scores were classified into four categories:

- 1. Mild Intellectual Disability (MID)** makes up 85% of the total population with intellectual disabilities. They have delayed development in areas like walking, talking, and toilet training. They are referred to as Educable Intellectually Disabled (EID).
- 2. Moderate Intellectual Disability (MID)** is less complex than profound or severe disabilities. They can benefit from specialized training in self-help skills and social awareness. They are known as Trainable Intellectually Disabled (TID).
- 3. Severe Intellectual Disability (SID)** involves significant damage to the central nervous system and other disabling conditions. They rely on others for support and often require medical care.
- 4. Profound Intellectual Disability (PID)** includes substantial impairment in the central nervous system and other disabilities like blindness and epilepsy. They require constant care and supervision.

Adaptive behavior involves daily activities for personal and social sufficiency, including skills children use to adapt to physical and socio-cultural demands. Professionals use adaptive behavior to diagnose mental retardation alongside intelligence measures and criteria from the American Association of Mental Retardation.

Special education for individuals with mental retardation focuses on intellectual development, including skills like visual motor coordination, reading, writing, and numeracy. Behavioral training and parent participation are effective approaches for managing mentally retarded children. Further research is needed to identify suitable training programs in India, with an emphasis on self-care skills, language development, and social behavior to promote independence and confidence in children.

OBJECTIVES OF THE STUDY

The objectives of the current investigation are as follows: (1) To evaluate the performance skills of mentally retarded children, (2) Mildly mentally retarded children may exhibit better performance skills compared to moderately mentally retarded children.

METHODOLOGY

The present investigation was conducted in two institutes situated in different locations. One institute in Tirupati town provides only day care services, while the other institute in Durgasamudram offers residential facilities. The latter institute is approximately 8km away from Tirupati town. The data collection process utilized purposive sampling. According to Adolph Jenson (1998), "purposive selection refers to the method of selecting groups of units in a way that these selected groups collectively represent the same averages or proportions as the entire population, with respect to characteristics that are already known statistically."

The investigator chose to conduct the study on these children in order to assess their behavioral skills. With this objective in mind, the study was carried out. The sample of the study consisted of 50 mentally retarded children. In this sample 2 major groups were divided 'period of training' (under 1 year training and more than 2 years training) and 'age group' (7-9 years age group and 9-12 years of age group children).

Tools and Materials

As the main purpose of the present study was to assess the Behavioural skills of the mentally retarded children, the following tools were used.

BASIC-MR (Part-A) (Behavioural Assessment Scale for Indian children with Mental Retardation).

RESULTS

Table-1 shows the distribution of sample according to age and period of training. The total number of under 1 year trained mentally retarded children were 20, in this 11 children belonged to 7-9 years age group and remaining 9 children belonged to 9-12 years of age group. The total number of children who had received more than 2 years training were 30, in these 12 mentally retarded children belonged to 7-9 years; remaining 18 children belonged to 9-12 years age group.

The data from Table-2 shows that 54% of mentally retarded children were aged 9-12 years, while 46% were belongs to aged group of 7-9 years. Boys made up 70% of the sample, indicating more boys in these institutions possibly because parents were reluctant to send their daughters. Most children (52%) were the second child in their families. Regarding birth type, 60% were born normally, 24% via cesarean, and 6% breech. Mildly retarded children constituted 52% while moderately retarded were 48%. Causes included consanguineous marriages (60%), forceps delivery (24%), chromosomal abnormalities (12%), and injuries (4%).

The profile of the parents of the mentally retarded children is presented in table -3. Regarding the educational status of the parents it is visible from the table that, 34% of mothers of mentally retarded children were literates and a high percentage of 66% were illiterate mothers. Same trend is noticed in the case of fathers also i.e., 48% of fathers were literates and 52% which were highest percentage, were illiterate fathers.

Relating to the income groups of families of retarded children it is clear from the data that 34% of families were low income families, 42% of families were middle income families and the 24% of families were high income families.

The table-4 clearly reveals the results of family health profile of the mentally retarded children. While perceiving the family health status of the mentally retarded children 100% of the parents i.e., both mothers and fathers were found to be normal.

When viewed into the health status of the siblings of the mentally retarded children, it was found that 100% of the siblings were normal. When the health status of other family members of mentally retarded children was examined, on paternal side 94% were found to be normal and 6% were found to be mentally retarded and on maternal side 86% were found to be normal and 14% were found to be mentally retarded.

The results are presented in the table. The performance skills of the mentally retarded children on Motor skills with variance of age and period of training. The present tool consisted activities with regard to three age groups i.e., 5-7 yrs, 7-9 yrs and 9+ yrs. The investigator used only 7-9 yrs and 9+ yrs for her convenience.

Table-5 shows the reading skills of mentally retarded children. Those aged 7-9 with over 2 years of training did better: 92% could read family/friends' names, compared to 36% with under 1 year of training. 25% of those with 2 years of schooling could read signs, but none with less than 1 year of training could. For 9-12-year-olds, those with over 2 years of training performed better: 56% could read medium-sized paragraphs, compared to 33% with under 1 year of training. 22% with nearly 2 years of training could read short news items, but none with under 1 year of training could. Mentally retarded children often struggle with cognitive skills, affecting their reading. They excelled at reading personal information but struggled with newspaper-related tasks due to lack of exposure. Poor performance may stem from sub-average intellect, limited memory strategies, and inadequate teaching. Encouraging parents to practice reading newspapers or small books with their children may help improve their skills.

Table-6 illustrates the writing skills of mentally retarded children. Among 7-9-year-olds, those with over 2 years of training were better: 67% could copy 5 printed sentences, compared to 18% with under 1 year of training. However, there wasn't much difference in writing dictated sentences. For 9-12-year-olds, those with over 2 years of training performed better: 67% could fill in an application, compared to 44% with under 1 year of training. 11% of the better-trained children could write a leave letter, but none with under 1 year of training could. Mentally retarded children struggled with tasks like writing letters or compositions but excelled at copying and dictation. Those trained for 2 years did better, and mildly retarded children outperformed moderately retarded ones. Boys tended to have slightly better skills, possibly due to associated issues like Down syndrome or attention deficit. Fine motor coordination and memory strategy deficiencies hindered writing skills. Parents noted their children's lack of interest in writing at home. Consulting

physiotherapists and collaborative efforts between teachers and parents could help overcome these challenges. Interestingly, mildly retarded children at school assisted moderately retarded peers in writing tasks.

The table presents number skills of mentally retarded children. Among 7-9-year-olds, those with over 2 years of training were better: 92% could add two-digit numbers with carrying, compared to 83% with under 1 year of training. But there wasn't much difference in two-digit subtraction with borrowing. For 9-12-year-olds, those with over 2 years of training performed better: 83% could measure liquids, compared to 56% with under 1 year of training. 17% of better-trained children could use a calculator for basic arithmetic, but none with under 1 year of training could. Both groups struggled with tasks like two-digit subtraction without borrowing and using a calculator. Lack of exposure to number concepts and difficulty with more complex tasks hindered performance. Effective training by teachers could help children learn and apply strategies effectively.

The table shows social interaction among mentally retarded children. Those aged 7-9 with over 2 years of training fared better: 83% could go to school alone if nearby, compared to 45% with under 1 year of training. Similarly, 17% of those trained for up to 2 years could go home from school, but none with under 1 year of training could. For 9-12-year-olds, all with over 2 years of training (100%) were proficient in giving/receiving messages, compared to 56% with 1 year of training. 22% of better-trained children could travel alone on a bus, but none with under 1 year of training could. Mildly retarded children generally performed better than moderately retarded ones. Those with over 2 years of training showed better communication and language skills, completing tasks comfortably. However, those with under 1 year of training struggled with tasks like introducing themselves or traveling alone, possibly due to parental anxiety. Hawkins (1991) noted that children with moderate mental retardation may need additional skills or experiences to improve social interactions.

Conclusions and Implications of the present study

It is an approach that, according to the investigator, offers the advantage of yielding insights about the causal factors of not performing the skills properly by the mentally retarded children. Basing on the results of the present study the following are the suggestions for the teachers and parents that will help to improve the skills of the mentally retarded children: Teachers need to concentrate more on the moderately retarded children. Teachers need to introduce new parent training programs with appropriate schedule through implementation of effective mass media approach. Additionally, the study recommends conducting further research to examine parental attitudes toward mentally retarded children before and after participating in training programs. This would provide valuable insights into the impact of such programs on parental perceptions and attitudes, potentially informing future interventions and support mechanisms.

List of Tables

Table-1 : Distribution of sample

Period of training	Age of the mentally retarded	
	7-9 years	9-12 years
Under 1 year training	11	9
More than 2 years training	12	18

Table -2: Profile of the mentally retarded children

Category	Number	Percentage
Age: 7-9 years	23	46
9-12 years	27	54
Sex: Boys	35	70
Girls	15	30
Ordinal position of the child		
First child	17	34
Second child	26	52
Third child	7	14
Normal	30	60
Caesarian	12	24
Forcep	5	10
Breech	3	6
Level of retardation		
Mild	26	52
Moderate	24	48
Causes of retardation		
Forceps delivery	12	24
Chromosomal abnormalities	6	12
Injuries	2	4
Onset		
By birth	44	88
After birth	6	12

Table - 3 : Profile of the parents of mentally retarded children

Category	Number	Percentage
Educational status of parents		
Mothers		
Literates	17	34
Illiterates	33	66
Fathers		
Literates	24	48
Illiterates	26	52
Income of the family		
Low income group (2,000-5,000)	17	34
Middle income group (5,000-10,000)	21	42
High income group (10,000-above)	12	24

Table - 4: Family health profile of the mentally retarded children

Category	Number	Percentage
Parents		
Normal	50	100
Abnormal	0	0
Siblings		
Normal	50	100
Mentally retarded	0	0
Other family members		
a. Paternal side		
Normal	47	94
Mentally retarded	3	6
b. Maternal side		
Normal	43	86
Mentally retarded	7	14

Table-5: Reading skills of the mentally retarded children

Activities	Reading skills (R)	Age group	Period of training			
			Below 1 year		Above 2 years	
		7-9 yrs	n-11	%	n-12	%
1.	Reads names of parents		6	55	10	83
2.	Reads 2 word phrases		2	18	5	42
3.	Reads own address		5	45	7	58
4.	Reads names of family members / friends		4	36	11	92
5.	Reads short sentences		1	9	5	42
6.	Reads sign boards		—	—	3	25
		9-12 yrs	n-9	%	n-18	%
1	Reads small paragraphs		2	22	5	28
2	Reads large print from news papers etc.		4	44	9	50
3	Reads medium sized hand written paragraphs		3	33	10	56
4	Reads short news item from news papers		—	...	4	22

Table-6: Writing skills of the mentally retarded children

Activities	Writing skills (W)	Age group	Period of training			
			Below 1 year		Above 2 years	
		7-9 yrs	n-11	%	n-12	%
1.	Copies 5 printed sentences		2	18	8	67
2.	Writes 5-6 words an dictation		3	27	7	58
3.	Writes five sentences on dictation		1	9	4	33
		9-12yrs	n-9	%	n-18	%
1	Fills in an application		4	44	12	67
2	Writes a composition		1	11	5	28
3	Writes a leave letter		...	—	2	11
4	Writes a letter		...	—	2	11

Table-7: Number skills of the mentally retarded children

Activities	Number skills (N)	Age group	Period of training			
			Below 1 year		Above 2 years	
		7-9 yrs	n-11	%	n-12	%
1.	Does two digit addition without carry over		7	64	10	83
2.	Does two digit subtraction without borrowing		5	45	9	75
3.	Does two digit addition with carry over		8	73	11	92
4.	Does two digit subtraction with borrowing		6	55	8	67
		9-12yrs	n-9	%	n-18	%
1	Names math symbols		4	44	14	78
2	Measures liquid using measuring cups		5	56	15	83
3	Weighs objects using weighting scale		6	67	13	72
4	Uses calculator for basic arithmetic operations		—	...	3	17

Table-8: Social interaction of the mentally retarded children

Activities	Social skills (s)	Age group	Period of training			
			Below 1 year		Above 2 years	
		7-9 yrs	n-11	%	n-12	%
	Comes and goes to school unattended when the school is within the some neighborhood		5	45	10	83
	Says 'please' and 'thank you'		2	18	6	50
	Introduces himself to others		1	9	4	33
	Plays with children for 20 in cooperative play		4	36	8	67
	Can cross road		...	—	3	25
	Goes to home from school		—	—	2	17
		9-12yrs	n-9	%	n-18	%
1.	Receives and gives message taken on phone or in person		5	56	18	100
2.	Travels in a bus on own		—	—	4	22

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