

## Communication Skills Of Mentally Retarded Children: Implementation Of Individualized Educational Programmes (IEP) In Classroom Setting

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### Abstract

*The systematic planning of instructions for a group can facilitate special educators for effective implementation of Individualized Educational Programmes (IEP) in classroom setting to enhance communication skills, i.e. receptive and expressive language, in mentally retarded children. For this purpose hundred mentally retarded children having I.Q. 35 to 49 with age group of 7 to 10 years have been selected from about 600 mentally retarded children enrolled in the institutes of mentally retarded located at various districts of Haryana. Out of these 100 children, 50 formed the control group and 50 formed the experimental group. The study was conducted in three stages. Initially at the pre-testing stage, the general background information was collected from the parents as well as special educators of all the 100 mentally retarded children on a Case History Performa. Further, all the subjects were assessed in communication skills with the help of Madras Development Programming System- Behavioural Scale (MDPS). After developing systematic Individualized Educational Programme for every subject of experimental group on the basis of the current level of communication skills in the subjects, Group Teaching Lesson Plan was developed for each group ( a group consisting of 10 subjects) of experimental group and implemented in group setting for 6 months. After the experimental stage, performance of each subject of both the groups was again evaluated and recorded in both areas of communication skills with the help of MDPS. The mean gain scores were also recorded for both the experimental and control groups of the subjects. The result showed that there exists significant difference in the mean gain scores of communication skills in mentally retarded children of both the groups.*

• **Key Words:** Social Isolation, Locus of control, Socio-economic Status

### Introduction

Disability is a bigger disadvantage as well as a challenge for the society in any part of the world, which has so far not been able to offer an ideal platform in many parts of the world to the persons with disabilities. It may be physical, sensory or

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intellectual impairment of a person that hinders his or her performance of activities of daily living, education, work and full participation. Out of all the types of disabilities, Mental Retardation (MR) poses greater challenges than the others due to intellectual disability. As this is a challenge for the parents to accept these persons as an important member of the family. This is also a challenge for the parents and teachers to train them in functional activities to make them independent lives. This is a challenge for the community and the whole society to accept and help these persons to live their life as normal as possible.

The persons with mental retardation have a condition of arrested or incomplete development of mind, which is specially characterized by sub-normality of intelligence, thus restricting or causing lack of ability in performing certain activities in their life. "Mental retardation is a condition of arrested or incomplete development of mind of a person which is specially characterized by sub-normality of intelligence" (Persons With Disability Act, 1995). The term mental retardation is a label used to identify an observed performance deficit i.e., failure to demonstrate age-appropriate intellectual and social behaviour. They respond slowly to what others say and to what happens in their surroundings. Sometime they do not respond at all. They can not express clearly their thoughts, needs and feelings, can not learn new and different as easily as others, can not understand easily what they see, hear, touch, smell or taste, cannot take even simple decisions, they have lack of concentration, short tempered, inability to remember, lack of coordination, delay in development. Deficits in communication, language and speech can make slow in learning other skills which are necessary for independent living. Communication is essential for every living being to share ideas, feelings, desires, emotions etc. Everyone is either giving or receiving information throughout the day. These two aspects i.e., receptive and expressive languages have very active role in exchanging these information. Thus it is necessary to provide help to mentally retarded children in learning to communicate better. Clark and Delia (1974), Delia Kline and Burleson (1979) and O'Keefe (1979) studies showed that mentally retarded could learn complex community adaptation skill if they are trained. Social perspective taking behaviour was a very important pre-requisite for successful inter-personal communication.

Another study conducted by Black and Cleworth (1978) on the communicative skills of moderately mentally retarded children aged 13 to 14 years (I.Q. 40-50) indicated that moderately retarded children if given appropriate training could interact verbally. Matson (1981) did a study on 20 mildly mentally retarded persons on use of independent training to teach shopping behaviour in a natural environment to develop social skills. The study showed that mentally retarded could learn complex community adaptation skill if they are trained. Snell (1988) recommended curriculum and methodology for individuals with disabilities to enhance the

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communication abilities in the mentally retarded children. Angelo (1990) did a study to find the effect of a pragmatic teaching strategy on 4 mildly and moderately retarded non-speaking children using manual communication boards.

Every activity of the person with mental retardation has a meaning in life, which they can learn through Individualized Educational Programme (IEP). A written Individualized Educational Programme (IEP) must be developed and maintained for each child who has been determined to be handicapped ((IDEA, PL 101-476, 1997) It was quoted that Individualized Educational Programme is both an important process and a document in decision-making concerning students; participation and accommodation in assessment (Shriner & Destenfang,2003). Individualized Educational Programme (IEP) is defined as a document, written by a team of professionals and parents, to provide student with handicap an appropriate intervention. Gupta & Sindhu (2007) concluded that Individualized Educational Programme in communication skills, if initiated and followed up on regular basis, can improve the skills of the child more effectively. Implementing IEP in group setting was found to be beneficial in enabling the mentally challenged children to compare their motor skills and self-help skills and to improve the functional academic skills in students with moderate mental retardation (Gupta & Sindhu, 2008).Gupta, Jain & Pasrija (2012) reported that systematic use of individualized educational programme is very beneficial in making possible the mentally challenged children to pick up their skills to some extent. Each area's particular strength and weakness must be identified so that Individualized Educational Programme can be developed, based on the child's present knowledge and abilities. Individualized Educational Programme can be effectively carried out in a classroom set up (in Group Setting). Individualization can be accomplished through one to one or one to two ratios in small groups.

In fact, this ability has been demonstrated by various organizations in abroad. Cooperative learning arrangements represent another way to have students learn in a group setting. Peer modeling is the most effective technique for learning performance skills in communication areas as compared to adult and no-model conditions for both EMR and TMR children (Narayan, 1992). Efficiency refers to the amount of time required for something to be learned. Social outcomes related to the efficacy of group or one-to-one instruction were found by different studies done in abroad whether they are benefits or detriments. Finf & Sandall (1980) posit that the introduction of small group work with preschoolers result in an increased ability to function in common school situations. Semmel & Cheney (1979) indicated that efforts to provide structured group interactions can afford excellent opportunities for the development of positive social behaviours.

Thus several research studies have cited the potential of group instruction for gains in

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the communication skills. Grouping children based on the range of the activities in which they need to be trained would enhance effective implementation of the Individualized Educational Programme system in a classroom environment (Jeyachandran et al., Madras Developmental Programming System, 1992). Participation with others in group training is expected the spontaneous development of social reinforcers as well as group enthusiasm among the mentally retarded children. There is no comprehensive study conducted in Haryana to study implementation of IEP in Classroom Setting for improving the Communication Skills of Mentally Retarded Children. Therefore, it has been expected that the findings of study would encourage the consideration of group experiences for the students with mentally retarded in the field of special education. All these factors and the facilitating conditions motivated the investigators to study the Communication Skills of Mentally Retarded Children through Implementation of IEP in Classroom Setting.

### **Objectives of the Study**

The present study was carried out with the following objectives:

- 1 To identify the mentally retarded children having I.Q. 35 to 49 of age group 7 to 10 years.
- 2 To assess and compare the Communication Skills in mentally retarded children of experimental and control group before experimental stage.
- 3 To prepare the Individualized Educational Programme for each and every mentally retarded child of experimental group.
- 4 To prepare and implement the lesson plan based on Individualized Educational Programmes in group setting.
- 5 To evaluate and compare the Communication Skills in mentally retarded children of experimental and control group after experimental stage.
- 6 To compare mean gain scores of the Communication Skills in mentally retarded children of experimental and control group after experimental stage.

### **Hypotheses of the Study**

**Ho1** There is no significant difference in the mean scores of communication skills (receptive and expressive languages) in mentally retarded children of experimental and control group before experimental stage.

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**Ho2** There is no significant difference in the mean scores of communication skills (receptive and expressive languages) in mentally retarded children with training in group setting as compared to those of mentally retarded children without training in group setting after experimental stage.

**Ho3** There is no significant difference in the mean gain scores of communication skills (receptive and expressive languages) in mentally retarded children with training in group setting as compared to those of mentally retarded children without training in group setting after experimental stage.

### **Design of the Study**

The purpose of the present study is an attempt to assess the effect of Individualized Educational Programme (IEP) in group setting on learning of Communication Skills regarding mentally retarded children in Haryana. In this study, both the pre-test and post-test design was used and this was carried out in the following three stages.

At the first stage, case history of each subject was taken from parents/ relevant relative of mentally retarded children. Then current level of all the above stated skills in mentally retarded children of both the groups i.e., experimental and control groups, was assessed with the help of Madras Developmental Programming System (MDPS) - Behavioural Scale.

At the second stage, on the basis of assessment of the current level, Individualized Educational Programme (IEP) of each and every mentally retarded child of experimental group was developed in communication skills as per their unique needs. Based on Individualized Educational Programmes of ten students of one group, lesson plans in group setting (Group Teaching Lesson Plan) for each skill area were developed and implemented on the group for a period of six months. In this way, 10 Group Teaching Lesson Plans on 02 skill areas i.e., receptive and expressive languages, were developed for all the five groups (10 subjects in each group) for 3 months and these were reviewed quarterly for next 10 Group Teaching Lesson Plans for next 3 months. No Individualized Educational Programme and lesson plan for group setting was developed for the mentally retarded children of control group.

At the third stage, communication skills in mentally retarded children of both the groups i.e., experimental and control groups, were evaluated with the help of Madras Developmental Programming System (MDPS).

### **Sample of the Study**

The sample of the study comprised 100 mentally retarded children of age group 7 to 10 years and having IQ 35-49, who were selected out of approximate 600 mentally

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retarded children enrolled in various institutions of mentally retarded located in Haryana state through purposive sampling technique. Out of these 100 mentally retarded children, 50 children formed the control group and 50 children formed the experimental group. However, the sample was equated on the basis of a few variables of the subjects such as IQ (35 -49), level of mental retardation (moderate), and age (7 to 10years).

### **Tools Used**

The following tools were used to collect data in the present study:

1. Seguin Form Board Test (SFBT) by Edward Seguin
2. Vineland Social Maturity Scale (VSMS) by Malin (Indian Adaptation)
3. Madras Developmental Programming System (MDPS) - Behavioural Scale by Jeyachandran & Vimala.
4. Case History Performa developed by the investigators themselves.
5. Individualized Educational Programme (IEP) developed by the investigators themselves.
6. Group Teaching Lesson Plan developed by the investigators themselves. Components of Group Teaching Lesson Plan are General objectives of the group, current level of functioning of each child, specific behavioural objective of each child, procedure ("How to teach" a group by using behavioural, teaching methods and instructional materials etc.) and evaluation & review of the objectives.

### **Statistical Techniques Used**

1. Means and S.D.'s were worked out on the scores of academic and occupational skills.
2. t-test was applied to compare the performance of two groups.

### **Results and Discussion**

The present study examines the effect of Individualized Educational Programme (IEP) in group setting on learning of Communication Skills in mentally retarded children. Here, the Individualized Educational Programme in group setting comprises the independent variable and Communication Skills in mentally retarded children comprise the dependent variables. In this section, a comparison has been made between the control & experimental groups of mentally retarded children with

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respect to the effect of Individualized Educational Programme in group setting on their communication skills i.e. both receptive and expressive languages. Tables- 1 & 2 presents the mean scores, standard deviations and t-values for these languages of control and experimental groups of the subjects before & after the implementation of Individualized Educational Programme in group setting. The Table-3 further presents the t-values for post-test mean gain scores of languages of both the groups of mentally retarded children. These mean scores have also been presented in the form of bar-diagram in Fig. 1.

**TABLE -1**  
**t- values for Pre-Test Mean Scores of Communication Skills in Mentally Retarded Children**

Communication Skills	Group	N	Mean	SD	t-values
Receptive Languages	Control Group	50	9.84	2.33	0.099 (NS)
	Experimental Group	50	9.90	3.55	
Expressive Languages	Control Group	50	7.94	2.76	0.089 (NS)
	Experimental Group	50	7.88	3.85	

**NS – Not Significant**

Table- 1 shows that t-value for the mean scores of both communication skills viz. receptive (0.099), and expressive (0.089) in mentally retarded children of control and experimental groups are not significant at pre-test stage. Thus, hypothesis Ho1, ‘There is no significant difference in the mean scores of communication skills (receptive and expressive languages) among mentally retarded children of control and experimental groups before experimental stage’ is accepted. This shows that both the groups have similar communication skills at the pre-test stage.

**TABLE - 2**  
**t- values for Post-Test Mean Scores of Communication Skills in Mentally Retarded Children**

Communication Skills	Group	N	Mean	SD	t-value
Receptive Languages	Control Group	50	10.84	2.07	2.057*
	Experimental Group	50	12.06	3.64	
Expressive Languages	Control Group	50	08.68	2.86	2.140*
	Experimental Group	50	10.16	3.97	

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**\* Significant at 0.05 Level**

Table- 2 depicts that t-values for the mean scores of the both communication skills viz. receptive (2.057), and expressive (2.140) languages in mentally retarded children of control and experimental groups at the post-test stage are significant at 0.05 levels. Thus hypothesis Ho2 , ‘There is no significant difference in mean scores of communication skills (receptive and expressive languages) among mentally retarded children with training in group setting as compared to those of mentally retarded children without training in group setting after experimental stage’ is rejected. In the context of mean scores, it was found that the mean scores of both the languages of experimental group are higher than that of control group

**TABLE - 3**  
**t- values for Mean Gain Scores of Communication Skills in Mentally Retarded Children**

Communication Skills	Group	N	Mean	SD	t-values
Receptive Languages	Control Group	50	1.00	0.76	08.585**
	Experimental Group	50	2.16	0.58	
Expressive Languages	Control Group	50	0.74	0.60	11.804**
	Experimental Group	50	2.28	0.70	

**\*\* Significant at 0.01 level**

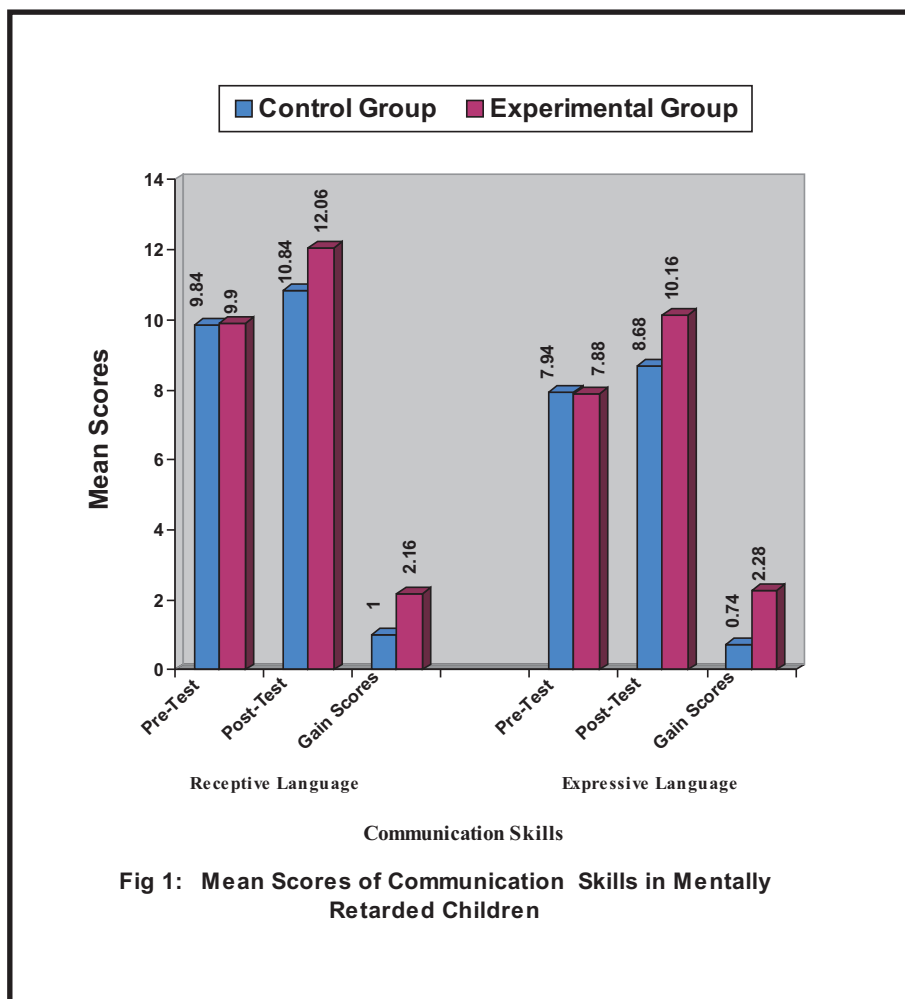
From Table- 3, it can be revealed that t-values for the mean gain scores of the communication skills viz. receptive (08.585), and expressive (11.804) languages in mentally retarded children of control and experimental groups are significant at 0.01 levels. Thus hypothesis Ho3 ‘There is no significant difference in the mean gain scores of communication skills (receptive and expressive languages) in mentally retarded children with training in group setting as compared to those of mentally retarded children without training in group setting after experimental stage’ is rejected. However, higher mean gain scores of both the languages stated above of experimental group children show that they have improved their communication skills more than control group. This may be due to the enhancement in motor skills and impact of social interaction in group setting. It also revealed that imitation, peer tutoring, co-operative learning were found very effective methods in the development of both receptive and expressive languages.

Similar results have also been observed in research by many experts. Freud (1961),

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Bandura (1977) considered imitation as an ability established by learning experiences. In the study, imitation was emphasized a useful teaching strategy in the development of communication skills. The study by Zetlin and Sabsay (1980) who reported that moderately retarded children, if given appropriate training, could interact verbally. During the comprehensive training, the children's linguistic behaviour was also observed and moderately retarded students interacted with each other. Lacona (1989) also advocated that computer assisted instruction (CAI) could enhance better individualized training programme for effective teaching of communication skills in mentally retarded children. Gupta & Jain (2011) found that mentally challenged children of experimental group have improved their skills after getting training than those of control group.



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### **Findings of the Study**

- No significant difference was found in the mean scores of communication skills in mentally retarded children of control and experimental group at the pre-test stage. This implies that both the groups are similar in performing their communication skills at the pre-test stage.
- With respect to communication skills, mentally retarded children of experimental group have significantly higher mean scores than that of children of control group at post-test stage. This leads to the inference that the children of experimental group have improved their communication skills after getting training in group setting as compared to those of control group.
- There is significant difference in the mean gain scores of communication skills in mentally retarded children of both the groups. Higher mean gain scores in case of mentally retarded children of experimental group gives rise to interpretation that training in group setting is very beneficial in enabling the mentally retarded children to improve their communication skills to some extent.

### **Educational Implications**

On the basis of results, it has been found that the findings of the present study are effective in enhancing the efficiency of almost all the subjects and have a variety of social and positive benefits which encourage the consideration of group experiences, peer interaction and group consciousness among the mentally retarded. Thus they facilitate many valuable and important educational implications for special educators, parents, siblings, speech therapist, social workers, psychiatrists, vocational instructors, and the community at last to work together in developing communication skills. The present study also revealed that the systematic planning of instructions for a group can facilitate special educators for effective implementation of Individualized Educational Programmes in group setting and promote observational learning, and facilitates maintenance and generalization among mentally retarded children. Language and communication have their roots in the students' relationship to other people and this too may require a deliberate teaching strategy, at least initially. Language is very important for social integration, academic skills (reading, writing, number, time and money), domestic, community oriented, recreational & leisure time activities and prevocational activities. Such type of children should be helped to develop their language skills to the fullest extent so that their social integration and later vocational training could be facilitated.

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