Volume 13 Issue 27
Originally issued as G10

Global Journal of human social science
Linguistics & Education
Volume 13 Issue 10 Version1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460X&Print ISSN: 0975-587X

Language Stimulation for Children with Mental Retardation-An Activity Manual for Parents

By Rajeev Ranjan & T. A Subbarao
College of Speech and Hearing, India

Abstract - The objectives of the Study: To develop training activities and guidelines suitable for north Indian home settings in an activity manual and to field test the developed material on a group of Hindi-English speaking parents of mental retardation. Method : 20 Parents and 20 Special educators (Mental Retardation) were included in this study. Field Study tool (Questionnaire) was developed on the base of coverage of content, use of language, style of presentation and difficulties in home implementation. Questionnaire and activities described in the manual were given to all the subjects for one week reading and they were asked to rate the questionnaire.

Keywords : *language stimulation, activity manual, mental retardation, home, parents, children, special educators, questionnaire.*

GJHSS-G Classification : *FOR Code: 200399*



Strictly as per the compliance and regulations of:

© 2013. Rajeev Ranjan & T. A Subbarao. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction inany medium, provided the original work is properly cited.

Language Stimulation for Children with Mental Retardation-An Activity Manual for Parents

Rajeev Ranjan [α] & T. A Subbarao [σ]

Abstract - The objectives of the Study: To develop training activities and guidelines suitable for north Indian home settings in an activity manual and to field test the developed material on a group of Hindi-English speaking parents of mental retardation.

Method : 20 Parents and 20 Special educators (Mental Retardation) were included in this study. Field Study tool (Questionnaire) was developed on the base of coverage of content, use of language, style of presentation and difficulties in home implementation. Questionnaire and activities described in the manual were given to all the subjects for one week reading and they were asked to rate the questionnaire.

Result : The data were statistically analyzed using Independent sample t-test to find out any significant difference among the groups. Result showed there was no significant difference among the groups. Both groups agreed that the most suitable material has been included regarding the coverage of content used in activity manual.

Conclusion : There was no suggestion and no difficulty faced by both the groups while implementing the manual at home, as both Parents and Special Educators rated the questions similarly. The activity manual will be helpful to the parents for planning and carrying out the activities in day to day routine for their child and it's a compliment for the special educators.

Keywords : language stimulation, activity manual, mental retardation, home, parents, children, special educators, questionnaire.

I. Introduction

Mental Retardation (MR) is an idea, a condition, a syndrome, a symptom and a source of pain and bewilderment to many families. Its history dates back to the beginning of man's time on earth. The idea of mental retardation can be found as far back in history as the therapeutic papyri of Thebes (Luxor), Egypt, around 1500 B.C. Although somewhat vague due to difficulties in translation, these documents clearly refer to disabilities of the mind and body due to brain damage (Sheerenberger, 1983).

Author α : MASLP, College of Speech and Hearing, Dr. M. V. Shetty Memorial Trust, Manglore-575001, Karnataka, India, [2]PhD Student in Audiology and Speech-Language Pathology (Part time) from AYJNIHH (Mumbai), C-164, F-1, Shalimar Garden, Extention-02, Sahibabad, Ghaziabad, UP-201005, India. E-mail : rajnav11@hotmail.com

Author σ : Professor & Principal, College of Speech and Hearing, Dr. M. V. Shetty Memorial Trust, Manglore-575001, Karnataka, India. E-mail : subbaraota@yahoo.com

Mental Retardation is a disability characterized by significant limitations both in intellectual functioning and adaptive behavior as expressed in conceptual, social and practical adaptive skills. This disability originates before age 18" (AAMR, 2002).

"Five assumptions essential to the application of the definition:

1. Limitations in present functioning must be considered within the context of community environments typical of the individual's age, peers and culture.
2. Valid assessment considers culture and linguistic diversity as well as differences in communication, sensory, motor and behavioral factors.
3. Within an individual, limitations often coexist with strengths.
4. An important purpose of describing limitations is to develop a profile of needed supports.
5. With appropriate personalized supports over a sustained period, the life functioning of the persons with mental retardation generally will improve" (AAMR, 2002).

The definitions prevalent in India are given below, which are a part of legislations adopted by the Government of India, these are:

1. The persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995: Mental Retardation refers to a condition of arrested or incomplete development of mind of a person which is specially characterized by the sub normality of intelligence.
2. National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation & Multiple Disability Act, 1999: Mental Retardation is the significantly subnormal intellectual ability (as measured on individually administered standardized psychometric tests) accompanied by subnormal adaptive (common sense, self-help and survival skills, sometimes known as 'street smart') skills.

A range of problems of children with mental retardation has been reported, among these, speech-language problems are important because speech and language are an important component of communication. Communication is about the transmission of information. Effective human communication relies heavily on language, a system of verbal or gestural symbols governed by rules in a sophisticated code,

© 2013 Global Journals Inc. (US)

though some simple forms of communication such as a hand clap to attract attention, is non-linguistic.

II. Literature Review

Subba Rao, (1992) while describing speech, language and communication problems of Mental Retardation persons, has stated that, "There is no typical speech and language pattern of mentally retarded persons. Mentally Retarded children exhibit a wide variety of speech and language problem and the problems are highly individualistic in nature. That means no two mentally retarded children show the same problems. The range is so wide that one child may not speak at all and understands very little of other's speech where as another child has fairly good comprehension for day to day living and has enough speech to express but the speech is unintelligible. Generally, it is accepted that the speech and language development in mentally retarded children is delayed as compared to normally developing children. That means to say that mentally retarded children develop speech and language skills in the same sequence as do normal children and the factors underlying development are same. However, they develop skills more slowly and they have a lower ceiling of development than normal individuals. The available evidence suggests that mentally retarded children are likely to show specific difficulties or delays in the structural aspects of language particularly in respect of sentence length, syntax and sentence complexity"(PP. 122-123).

The frequency of language disorder is about 100% below the I.Q-20, around 90% between the IQ 21-50, and about 45% in the mild retarded group (Carrow-wool folk and Lynch, 1982). In a retrospective analysis of 300 mentally retarded children done at NIMH (National Institute for the Mentally Handicapped) SubbaRao and Srinivas, (1989) found that, 81.24% had speech and language deficits. It was noticed that 30% of them had no speech and about 60.67% spoke a few words only. All the children had delayed speech and language development, articulation defects were 52%, voice defects were observed in about 39.33% and 13% showed fluency defects. Bharat Raj, (1987) reported that the percentage of speech and hearing defects were 37% in mild, 21% in moderate, 16% in severe mental retardation groups. The most common disorder was delayed speech, which increased with severity of mental retardation. Speech and language defects were more prevalent amongst males than in females. Shah et al (1970) reported that 82% of the 133 cases of mentally retarded from a chronicle population were found to have speech defects and a male-female ratio of 2:1 was observed. Gupta, (1970) analyzed 300 cases of intellectually retarded observed that speech defect was one of the main reasons for psychological consultations. Prabhu, (1968) covering a sample of 320 mentally retarded children showed that 45% of them had speech defects. It was also observed that speech defects were more common amongst a severely subnormal group than the subnormal group.

An invaluable resource in evaluating and treating children with mental retardation is the Childs family. Trying to understand and include families in the decision making process can ultimately be rewarding and beneficial for all involved.

In Indian context only one guide for parents has been developed at National Institute for the Mentally Handicapped (NIMH), Secundrabad, namely "Training in Communication Skills for Persons with Mental Retardation (UTILITY GUIDE FOR PARENTS)," by Subba Rao & Narayan, (2003). The utility guide is divided into two sections, one dealing with details on how children develop their speech and language skills. The other section involves 8 chapters, dealing with activities related to preparatory skills, listening skills, expression skills, etc. Each activity has information on material and context. This has general objectives and limited activities and their examples in each category.

It is felt that the number of such parent utility manual should increase and be available to all needy parents. It is also felt that there is a need to expand objectives and activities to suit different socio-cultural-language speaking environments. The present manual will include a larger set of activities in limited area / objectives. The activities will be focusing on a general north Indian cultural set up.

III. Methods

The Present study aims:

1. To develop training activities and guidelines suitable for north Indian home settings in an activity manual.
2. To include modified and new activities based on the skill areas of prelinguistic skills, listening comprehension of words and word level expression, which are selected from the work of SubbaRao & Narayan, (2003).
3. To field test the developed material on a group of Hindi-English speaking parents of mental retardation.

a) Material

Objectives were planned and activities were written under each objective.

Selected Objectives under each section are written below.

Section 1. Pre-linguistic skills (Attention):

1.A. Helping the child to participate in making and breaking towers.

1.B. Helping the child to match the picture.

1.C. Encouraging the child to attend to puzzles.

© 2013 Global Journals Inc. (US)

Section 2. Listening and comprehension:

2.A. Helping the child in responding to verbal sounds.

2.B. Helping the child to develop name recognition.

2.C. Helping the child to following simple instructions.

Section 3. Word level expression:

3.A. Helping the child to say meaningful single words such as /mamma/, /papa/.

3.B. Helping the child to say his name, or introducing self by name.

3.C. Helping the child to name parts of the body.

Under each objective, three principles were taken, namely: Creating a need to communicate in the environment, Role reversal and Hiding objects. Under each principle three activities were listed, which was based on home environment/ home based.

b) Language and Scope

Manual was made in simple English, suitable for graduate level educated parents of mentally retarded children. It is useful for parents in implementing home training program and complements the speech language pathologists/ Special educators.

c) Subjects

20 parents of children with mental retardation and 20 Special educators of the children with mental retardation, with minimum experience of 1 year were involved in field testing.

d) Field Study tool

Questionnaire was developed on the base of coverage of content, use of language, style of presentation and difficulties in home implementation.

Total number of questions in the questionnaire-15

Total number of multiple choices of questions-10

Total number of open ended or descriptive questions-5

Questionnaire and activities described in the manual were given to all the subjects for one week reading and they were asked to rate the questionnaire based on that.

Questionnaires were rated on a 4-point scale i.e. 1-4 for the purpose of analysis the score was assigned, i.e. 1 - No, 2 - Very limited/ little, 3 - Mostly suitable/ Easy/ Useful and 4 - Very relevant/ Very easy for both the groups only for multiple choice questions. The open ended or descriptive questions were taken as a suggestion to improve or reorganize the activities of the manual.

The data were statistically analyzed using Independent sample t-test to find out any significant difference among the groups.

IV. Results

For this study 20 parents and 20 special educators were selected and most of the parents and special educators were from various places of Ranchi (Jharkhand) and very few from the Mangalore (Karnataka), India. All Parents were Hindi speakers and had a working knowledge of English. The activity manual and Questionnaire which contains a set of 15 questions, in which question no 1 is excluded from the analysis because it generally tells about the previous experience/ familiarization about the manuals in general. Question numbers 2 to 9 & 15 are multiple choice questions which were rated on a 4 point rating scale. Question number 10 to 14 are open ended/ descriptive questions that focus on coverage of content, use of language, style of presentation and difficulties in home implementation. Questionnaires were given to the parents and special educators for one week reading at the end of which Questions were answered. In order to analyze the data, the rating points were scored as follows: 1 - No, 2 - Very limited/ little, 3 - Mostly suitable/ Easy/ Useful and 4 - Very relevant/ Very easy. The results are presented in this section.

© 2013 Global Journals Inc. (US)

Table 1 : Characteristics of Subjects: Parents group

S.No	Name	Age/Sex	Education	Age of the MR child	Knowledge of English
1.	Mr. J.C	24Yrs/M	BA	3Yrs/M	Yes
2.	Mr. I	32Yrs/M	PUC	3Yrs/M	Yes
3.	Mr. G.S	50Yrs/M	PUC	18Yrs/M	No
4.	Mr. R.P	52Yrs/M	PUC	2Yrs/M	Yes
5.	Mr. B.T	31Yrs/M	PUC	24Yrs/M	Yes
6.	Mr. R.P	52Yrs/M	BA	18Yrs/M	Yes
7.	Mr. V.K	52Yrs/M	PUC	24Yrs/M	No
8.	Mr. S.R	40Yrs/M	PUC	12Yrs/M	Yes
9.	Mr. S.P	55Yrs/M	MBBS	28Yrs/M	Yes
10.	Mr. V.M	35Yrs/M	IA	10Yrs/M	Yes
11.	Mr. S.K	50Yrs/M	MA	12Yrs/F	Yes
12.	Mr. H.S	41Yrs/M	IA	18Yrs/M	Yes
13.	Ms. S.R	33Yrs/F	MA	3.6Yrs/F	Yes
14.	Ms. P	26Yrs/F	BSC	3Yrs/M	Yes
15.	Mr. B.P	25Yrs/M	IA	3Yrs/F	Yes
16.	Mr. S.M	31Yrs/M	BA	5Yrs/M	Yes
17.	Mr. G.S	35Yrs/M	BA	8Yrs/M	Yes
18.	Ms. A. S	30Yrs/F	IA	6Yrs/M	Yes
19.	Mr. K.P	41Yrs/M	MA	10Yrs/F	Yes
20.	Mr. A.P	55Yrs/M	BA	12Yrs/F	Yes

(Note: PUC- Pre University College, IA- Intermediate of Arts, BA- Bachelors of Arts, BSC- Bachelors of Science, MA- Master of Arts, MBBS- Bachelors in Medicine and Bachelors in Surgery,)

Table 1 shows the characteristics of subjects i.e. Name, Age/Sex, Education, Age of the MR child and knowledge of English for parents and Name, Age/Sex, Education, Knowledge of English and work experience for the special educators in Table 2. It can be observed that 17 fathers and 3 mothers participated in the study. The education levels are generally above degree level. Two parents who had no working knowledge of English took the help of other family members in Evaluation.

Table 2 : Characteristics of Subjects: Special educators group

S.No	Name	Age/Sex	Education	Experience	Knowledge of English
1.	Ms. S	23Yrs/F	DSE MR	3Yrs	Yes
2.	Ms. R	26Yrs/F	DSE MR	3Yrs	Yes
3.	Ms. S	27Yrs/F	DSE MR	3Yrs	Yes
4.	Ms. P	22Yrs/F	DSE MR	3Yrs	Yes
5.	Ms. M.P	27Yrs/F	DSE MR	3Yrs	Yes
6.	Ms. M	22Yrs/F	DSE MR	3Yrs	Yes
7.	Ms. S.	25Yrs/F	DSE MR	3Yrs	Yes
8.	Mr. M	35Yrs/M	DSE MR	4Yrs	Yes
9.	Mr. P	26Yrs/F	DSE MR	5Yrs	Yes
10.	Mr. S.M	22Yrs/M	DSE MR	1Yrs	Yes
11.	Mr. J.K	22Yrs/M	DSE MR	1Yrs	Yes
12.	Ms. M.S	22Yrs/F	DSE MR	1Yrs	Yes
13.	Ms. P.S.	22Yrs/F	DSE MR	1Yrs	Yes
14.	Mr. S	18Yrs/M	DSE MR	1Yrs	Yes
15.	Ms. K.P	19Yrs/F	DSE MR	1Yrs	Yes
16.	Mr. B	22Yrs/M	DSE MR	1Yrs	Yes
17.	Mr. N	22Yrs/M	DSE MR	1Yrs	Yes
18.	Ms. H. K	26Yrs/F	DSE MR	2Yrs	Yes
19.	Mr. M.K.	25Yrs/M	DSE MR	2Yrs	Yes
20.	Mr. M.P	26Yrs/M	DSE MR	2Yrs	Yes

As can be observed from table 2: All Special Educators had Diploma in Special Education-Mental retardation (DSE MR), with a minimum experience of 1 Year. All reported a working knowledge of English.

© 2013 Global Journals Inc. (US)

Table 3 : Mean, Standard deviation and t-value for the two groups i.e. Parents (P) and Special Educators (SE)

Questions	Groups	Mean	Standard deviation	t-value
Q.2.	P	2.8	.69	-1.840NS
	SE	3.15	.48	
Q.3.	P	3.1	.44	-2.746NS
	SE	3.6	.68	
Q.4.	P	3.15	.67	-1.334NS
	SE	3.4	.50	
Q.5.	P	2.9	.39	-2.552NS
	SE	3.3	.47	
Q.6.	P	2.85	.74	-2.284NS
	SE	3.3	.47	
Q.7.	P	3.05	.22	.000NS
	SE	3.05	.60	
Q.8.	P	3.35	.48	.000NS
	SE	3.35	.74	
Q.9.	P	3.05	.51	-.273NS
	SE	3.10	.64	
Q.15.	P	3.35	.81	-1.667NS
	SE	3.70	.47	

(Note: NS– Not Significant)

Independent sample t- test was done to find any significant difference between the two groups and results showed that there is no significance difference among the two groups. Table 3 shows the Mean, Standard deviation and t-value for the two groups. The results imply that both parents and Special Educators have rated the Questions on Evaluation of the manual in the same pattern.

Table 4 : Questions regarding Coverage of Content

Q. R Q	Parents				Special educators			
	No (1)	Very limited (2)	Mostly suitable (3)	Very relevant (4)	No (1)	Very limited (2)	Mostly suitable (3)	Very relevant (4)
2.	2	1	16	1	-	1	15	4
3.	-	1	16	3	-	2	4	14
4.	-	3	11	6	-	-	12	8

Table 5 : Questions regarding the Use of Language

Q. R Q	Parents				Special educators			
	No (1)	Little easy (2)	Easy (3)	Very easy (4)	No (1)	Little easy (2)	Easy (3)	Very easy (4)
5.	-	2	17	1	-	-	14	6
6.	1	4	12	3	-	-	14	6
7.	-	-	19	1	-	3	13	4

Table 6 : Questions regarding the Style of Presentation

Q. R Q	Parents				Special educators			
	No (1)	Very limited (2)	Useful (3)	Very relevant (4)	No (1)	Very limited (2)	Useful (3)	Very relevant (4)
8.	-	-	13	7	-	3	7	10
9.	-	2	15	3	-	3	12	5

© 2013 Global Journals Inc. (US)

Table 4, shows the comparison between two groups for coverage of the content of the activity manual among both groups. Relevant questions 2 to 4 are included in this table. The results clearly indicate that in both the groups the agreement is in the most suitable category. While 80% of parents and 75% special educators ratings are obtained Q.No.2, for Q.No.3. 80% of parents and 70% of special educators agree that the manual has very good suitable content. For Q.No.4, 55% of parents and 60% of special educators say mostly stable, which indicates the coverage of content in the present activity manual, is mostly suitable for both the groups.

Table 5 shows the comparison between parent and special educator groups in rating the level of language used in activity manual, elicited by Q.No.5 to 7. The percentage scores for language being 'Easy' are maximum for both parents and special educators. It is also significant that 15-20 of the subjects in the study noted that the language is very easy. It can be concluded that language level was found to be easy or very easy.

Table 6 shows the comparison between parent and special educator groups regarding the style of presentation in activity manual as judged by the subjects; these aspects were included in Q.No.8 & 9. The results indicate that both groups were in agreement that the style of presentation is useful or very relevant.

Question number 10 to14 were open ended questions and all suggestions to improve the manual are listed, if they were given. Suggestions were not given by all the parents and special educators. Few suggestions given by both the groups are divided into two parts. All suggestions regarding the content and presentation of the manual are listed in table 7. All suggestions for home implementation of activities are listed in table 8.

Table 7 : Suggestions for Content and Presentation of Manual

Q.No.	Group	Suggestions	Number of suggestions
10.	P	Make it available in Hindi also	5
		Picture should be more	3
		Parent education is needed	2
	S.E	No suggestions/content is good	10
		It should include children with CP, Autism & HI	2
		More pictures should be added	1
		Social skills should be added	1
		Activities for grooming should be added	1
		Suggestions for the siblings should be added	1
		Include the activities which can be given in mingling with the society	1
11.	P	It is good and useful	5
		Materials should be divided according to age of the child	
		Presentation of the manual should be more practical	2
		It would be better if all the parents who have mentally retarded child called together to express their opinion with group discussion with LCD presentation	1
			1
	SE	It is good and useful	8
		Information about neighborhood should be added	1
		It should be given in understandable clear and useful	1
		Materials should be divided according to age of the child	
		Help the child to use word combination and sentences, when the individual's home is multiword combinations, more from simple to complex sentence	1
			1
13.	P	It is sufficient	6
		To make the children self independents should be included	
		Job oriented goals should be included	1
		Occupational training should be included	1
			1
	SE	It is sufficient	4
		Emotional play should be included	3
		Social skills should be included	2
		Self help skills should be included	2
		AAC should be included	1
		Job oriented guidelines is needed	1

© 2013 Global Journals Inc. (US)

Table 8 : Suggestion for Parental implementation

Q.No.	Group	Suggestions	Number of suggestions
12.	P	No difficulty faced	6
		Lack of material	2
		Should cover low economic status	1
		It should be in easy language/formant for rural areas	1
		If people are not educated then difficulty in implementing so he/she should be educated	1
	SE	No difficulty faced	7
		It can be harmful to child in the kitchen	2
		Making the child to listen is difficult	1
		Beginning stage is quite difficult	1
		How to teach the language in profound MR children	1
14.	P	No suggestions	4
		The manual should be well explained	1
	SE	No suggestions	2
		Social skills should be included	1
		Suggestions for the siblings should be added	1
		Information for the teachers should be included	1
		Easy language should be used	1
		Mention more explanations on how to teach language & communication	1
15.	P	To give all parents	11
		To some parents	5
		Give to few parents	4
	SE	To all parents	14
		To some parents	6

About 5 parents indicate that the manual should be available in regional language-Hindi also. The Results clearly indicate that the content and presentation of manual is adequately done.

Table 8 shows the number of suggestions given by parents and special educators for parental implementation. Parents and Special educators, indicate that activities can be carried out at home without much difficulty. More than 50% of subjects in each group, i.e.11 parents and 14 special educators suggest that the manual can be given to all Parents.

The overall findings of this study reveal that the content, language, style of presentation and the activities which are based on general North Indian cultural setup are suitable and useful for the needy parents.

V. Discussion and Conclusion

The present manual is an expansion and adaptation of as earlier communication developmental manual by Subba Rao & Narayan, (2003). The present manual has 10 numbers of objectives and 175 numbers of activities. The activities in the present manual have been prepared keeping in mind a North Indian cultural, middle income group contexts. Parents and Special Educators find the manual useful and easy to use. This generally points to the fact that many such manual covering wider objectives are needed. Some suggestions, such as the need for Hindi translation and adaptation of the manual to rural areas are very good; however they are out of the focus of the present manual. The positive high ratings of the manual by Parents and Special educators indicate how well efforts in the direction are appreciated. All future efforts may take the suggestions from parents and Special Educators seriously. The present manual is useful for language interaction purposes.

a) Limitations of the Study

The number of subjects taken and areas (sections) covered in this study was less & very limited. The planned activities were not based on the child age range and language used in this study was only English.

b) Further Recommendations

More number of subjects and areas (sections) can be included.

The activities can be planned at the base of child age range and the manual can be translated into regional languages.

VI. Acknowledgment

I would like to thank Professor Dattatareya, principal, College of speech and hearing, Mangalore for giving me an opportunity to carry out this project as a master thesis, Dr. Subba Rao, professor, College of speech and hearing, Institute of health sciences, Mangalore for his guidance. My sincere thanks to Miss Archana. J., Lecturer, College of speech and hearing,

© 2013 Global Journals Inc. (US)

for her support, encouragement Ms Punam for helping in data collection and all the participants for their participation in this study.

VII. Conflict of Interests

This research was not funded. This research work was a part of Master Thesis and has been submitted to the Library of College of Speech and Hearing as well as Mangalore University in 2006. During research, First Author was a student of Master in Audiology and Speech Language Pathology and Second Author was the Professor at College of Speech and Hearing, Mangalore. Currently, the first Author is doing a PhD in Audiology and Speech-language Pathology.

References Références Referencias

1. American Association on Mental Retardation (2002). *Mental Retardation-Definition, classification and systems of supports*, 10th edition. Washington, D.C.: AAMR.
2. Bharatraj, J. (1987). Speech and Hearing problems among the mentally retarded. *Indian Journal of Disability and Rehabilitation*, 1, 5-8.
3. Carrow-Wolfalk, E., & Lynch, J. (1982). *An integrative approach to language disorders in children*. New York: Grune & Stratton.
4. Gupta, S.C. (1970). An analysis of 300 mentally retarded cases. *Indian Journal of Mental Retardation*, 3, 69-74.
5. Prabhu, G.G. (1968). Speech problems of the mentally retarded. *Indian Journal of Mental Retardation*, 87-94.
6. Shah, D.K., Verma, S.K., & Teja, J.S. (1970). Differential Problems in primary and secondary retardates. *Indian Journal of Mental Retardation*, 3, 25-49.
7. Sheerenberger, R.C. (1983). *A history mental retardation*. Baltimore: Brookes Publishing Co.
8. SubbaRao, T.A., & Srinivas, N.C. (1989). Speech and Language defects and mental retardation-A report on the analysis of 300 mentally retarded persons. *Indian Journal of Disability and Rehabilitation*, 31-43.
9. SubbaRao, T.A. (1992). *Manual on developing communication skills in mentally retarded persons*. Secundrabad: National Institute for the mentally handicapped.
10. SubbaRao, T.A. & Narayan. (2003). *Training in communication skills for Persons with Mental Retardation: UTILITY GUIDE FOR PARENTS*. Secundrabad: national institute for the mentally handicapped.
11. The persons with disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act (1995). New Delhi: Ministry of Social Justice & Empowerment (Govt. of India), Press.
12. National Trust for the Welfare of persons with Autism, Cerebral palsy, Mental Retardation and Multiple disabilities Act (1999). New Delhi: Ministry of Social Justice & Empowerment (Govt. of India), Press.

© 2013 Global Journals Inc. (US)