

**DEVELOPMENT OF MATERIALS FOR SKILL TRAINING  
IN THE MENTALLY RETARDED CHILDREN**

**PROJECT REPORT**

and

**MANUAL FOR  
'TOWARDS INDEPENDENCE SERIES'**

(Oct. 1987 to Sept. 1990)

(Funded by UNICEF)



**NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED**

(Ministry of Welfare, Govt. of India)

Manovikas Nagar, Bowenpally

Secunderabad 500 001.

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The materials developed in this project are in the form booklets and pamphlets under the title "Towards independence series 1-9". The following are the titles developed :

**BOOKLETS**

1. Gross Motor Skills
2. Fine Motor Skills
3. Mealtime Skills
4. Toilet Training
5. Tooth Brushing
6. Bathing
7. Dressing
8. Grooming
9. Social Skills

**PAMPHLETS**

1. Enhancing Gross Motor Skills
2. Fine Motor Skills
3. Feeding on their own
4. Toilet Training
5. Teaching Brushing Skills
6. Train your child to Bathe
7. We can Dress Ourselves
8. Teaching Grooming Skills
9. Teaching Basic Social Skills

10. A manual for the above materials

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## PREFACE

*This book is a report of the project on Development of skill training in mentally retarded children as well as a manual for the materials developed under the project. With funding from Unicef, this project has developed booklets and pamphlets for parents of the mentally retarded children with guidelines for training in a series of skills. This series called as Towards Independence Series includes 9 skills namely, gross motor, fine motor, feeding, toileting, brushing, bathing, grooming, dressing and socialisation. The skills are selected based on the parental perception of the skills that needed to be developed in their child and the special education assessment by qualified special educators. The target group for whom the package is developed is mentally retarded children below 15 years of age. It can however be used for any child who has a deficit in that given skill. To make sure that the information given in the packages benefits the children, they are field tested on children with deficit in the skills, and modified based on the results of the field trial. This book has information on the need for parent training, selection of skills, field trial of the package and brief information on the basic principles to be followed for developing skills in the children. Keeping in mind the parents as the target users, technical jargons are avoided as far as possible and simple language is maintained. It is hoped that the package is of value to the users in training their children with deficits in the selected skills. Comments and suggestions on the package from the users will be appreciated.*

**Jayanthi Narayan  
A.T. Thressia Kutty  
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The guidance and suggestions of Dr. D.K. Menon, Director, NIMH are acknowledged with special reference. The efficient secretarial assistance in typing out the drafts throughout the project by Sri A. Venkateswara Rao requires a special mention and grateful acknowledgement. The administrative support by Sri T. Pitchaiah, Sri V. Ram Mohan Rao and Mr. K.S.R.C. Murthy are sincerely appreciated. Last, but not the least, we are grateful to the parents of the mentally retarded children who cooperated with us for the field trial of the skill training packages and for having given suggestions for modification which are suitably incorporated.

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# SKILL TRAINING FOR MENTALLY RETARDED CHILDREN

## CHAPTER - I

### INTRODUCTION

The parents learn the art of parenting as they bring up their children. This is especially true with the present day family set up which usually consists of small nuclear families. In olden days, the large joint family set up gave exposure to men and women in atleast partial involvement in rearing of brothers, sisters, nephews or nieces. With that system fading, every parent tends to learn the art of parenting with his/her own child. As the child grows, his physical, social, emotional and intellectual needs change and the parents adapt themselves to meet the emerging needs of the child from time to time.

Homan (1977) as quoted by Shea and Bauer (1985) defines parenting as a process of responding responsibility to a child's expressed and unexpressed need for love, management leading to self discipline, emotional security, intellectual stimulation, freedom to explore, feedback on efforts, joy of living, physical care, nourishment and safety. Needs of the mentally retarded children are not very different from the needs of normal children. Parenting such children requires a better understanding of the child's condition, the uniqueness of his developmental pattern and the skills needed in training such children. Invariably parents of such children feel anxious, exhausted and depressed. Such feelings are more due to the 'ignorance' on their part regarding the child's condition and the methods of handling the child, rather than the condition of the child itself. If properly informed at the right time, that is, early in the life of the child, a great amount of strain and stress on the part of the parent can be reduced. Usually parents become aware of the child's problem in preschool years or after he enters the school, if the nature of the disabling condition is mild. If it is moderate or severe, with a conspicuous condition such as in cerebral palsy or microcephaly the parents become aware relatively earlier. Whenever they become aware, going through a hard phase of shock and denial happens to be very painful for them. A sensitive professional would be a support to the parents at this stage in assisting them to go through the phase and learn to accept the child. This new role of 'exceptional parent' would require that the parent learns to accept the new responsibility and set a realistic goal for the child. The role of the professional at this stage is of extreme importance as, the attitude towards the child can be moulded appropriately at this stage. This in turn will help in gaining the cooperation of the parent in training the child in various skills in the days to come.

#### **Advantages of training parents:**

- Parents spend maximum time with their child than anyone else.
- As they are involved in the child's day to day activities, they are in a better position to train the children in those activities.
- Parental involvement in training early in the life of the child, enables development of positive attitude in the parents towards the child, acquisition of knowledge and skills in training the child and development of confidence in them in handling their child on their own.
- Active parental interest and involvement in training the child provides the child with the feeling of belonging and a sense of security at home.



Because parents develop an understanding and actively participate in bringing up the child, they accept the child better.

Above all it reduces the dependence of the parents on a professional for training and management of their child. Parent will be able to independently handle the child for various skill development, once they learn the 'know how' of it.

### **Modes of training :**

The parents can be taught the 'know how' of training their child through various modes. This includes, direct demonstrations by the professional on the child, lectures, film shows, slide shows, home visits and printed matter. Kashima, Baker, Landen (1988) reported the efficacy of a media based programme. A media based programme for parents of mentally retarded children presented information on self-help skill teaching primarily through video tapes and instructional manuals. Sixty-one families were randomly assigned to media-based training, the same curriculum was followed using a professional leader and a delayed-training control condition. The delayed training control group did not have training when the other two groups had the training. Media-trained families evaluated their programme very positively and showed significantly greater gains than did control parents on all but one outcome measure. Live training increased parents knowledge of behavioural principles more than did media-based training, but otherwise the results of the two conditions were quite similar. Media-based programmes may be a cost effective way to make parent training more widely available. Among all of these modes, printed materials has the additional advantages of reaching out to a larger population, being relatively cheap and the parent can have it at home for guidance all the while. However, one has to keep in mind that parental literacy is an essential factor in making use of printed matter for training the child. With the literacy rate on the increase in the country and the larger number of children of younger generation going to school when compared to olden days, the role of printed matter in the education and training of retarded children is promising. Even if the parents are uneducated, they can take the help of the siblings of the retarded child in understanding the printed matter and applying the techniques given therein for training their child. In short, when the advantages and limitations of the printed matter are considered, the advantages outweigh the limitations. Well written materials with appropriate illustrations are of paramount assistance to parents and families of mentally retarded children in training them at home in the various activities that would lead them towards independence of their children.

### **Selection of skills for training:**

Though mentally retarded children cannot be made normal, they can certainly be trained to independently look after their activities for daily living. The key factor in training lies in selection of priority activities in order. When there are a large number of activities for daily living to be trained, it is rather a difficult task to do. Usually, the parents are sensitive to the immediate needs for training. The deficit in those skill areas that become a problem in management of the child are generally identified as priority areas to be trained. For instance, a 7 year old who is still unaware of toilet control, requires to be trained in toilet skills first, among other skills. Similarly, a child who cannot sit without support needs to be trained in that skill before training in standing. Based on the parental information on presenting complaints and their expectations, a fair idea on the sequence of skills to be taught can be developed.

The present project was aimed at developing training materials for selected skills for mentally retarded children. The skills and activities selected were based on the parental perception of the child's problem and special educational assessment. After selecting the skills, booklets and pamphlets were developed which contain instructions in simple language with illustrations for training. A Project Advisory Committee consisting of experts in the field of mental retardation provided their valuable suggestions in the development of the booklets and pamphlets. After the completion of the development of materials they were field tested by giving them to parents of the mentally retarded children. The suggestions of the parents for modification were incorporated and the materials were printed. The following pages have details on the process of selection of skills and field trial of the materials and basic principles to be followed in skill training.

## CHAPTER - II

### SELECTION OF SKILLS FOR TRAINING

When the parents find the child to be looking normal but does not perform like his age peers, they perceive and interpret the problem in their own way. Due to the inconspicuous nature of mental retardation perceptions and interpretations vary widely. Yet, parents views on their child's condition is the first indicator of a problem existing in the child and also informs of the level of awareness of parents regarding the problem. The parental counselling and guidance to be given will largely depend upon their perception of the problem. Comparing the actual assessment data with that of parental perception is one way of finding out the parental awareness. This would also provide an idea on what are the areas which need training on priority. This assists in objectively selecting the skills for training the child. Keeping this in mind, a study was conducted with 150 children below the age of 15 years with mental retardation. The selection of skills for developing the package was based on the results of this study. The details of this study are as follows.

#### OBJECTIVES

1. To compare the problems of mentally retarded children below the age of 15 years as perceived by the parents, with that of special educational assessment.
2. To analyse the results and list the priority skills to be trained.
3. To recommend suitable programmes for intervention.

#### METHODOLOGY

One hundred and fifty cases below the age of fifteen years who were registered for services at the National Institute for the Mentally Handicapped (NIMH) during 1986 and diagnosed as having mental retardation were selected for the study. Information on the presenting complaints as given by the parents was collected from the case files. Special educational assessment was done using informal, criterion referenced tests by a qualified special educator and the current level of functioning was recorded in each of the areas namely, motor, selfhelp, social, communication, and academic domains. The complaints were grouped under the heads of motor - gross motor, fine motor; selfhelp - feeding, toileting, brushing, bathing, grooming, dressing; communication; social behaviour and functional academics - reading, writing, arithmetic, time and money. The number of complaints and the details on educational assessment in each of these areas were grouped in the age ranges of 0 to 5, 6 to 10 and 11 to 15 years. The data was analysed.

## RESULTS

Table-1 gives the demographic data of the subjects in terms of age, sex and level of retardation. It is seen that the male children were more than the female children and profoundly retarded children constituted the least in number.

**Table-1:** Distribution of the sample by age, sex and level of retardation

Level of Retardation	Age & Sex						Total
	0-5 years		6-10 years		11-15 years		
	Male	Female	Male	Female	Male	Female	
Profound	5	5	5	9	2	1	27 (18.0)
Severe	10	9	11	3	11	7	51 (34.0)
Moderate	15	6	10	12	23	6	72 (48.0)
Total	30 (12.0)	20 (13.3)	26 (17.3)	24 (16.0)	36 (24.0)	14 (9.3)	150

Figures in parentheses indicate percentages.

Table-2 gives the details on the number of children requiring training in the various skills as perceived by the parents and as identified through special educational assessment.

**Table-2:** No. of children requiring training in the areas of Motor, Selfhelp and Social skills

Skills	Age		0-5yrs		6-10yrs		11-15yrs		Age groups pooled			
			A	P	A	P	A	P	A		P	
			Total	%	Total	%	Total	%	Total	%	Total	%
<b>MOTOR SKILLS</b>												
a) Gross motor			29	29	31	12	15	8	75	50.0	49	32.6
b) Fine motor			29	7	35	0	18	3	82	54.7	10	6.7
<b>SELFHELP SKILLS</b>												
a) Feeding			34	14	37	26	26	26	97	64.7	66	44.0
b) Toileting			37	16	45	25	28	27	110	73.3	68	45.3
c) Brushing			31	0	48	21	34	19	113	75.3	40	26.7
d) Bathing			31	0	49	22	33	20	113	75.3	42	28.0
e) Grooming			28	0	47	21	33	18	108	72.0	39	26.0
f) Dressing			33	1	48	20	33	22	114	76.0	43	28.7
<b>APPROPRIATE SOCIAL BEHAVIOUR</b>												
			34	0	47	5	43	18	124	82.7	23	15.3

A= Special Educational Assessment

P= Perception of the parents regarding the problem.

It can be seen that the gross motor problem in the 0-5 age group is in total agreement, may be for the reason that the problem is very obvious. As 0-5 is the age of development of predominant motor milestones, a delay in that is readily noted by the parent. In higher age group the perception of the parents as problem in motor area is relatively less, which may be probably because the parents look for functional abilities, rather than perfection, while the special educational assessment takes into account the age appropriate development in this area. It may also be possible that in the higher age groups, when the age appropriate selfhelp skills and language skills are not developed, the finer aspects of motor development may not be of priority concern of parents and hence not perceived as a complaint by the parent. The reason for wide disparity in the fine motor area may be that parents might have informed under activities such as feeding, buttoning and holding pencils, that involve fine motor skills and not as a motor problem perse. Therefore, this difference might be more of technical terminology rather than the perception of the problem.

In the area of selfhelp skills, there is a difference of 20% to 30% in the feeding and toilet skills, the parental perception being lower than the assessment. This is explainable as the assessment takes only total independence into account for not requiring training while parents may be satisfied even with partial independence and may not call it a complaint. In these two areas as the age increases, the agreement in the parental perception and assessment information is higher as can be seen in the 11 to 15 age group. On the other hand, in the 0-5 age group, the agreement is low as the parents would have preferred helping the child in these areas as the child is still young.

In the areas of brushing, bathing, grooming and dressing there is almost a 50% difference in the perception and the assessment, the former being lower than the latter. In the 0-5 age group parents have not complained at all as they would have taken that the child is not yet ready for those skills, and also the motor and language problems would have got priority over these skills. In the special educational assessment, wherever not applicable in 0-5 age groups, such as in infants, are excluded and the assessment is given for the other children depending on their dependence level. The general trend in the lower rating of problems by the parents against that of the educators have been in concurrence with the study by Heath and Obrzut (1984)\*. They found in a similar study with 5 mentally retarded children that the parents rated their children as having better adaptive behaviour than as rated by the teachers. This may be because the parents might look at the skills in relative terms with other skills and also other children, and the perception of priority skills would vary, while a teacher would assess objectively all the skill and activity areas with equal importance and then would plan on priority goals.

In the area of social behaviour, the parents complained only of maladaptive behaviour such as self injurious behaviour, injuring others, wandering, thumb sucking and such behaviours while the assessment included deficits in social behaviour including good manners and appropriate social interaction. This might have contributed to the wide disparity (67.4%) in the parental perception and the educator's assessment.

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\* Heath, C.P. and Obrzut, J.K. (1984) 'Comparison of three measures of adaptive behaviour,' *American Journal of Mental Deficiency*, 89(2), PP. 205-208.

**Table-3:** No. of children requiring training in the areas of Communication and Functional academics

Skills	0-5yrs		6-10yrs		11-15yrs		Age groups pooled			
	A	P	A	P	A	P	A Total	%	P Total	%
<b>COMMUNICATION SKILLS</b>										
a) Responding to sounds	7	3	13	3	2	0	22	14.7	6	4.0
b) Following simple instructions	23	1	19	1	4	2	46	30.7	4	2.7
c) Understanding simple questions	31	1	23	1	7	5	61	40.7	7	4.7
d) Using simple words	33	35	28	18	12	13	73	48.7	66	44.0
e) Expressing in simple sentences	34	35	40	19	25	20	99	66.0	74	49.3
f) Conversation	33	35	44	39	32	45	109	72.7	119	79.3
<b>FUNCTIONAL ACADEMICS*</b>										
a) Reading				2		8			10	6.7
b) Writing				3		8			11	7.3
c) Numbers				2		8			10	6.7
d) Time				-		1			1	0.7
e) Money				-		3			3	2.0

A= Special Educational Assessment

P= Perception of the parents regarding the problem.

- \* As per the assessment the academic skills are needed for all children (except 0-5 age group) appropriate is to the level of functioning. Perception of parents alone is noted in the table.

Table-3 provides details on the number of children requiring training in communication skills and functional academics as perceived by parents and as assessed by the teachers.

In the communication area, the first three tasks a, b and c involving receptive language abilities have not been perceived as problems by the parents while the assessment revealed that upto 40% of the subjects did require assistance in this area. On the other hand, the parents showed concern on the 'speech' of their children which pertains to expressive language areas as seen in the table under d, e and f. The parental perception in this area is quite close to the assessment, as it is easily observable. The parental poor perception on the receptive language aspects may be due to their ignorance regarding speech and language aspects in general and the tendency to believe that if the child has hearing ability, he would definitely understand instructions. However, as perceived by the parents and the assessment of the educators the communication area ranks the highest with regard to requirement of training among other skills. Interesting findings were reported by Handen, Feldman and Honigman (1967)<sup>1</sup>, in their study on comparison of parent and teacher assessment of 98 developmentally delayed children's behaviour. Lowest level of agreement was observed in the area of speech and language. The authors further cite that abstract concepts evoke varying interpretations, leading to greater variance in response and ultimately to less agreement. Further, Rao and Srinivas (1989)<sup>2</sup>, in their study on speech and language deficits of 300 mentally retarded persons reported that the parents' perception of the speech and language disorders corresponded well with the clinical diagnostic categories, but only 10% of the parents complained regarding the comprehension aspects, indicating that majority of parents concentrated on the spoken output rather than listening aspects. It is evident in the present study also, where the inability to converse is perceived by 79.3% of the parents as a major problem against 72.7% as per the assessment. This may be because assessment credits functional gestural communication while parents insist on speech.

In the area of functional academics as per the assessment, all the children except 0-5 age group at various levels require input depending on their level of functioning and other priority goals selected for training. The parental perception of need in this area has been very minimal amounting to less than 8% though the children belong to school going age, which may be attributed to the other pressing concerns with regard to the child, and rightly so. As the children were from the category of moderate retardation or below, the concern for focus is not so much on functional academics which is understandable.

Computation of chi-square values to test the statistical significance of the agreements among parental perception and the special educational assessment revealed that except for two subskills in the area of expressive language namely using simple words and conversation, the disagreements were significant at 1% level and for gross motor skills, responding to sounds, expressing in simple sentences, at 0.1%.

It has already been mentioned in the section on methodology that data on parental perceptions was collected from the information on the presenting complaints as given by the parents. It may be interpreted that the parents, at the time of interview, could have expressed the immediate complaints of the child, which, in their view are of major concern at the age and existing circumstances. The fact that the parent has not expressed the need for training in other areas does not necessarily imply that it is not a problem in that child. It is possible that it would be perceived at a later age in varying circumstances. This is further strengthened by the fact that individual scores in each of the selfhelp areas as collected from the parents asking for help is quite high ranging from 26 to 45%. Gaitskell and Pratt (1989)<sup>3</sup> reported that parents had difficulty in rating items involving personal and social responsibility while they found it easy to rate personal self sufficiency including selfhelp and communication skills.

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1. Handen, B.L., Feldman, R.S. and Honigman, F.A. (1967) 'Comparison of Parent and Teacher assessment of developmentally delayed children's behaviour,' *Exceptional children*, 54(2), PP.137-144.

2. Rao, T.A.S. and Srinivas, N.C. (1989) 'Speech and language deficits and Mental Retardation - A Report on the analysis of 300 mentally retarded persons,' *Indian Journal of Disability and Rehabilitation*, 3(2), PP.31-43.

3. Gaitskell, D.F. and Pratt, C. (1989) 'Comparison of parent and teacher ratings of adaptive behaviour of children with Mental Retardation'. *American Journal of Mental Retardation*, 94(2), pp.177-181.

In general, the skill areas that required training were predominantly from feeding and toileting skills and communication skills, where both parental perception and assessment are considered. A marked difference is found between the two in the area of appropriate social behaviour and receptive language skill areas, as these are not observed and quantified by the parents as is done by the professionals. All the subskills in selfhelp area are of concern for parents as well as found to be areas requiring training by the professionals.

## **CONCLUSION AND RECOMMENDATION**

It could be seen that parental perception of the problem in their retarded child is largely dependent on the age of the child and the extent to which it is observable. Therefore, certain skill deficits that were present in the child were not perceived by the parent at that given age or situation. Another reason for parents perceiving problems that are of immediate relevance to them is that the complaints listed are voluntarily given by them with prompts and not elicited as in special educational assessment.

While informing the parents about the level of functioning and the possibility of training the child, it is necessary to take into consideration, their needs and resources and not to over emphasize on the deficits of the child, as a professional's words will have a great impact on the parents and may further depress the parents. However, caution must be exercised in informing them regarding certain prerequisite skills which the parent might not have perceived, but may have complained only about the skill they want the child to learn. This is well evident in the communication area, where, without perceiving receptive language problem, the parents have complained on expressive language deficits. The educator must carefully explain to them the need for pre requisite skills in such circumstances.

While planning the IEP it is absolutely essential that parents must be involved and their concern must be considered for selection of priority goals. This happens automatically in countries where parental involvement is a requirement by law. In other countries, special care should be taken by the professionals.

As home training of the mentally retarded children is found to be an appropriate service delivery model in a country like India, the parental resources can be used for training the child at home for the activities of daily living. Literature in simple language with illustrations including details on how to assess and train, if made available to the parents, it would assist in reaching out to parents in various parts of the country, who are already aware of their child's needs.

In the present project, after considering the results of this study, nine skills were taken for including in the training package namely feeding, toileting, gross motor, fine motor, brushing, bathing, dressing, grooming and socialization.

Though communication area has been one of major importance and had been perceived by majority of the parents as a necessary skill to be trained, it is not included in this package as communication skills for mentally retarded children is being taken up as a separate project by NIMH under Unicef funding and this package will be available in due course.

It is reiterated here that in this project the target group is specifically children of below the age of 15 years and the skills chosen for training package is based on the parental perception of the need and the assessment data. The efficacy of the packages are evaluated by giving the draft materials to the parents for a period of time, evaluating the child's progress after using the package as well as considering the suggestion given by the parents for modification of the package. Wherever possible their suggestions are incorporated. The following pages have the details on the field trials of the packages and guidelines on certain basic principles to be followed in training a mentally retarded children in any skill or activity.

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## CHAPTER - III

### REPORT OF FIELD TRIAL OF THE SKILL TRAINING PACKAGES

#### Methodology

The booklets and pamphlets developed under this project were field tested to find out the efficacy of the materials and to modify the materials if needed. As decided by the Project Advisory Committee, each of the booklets and the pamphlets were given to atleast three families with mentally retarded children requiring training in the particular skill.

#### Field trial of booklets

##### Subjects

The draft booklets on various skills including gross motor, fine motor, feeding, toileting, brushing, bathing, dressing, grooming and social skills were prepared. Of the children who come for special educational intervention at NIMH, those children who required training in the specific skill were chosen for the field trial.

The age range of children chosen was one year to 15 years. The criteria for selection required that atleast one of the parents or the trainer should be able to read and understand English and that the child should have the need for training in the given skill irrespective of the level of mental retardation. For the booklet on each skill a minimum of three cases were selected. The level of retardation was taken as it is from the child's case file which contained information recorded by the multidisciplinary team including a medical doctor, special educationist and a psychologist, after detailed assessment of the child.

##### Procedure

After the special educational assessment, if the child was found to be one requiring training in the given skill, the parents were given the booklet and told to follow the steps given in the booklet at home to train the child with mental retardation. The parents were asked to come back after a given period of training the child. The time given to the parents varied from case to case, depending on their area of residence, child's level of functioning and the skill that needed training. After the specified period, the child was reassessed and the current level of functioning in the given skill was noted. The difference between the current level at entry and after training was compiled and analysed which indicated the efficacy of the package.

To evaluate the general presentation of the booklet, a five point scale ranging from 'very much appropriate' to 'not at all appropriate' was used with various details including language, size of the booklet, illustration, utility of the booklet with families of various educational and economic backgrounds and suitability to children with varied levels of mental retardation. The parents views on the above aspects were compiled which are seen in the following pages.

#### Field trial of the pamphlets

The pamphlets were evaluated by the parents on a similar five point scale designed for the booklet. The pre and post assessments were not done for the pamphlets as they were designed as information pamphlets with tips for training.

## Results

Results of field trial of the booklets and pamphlets on each skill are discussed in detail. For each booklet there are data shown in three tables namely Table-1 - Demographic data of the families included for field trial, which is self explanatory, Table-2 - pre and post assessment data on the children and Table-3 - parents opinion on specific details regarding the booklet as listed in the table. For each pamphlet there are two tables, one giving the demographic data and the other giving the parents opinion on specific details regarding the pamphlet. Field trial data of each of the booklets and pamphlets is discussed below.

Name of the skill: **Gross Motor Skills**

**Booklet**

**Table G.M.1:** Demographic Data

Sl.No. Rural/ Urban	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income Rs. 3,500 pm	Language spoken
1. Urban	2y 4m	F	Moderate	Father	B.Com C.A.IIB	3,500 pm	Telugu
2. Urban	4y	M	Moderate	Father	B.Com	1,800 pm	Telugu
3. Urban	1 <sup>1/2</sup> y	M	Moderate	Mother	S.S.C.	500 pm	Telugu

**Table G.M.2:** Information on rate of improvement in the child

Sl.No.	Level-of functioning before using the booklet	Date	Level of functioning after using the booklet	Date
1.	Can sit with support	25.01.90	Can sit without support, Can stand with support	28.02.90
2.	Stands with support, walks with support	21.04.90	.Walks with minimum support	25.05.90
3.	Does not pull up to sitting position, can sit without support if made to sit	23.11.90	Able to pull up to sitting	23.04.90

**Table G.M. 3 : Analysis of the package**

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	2	1			
2. Content	2	1			
3. Language	2		1		
4. Pictures	2	1			
5. Applicability of the package to :					
i) families in any part of the country	1	1	1		
ii) families of any educational background	2	1			
iii) families of any socio-economic background	1	1	1		
iv) any level of mentally retarded child	1	1	1		
6. Ease in using the package	1	1			

Table G.M. 2 shows that the current level of functioning varied from child to child at entry level. Parents of two children used the booklet for one month while one used for 5 months. All the children have shown improvement in the skills as it can be seen from the table. To a certain degree the improvement in the child at serial number 3 can be attributed to maturation also that would have occurred in 5 months. However, the parents reported that the booklet served as a good guide in helping them to handle the child and train him in the activities.

Table G.M. 3 provides information on the parental rating on the various aspects of the booklet. As it can be seen there have been no adverse opinions by the parents the various details regarding the booklet.

**Table G.M.1.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	6y	M	Mild	Mother	M.Sc. B.Ed.	Rs. 3,000 pm	Tamil	Urban
2.	4y	M	Moderate	Father	B.Com	2,000 pm	Telugu	Urban
3.	1 <sup>1/2</sup> y	F	Profound	Maternal Uncle	B.Com.	1,500 pm	Telugu	Urban

**Table G.M.2.1:** Analysis of the package

Details regarding the package appropriate	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	2	1			
2. Content	2	1			
3. Language	3				
4. Pictures	3				
5. Applicability of the package to:					
i) families in any part of the country	1	2			
ii) families of any educational background	1	2			
iii) families of any socio-economic background	1	2			
iv) any level of mentally retarded child	1	2			
6. Ease in using the package	1	2			

The details on the analysis of the pamphlet is seen in table G.M.2.1 which shows that the pictures and language are very much appropriate and all the other aspects are adequately included.

**Table F.M.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	12y	F	Moderate	Father	Nil	Rs. 1,800 pm	Telugu	Rural
2.	6y	F	Severe	Mother	VIII	2,000 pm	Telugu	Urban
3.	6y	M	Severe	Father	B.A.	1,900 pm	Telugu	Urban

**Table F.M.2:** Information on rate of improvement in the child

Sl.No.	Level of functioning before using the booklet	Date	Level of functioning after using the booklet	Date
1.	Has coordination of fingers but not introduced to domestic work and working tools	06.06.90	Started helping in domestic work using tools like hammer, screwdriver	01.08.90
2.	Does not have proper coordination. Has difficulty in picking up small things	06.06.90	Improved coordination Can pick up with thumb and fingers	25.07.90
3.	Can reach and hold objects in sitting position with whole hand	09.04.90	Can pick up using thumb and fingers	01.06.90

**Table F.M.3: Analysis of the package**

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	3	1			
2. Content	3				
3. Language	1	2			
4. Pictures	1	2			
5. Applicability of the package to:					
i) families in any part of the country	2		1		
ii) families of any educational background	2		1		
iii) families of any socio-economic background	2		1		
iv) any level of mentally retarded child	2		1		
6. Ease in using the package		2			

As it can be seen from table F.M.2 all the three children have shown improvement in their fine motor coordination. Table F.M.3 shows that the size and content of the booklet were very much appropriate for training the children. The rural parent has found the appropriateness as average with regard to use in any part of the country, or for people with any educational or socio economic background. This necessitated modifying the booklet to suit the needs of rural parents. The contents of the booklet were further modified on account of this finding to make it suitable for all parents, as far as possible.

**Table F.M.1.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	4y	F	Mild	Father	Nil	Rs. 1,500 pm	Telugu	Rural
2.	1y 3m	M	Severe	Mother	B.A	2,000 pm	Telugu	Urban
3.	3y	F	Moderate	Mother	B.Corn.	1,500 pm	Telugu	Urban

**Table F.M.2.1:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	2	1			
2. Content	1	2			
3. Language	3				
4. Pictures	2	1			
5. Applicability of the package to:					
i) families in any part of the country	3				
ii) families of any educational background	2	1			
iii) families of any socio-economic background	2	1			
iv) any level of mentally retarded child	2		1		
6. Ease in using the package	2	1			

The pamphlets were found to be very much appropriate with regard to language and applicability of the package in any part of the country by all the parents. The content was modified and presented in the final version.

**Table M.S.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
						Rs.		
1.	2y 4m	F	Moderate	Father	B.Com. C.A.IIB	3,500 pm	Telugu	Urban
2.	7y	M	Mild	Father	10th	750 pm	Telugu	Urban
3.	4y	M	Borderline	Father	B.A. B.Sc.	2,200 pm	Telugu	Urban

**Table M.S.2:** Information on rate of improvement in the child

Sl.No.	Level of functioning before using the booklet	Date	Level of functioning after using the booklet	Date
1.	Mother feeds the child. She can chew and swallow	25.01.90	Picks up food with fingers and puts into the mouth, asks for food and water	28.02.90
2.	Child does not chew the food, he swallows it. Parents prefer to feed the child rather than allowing the child to feed by himself	25.04.90	Child has learnt to indicate food needs Chew food 50% of the time	21.05.90
3.	Does not mix food. Eats rice when given in the form of balls. Eats pieces of dosa, idli	24.04.90	Child tries to mix rice Helps in getting plates and glasses ready. Tries to wash	23.05.90



**Table M.S.3: Analysis of the package**

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	1	2			
2. Content	2	1			
3. Language	2	1			
4. Pictures	1	1	1		
5. Applicability of the package to:					
i) families in any part of the country	2		1		
ii) families of any educational background	2		1		
iii) families of any socio-economic background	2		1		
iv) any level of mentally retarded child	2		1		
6. Ease in using the package	1		2		

The respondents were fathers for this skill. All the three children were trained for one month, using the booklet and all the three have shown remarkable improvement as it can be seen from Table M.S.2. While the efficacy was found to be good the general appearance and applicability of the booklet was found to be average. This mainly included size of the booklet, ease in use in 2 instances and applicability, content, pictures and language in one instance. One parent had suggested printing in colour. To maintain uniformity in the booklet size of the package, the size could not be altered but language, content and pictures were modified before printing. Printing in colour was not possible due to budget restriction.

**Table M.S.1.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Intormant	Informant's Education	Income	Language spoken	Rural/ Urban
1.	4y	M	Severe	Mother	B.Com.	Rs. 2,500 pm	Punjabi	Urban
2.	4y	M	Mild	Mother	Inter	700 pm	Telugu	Urban
3.	4y	F	Mild	Mother	B.A.	3,500 pm	Tamil	Urban

**Table M.S.2.1:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size		3			
2. Content	3				
3. Language	2		1		
4. Pictures	2		1		
5. Applicability of the package to:					
i) families in any part of the country	2	1			
ii) families of any educational background	2	1			
iii) families of any socio-economic background	2	1			
iv) any level of mentally retarded child	2	1			
6. Ease in using the package	2		1		

As it can be seen in table M.S.2.1 the pamphlets had no adverse comments. Here again the parents asked for colour pictures which could not be made possible due to budget restrictions.

**Table T.T.1** : Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	15y	M	Moderate	Father	B.Com	Rs. 3,000 pm	Telugu	Urban
2.	3y	F	Moderate	Father	B.Com	3,800 pm	Telugu	Urban
3.	6y	M	Mild	Mother	M.Sc. B.Ed.	3,000 pm	Tamil	Urban
4.	4y	F	Mild	Father	B.Sc.	1,500 pm	Tamil	Urban

**Table M.S. 2** : Information on rate of improvement in the child

Sl.No.	Level of functioning before using the booklet	Date	Level of functioning after using the booklet	Date
1.	Can not wash after toileting, cannot identify toilet in public places	10-05-90	Washes after toileting, identifies toilet in public places (70% of the time)	27-11-89
2.	Does not indicate the need	24-01-90	Has learnt to indicate	28-02-90
3.	Indicates toilet needs but cannot go by himself	06-04-89	Goes to the toilet when needed, opens the door, closes the door, flushes after toileting	10-07-89
4.	Totally unaware, plays with faeces if unattended	29-03-89	Goes to toilet on her own needs help in removing panties. Very rarely wets pants. Bowel movement needs help in washing only	10-08-89

**Table T.T.3: Analysis of the package**

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	2	2			
2. Content	3	1			
3. Language	2	2			
4. Pictures	1	3			
5. Applicability of the package to:					
i) families in any part of the country	1	3			
ii) families of any educational background		4			
iii) families of any socio-economic background	1	3			
iv) any level of mentally retarded child	1	3			
6. Ease in using the package	1	3			

Table T.T.1 shows that four families had used this package, ages of the children ranging from 3 to 15 years. It is noteworthy from table T.T.2 that a moderately retarded child who could not wash after toileting, could be trained to do so by using the booklet for about 5 months. Similarly a 4 year old child who was totally unaware and was playing with the faeces when not attended after training for almost 5 months had become independent in toileting except for washing after bowel movement.

The analysis in Table T.T.3 also shows that the booklet was found appropriate with no adverse comments.

**Table T.T.1.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	9y	M	Moderate	Father	S.S.C.	Rs. 1,000 pm	Telugu	Rural
2.	15y	M	Moderate	Father	S.S.C.	1,730pm	Telugu	Semi-Urban
3.	5y	F	Mild	Father	B.Sc.	1,000 pm	Punjabi	Urban

**Table T.T.2.1:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size		3			
2. Content	2	1			
3. Language	1	2			
4. Pictures	1	2			
5. Applicability of the package to:					
i) families in any part of the country	2	1			
ii) families of any educational background	2	1			
iii) families of any socio-economic background	2	1			
iv) any level of mentally retarded child	2	1			
6. Ease in using the package		3			

The families who gave their opinions on the pamphlet belonged to rural, semi urban and urban area and all the families found the pamphlet suitable for training. They had recommended printing in colour and in various languages. Hindi translation of the pamphlets are ready and are to be printed.

**Table Br.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	9y	M	Moderate	Father	B.A	Rs. 1,500 pm	Telugu	Urban
2.	5y	F	Moderate	Father	B.Sc.	1,000 pm	Punjabi	Urban
3.	9y	F	Moderate	Father	B.A.	2,800 pm	Telugu	Urban
4.	12y	M	Severe	Father	Dip.in	1,385 pm	Telugu	Urban
5.	6y	M	Mild	Mother	M.Sc. B.Ed.	3,000 pm	Tamil	Urban

**Table Br.2:** Information on rate of improvement in the child

Sl.No.	Level of functioning before using the booklet	Date	Level of functioning after using the booklet	Date
1.	Can brush only with assistance, swallows paste	29.05.89	Can brush on his own, can spit	01.12.89
2.	Can not brush on her own	13.06.89	Can brush, spit, wash	29.11.89
3.	Can not brush on her own	19.04.89	Brushes front teeth, spits Can identify her brush, can press the tube. Has established routine	01.12.89
4.	Can brush, not given opportunity to open the cap and apply paste	15.11.89	Opens the cap, applies paste	27.12.89
5.	When paste is applied and given, he brushes with physical help	06.04.89	Opens the cap, presses the tube, brushes front teeth	10.07.89

**Table Br.3:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	2	3			
2. Content	3	2			
3. Language	3	2			
4. Pictures	2	3			
5. Applicability of the package to:					
i) families in any part of the country	3	2			
ii) families of any educational background	1	3		1	
iii) families of any socio-economic background		5			
iv) any level of mentally retarded child	2	3			
6. Ease in using the package		4	1		

Five families who used the booklet to train their mentally retarded children have found the booklet useful. All the five children have shown improvement in their level of functioning with regard to brushing, as it can be seen from table Br.2. The functional analysis of the characteristics of the booklet is seen at table Br.3 which clearly shows that it has been well accepted for all the details. The one parent who found it not suitable for all educational background implied that those who do not know English cannot use the booklet. He was informed that translation in various languages is in process.

**Table Br.1.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	6y	M	Mild	Father	Inter	Rs. 700 pm	Telugu	Rural
2.	7y	M	Moderate	Mother	Inter	1,000 pm	Telugu	Urban
3.	6y	F	Mild	Mother	B.A	3,000 pm	Tamil	Urban

**Table Br.2.1:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	1	2			
2. Content	3				
3. Language	3				
4. Pictures	2	1			
5. Applicability of the package to:					
i) families in any part of the country	2		1		
ii) families of any educational background	2		1		
iii) families of any socio-economic background	2		1		
iv) any level of mentally retarded child	2		1		
6. Ease in using the package	3				

As shown in table Br. 1.1 families belonging to various socioeconomic status, gave their opinion on the pamphlet. Content, language and ease in using the pamphlet were found to be very much appropriate by all the parents. Here again colour pictures and larger pamphlet size was suggested.



**Table B.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	8y	F	Moderate	Mother	S.S.C.	Rs. 600 pm	Malayalam	Urban
2.	15y	F	Moderate	Father	Inter	600 pm	Telugu	Urban
3.	7y	M	Moderate	Father	Ph.D	7,000 pm	Telugu	Urban

**Table B.2:** Information on rate of improvement in the child

Sl.No.	Level of functioning before using the booklet	Date	Level of functioning after using the booklet	Date
1.	Can pour water. Does not apply soap properly, does not know to wipe	06.02.90	Applies soap and wipes with towel, with assistance	04.06.90
2.	Pours water, needs help to apply soap on all parts of the body	18.03.90	Applies soap with only 25% help, rubs, pours water	15.06.90
3.	Can pour water, cooperates	08.04.90	Started applying soap and rubbing	07.06.90

**Table B.3:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	1	2			
2. Content	3				
3. Language	2	1			
4. Pictures	2	1			
5. Applicability of the package to:					
i) families in any part of the country	2	1			
ii) families of any educational background	2	1			
iii) families of any socio-economic background	2	1			
iv) any level of mentally retarded child	1	2			
6. Ease in using the package	3				

Using the pamphlet, all the three families could show improvement in their moderately retarded child, as it can be seen from table B.2. As far as their comments on the various aspects of the pamphlet are concerned there have been no adverse comments (Table B.3) and are well appreciated.

**Table B.1.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	8y	M	Moderate	Father	H.S.C.	Rs. 1,800 pm	Telugu	Urban
2.	7y	M	Moderate	Brother	B.Sc.	Student	Telugu	Urban
3.	10y	M	Mild	Father	D.B.K.	2,000 pm	Tamil	Urban

**Table B.2.1:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	1	1	1		
2. Content		2	1		
3. Language	1	2			
4. Pictures		2	1		
5. Applicability of the package to:					
i) families in any part of the country	2		1		
ii) families of any educational background	2		1		
iii) families of any socio-economic background	2		1		
iv) any level of mentally retarded child	2		1		
6. Ease in using the package	1	2			

This pamphlet was also found to be appropriate in its various aspects (Table B.1.1) and translation in various languages was requested by the parents.

**Table D.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	12y	F	Severe	Mother	S.S.C.	Rs. 1,500 pm	Telugu	Urban
2.	9y 8m	F	Moderate	Mother	S.S.C.	1,500 pm	Telugu	Urban
3.	8y 3m	M	Moderate	Father	B.Com.	500 pm	Telugu	Rural

**Table D.2:** Information on rate of improvement in the child

Sl.No.	Level of functioning before using the booklet:	Date	Level of functioning after using the booklet	Date
1.	Remove and wears with help	06.06.90	Planning to use press buttons and modified fasteners and patterns to reduce help and to become independent	01.08.90
2.	Cannot button, cannot tie a knot	15.04.90	Can button (front buttons 70%) can make first knot, can keep tape cross-wise and insert	24.07.90
3.	Can remove shirt, but cannot wear	10.04.90	Started wearing shirt can insert sleeves	14.07.90

**Table D.3: Analysis of the package**

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	3				
2. Content	2	1			
3. Language	3				
4. Pictures		3			
5. Applicability of the package to:					
i) families in any part of the country	1	2			
ii) families of any educational background	1	2			
iii) families of any socio-economic background	1	2			
iv) any level of mentally retarded child	1	2			
6. Ease in using the package	1	2			

Two urban children and one rural child were trained by the caretakers using the booklet (Table D.1) and all the three children have shown progress from their current level (Table D.2). The comments on the various aspects (Table D.3) showed to be graded in the higher side.

**Table D.1.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	6y	F	Mild	Mother	B.A.	Rs. 3,000 pm	Tamil	Urban
2.	4y	F	Moderate	Mother	B.Sc.	1,200 pm	Telugu	Urban
3.	13y	M	Mild	Brother	B.Sc.	Student	Telugu	Urban
4.	3y 5m	F	Severe	Father	B.A. LL.B.	6,000 pm	Marathi	Urban
5.	12y 3m	F	Mild	Father	Inter	1,000 pm	Telugu	Urban
6.	5y 6m	F	Profound	Father	IX	450 pm	Urdu	Rural

**Table D.2.1:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	5	1			
2. Content	1	4	1		
3. Language	2	4			
4. Pictures	2	1	3		
5. Applicability of the package to:					
i) families in any part of the country		4	2		
ii) families of any educational background		4	2		
iii) families of any socio-economic background		4	2		
iv) any level of mentally retarded child		4	2		
6. Ease in using the package	2	4			

Six families commented on the usefulness of the booklets from varying educational, socio economic status (Table D.1.1). Majority have found the booklet appropriate in its various aspects.

**Table G.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	15y	F	Severe	Mother	Matric	Rs. 1,500 pm	Telugu	Urban
2.	9y 4m	F	Moderate	Father	B.Com.	400 pm	Telugu	Urban
3.	13y	F	Moderate	Mother	S.S.L.C.	1,000 pm	Malayalam	Urban

**Table G.2:** Information on rate of improvement in the child

Sl.No.	Level of functioning before using the booklet	Date	Level of functioning after using the booklet	Date
1.	Wears the pantie, not aware of menstrual hygiene	01.06.90	Recognizes when menstrual flow starts, uses pads with physical prompting	01.08.90
2.	Does not comb properly can make parting, does not plait the hair, needs help to place bindi	08.05.90	Does 70% of plaiting and combing, puts bindi, applies nail polish	14.07.90
3.	Combs hair when physical assistance is given		Combs hair independently	

**Table G. 3 : Analysis of the package**

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	2	1			
2. Content	2	1			
3. Language	3				
4. Pictures	1	1	1		
5. Applicability of the package to :					
i) families in any part of the country	3				
ii) families of any educational background	2		1		
iii) families of any socio-economic background	2	1			
iv) any level of mentally retarded child	2	1			
6. Ease in using the package	2	1			

All the three children belonging to families of various socio economic status (Table G. 1) were reported to have improved in the child's level of functioning as seen in Table G. 2. Language and applicability in any part of the country were graded as most appropriate by all the parents. As pictures were not graded as very appropriate by all, they were improved.



Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	7y	M	Mild	Father	M.D.	Rs. 1,500 pm	Telugu	Urban
2.	10y 3m	F	Mild	Mother	S.S.C.	3,000 pm	Telugu	Urban
3.	34y	M	Moderate	Sister	B.Sc.	800 pm	Marathi	Urban

**Table G.2.1: Analysis of the package**

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	2	1			
2. Content		3			
3. Language	2	1			
4. Pictures	2	1			
5. Applicability of the package to:					
i) families in any part of the country		3			
ii) families of any educational background		2	1		
iii) families of any socio-economic background		2	1		
iv) any level of mentally retarded child		2	1		
6. Ease in using the package	1	2			

The pamphlet was graded as appropriate by the users (Table G.2.2) in majority of the aspects and was emphasized that it should be made available to parents.

**Table S.S.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income	Language spoken	Rural/Urban
1.	6y	F	Mild	Mother	S.S.C.	Rs. 2,000 pm	Telugu	Urban
2.	12y	F	Moderate	Mother	S.S.C.	1,000 pm	English	Urban
3.	11m	F	Moderate	Father	B.Com.	400 pm	Telugu	Semi-Urban
4.	7y	M	Moderate	Father	Ph.D.	7,000 pm	Telugu	Urban

**Table S.S.2:** Information on rate of improvement in the child

Sf.No.	Level of functioning before using the booklet	Date	Level of functioning after using the booklet	Date
1.	Greets peers cooperates in play activity	01.07.90	Waits for turns, asks permission	01.08.90
2.	Cooperates and plays with other children, does not wait for her needs to be fulfilled	15.05.90	Waits for her needs, says 'please' and 'thank you'	26.07.90
3.	Does not obey, does not wait for her needs, does not ask before taking others' belongings	15.05.90	Helps parents in domestic work, says 'please', waits for needs	26.07.90
4.	Responds to name, says bye when guests leave, sits and plays with one child	20.05.90	Waits for needs, cooperates and helps parents, greets others	26.07.90

**Table S.S.3: Analysis of the package**

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	4				
2. Content	4				
3. Language	2	1	1		
4. Pictures	3	1			
5. Applicability of the package to:					
i) families in any part of the country	2	1	1		
ii) families of any educational background	1	2	1		
iii) families of any socio-economic background	1	2	1		
iv) any level of mentally retarded child	3		1		
6. Ease in using the package	1	2			

Four parents had used the pamphlet and have reported improvement when compared to the earlier level of functioning (Table S.S.2). Though the parents belonged to various areas and various educational and socio economic status (Table S.S. 1) all of them could use the booklet and gave positive comments on the various aspects (Table S.S.3)

**Table S.S.1.1:** Demographic Data

Sl.No.	Age of the child	Sex	Level of Retardation	Informant	Informant's Education	Income Rs.	Language spoken	Rural/ Urban
1.	13y	M	Mild	Father	B.E.	2,800 pm	Telugu	Urban
2.	6y	M	Moderate	Father	B.Com.	1,600 pm	Telugu	Urban
3.	14y	F	Severe	Pat.aunt	B.Sc.	5,000 pm	Telugu	Urban
4.	2y 6m	M	Mild	Father	S.S.C.	1,200 pm	Marathi	Semi-Urban

**Table S.S.2.1:** Analysis of the package

Details regarding the package	Very much appropriate	Appropriate	Average	Not so appropriate	Not at all appropriate
1. Size	1	3			
2. Content	2		2		
3. Language	4				
4. Pictures	3	1			
5. Applicability of the package to:					
i) families in any part of the country	2	2			
ii) families of any educational background	3	1			
iii) families of any socio-economic background	1	2	1		
iv) any level of mentally retarded child	2	1	1		
6. Ease in using the package	2	2			

This also was used by 4 parents and well appreciated for its various aspects.

The literature on social skills was difficult to develop due to the varied social system and culture in India but the comments on efficacy are encouraging.

## General Discussion

It is seen from the field trial of the booklets and pamphlets that all the materials were welcomed by the parents and have been found useful in training the mentally retarded children at home without additional professional assistance. The following were the general comments from most of the trainers.

1. The literature should have coloured illustrations.
2. The materials should be made available in all Indian languages.
3. Such materials must be freely available to the needy parents.

Efforts are being taken to have the materials in other Indian languages. Colour pictures were not possible due to lack of funds. However, efforts have been taken to introduce variety in the pictures, such as different kinds of drawing and shading different size and shape of the literature and so on. The comments from the parents and the members of the Project Advisory Committee are duly incorporated in the booklets and pamphlets.

When we compare the field trial reports across the skills, it is evident that children have shown improvement in all the skill areas (Tables 2s of booklets). Remarkable improvement is seen in activities such as feeding, toileting, brushing, bathing and dressing. In the other areas such as gross and fine motor and socialization, though there is improvement, it is not so marked. This may be because motor and social skills are not specific activities such as bathing or feeding but, are required skills in a number of activities under varied circumstances. Therefore, there is no clear cut beginning and end in these areas but they involve a number of activities. Any efforts from the parents to introduce various opportunities and activities to improve social and motor skills will benefit the child.

It is well known that almost every activity involves a certain amount of social and motor skill. For example, bathing is an activity that requires the motor movements for pouring water, applying soap and so on. Similarly, undressing, maintaining privacy while bathing, dressing and so on require social awareness and social skills in the child. Therefore, in addition to the specific motor and social skills parents need to be sensitized regarding the role of motor and social skills in every activity the child is trained in. Another important skill area that overlaps all activities is communication skills which is separately taken up as a project by NIMH and therefore not included in this package.

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## CHAPTER - IV

### BASIC PRINCIPLES IN TRAINING CHILDREN WITH MENTAL RETARDATION

If one reviews the package developed under this project for training the mentally retarded child in various skills, it can be seen that there are certain common steps followed for all the skills. To quote some for instance, teaching the easier step first, rewarding or appreciating the child for his attempts and providing him opportunities to perform the skill in various circumstances. To train a person in any skill, there are certain common basic principles to be followed. If one is aware of these principles, it is easy to train the child, not only in the 9 skills included in the package but in any suitable activity or task, he needs to be trained. Behavioural methods of teaching are based on these principles. All the behaviour management methods and techniques are based on the assumption that behaviours are learned. Therefore such techniques are used for increasing desirable behaviour, learning new behaviour and decreasing undesirable behaviour. By these methods new behaviour can be so learned to substitute an undesirable behaviour. The latest trend in training is such behaviourally based teaching methods, which are suitable for training normal as well as disabled individuals. The brief guidelines given here are restricted to increasing desirable behaviours in children.

#### Teaching step by step

Teaching in a step by step manner is emphasised in all the skill training packages. What does it mean and why is it so? Every activity or every task involves a number of smaller steps or 'subtasks'. When all these subtasks are performed in a sequential order, the task is performed. For instance let us take the simple task: wearing slippers. The major subtasks are a) identifying one's own slippers, b) identifying right and left slipper, c) inserting the correct foot in one slipper, and d) inserting the other foot in its slipper. Thus one has to perform all of these subtasks to complete the act of wearing slipper. It is so routinely done by us everyday that we do not stop to think through the subtasks we perform. When we have to train a mentally retarded child, for every task we have to analyse the subtasks. This is called '**task analysis**'. This would let us know the sequence of subtasks and the easier and difficult subtasks. Based on the task analysis the child should be trained.

For training, there are certain basic methods to be followed. They can be any one or combination of the following: a) chaining, b) prompting, c) shaping, d) modelling and e) fading.

#### Chaining

Chaining is simply the linking of all the subtasks of a given task. Therefore, when the child is taught the various subtasks, they are all joined together to form a chain. This chaining can be of two types. 1. forward chaining, 2. backward chaining. As the names imply, when the subtasks are taught in a sequential order starting from the first step, it is forward chaining. If the last step is taught first and proceeded from last to first step, it is backward chaining. Choice of which of the two to use would largely depend on the task itself and the ability and cooperation of the learner.

To quote an experience, one of the boys with mental retardation refused to cooperate for learning to bathe self. He enjoyed being bathed by others and would run away if he were to learn to do it by himself. To train him, the parents were suggested to get him to the bathroom, pour water, apply soap, scrub and ask him to pour water on self to wash the soap. As he could not run out with soap all over his body he **had**

to pour water on self by himself. When he did so, the parents were instructed to appreciate him. Any behaviour that is followed by a consequence that the person enjoys will tend to be repeated by the person. Therefore he cooperated for self bathing - for pouring water the next day. Training him in scrubbing, applying soap, and other steps could gradually be trained successfully.

Here, the method followed is 'backward chaining', as we started with the last step and proceeded to the earlier steps in the task of bathing. The appreciation given to him initially is called '**reinforcement**'. This is gradually reduced systematically as the child masters a given task. The concept of reinforcement is discussed in detail later.

### **Prompting**

As the word implies, prompting is providing appropriate assistance to the child in performing a task. In most of the skill training booklets one frequently finds instructions such as: initially assist the child by physically holding his hand, gradually give only verbal guidance..... This is nothing but prompting the child at various levels. When a child is assisted physically to perform a task, it is called physical prompting. This is reduced to verbal prompting or gestural prompting as the child learns the task. Finally occasional cues may be required when he performs the series of subtasks, until he becomes totally independent. Such gradual reduction of assistance is called '**fading**'. Prompting and fading are methods used while training in each link of the chain of subtasks, depending on the task.

### **Modelling**

This is a procedure where a model's act or behaviour acts as prompt for the learner. In the skill training package, in various occasions it is suggested to have the child's brother or sister, carrying out the activity with the child, so that the child can observe and imitate - for instance brushing. Modelling is a very effective technique for teaching. All of us at some occasion or the other, consciously or unconsciously follow a model and learn to perform activities. There are a number of research findings to support modelling as a very effective method of teaching skills. It is also documented that models of same age group tend to have more impact on the learner in learning a skill. This is why in this package, on skill training it is suggested to use the child's brother or sister as a model. By this, in the home situation the model also would tend to develop a sense of responsibility towards his brother or sister who is retarded.

### **Shaping**

Shaping is a method which helps one to learn a new task, through a series of steps, and having the known aspect of the task as the take off point. While doing so the child is rewarded in a systematic manner for the success. Let us look at an example for easier understanding of shaping procedure. In the package on skill training in many occasions, it is suggested to start the training at the point where he is successful in the given task. While proceeding further, initially the near success attempts will be rewarded, gradually working towards the total perfection in performing the task, by offering reinforcement at the next successful effort. Let us assume that a child is being taught to comb hair. He could not hold the comb properly when the training started. On the first day when he holds the comb properly he would be appreciated. The next day, in addition to holding, if he directs the comb to the head he is appreciated and not for just holding it. Here, we can see that the response which received reinforcement at one time is no longer sufficient and the child had to show the next step towards the completion of the task to receive reinforcement. This is called shaping. For successful implementation of shaping procedure one has to be very careful regarding reinforcing (rewarding) the child's successive approximations i.e., continuing change in the complexity of the subtasks to receive an appreciation.

### **Fading**

Fading is withdrawing all the training procedures in a systematic manner. In other words, it is the gradual removal of prompts and modelling procedures. While teaching the child to pick up food and direct to mouth, it is suggested to initially assist him to pick up food by placing the trainer's hand on the child's hand, gradually reduce the assistance from hand to elbow, then to shoulder and finally allow him to pick up and eat by himself. This is an example of fading physical prompts. This is a final effort in leading the child towards total independence in a given task and needs to be exercised carefully and systematically.

## Reinforcement

The meaning of reinforcement in the Chambers 20th century dictionary is 'to strengthen'. It is therefore the procedure we use to strengthen a behaviour. We often see in our daily routine many behaviours that are reinforced. When you get ready to go out, assume that your child gets your slippers for you to put on. You show your appreciation with a pat on his back accompanied by a word of appreciation - your reinforcement - to the child it is likely that he would bring your slipper the next time also when you get ready to go out. Thus you have 'strengthened' the behaviour of him by your 'reinforcement'. Reinforcement can be positive or negative. Positive reinforcement is anything a person likes which follows a behaviour. Negative reinforcement is a behaviour that removes a stimulus that is unpleasant. Positive reinforcement can be primary and secondary. Food, water, sleep and warmth are primary reinforcers which are necessary for survival. Secondary reinforcement are experiences and things that one has 'learnt' to value. This includes materials, verbal appreciation, social approval, activities and tokens. For effective use of reinforcers one has to follow the brief guidelines given as follows:

- \* Observe and find out the reinforcers for your child, as it varies from person to person.
- \* Provide reinforcement 'immediately' following a desired behaviour.
- \* If you verbally praise the child, 'mention' why you are appreciating/reinforcing him.
- \* Do not choose reinforcements that would disturb the routine.
- \* Be consistent with the reinforcement following an act until the child learns.
- \* If you make a promise in the form of reinforcement for the child's correct performance, keep up your promise. Only promise those that you can keep up. If the child did not fulfil the required target, do not yield and give him what you promised for the completion of the target.
- \* Be specific and clear in your statements.
- \* When the whole family is involved in training the child, understanding, uniformity and consistency is expected of all the members of the family for successful results.

## Acquisition, maintenance and generalization

By using the various methods and techniques explained here, a child acquires the skills necessary for daily living. Usually there is a gradual progress in the child's learning of a specific skill. After acquiring the skill, one has to make sure that the skill learnt is maintained. With no assistance at any level if he is able to perform the skill consistently for a period of time we may assume that the skill is '**acquired and maintained**'. Generalization occurs when the child performs that given skill in any required situation. In our package, for instance mealtime skill extends upto eating in restaurants and social functions. As the skill is acquired and maintained at home setting, it gets generalized when the child exhibits it in other situations such as restaurants. Similarly toileting skills are generalized to using of public toilets, dressing skills to wearing of any kind of clothes with varied fasteners and so on. It is important that training in all the skills and activities should be extended upto **generalization** of it to be exhibited in any given situation appropriately. Then only the child would learn the necessary social competence to be independent and get interested in the society.

It is also necessary to see that the mentally retarded individuals are taught only those skills that are of importance for independent living - in other words the functional skills. When a child is unable to learn the skill, modification may be thought of such as the suggestions given for fasteners in the packages on dressing. The ultimate aim in training the mentally retarded children is to develop independence in them so that they do not have to look up at some one for assistance in their daily routine.

Patient, systematic training in a step by step manner and the effective use of common sense while training would go a long way in leading the mentally retarded individuals towards independent living