

BEHAVIOURAL ASSESSMENT SCALES FOR ADULT LIVING - MENTAL RETARDATION

BASAL-MR



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FOREWORD

June 20, 2000

The appropriate assessment of adults with mental retardation has always posed a challenge for professionals and families alike. The unique needs of individuals with mental retardation and the variation in the circumstances in which they live and work often means that assessment instruments do not reflect the real needs, and thus are not helpful in planning programs and services.

The Behavioural Assessment Scales for Adult Living - Mental Retardation marks the culmination of several years work by Drs. Reeta Peshawaria, D.K. Menon, and their colleagues. The scales are designed to provide a means of assessing the functional abilities of adults with mental retardation. By focusing on practical abilities as well as problem behaviours, the scales provide an alternative assessment that should be very useful for families and professionals. This instrument builds on the author's previous work in developing a scale for child assessment (BASIC-MR) and reflects their considerable experience in working with persons with mental retardation and their families. The scale has been field-tested with a number of individuals and its contents has been reviewed extensively.

No one approach to assessment will ever cover all of the unique needs of individuals with mental retardation. The BASAL-MR scales, however, provide a solid core of information which, when combined with other observational and interview data, will form the basis for appropriate programs of intervention and services.

Don Bailey, Ph.D., Director
Frank Porter Graham Child Development Center

PREFACE

It is only in recent years that programs for adults with mental retardation have received academic attention. There could be two reasons for this. One, with better health care and increase in the life span, larger number of persons with mental retardation have come into the upper age bracket. Two, large number of countries in Europe and America have adopted non-residential programs, hence, in recent years there has been greater interest in adult programs particularly with reference to their integration in the mainstream of society and family oriented services.

Reviewing the scenario in our country necessitates professionals' attention for adult mentally challenged population. The trends focusing primarily on vocational training and employment aspects probably needs a shift to a more balanced approach which focuses adult training on all aspects of adult-living thus coming closer to the goal of "making them independent as far as possible to work and also to live within the family and community". Behavioural Assessment Scales for Adult Living - Mental Retardation (BASAL-MR) is thus developed to meet the above intention. The most difficult challenge we faced in developing this tool was to incorporate all possible competencies expected of Indian adult persons with mental retardation commensurating with his maximum available cognitive abilities along with the possibilities of the most likely enriched and stimulating environment. However the actual functioning and performance of the mentally challenged adults, expectations of their parents, literature reports of success stories and possible intuitions of parents and professionals facilitated us to find our ways around this difficult situation.

The basic tenet of behavioural assessment is objectivity. This tool thus developed "Behavioural Assessment Scales for Adult Living-Mental Retardation" (BASAL-MR) reflects this to its core. The items in BASAL-MR are behaviourally worded as far as possible and wherever necessary a glossary for greater explanation of a given item is added. Other behavioural characteristics include objectivity in the procedures for assessment, scoring and evaluation

Logically assessment always precedes interventions and assessment is meaningful only if it guides interventions and helps develop training programmes as also evaluate them. Behavioural Assessment Scales for Adult Living-Mental Retardation (BASAL-MR) have been developed for use with adult persons (18 years

and above) having mental retardation. BASAL-MR can be used as a curriculum guide for training adults in work settings, home and community living and training in personal independence. Those dimensions of adult living are included in BASAL-MR (Part A) which are essentially prescribed by and are found critical and relevant by Indian parents of mentally retarded adults themselves as also by the professionals. These include 1) personal care and appearance 2) food management 3) household tasks and responsibility 4) community and leisure 5) sexuality 6) work 7) functional literacy 8) social-communication.

BASAL-MR (Part B) assesses and evaluates challenging/problem behaviours of adults with mental retardation. Those problem behaviours have been included which are commonly reported by Indian parents and professionals. The problem behaviours have been listed under 12 domains 1) physical harm towards others 2) damages property 3) misbehaves with others 4) temper tantrums 5) self-injurious behaviours 6) repetitive behaviours 7) odd behaviours 8) inappropriate social behaviours 9) inappropriate sexual behaviours 10) rebellious behaviours 11) hyperactive behaviours 12) fears.

A sincere effort has been made to develop simple, objective yet a comprehensive tool to assess, plan interventions/training programmes and/or evaluate interventions/training programmes for adults having mental retardation. Teachers, rehabilitation workers, vocational instructors and other professionals involved in the training and management of adults with mental retardation could find BASAL-MR useful. Parents of adults may too find BASAL-MR as a guide for assessment and setting training goals for their wards. This contribution is hoped to guide trainers of adults with mental retardation in choosing/targeting goals for training, which would make the lives of adults more “functional”, “happier” and “productive”. It was difficult yet possible to put BASAL-MR through some of the rigors that go to make a scientific tool. The information on development of BASAL-MR, field testing, reliability, validity and sensitivity are detailed in the relevant chapters of this book.

It has been our endeavour to look into all aspects of adult life and prepare a tool which can make objective assessment of current status and possibilities for training in as diverse areas as a person with mental retardation in different socio economic and cultural conditions would encounter. Needless to say such kind of assessment tools require periodic revision and adaptation to local conditions. We do hope that it will be

possible to generate data from diverse populations in the coming years and incorporate changes and modifications as we acquire feedback from users living in different parts of the country. We do hope that this instrument will open up new opportunities in training adults with mental retardation.

BASAL-MR is considered just a humble contribution in the vast area of assessment of mentally challenged adults. We hope that this small contribution shall inspire many a meaningful people for larger contributions.



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Our collaborators from USA, Dr. Don Bailey, Dr. Debra Skinner and Dr. Rune Simmeonson from Frank Porter Graham Child Development Center, a multidisciplinary research center at the University of North Carolina at Chapel Hill, USA, deserve all the credit for their guidance and above all their continued support for this publication.

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Without dedicated, task focused and skillful research team, such outcome as this publication is next to impossible. We are thankful for the contributions made by Mr. Rahul Ganguly (Research officer, June 1998 - February 1999), Ms. Beenapani Mohapatra (Research officer, March 1999 - July 1999), Mr. Rajshekar (Research Assistant, February 1999 - Continuing), Ms. Sontosh Kumari (Research Assistant, February 1999 - August 1999).

Field trials of the BASAL-MR was one of the most challenging tasks. The extremely cooperative and positive attitude of the Heads of the Institutions/Special

Schools, and of the teachers/staff of these Institutions/Schools was very encouraging for us. These include the Heads and Staff of Aakanksha, Vocational Training Center; Kiranam, Vocational Training Center; Jai Vakeel School for Children with Special Needs, Mumbai ; Mentaidd, Calcutta ; Alakendu Bodh Niketan, Calcutta.

The unconditional support provided by Mr.V. Shankar Kumar, Stenographer, Department of Clinical Psychology, NIMH, in secretarial matters deserves special mention. We would like to thank Mr.V.Shankar Kumar for all his patience and putting up with our obsessions and idiosyncrasies while he typed the manuscript of this book.

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CHAPTER I

INTRODUCTION

Three major developments in recent years deserve to be mentioned to highlight the importance of developing programmes for adults with mental retardation. Firstly, parents and service providers have become increasingly aware of the potentials of adults with mental retardation. Secondly, the passage of Persons with Disabilities Act (1995) has given an impetus to review and develop need-based services for adults with disabilities. Finally, improved health care and medical technology has increased the longevity and life span of persons with disabilities. Consequently, the need for systematic planning and developing person referenced alternatives for assessment, training and management of adults has assumed added significance.

Services for adult mentally retarded individuals in India are still in a state of evolution. Presently, majority of the adults in India remain unserved. Services for the adults with mental retardation are generally restricted to sheltered workshop setup in special schools. These provide limited opportunities for training towards earning and independent/interdependent living particularly within the family and community. Although, there are no follow up studies reported in India, review of the western literature indicates a high rate of unemployment among adults with mental retardation. Studies also indicate that unacceptable personal appearance, inappropriate social interaction with others, behaviour problems are some of the major reasons for job loss among mentally retarded adults.

The review of the post school and adult adjustment studies related to adults with mental retardation (Goldstein, 1964; Cobb, 1972; Butler & Browning, 1974; Haring and Lovett, 1990) indicate the following:

1. High rate of unemployment
2. Unstable marriages
3. Living with their parents
4. Restricted participation in community activities and leisure time opportunities
5. Frequent health and childcare problems
6. Difficulty in developing social relationships
7. Necessity of one or more non-disabled advocate to provide support in the lives of most persons with mental retardation.

Management of money has been reported to be the most difficult task experienced by adults with mental retardation (Halpern, Close and Nelson, 1986). The rank order of other difficulties experienced by adults with mental retardation according to Halpern et al., (1986) were as follows:

1. Money management
2. Social networking
3. Home maintenance
4. Food management
5. Conflict over what being told to do versus asking for help
6. Employment
7. Transport
8. Avoiding/handling problems

The above situation, thus, necessitates the need to develop programmes that focus on personal-social skills, daily living skills, leisure recreation skills in addition to vocational skills. This need comes at a significant point of time; at a time when adults with mental retardation and their family members are increasingly demanding and expecting personalized services and enhanced quality of life within the desired goals of increased independence and productivity. Thus, an added emphasis of this book is on the assessment of the adult with mental retardation for rehabilitation programming and interventions.

Assessment of persons with mental retardation is guided by the purpose for which assessment is required. Assessment which was once considered a diagnostic function primarily for identification and classification, is now being intended also for individual education and planning process. Assessment involves a systematic collection, organisation and interpretation of information about an individual to enable decisions about him (Sundberg and Taylor, 1962; Fiske and Pearson, 1970). There are many approaches to psychological assessment depending on the different purposes of assessment in the field of mental disability.

Diagnostic assessment aims at identification and isolation of an individual with mental retardation as different from other normal person. In a way, diagnostic assessment is an assessment for identification. Diagnostic assessments follow a normative or psychometric models to make comparative evaluations of individuals (Witt et al, 1989). The normative approach involves assessment of typical performances of groups or sub-groups on a given psychological variable as against a large collectively representative sample of the general population known as the "norm or reference group". The obtained raw scores are transformed into standard or transferred scores, such as, percentiles, stanines, point , grade equivalents, etc., so as to enable

interpretations and comparisons of the individual scores to those of the group. There are various types of normative assessments, such as, norm referenced tests of intelligence, developmental schedules, adaptive behaviour, achievement tests, etc.

Criterion referenced assessments follow trends in the field of special education and rehabilitation medicine (Glaser, 1963). In contrast to normative approaches, this approach is not concerned with comparison of individuals with a norm or standard. The point of reference is to an absolute standard within an individual rather than a population norm (Glaser and Nitko, 1971; Popham, 1973). Criterion measures try to answer specific questions, such as, does this adult pick ripe mangoes eight out of ten times successfully? It is argued that conventional normative approaches do not really provide any useful information except stating the obvious (i.e., the individual testee deviates from the normal). In target populations, especially in individuals with mental retardation the individual differences are so great that group comparisons are futile. This is true, if the assessment information is required to decide appropriate training or rehabilitation programmes (Livingston, 1977).

Behavioural assessments view behaviour as objective, observable and measurable units of actions with precise functional consequences. Behavioural assessments have flourished with the progress in the field of behaviour therapy/modification (Goldfried and Pomeranz, 1968; Kanfer and Philips, 1970; O'Leary, 1979). The crucial points of difference between diagnostic and behavioural approaches to assessment are summarised in Table 1.1.

TABLE: 1.1

BEHAVIOURAL ASSESSMENT	DIAGNOSTIC ASSESSMENT
Understands behaviour as a function of its environment;	Understands behaviour as a function of its underlying causes;
Recognises behaviour as a sample of the individual phenomena per se;	Recognises behaviour as a sign of some underlying construct, such as, personality, intelligence, etc.,
Samples varied, but specific behaviours in particular situations;	Samples limited behaviour in broad and general situations;
Involves assessment for programming and evaluation;	Involves assessment for identification and diagnostic labeling;

Lead on directly to planning and programming;	Bear only an indirect relationship to planning and programming;
Continue throughout the stages of programme planning and evaluation.	Occur mainly prior to intervention or programming.

Thus, diagnostic assessments are always followed by behavioural assessment. Behavioural assessment involves systematic collection and organisation of information regarding what a mentally retarded adult can do or cannot do. This information is needed to decide on what to teach.

Objectivity is an important salient feature of behavioural assessment. Objectivity is vital at all stages of using behavioural assessment tools, including, administration, scoring and interpretation of test results. Some of the ways in which behavioural assessment is carried out in adults with mental retardation are, **interview** (Kanfer and Saslow, 1969; Meyer, Liddell and Lyons, 1977); **direct observation** (Nay, 1977); and use of **behaviour rating scales** (Stuart and Stuart, 1972; Rathus, 1973; Wolff and Merrens, 1974).

In the West, several behaviour assessment scales have been developed for routine use in the assessment and training of mentally retarded individuals. A few of them are, Balthazar Scales of Adaptive Behaviour (Balthazar, 1973), Adaptive Behaviour Scales (Nihira, Foster, Shellhaas and Leland, 1974), Disability Assessment Schedule (Holmes, Shah and Wing, 1982), Aberrant Behaviour Checklist (Aman, Singh, Stewart and Field, 1985a; 1985b); Psychopathology Instrument for Mentally Retarded Adults (Senatori, Matson and Kazdin, 1985), Behaviour Disturbance Scale (Leudar, Fraser and Jeeves, 1987).

The present service delivery system for adults with mental retardation are being strongly influenced by recognition of choice, full participation, empowerment and personal growth. In addition, there is an increasing awareness and expectations among the parents of adults with mental retardation about the need for training them to become useful and contributing members in the family and in the community. Thus, assessment and training for adults with mental retardation has become multidimensional. Review of Indian Scales (see Chapter :II) indicates that adult assessment is heavily loaded towards vocational competency. Aspects related to community living, leisure/recreation, rights and duties and assessment of basic competencies required to live an acceptable family and social life need to be addressed.

Vocational training and employment though are important dimensions of adulthood yet other critical competencies necessary for successful adult living need attention. Such as;

- ◆ Independence in personal care
- ◆ Skills to enjoy leisure and recreation
- ◆ Meaningful family and social life
- ◆ Helping others
- ◆ Use community resources for living
- ◆ Skills to earn one's living to the extent one can.

The present scale BASAL-MR thus have been developed to address these above mentioned issues. Also, a need was felt to develop an objective tool for assesment of adults which is based on *both professional and parents perceptions* of adult competencies required for adult living.

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CHAPTER II

REVIEW OF THE EXISTING ASSESSMENT TOOLS USED FOR ADULTS WITH MENTAL RETARDATION

INTRODUCTION AND METHODOLOGY

An effort was made to gather information on the present assessment procedures used by the organisations working for adults having mental retardation in India.

An open-ended questionnaire was sent to 50 organizations working for adults in the country in 1998 and early 1999 to know about the methods and the existing tools of assessment being used with adults having mental retardation. Two reminders were sent to the organisations who had failed to reply on time. Seventeen organisations serving approximately 800 adults responded to the request. Ten tools of adult assessment were received from the seventeen organisations.

Table 2.1 indicates the procedures commonly used presently by the organizations to assess adults with mental retardation in India.

**TABLE: 2.1 ASSESSMENT PROCEDURES USED FOR ADULTS WITH
MENTAL RETARDATION**

S. No.	ASSESSMENT PROCEDURE	ORGANISATIONS (N=17)
1.	Interview-Observation-Formal Assessment	12
2.	Interviews-Observation	03
3.	Observation-Formal Assessment	01
4.	Interviews-Formal Assessment	01

Table 2.2 indicates the tools used by the organisations in assessing adults with mental retardation.

TABLE : 2.2 ASSESSMENT SCALES BEING USED WITH ADULT MENTALLY RETARDED INDIVIDUALS IN INDIA

S.No.	ASSESSMENT TOOL	ADDRESS
1.	MADRAS DEVELOPMENTAL PROGRAMMING SYSTEM	P. JEYACHANDRAN AND VIMALA VIJAY HUMAN SERVICES 6, LAXMIPURAM STREET ROYAPETTAH, CHENNAI.
2.	BEHAVIOURAL ASSESSMENT SCALES FOR INDIAN CHILDREN WITH MENTAL RETARDATION (BASIC-MR)	DEPARTMENT OF CLINICAL PSYCHOLOGY, NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED, SECUNDERABAD.A.P.
3.	NIMH VOCATIONAL PLACEMENT AND PROFILE CHECKLIST	DEPARTMENT OF VOCATIONAL TRAINING NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED, SECUNDERABAD.A.P.
		DIGDARSHIKA INSTITUTE OF REHABILITATION AND RESEARCH, BHOPAL. (Available in Hindi)
4.	VOCATIONAL TRAINING CHECKLIST AND INDIVIDUALISED EDUCATION PROGRAMME	ASHA GUPTA NAVJYOTI INSTITUTE FOR MENTALLY RETARDED, NEW DELHI.
5.	ASSESSMENT OF VOCATIONAL READINESS	D.J.K. CORNELIUS AND SMITHA RUKMANI NAVJYOTI TRUST, CHENNAI.
6.	WORKSHOP OBSERVATION SCALE	BM INSTITUTE, AHMEDABAD.
7.	STUDENT PROFILE CHECKLIST	TAMANNA SPECIALSCHOOL, NEW DELHI.
8.	PROFORMA ON DEVELOPMENTAL DATA AND ACADEMICS	JAI VAKEEL SCHOOL FOR CHILDREN WITH SPECIAL NEEDS, MUMBAI.
9.	ASSESSMENT CUM CURRICULUM GUIDELINES FORMAT FOR VOCATIONAL TRAINING SCHOOL AND REHABILITATION CENTER	DILIP KURANI LEONI MIRANDA NILESH SHANE AND T.D. SHROFF JAI VAKEEL SCHOOL FOR CHILDREN WITH SPECIAL NEEDS, MUMBAI.
10.	ADULT ASSESSMENT FORM	SPASTIC SOCIETY OF EASTERN INDIA, CALCUTTA.

REVIEW OF THE EXISTING ASSESSMENT TOOLS

The information of various assessment tools presently being used for programming and training of adults with mental retardation in India are listed along with a brief review and the addresses for procuring them. This list may not, however, be all inclusive.

I. MADRAS DEVELOPMENTAL PROGRAMMING SYSTEM (MDPS)

The MDPS designed by P.Jeyachandran and Vimala provides information about the functional skills for persons with mental retardation in order to facilitate individualised programme planning.

The scale consists of 360 items grouped under 18 functional domains, namely, gross motor, fine motor, eating, dressing, grooming, toileting, receptive language, expressive language, social interaction, reading, writing, numbers, time, money, domestic behaviour, community orientation, recreation and vocational. Each domain lists 20 items in an increasing order of developmental difficulty and the scoring along the dependence to independence lines. The MDPS also provides an assessment kit comprising materials to be used for the assessment of each child with mental retardation.

The administration procedure involves getting information on what skill behaviours the child can or cannot do currently. This information is derived by direct observation of the child, parent/caretaker interviews or by means of testing during assessment. The child's performance on each item is rated along two descriptions, A and B respectively, depending on whether the child can or cannot perform the target behaviour listed in an item on the scale. The data derived from MDPS helps the teacher to set goals and draw profiles of students. Besides, it helps in the evaluation of a child's progress over a period of time.

As reported by the authors in 1992, feedback from 204 special educators from the country was collated by 10 special educators on the use of MDPS. Further details on reliability and validity of the tool however are not available.

For further details please contact:

**Vijay Human Services,
6, Laxmipuram Street,
Royapettah, Chennai - 600 014.**

II. BEHAVIOURAL ASSESSMENT SCALES FOR INDIAN CHILDREN WITH MENTAL RETARDATION (BASIC-MR)

This tool was developed in the year 1992 by Reeta Peshawaria and S.Venkatesan, Department of Clinical Psychology, National Institute for the Mentally Handicapped, Secunderabad. The BASIC-MR has been designed to elicit systematic information on the current level of behaviours in school going children with mental retardation. The scale is designed to be used for children aged between 3 to 18 years. However, its use has also been recommended for older severely retarded persons. Hence, some institutions are finding BASIC-MR useful for assessing adults with severe mental retardation.

BASIC-MR has two parts. Part A consists of 280 items distributed equally, that is, 40 items each in 7 domains namely motor, activities of daily living, language, reading-writing, number-time, domestic- social and prevocational-money. Part A of BASIC-MR assesses the current level of skill behaviours in the child. Part B consists of 75 items. It helps to assess the current level of problem behaviours in the child. All items are written in clearly observable and measurable terms. Further, a glossary has been added to clarify meanings of certain difficult items in the scale (marked with an asterisk). The items within a domain or sub domain have been placed according to increasing order of difficulty.

The performance of each child on BASIC-MR (Part A) is assessed using a quantitative numerical scoring system. The score ranges from 0 (not applicable), 1 (totally dependent), 2 (physical prompting), 3 (verbal prompting), 4 (clueing) to 5 (independent).

The performance of each child on BASIC-MR (Part B) is assessed using 3 point rating scale, never (0), occasionally (1) and frequently (2). The scales also contain a chapter on suggestions for preparation of the material kit. Record booklet, profile sheets and a report card provide facility for periodic evaluations on quaterly basis for a year. The report card can be used to convey the child's progress to parents. The book "Behavioural assessment scales for Indian children with mental retardation BASIC-MR(Part A) contains seperate chapters on development of BASIC-MR (Part A) and (Part B). Details on development of the tool, data on field testing, reliability , validity and sensitivity of the tool are also included in the book.

The information elicited from BASIC-MR scales assists the teacher working with children having mental retardation to find current level of functioning of children,

set priority goals and also evaluate the training/teaching programmes. Grouping of children can also be done based upon their age and scores on BASIC-MR. The tool is available in English and Hindi.

For further details, please contact:

**Dr. Reeta Peshawaria,
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Manovikas Nagar, Secunderbad- 500 009.**

III. NIMH VOCATIONAL PROFILE AND PLACEMENT CHECKLIST

This checklist has been developed by the Department of Vocational Training, National Institute for the Mentally Handicapped, Secunderabad to facilitate programme planning for adults with mental retardation. This tool has been translated in Hindi by Digdarshika Institute of Research and Rehabilitation, Bhopal.

The tool consists of two parts. The first part consists of eight sections. The open ended questions in this section elicit information on generic readiness skills, special skills, description of daily routines, employment experiences, possible employment options and areas of support to be provided.

The second part consists of Vocational Placement Rating Checklist. The checklist covers 8 domains namely self help, communication, social behaviour, functional academics, safety skills, domestic behaviour, motor skills and vocational skills. The number of items included within each domain of the checklist varies from 4 to 30. There are 97 items in the checklist.

Each item on the Checklist is rated along descriptive scale, viz., Independent (I), Needs Cueing (C), Needs Verbal Prompting (VP), Needs Physical Prompting (PP), Totally Dependent (TD), and Physically Incapable (PI), respectively. The checklist also recommends periodic evaluation of each individual on three occasions, i.e., entry level, periodic (formative) level, and final (summative) evaluation.

Information on the reliability, validity, field testing of this tool is not known or available so far.

For further details, please contact:

**Department of Vocational Training,
National Institute for the Mentally Handicapped,
Manovikas Nagar, Secunderabad 500 009.**

IV. VOCATIONAL TRAINING CHECKLIST AND INDIVIDUALISED EDUCATION PROGRAMME

This checklist has been developed by Asha Gupta, Navjyoti Institute for the mentally retarded, Delhi. It contains a list of skills that will facilitate the entry of a person with developmental disability into the world of work.

The scale consists of 88 items under 6 main domains namely basic work behaviour, personal, communication, functional academics, shopping skills and domestic behaviour. The number of items included under each domain varies from as few as 9 to 20. Each item on the checklist is rated along a descriptive scale namely independent, needs cueing, needs verbal prompting, needs physical prompting, totally dependent and not applicable.

The checklist is recommended for periodic evaluation of each adult on three occasions in a year in addition to entry level information. Information on reliability, validity, field testing of this checklist is not known or available so far.

For further details, please contact :

**Mrs Asha Gupta,
Director, Navjyothi Institute for the Mentally Retarded,
224 Vasant Enclave, New Delhi-57.**

V. ASSESSMENT OF VOCATIONAL READINESS

D.J.K. Cornelius and Smita Ruckmani at Navjyoti Trust, Chennai, have developed this tool. Published in 1998, this scale has been designed to assess the vocational readiness of persons with mental retardation. A person with mental retardation has to master a certain number of skills before being eligible for the higher or next level. The scale consists of 50 items under 8 domains namely social competency, safety awareness, self care, travel competencies, auxillary skills, functional academics, vocational readiness and dexterity. Items under each domain vary from as few as 4 to 13. Each item on the checklist has been further broken down and graded into four performance competencies. Although the performance varies according to the skills, the overall gradation rating ranges from 0 (inability to perform) to 3 (performs as required). The raw scores obtained give the vocational profile of the person with mental retardation and indicate as to what type of vocational programme is best suited for him/her. The instrument is helpful for vocational instructors as it indicates what type of vocational rehabilitation programme is best suited for the individual with

mental retardation. Information on reliability, validity, field testing or standardisation of this scale is not known or available so far.

For further details, please contact:

**Mr. D.J.K. Cornelius,
Navajyoti Trust,
A-916, Poonamallee High Road,
Chennai.**

VI. WORKSHOP OBSERVATION SCALE

This scale has been designed by BM Institute, Ahmedabad. The scale has been adapted from Goodwill Industries manual. A Marathi translation of this scale has been done at Wai Akshar Institute. The main purpose of this instrument is to identify characteristics of work behaviour among persons with mental retardation.

The scale consists of 63 items under 6 main domains namely, work attitude, quality of work, reaction to supervisor, reaction to co-workers, personality characteristics and general observations. The number of items in each of the domains vary from as few as 5 to 20. Each item on the checklist has been further classified into 4 patterns of behaviours out of which one option is ticked which is most like the person being assessed.

The instrument is helpful in assessing the strengths and weaknesses of the person with mental retardation in work related situation. Information on reliability, validity, field-testing of this scale is not known or available so far.

For further details, please contact:

**B.M.Institute
Nehru Bridge, Navrangpura,
Ahmedabad.**

VII. STUDENT PROFILE CHECKLIST

This checklist has been designed by Tamanna Special School, New Delhi. The main purpose of this scale is to identify the strengths and weaknesses of persons with mental retardation.

The scale consists of 275 items under 12 major domains namely self help, communication, mobility, social skills, academics, safety, responsible behaviour, recreation, self identification, general knowledge, vocational and domestic. Items in each of the domains range from as few as 4 to 82. Each item on the checklist is rated along a descriptive scale namely independent, partial help and totally dependent.

The checklist is recommended for periodic evaluation of each adult on three occasions in a year. Information on reliability, validity, field testing of this tool is not known or available so far.

For further details, please contact:

**Tamanna special school,
D-6, Vasant vihar,
New Delhi .**

VIII. PROFORMA ON DEVELOPMENTAL DATA AND ACADEMICS

This scale has been developed by T.D. Shroff, Kaneez Merchant, Ratan Adhikari and Dilip Kurani of Jai Vakeel special School, Mumbai. The main purpose of this tool is to elicit information on functional abilities of the individual with mental retardation.

The scale consists of 392 items under 9 major domains namely general orientation, gross motor, sensory discriminative ability, ADL, speech and language, classroom behaviour, practical abilities, academics and numerical ability. Items in each domain range from as few as 5 to 88. Each item on the checklist is rated along 5 point numeric scale namely 4 = Independent; 3 = needs cueing; 2= verbal prompt; 1 = physical prompt; 0 = totally dependent; PI= physically incapable.

The checklist is recommended for periodic evaluation of each adult on 3 occasions in a year. Information on reliability, validity, field testing of this scale is not known or available so far.

For further details, please contact:

**Jai Vakeel Special School,
Sewri Hills, Sewri,
Mumbai.**

IX. ASSESSMENT CUM CURRICULUM GUIDELINES FOR VOCATIONAL TRAINING SCHOOL AND REHABILITATION CENTRE

This instrument has been designed by Dilip Kurani, Leona Miranda, Nilesh Shane and T.D. Shroff of Jai Vakeel School in the year 1992. The main purpose of this tool is to assess the vocational readiness of the individual with mental retardation for successful job placement.

The tool consist of 93 items under 6 major domains namely motor, self help, psycho social, communication, cognitive, and vocational. The number of items vary in each domain from as few as 7 to 22. The instrument consists of two parts. The first part consists of a rating checklist of 93 items. The items are rated on descriptive scoring system ranging from independent to physically incapable. In the second part each item on the checklist has been further classified into 5 patterns of behaviours out of which one option is ticked which is most like the person being assessed.

The instrument helps vocational instructors in programme planning for the adults with mental retardation. Information on reliability, validity, field-testing of this scale is not known or available so far.

For further details, please contact:

**Jai Vakeel Special School,
Sewri Hills, Sewri,
Mumbai.**

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CHAPTER III

INTRODUCTION TO BEHAVIOURAL ASSESSMENT SCALES FOR ADULT LIVING - MENTAL RETARDATION BASAL-MR (Part A & B)

The Behavioural Assessment Scales for Adult Living - Mental Retardation BASAL-MR (Part A&B) have been designed to elicit systematic information on the *current level of competencies/behaviours* in adults with mental retardation. The scales are suitable for use with mentally retarded adults who are 18 years and above. Part A of the BASAL-MR scale can be used as a curriculum guide for planning training programmes based on the individual's needs and current level of functioning of each mentally retarded adult. BASAL-MR (Part B) helps to identify and assess the *maladaptive behaviours/problem behaviours* in mentally retarded adults. Following the training programmes the same tool of BASAL-MR (Part A&B) can be used for evaluation purposes also.

A separate chapter on *glossary* has been included which helps clarify administration of specific items on the scale. The chapter on the *list of materials* has also been provided to guide the assessor for preparing material kit for assessment. There is a specific *quantitative scoring procedure* for BASAL-MR (Part A&B) which has been detailed in Chapters VII and IX. *Profile sheets* have been also included in the scales. Following the baseline assessment there are provisions for periodic assessment of each adult for additional three occasions. Printed or photocopies of the BASAL-MR scales can be used for subsequent assessments giving due credit to authors on front page. Both the subscales Part A&B of BASAL-MR have been field tested on select sample population. Information on the technical aspects such as reliability, validity and sensitivity of the scales are given in the chapters IV and VIII.

BASAL-MR has been developed in two parts:

- a) **Part A:** The items included in Part A of the scale helps to assess the current level of skills/behaviours/competencies in the adult.
- b) **Part B:** The items included in Part B of the scale helps to assess the current level of problem behaviours in the adult.

The BASAL-MR (Part A) consists of 120 items grouped under the following 8 domains.

1. Personal care and appearance (PA)
2. Food management (FM)
3. Household tasks and responsibility (HR)
4. Community and leisure (CL)
5. Sexuality (S)
6. Work (W)
7. Functional literacy (FL)
8. Social - communication (SC)

There are 15 items in each domain.

The BASAL-MR (Part B) consists of 109 items grouped under 12 domains.

1. Physical harm towards others
2. Damages property
3. Misbehaves with others
4. Temper tantrums
5. Self injurious behaviours
6. Repetitive behaviours
7. Odd behaviours
8. Inappropriate social behaviours
9. Inappropriate sexual behaviours
10. Rebellious behaviours
11. Hyperactive behaviours
12. Fears

The number of items within each domain varies.

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CHAPTER IV

DEVELOPMENT OF BASAL- MR (Part A)

The following steps were taken to develop BASAL-MR (Part A):

- I. Formation of initial item pool
- II. Selection of items for initial tryout
- III. Preparation of BASAL-MR (Part A)
- IV. Initial Try out of BASAL-MR (Part A) and first revision
- V. Pilot study and second revision of BASAL-MR (Part A)
- VI. Final study of BASAL-MR (Part A)
- VII. Sensitivity of BASAL-MR (Part A)
- VIII. Reliability
- IX. Validity

STEP I : FORMATION OF INITIAL ITEM POOL

Initial item pool of 400 items was formed by adopting the following steps.

1. A comprehensive review was undertaken of the available adult assessment tools presently being used in India and abroad for the purpose of developing the initial item pool.
2. An exhaustive review of literature was done on adult adjustment and dimensions critical to adult functioning. The purpose of the literature review was to identify areas where adults with developmental disabilities face problems so as to include items of these areas in the tool (See Chapter: I for details).
3. Experience of authors and professionals working in the field of mental retardation helped in forming the item pool.
4. Information was obtained using a semi-structured interview schedule on competencies perceived important from 35 parents having son/daughter with

mental retardation over 18 years of age. Open-ended questions were used to identify competencies that parents expect their son / daughter with mental retardation to perform as an adult. Parents of 35 persons with mental retardation above 18 years of age were interviewed in Secunderabad and New Delhi. Of the 35, 20 parents were interviewed in Secunderabad and the remaining 15 in New Delhi. Only one parent per family was interviewed. In Secunderabad, all the interviews were conducted in the Department of Clinical Psychology, NIMH. Home visits were undertaken to conduct interviews of the parents based in New Delhi. Each of the interviews lasted for nearly 30 minutes. Tables 4.1 and 4.2 indicates the basic characteristics of the respondents including parents and their children.

TABLE: 4.1 CHARACTERISTICS OF PARENTS

CHARACTERISTICS		NUMBER (%) (n=35)
Relationship		
	Mother	25 (71)
	Father	10 (29)
Age		
	65 yrs and below	15 (43)
	65 yrs above	20 (57)
Education		
	Below inter	16 (46)
	Inter and above	19 (54)
Family Income (Annual)		
	Rs 60,000 and below	14 (40)
	Rs 60,000 above	21 (60)

TABLE : 4.2 CHARACTERISTICS OF ADULTS WITH MENTAL RETARDATION

CHARACTERISTICS	NUMBER (%) (n=35)
Sex	
Male	23 (66)
Female	12 (34)
Age	
Between 18-25 yrs	19 (54)
Above 25 yrs	16 (46)
Education/training/occupation	
Attending day programmes	12 (34)
Attending vocational programmes	10 (29)
At home	13 (37)
Severity of mental retardation**	
Mild	9 (26)
Moderate	14 (40)
Severe	12 (34)

*** Severity of retardation obtained from psychological reports/disability certificates/ diagnostic reports available with parents.*

Two open ended questions were used to obtain information from parents.

The first one helped in understanding the present level of functioning and competencies already obtained by their sons/daughters with mental retardation. The second open-ended question was directed to parents to obtain information on expected competencies from their son/daughter having mental retardation. The following questions were asked :

Q1. *Which are the skills/behaviours or competencies that your _____ (include name of son/daughter having mental retardation) has already obtained which you think are essential to function as an adult?*

Q2. Which are the skills/behaviours/competencies which you think that your _____ (including name of son/daughter having mental retardation) should acquire/learn to function as an adult.

All the responses to the open ended questions were jointly coded by the first and the fifth author and placed under 12 categories /themes. When a parent reported more than one response which belonged to one category, it was noted as one. Tables 4.3 & 4.4 highlight the competencies of mentally retarded adults as expressed by 35 parents.

TABLE: 4.3 PARENTS RESPONSES OF ADULT COMPETENCIES

Rank	Adult Competencies/Themes	Endorsement (N=35) (%)
1.	Self dependent in routine personal hygiene	35 (100)
2.	Manage money	33 (94)
3.	Able to commute from home to work/places of interest	33 (94)
4.	Have a job	33 (94)
5.	Assist in household work in the family	32 (91)
6.	Handle pressures within the family/community	30 (86)
7.	Should be able to have friends	30 (86)
8.	Concept formation	29 (83)
9.	Responding to social and medical emergencies	29 (83)
10.	Live in harmony with family members	27 (77)
11.	Control/Manage behaviour problems	23 (66)
12.	Able to Marry	20 (57)

(Multiple responses. Refer to Table: 4.4 for more details).

TABLE : 4.4 DESCRIPTION OF COMPETENCIES/THEMES

Sl. Competencies/Areas
No.

1. Self dependent in routine personal hygiene
 - Toileting
 - Eating
 - Bathing
 - Braiding hair
 - Shaving
2. Manage money
 - Able to budget
 - Get correct change
 - Save
3. Able to commute from home to work/places of interest
 - Using Train
 - Using Bus
 - Visiting religious places
 - Using public telephones
 - Going to movies
4. Have a job
 - Embroidery
 - Tailoring
 - STD/PCO booth facilities
 - Technical skills training
5. Assist in household work in the family
 - Planning and preparing meals
 - Purchasing and storing grocery
 - Caring for younger children at home
 - Taking care of grandparents
 - Help siblings

Doing house maintenance
Washing/drying/folding clothes
Entertaining guests

6. Handle pressures within the family/community
 - Not signing anywhere
 - Protection from sexual abuse
 - Handling community pressures like mocking, ridiculing
 - Dealing with pension
7. Have a circle of friends
8. Concept formation
 - English language
 - Writing
 - Colour concept
 - Number concept
9. Respond to social and medical emergencies
 - Taking medication
 - Death of parents
10. Live in harmony with family members
 - Living and adjusting with the
family members/sisters-brothers in law
 - Visiting friends/relatives and neighbours
 - Attending social gatherings/functions
11. Absence of behaviour problems
 - No sexual problems
 - No destructive behaviours
12. Be able to marry

Table: 4.5 indicates details of the initial formation of item pool which consisted of 400 selected items.

TABLE: 4.5 INITIAL ITEM POOL SELECTION

STRATEGY	ITEMS (N = 400)
Through literature review (Western and Indian)	311
Additional competencies identified through parent interviews	42
Additional competencies identified from professionals working in the field of mental retardation including authors	47

STEP II : SELECTION OF ITEMS FOR INITIAL TRYOUT

The initial item pool consisting of 400 items was further put through detailed scrutiny and selection by the first and fifth authors. The following inclusion/exclusion criteria was developed and used to select/reject/modify items from the initial pool to main item pool of BASAL-MR (Part A).

1. *Comprehensive-coverage of all aspects of life activities*

The aim was to develop an exhaustive and comprehensive tool for assessing adults with mental retardation. Consequently, many behaviours were selected that were critical to basic successful functioning for both male and female adult with mental retardation.

2. *Relevant and functional*

Emphasis was placed on selection or addition of items that were functional and would provide maximum opportunities for normalization of adults with mental retardation in their natural home/work/community conditions particularly relevant in Indian settings.

3. Behavioural terms

To attain objectivity in assessment and scoring, those items which could be expressed in clear measurable and observable terms only were selected.

4. Socioeconomic conditions

Preference was given in the selection of items that were relevant to adults with mental retardation belonging to all socioeconomic strata.

5. Compactness of task elements

Wherever possible importance was given in selecting items that reflected a range of complexity and difficulty in the level of tasks from lowest to highest functioning level within and among individual tasks as applicable to different levels of functioning of adults with mental retardation.

6. Ease of administration

Items were worded in simple language that could be easily understood by the user.

By applying the above mentioned inclusion/exclusion criteria, 126 (31.5 percent) items were rejected outright, out of which 40 items were eliminated due to non relevance and another 86 items which were stated in non - behavioural terms. 274 (68.5 percent) items were retained. Out of which 145 items were clubbed under 20 items, 17 items were modified and 112 were retained as they were. Hence a total number of 149 items were included into the main pool of BASAL-MR (Part A).

FEW EXAMPLES OF ITEMS EXCLUDED FROM MAIN POOL

Non-Functional And Not Relevant

Playing Billiards/snooker ; Mountaineering; Counts upto 100 ; Can cut drawn rectangles; Helps animal delivery.

Non-Behavioural Terms

Shows appropriate social behaviour ; Aware of values in everyday life; Obeys all laws and rules; Discusses one's strength and weaknesses; Acts cautiously with strangers; Follows all 4 parts of spoken instruction; Asks in simple words.

FEW EXAMPLES OF ITEMS RETAINED BUT MODIFIED/CLUBBED

Modified

- ★ Uses complex sentences *Changed to* "Initiates and maintains simple conversation"
- ★ Visits friends/neighbours/relatives at appropriate times *Changed to* "Joins and participates in organised social activities"

Clubbed

- ★ Washes/dries hair & Takes body bath *Clubbed As* "Takes head/body bath"
- ★ Cleans up table after meals & Cleans space after food preparations *Clubbed As* "Cleans space after—food preparation"

TABLE: 4.6 SUMMARY OF ITEMS IN THE MAIN POOL

NO. OF ITEMS RETAINED FROM THE INITIAL POOL	NO. OF ITEMS RETAINED BUT MODIFIED	NO. OF ITEMS CLUBBED	TOTAL NO. OF ITEMS
112	17	145 <i>Under 20 items</i>	149

STEP III : PREPARATION OF BASAL-MR (Part A)

Format : The 149 items were initially grouped to cover behavioural assessment in the following 10 broad domains:

TABLE: 4.7 NUMBER OF ITEMS IN EACH OF THE DOMAINS ON BASAL-MR (Part A)

S.No.	DOMAINS	NO. OF ITEMS
1.	Personal Care and Appearance	28
2.	Food Management	19
3.	General Tasks and Responsibility	20
4.	Recreation and Leisure	11

5.	Mobility and Transportation	05
6.	Sexuality	08
7.	Vocational Performance	20
8.	Money Management	12
9.	Functional Literacy	10
10.	Social - Communication	16
TOTAL NO. OF ITEMS		149

Glossary: The glossary was prepared for the items which needed more clarification.

Materials : The materials to be used for assessment were listed separately.

Scoring: Adult Performance

A quantitative scoring system was evolved to assign numerical scores for each adult client,s performance on every item of the scale.

The six possible levels of performance under which each item could be scored was developed as follows:

Level One: Independent (Score 5)

If the adult performs the listed behaviour without any kind of assistance or help, it is marked as independent and given a score of 5.

Level Two: Clueing/Modeling (Score 4)

If the adult performs the listed behaviour only with some kind of verbal hints (example, open, close, tighten, loose, etc.) or gestural clues (example, pointing with fingers, shaking forefinger to hint “no” or having to show him how to do a task and then only he does, etc.), it is marked as “clueing/modeling” and given a score of 4.

Level Three: Verbal Prompting (Score 3)

If the adult performs the listed behaviour only with some kind of accompanying verbal statements (example, lift the telephone receiver and hold it close to ear, cover

the dish, join both ends before you fold, etc.) it is marked as verbal prompting and given a score of 3.

Level Four: Physical Prompting (Score 2)

If the adult performs the listed behaviour only with any kind of accompanying physical or manual help (example, requires physical help in cutting vegetables, holding screwdriver, for changing bulbs, etc.) it is marked as physical prompting and given a score of 2.

Level Five: Totally Dependent (Score 1)

If the adult does not perform the listed behaviour currently although he can be trained to do so, (example, others have to shave and the adult makes no attempt to shave on his own or others have to change sanitary napkins and the adult makes no attempt to change the sanitary napkins on her own), it is marked as totally dependent and given a score of 1.

Level Six: Not Applicable (Score 0)

If an adult is not able to perform the listed activity or is not expected to perform due to physical or sensory handicaps. For example an adult mentally retarded individual with visual impairment will not be able to read train timings from ordinary board display or play computer games which are not adapted. Similarly, the item "plays basketball" may not be applicable to an adult mentally retarded individual with cerebral palsy where his upper limbs are grossly affected. In such instances a score of 0 is given.

STEP IV : INITIAL TRYOUT OF SELECTED ITEMS

The BASAL-MR (Part A), initially consisting of 149 items was put to an initial tryout with parents of 86 adults with mental retardation in Calcutta, Mumbai, Delhi and Hyderabad. All the items were worded as far as possible in observable and measurable terms. Wherever, it was not possible to elaborate an item in the text of the scale a glossary was prepared for that item. Each item was scored on 2 dimensions.

1. The current performance level of the adult with mental retardation on each of the items on BASAL-MR (Part A) was given a score using the scoring system

of independent 5; clueing/modeling 4; verbal prompting 3; physical prompting 2; totally dependent 1 and not applicable 0.

2. Expectations of the parents related to the need for mastery of each of the items on BASAL-MR (Part A) was scored as follows.

Scoring: Parental Expectations from Adults

Parental expectations were scored in the following way:

- Score 3: Parents expect the adult with mental retardation to master the Item/activity (opportunity for learning provided)
- Score 2: Parents expect the adult with mental retardation to master the Item/activity (opportunity for learning not provided)
- Score 1: Parent would not like the adult with mental retardation to master the Item/activity due to possible exploitation; or no need felt
- Score 0: Parent doesn't expect the adult with mental retardation to master the Item/activity due to individual's associated condition (sensory/physical/medical condition).

This exercise of gathering parental expectations was specifically undertaken with the background information that very limited work has been done so far in India with regards to functional assessment and systematic training of the adults because of which parents are least aware of what level of performance to expect from the adult with mental retardation. This exercise was taken up to get the expectations from the parents about their awareness levels of adult competencies which could be influenced due to cultural factors, training provisions in the country and the individual condition factors.

Tables 4.8 and 4.9 indicate the characteristics of the parents/respondents and their adult son/daughter with mental retardation. The overall scores obtained for the sample of subjects in the initial tryout of BASAL-MR (Part A) are given in Table 4.10.

TABLE: 4.8 CHARACTERISTICS OF PARENTS

CHARACTERISTICS		NUMBER(%) (N=86)
Relationship		
	Mother	51 (59.3)
	Father	35 (40.7)
Age		
	55 yrs and below	48 (55.8)
	55 yrs above	38 (44.2)
Education		
	Below Inter	56 (65.1)
	Inter and above	30 (34.9)
Income (per month)		
	Rs 3 000 and below	40 (46.5)
	More than Rs 3 000	46 (53.5)

TABLE: 4.9 CHARACTERISTICS OF ADULTS WITH MENTAL RETARDATION

CHARACTERISTICS		NUMBER (%) (N =86)
Sex		
	Male	46 (53.5)
	Female	40 (46.5)
Age		
	25 yrs and below	44 (51.2)
	25 yrs above	42 (48.8)
Services		
	Attending services*	65 (75.6)
	Not attending services	21 (24.4)

Severity of mental retardation**

Mild	39 (45.3)
Moderate	26 (30.2)
Severe	21 (24.4)

* *ATTENDING SERVICES refers to the adult with mental retardation attending regularly either a day programme or vocational programme.*

** *Severity of retardation obtained from psychological reports/disability certificates/ diagnostic reports available with parents.*

TABLE: 4.10 MEAN SCORES OF ADULT MENTALLY RETARDED INDIVIDUALS ON BASAL-MR (Part A) INITIAL TRYOUT

S. No.	DOMAINS	MEAN (n=86)	SD
1.	Personal Care And Appearance	53.17	17.60
2.	Food Management	59.58	21.02
3.	General Tasks and Responsibility	43.62	16.79
4.	Recreation and Leisure	36.70	15.64
5.	Mobility and Transportation	52.56	13.80
6.	Sexuality	57.73	19.31
7.	Vocational Performance	52.41	25.48
8.	Money Management	38.00	15.34
9.	Functional Literacy	40.30	17.64
10.	Social - Communication	51.41	24.70
	OVERALL	49.34	16.00

The first revision of BASAL-MR, (Part A) took place after the initial try out on a sample of 86 adult mentally retarded individuals. Based on the responses revision was undertaken by first and sixth authors which includes merging of two domains that is, "Mobility & transportation" was merged with "Recreation and leisure," which was renamed as "Community and leisure." "Money management was merged with "Functional literacy". "Vocational performance" was renamed as "Work" and "General tasks and responsibility" as "Household tasks and responsibility". After the revision 12 items were added to the scale, 33 items were deleted, 32 items were modified, 15 items were clubbed under 6 items and 21 items were shifted from one area to another which lead to reducing 149 items to 128. Details of the revisions are given domain wise in (Table 4.11).

TABLE: 4.11 NUMBER OF ITEMS IN EACH OF THE DOMAINS ON BASAL-MR (Part- A) FOLLOWING FIRST REVISION

S.No.	DOMAINS	NO. OF ITEMS
1.	Personal Care and Appearance	23
2.	Food Management	15
3.	Household Tasks and Responsibility	16
4.	Community and Leisure	17
5.	Sexuality	12
6.	Work	15
7.	Functional Literacy	15
8.	Social - Communication	15
TOTAL NO. OF ITEMS		128

EXAMPLES OF ITEMS ADDED/DELETED/RETAINED BUT MODIFIED/ CLUBBED

Items Added

- ★ Prays daily
- ★ Prepares a daily personal schedule of activities



Items deleted

- ★ Tells what free time is.
- ★ Identifies physical changes associated with growth and maturation process.

Modified

- ★ Combs hair ***Changed to*** “Combs/styles hair”.
- ★ Prepares tea/coffee ***Changed to*** “Prepares food items which require cooking
a. tea/coffee; b. hot milk; c. boiling eggs/omlet/toast”.

Items clubbed

- ★ Fetches milk & Fetches drinking water ***Clubbed As*** “Does other household activities”.
- ★ Purchases personal hygiene/grooming items & Purchases clothes/shoes & Purchases groceries/fruit/vegetables ***Clubbed As*** “Shops for desired items
a. personal hygiene/grooming ; b. clothes/shoes; c. groceries ; d. vegetables ;
e. fruit”.

Items shifted form one area to another

- ★ “Orders and eats food from public eating places” ***shifted from*** Food Management to Community and Leisure.
- ★ “Washes/sorts/folds clothes” ***shifted from*** Personal care and Appearance to General tasks and Responsibility.

STEP V : PILOT STUDY

Following the initial try out and first revision of BASAL-MR (Part A), a pilot study was conducted on a random sample of 52 adults with mental retardation belonging to a special school cum vocational unit. The sample included adults with mild (n=29), moderate (n=20) and severe mental retardation (n=3). There were 35 males and 17 females in the age range from 18 to 55 years. The overall scores obtained for the sample of subjects in the pilot study are given in Table 4.15, Tables 4.12, 4.13 and 4.14 indicate the characteristics of the parents, and their adult mentally retarded children and their family.

The pilot study helped in finalizing the structure and sequencing of items. It also helped in making decision regarding expected performance levels on some of the items on BASAL-MR (Part A).

Decisions regarding how many sub-items such as, any one/two/three within the given item the adult is expected to perform was based on the expected functionality and the performance levels obtained by the sample of the pilot study.

TABLE: 4.12 CHARACTERISTICS OF PARENTS

CHARACTERISTICS	NUMBER (%) (N=52)
Relationship	
Mother	25 (48)
Father	19 (37)
Others	08 (15)
Age	
55 yrs and below	33 (63)
55 yrs above	19 (37)
Education	
Below Inter	42 (80.8)
Inter and above	10 (19.2)
Income (per month)	
Rs 5 000 and below	32 (62)
More than Rs 5 000	20 (38)

TABLE: 4.13 CHARACTERISTICS OF ADULTS WITH MENTAL RETARDATION

CHARACTERISTICS	NUMBER (%) (N=52)
Sex	
Male	35 (67)
Female	17 (33)
Age	
18 - 25 yrs	24 (46)
26 - 35 yrs	22 (42)
> 36 yrs	06 (12)
Severity of mental retardation**	
Mild	29 (56)
Moderate	20 (38)
Severe	03 (06)

****** *Severity of retardation obtained from psychological reports/disability certificates/ diagnostic reports available with parents.*

TABLE: 4.14 CHARACTERISTICS OF FAMILIES

CHARACTERISTICS	NUMBER (%) (N=52)
Family Type	
Nuclear	33 (63)
Joint	17 (33)
Others	02 (04)
Family Status	
Intact	52 (100)
Religion	
Hindus	35 (67)
Muslims	04 (08)
Christians	13 (25)

TABLE: 4.15 MEAN SCORES OF ADULT MENTALLY RETARDED INDIVIDUALS ON BASAL-MR (Part A) PILOT STUDY

S.No.	DOMAINS	MEAN (n=52)	SD
1.	Personal Care And Appearance	62.42	14.78
2.	Food Management	50.81	21.03
3.	Household Tasks And Responsibility	50.08	19.22
4.	Community And Leisure	37.44	13.06
5.	Sexuality	47.10	12.24
6.	Work	62.73	11.30
7.	Functional Literacy	31.80	17.39
8.	Social - Communication	66.10	12.11
	OVERALL	64.51	17.28

Following the pilot study on a sample of 52 adults with mental retardation a second revision of BASAL-MR (Part A) was undertaken. In the revision, 3 items were added, 11 items were deleted and 36 items were modified. The 8 Domains remained unchanged. The BASAL-MR (Part A) now had 120 items in 8 domains which are given at (Table 4.16).

TABLE: 4.16 NUMBER OF ITEMS IN EACH OF THE DOMAINS ON BASAL-MR (Part A)

S.No.	DOMAINS	NO. OF ITEMS
1.	Personal Care and Appearance	15
2.	Food Management	15
3.	Household Tasks and Responsibility	15
4.	Community and Leisure	15
5.	Sexuality	15
6.	Work	15
7.	Functional Literacy	15
8.	Social - Communication	15
	TOTAL NO. OF ITEMS	120

FEW EXAMPLES OF ITEMS ADDED/DELETED/ RETAINED BUT MODIFIED.

Items Added

- ★ Receives or makes telephone calls.
- ★ Measures materials upto 1 meter.
 - a) cloth
 - b) paper
 - c) Rexene
 - d) Leather

Items deleted

- ★ Indulges in leisure activities
- ★ Indulges in crafts/hobbies
 - a) Attends dancing classes

Modified

- ★ Rides ***Changed to "Uses transport"***
- ★ Tells names of private body parts to differentiate sex ***Changed to "Tells names of private body parts to differentiate sex using pictures of male/female anatomy"***

STEP VII : FINAL STUDY OF BASAL- MR (Part A)

To conduct the final study of BASAL - MR (Part A) a vocational unit was identified in Vansathalipuram, Hyderabad, which was involved in training the adult mentally retarded individuals. The vocational training center had about 35 adults on rolls with 5 vocational instructors out of which 4 vocational instructors participated in the study. 25 out of 35 adult mentally retarded individuals were selected for the final study as they were reported to be regular in attending the vocational training programmes.


The final study consisted of the following steps :

- a) Training of vocational instructors in the use of BASAL-MR (Part A) and behavioural strategies
- b) Establishing inter rater reliability between vocational instructors and research staff in the use of BASAL -MR (Part A)
- c) Baseline assessment of adult mentally retarded individuals using BASAL-MR (Part A)
- d) Training of adult mentally retarded individuals by the vocational instructors
- e) Post training assessment of adult mentally retarded individuals using BASAL-MR (Part A)
- f) Feedback from the vocational instructors

a) TRAINING OF VOCATIONAL INSTRUCTORS IN THE USE OF BASAL-MR (Part A) AND BEHAVIOURAL STRATEGIES

The newly developed BASAL-MR (Part A) was introduced to the four vocational instructors from the vocational training center in Vanasthalipuram, Hyderabad. The vocational instructors were trained in use of BASAL-MR. The vocational instructors underwent a training of 24 hours extending 3 days by the research project team. 8 hours were spent in training on behavioural assessment and 16 hours in the use of behavioural strategies/methods in training adult mentally retarded individuals and management of problem behaviours. All the four vocational instructors were female in the age range of 25 to 27 years. All were untrained graduates and had minimum 3 years of experience of working in the field of mental retardation especially with adults. The areas covered during the training period included:

- ☆ Introduction and meaning of behavioural assessment
- ☆ Need for behavioural assessment
- ☆ Introduction to BASAL- MR (Part A)
- ☆ Administration of use of BASAL-MR (Part A) with adult mentally retarded individuals on aspects of administration, use of glossary and scoring in BASAL-MR (Part A)

- 
- ☆ Developing training programmes for adults with mental retardation
 - ☆ Behavioural strategies for training adults with mental retardation

The methods used for training were case demonstrations, didactic lectures and discussions, worksheets and individual case work with adults along with reporting and feedback.

b) ESTABLISHING INTER-RATER RELIABILITY BETWEEN VOCATIONAL INSTRUCTORS AND THE RESEARCH STAFF IN THE USE OF BASAL-MR (Part A)

To establish inter-rater reliability the vocational instructors following the training assessed 10 adult mentally retarded individuals from the selected vocational training centre using BASAL-MR (Part A). The same adult mentally retarded individuals were again assessed by the qualified members of research project team independently using BASAL-MR (Part A). The reliability between the vocational instructor and research staff was found to be significantly very high. ($r=0.963$; $p<0.001$).

c) BASELINE ASSESSMENT OF ADULT MENTALLY RETARDED INDIVIDUALS USING BASAL-MR (Part A)

After establishing inter-rater reliability and receiving training inputs, the 4 vocational instructors administered BASAL-MR (Part A) to assess the selected 25 adult mentally retarded individuals. The overall mean baseline scores and the domain wise distribution of scores on the BASAL-MR (Part A), for 25 mentally retarded adults were compiled as shown in Table 4.19. Characteristics of adult mentally retarded individuals and their parents are listed in Table 4.17 and Table 4.18 respectively.

d) TRAINING OF ADULT MENTALLY RETARDED INDIVIDUALS BY THE VOCATIONAL INSTRUCTORS

The selected 25 adult mentally retarded individuals underwent a 3 months training programme following the baseline assessment. The training was conducted both at home by the parents and at the vocational training center by the vocational instructors. Supervision was provided by the research project team for the training programme on weekly basis.

e) POST TRAINING ASSESSMENT OF ADULT MENTALLY RETARDED INDIVIDUALS USING BASAL-MR (Part A)

The post training assessment was conducted using BASAL-MR (Part A) for the same selected 25 adult mentally retarded individuals after 3 months of training using BASAL-MR (Part A) again. Care was taken that post assessment of the adult

mentally retarded individuals was not conducted by the same vocational instructors who had conducted the baseline assessment. The overall post test mean scores and domain wise distribution of scores of BASAL-MR (Part A) are presented in Table 4.22.

f) FEEDBACK FROM THE VOCATIONAL INSTRUCTORS

Following the training of four vocational instructors and the training of the 25 adult mentally retarded individuals for 3 months the vocational instructors were asked to fill up a semi structured feedback questionnaire with regard to the use of BASAL-MR (Part A and B). Verbal and written comments and suggestions were also invited from them to understand the feasibility of BASAL-MR (Part A). All of them reported the utility of BASAL-MR (Part A&B) and found it very useful. The administration of BASAL-MR (Part A&B) was reported to be easy, all items on the scales were reported to be very relevant for adult living and easy to understand. Glossary was reported to be very helpful. The vocational instructors reported the scoring system to be very objective but reported that they had to work hard to learn to score the adults performance correctly. The language of the items were also reported to be easy.

TABLE: 4.17 CHARACTERISTICS OF ADULTS WITH MENTAL RETARDATION

CHARACTERISTICS		NUMBER (%) (N=25)
Sex	Male	20 (80)
	Female	05 (20)
Age	Between 18-25 yrs	10 (40)
	Above 25 yrs	15 (60)
Severity**	Mild	09 (36)
	Moderate	14 (56)
	Severe	02 (08)
Associated condition	No Associated Condition	08 (32)
	Other Physical Impairment	05 (20)
	Seizures	04 (16)
	Any Other	08 (32)

** *Severity of retardation obtained from psychological reports/disability certificates/ diagnostic reports available with parents.*

TABLE: 4.18 CHARACTERISTICS OF PARENTS

CHARACTERISTICS	NUMBERS (%) (N=25)
Relationship	
Mother	17 (68)
Father	04 (16)
Others *	04 (16)
Age	
50 yrs and below	19 (76)
50 yrs above	06 (24)
Education	
Below Inter	16 (64)
Inter and above	09 (36)
Family Income (per month)	
Rs 6000 and below	17 (68)
More than Rs 6000	08 (32)

* others include grandparents

TABLE:4.19 PRE-TEST MEAN SCORES OF ADULT MENTALLY RETARDED INDIVIDUALS ON BASAL-MR (Part A) FINAL STUDY

S.No.	DOMAINS	MEAN (n=25)	SD
1.	Personal Care And Appearance	63.40	12.57
2.	Food Management	49.36	19.08
3.	Household Tasks And Responsibility	47.20	16.43
4.	Community And Leisure	46.12	13.98
5.	Sexuality	52.88	12.18
6.	Work	51.16	15.89
7.	Functional Literacy	36.04	13.59
8.	Social - Communication	69.92	7.99
	OVERALL	69.35	15.35

A one way ANOVA test was conducted to see the difference among the three groups of severity levels of mental retardation in the pre-test and post test scores . Tables 4.20 & 4.21 indicate that there is a significant difference between the total mean scores and severity levels at both the pre-test and post -test assessment using BASAL-MR (Part A).

**TABLE: 4.20 ONE- WAY ANOVA BETWEEN
TOTAL SCORES OF PRE-TEST AND SEVERITY**

SEVERITY	TOTAL MEANS	F- RATIO
Mild	77.56	3.92*
Moderate	65.42	
Severe	58.33	

* $p = < 0.05$

**TABLE: 4.21 ONE- WAY ANOVA BETWEEN
TOTAL SCORES OF POST-TEST AND SEVERITY**

SEVERITY	TOTAL MEANS	F- RATIO
Mild	82.69	4.72*
Moderate	68.74	
Severe	64.30	

* $p = < 0.05$

STEP VII: SENSITIVITY OF BASAL-MR (Part A)

A follow up repeat assessment of the same 25 adults with mental retardation was conducted after a period of three months on the BASAL-MR (Part A), in order to determine the sensitivity of the scale to behavioural changes over an intervening three months training phase. After the pre and post test assessment of 25 adults on BASAL-MR (Part A), a paired t-test was conducted to know the difference between the pre and post test scores. The results indicate that the scale is indeed sensitive to behavioural changes over time even within three months at a statistically highly significant level, both overall as well as within each domain which is indicated at (Table 4.22).

**TABLE: 4.22 SENSITIVITY OF BASAL-MR (Part A)
TO BEHAVIOURAL CHANGES**

DOMAINS (Pre-Post Scores)	MEAN (n=25)	SD	"t" VALUE
Personal Care And Appearance			
Pre	63.40	12.57	
Post	67.04	8.97	3.99**
Food Management			
Pre	49.36	19.08	
Post	54.60	16.85	3.62**
Household Tasks And Responsibility			
Pre	47.20	16.43	
Post	50.52	15.78	5.51***
Community And Leisure			
Pre	46.12	13.98	
Post	49.56	13.93	5.09***
Sexuality			
Pre	52.88	12.18	
Post	53.84	11.03	2.61*
Work			
Pre	51.16	15.89	
Post	56.68	18.04	4.21 ***
Functional Literacy			
Pre	36.04	13.59	
Post	40.96	14.22	4.38***
Social - Communication			
Pre	69.92	7.99	
Post	70.76	7.93	4.45***
Overall			
Pre	69.35	15.35	
Post	73.99	14.67	6.60***

(*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$)

STEP VIII: RELIABILITY

Inter-rater reliability for the BASAL- MR (Part A) was established between two raters with the sample of 10 adults with mental retardation attending the vocational training unit. Rater I was vocational instructor who had undergone 24 hours training in the use and administration of BASAL-MR (Part A&B) and Rater II was the research staff member. The adult mentally retarded individuals were assessed independently by both the raters. The results show a high degree of positive correlation between the two independent assessments for the overall scores ($r=0.963$) as well as within each domain of the scale which is indicated at Table 4.23.

TABLE: 4.23 RELIABILITY OF BASAL-MR (Part A)

S.No.	DOMAINS	RATER I & II	MEAN (n=10)	SD	r
1.	Personal Care and Appearance	Rater I Rater II	62.70 63.80	8.94 8.84	0.953 ***
2.	Food Management	Rater I Rater II	43.30 43.80	12.91 16.48	0.889***
3.	Household Tasks and Responsibility	Rater I Rater II	39.70 40.90	10.53 12.52	0.882***
4.	Community And Leisure	Rater I Rater II	45.20 46.40	14.09 14.05	0.976***
5.	Sexuality	Rater I Rater II	56.30 56.40	5.89 6.33	0.673***
6.	Work	Rater I Rater II	51.80 51.80	14.42 15.08	0.911***
7.	Functional Literacy	Rater I Rater II	41.60 37.70	15.91 16.13	0.964***
8.	Social - Communication	Rater I Rater II	65.80 71.80	10.67 5.41	0.718***
	Overall	Rater I Rater II	67.73 68.77	11.59 12.35	0.963***

(*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$)

STEP IX: VALIDITY

The concurrent validity of the BASAL-MR (Part A) was established against social quotient of the mentally retarded adults as derived on the Vineland Social Maturity Scale (VSMS), Indian adaptation by Dr.A.J.Malin. For a sample of 25 adults with mental retardation attending vocational training centre, the VSMS was administered individually and the scores derived on this scale were correlated against their scores on the BASAL - MR (Part A) (Table 4.24). Construct validity of BASAL-MR (Part A) was also measured for the difference between the mean scores of 25 mentally retarded adults on pre and post test levels. The scores were found to be statistically significant ($p < 0.001$) as seen at Table 4.22. The face validity for BASAL-MR (Part A) as obtained from four vocational instructors ratings which was found to be quite high as reported in the final study of BASAL-MR (Part A&B) as seen at page 39.

TABLE: 4.24 VALIDITY OF BASAL - MR (Part A)

SCORES	MEAN (n=25)	SD	r
Pre Test	69.35	15.35	0.854***
Post Test	73.99	14.67	0.825***
VSMS	75.48	10.03	

(*** $p = < 0.001$)

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CHAPTER V

GLOSSARY FOR BASAL-MR (Part A)

To help clarify certain issues related to the administration of specific items on the scale, a glossary has been added. The assessor must refer to the glossary, items marked with asterisk* on the scale. However, as the trainer/user gains experience in the use of the BASAL-MR (Part A) scales, the need for referring to the glossary will decrease.

The expected level of performance of the adult mentally retarded individual for the items included in the BASAL-MR (Part-A), should be that, which is normally expected from an ordinary average adult individual functioning in the given cultural setting in which the adult mentally retarded individual resides.

Item DOMAIN - I: PERSONAL CARE AND APPEARANCE (PA) No.

- | | |
|---------|---|
| PA-9. | Dressing includes clothing and footwear that should be decided based on the time of the day, existing weather conditions and special occasions like festivals and weddings. |
| PA -11. | Performs exercises for a minimum of 20-30 minutes, at least 3-4 times a week. |
| PA -12. | Sleeps 6-8 hours at night without disturbing others. |
| PA -13. | The individual should follow the dosage and timings of medicines as per prescription. |
| PA -15. | Tells at least one negative effect for each of the two hazardous substances or situations e.g. alcohol is dangerous for liver; smoking can lead to cancer. |

Item No.	DOMAIN-II: FOOD MANAGEMENT (FM)
----------	---------------------------------

Note: *Food preparation and serving should meet the needs of minimum four persons to be scored 5 (independent)*

FM -3. Sets table/spreads mat and places utensils in order.

FM -5. Removes the utensils and cleans the table/mat.

FM -6. Should be able to remove stones /unwanted particles from rice/pulses and washes rice/pulses/vegetables/fruits.

FM - 11. Utensils should be washed with soap/detergent/ash or as per the household norms.

FM - 12. Cleaning kitchen includes cleaning with broom/cloth as per the household norms.

FM -15. Should be able to identify and collect needful raw materials to use the stove, and cook required food items.

Item No.	DOMAIN-III: HOUSEHOLD TASKS AND RESPONSIBILITY(HR)
----------	--

HR -4. The individual should be able to use harpic/ bleaching/ detergent powder and broom/brush/cloth to clean the bathroom/toilet

HR - 5. Should dust the bed, arrange the bed sheets/bed covers and put the pillows in order as per household norms.

HR - 11. Performs household activities on a regular basis as part of responsibility. Wherever applicable money transactions in terms of correct change is not expected from the individual.

HR - 13. Should recite minimum of 4 lines or 10 words of prayer.

HR - 14. Should verbally state or list down in writing personal activities of the whole day with timings on an hourly basis.

Item No.	DOMAIN-IV: COMMUNITY AND LEISURE (CL)
----------	---------------------------------------

Note: *The individual should be able to access community resources and indulge in leisure activities independently to score 5. Wherever applicable correct change of money is not expected.*

CL -3. The individual should be able to reach the predetermined destination within the city by using available means of transport by purchasing ticket or using pass.

CL -4. The individual should make a detailed plan of the tour within the city or outside the city. The plan should include schedule of travel, destination places, the distance, travel time, mode of conveyance, accommodation for stay and the approximate total expenditure for travel.

CL -6. The individual should verify the quality/brand name and the quantity of the desired items as per instruction to be purchased with the given money.

CL-7. Should be able to mail the letters, with the given money purchases stamps/ inland letter/envelops/money order form, sends money order/registered post/packages and collects receipt.

CL -8. Should be able to check amount in his account using the passbook should deposit/withdraw money up to Rs.500 by using filled deposit or withdrawal forms and giving the amount.

CL -9. The individual should select from available items by asking or using from menu card, place order, eat the food ordered and pays the bill. Should be able to order for a minimum of 2 persons.

CL -15. The individual should go on tour as per predetermined plans of place/ persons of visit and return home as per scheduled travel plans.

Item No.	DOMAIN-V : SEXUALITY (S)
----------	--------------------------

S -10. The individual does not allow the unwanted touching by members belonging to any sex.by raising an alarm, pushing, hitting complaining or by any other acceptable means

-
- S -11.** Should be able to meet at least any one of the items. Masturbation in private, watching adult movies, browsing magazines having pictures of adults, normal sexual relationships of married people.
- S -13.** Should be able tell at least one medically accepted contraceptive measures used by men and women one each.
i.e., men: condoms, vasectomy, women: tubectomy , pills, copper -T.
- S -14.** Should be able to select or use at least one medically accepted contraceptive measures and give reasons for selection/use.
i.e., men: condoms, vasectomy women: Pills, copper-T, hysterectomy
- S -15.** The individual should be able tell about mating ,conception, pregnancy Period (9 months), delivery process.
-

Item No.	DOMAIN-VI: WORK (W)
----------	---------------------

- | | |
|----------------|---|
| W -8. | The individual should request leave from work verbally or written as per the rules of the organisation. |
| W -10. | Should be able to follow the work timings and the sequence of work as per instruction. |
| W -14. | Should be able to tell and follow all safety rules of the organisation e.g. wearing helmet while working, putting on protective glasses while welding, leaving the work place on hearing the fire alarm etc.. |
| W - 15. | The individual should be able to verbally/non verbally convey gratitude on receiving compliments by smiling or saying "Thanking you" if the individual is criticized for something wrong s/he should accept gracefully by saying sorry/keeping quite. If he/she has been criticized wrongly then, he/she should be able to assert and convey verbally/non verbally that what is been said/done to him is wrong and should be stopped. |
-

Item No.	DOMAIN-VII: FUNCTIONAL LITERACY (FL)
----------	--------------------------------------

- | | |
|---------------|--|
| FL -1. | The individual should be able to understand that money is precious and should be kept safely, preferably in a bank/locker or at a place in the house which is considered to be safe. |
|---------------|--|
-

-
- FL -2.** Should be able to purchase items within a minimum of Rs 100 at one go. The items may include a combination of groceries /personal care items / vegetables/milk/fruits/any other.
- FL -4.** Should be able to save minimum 10% of money earned from various sources e.g. Job, gifts received etc.
- FL -5.** Should be able to lend/retrieve money minimum of Rs.500 to trusted close relatives only and should maintain proper written documents and witnesses.
- FL -12.** Should be able to write a minimum of 5 lines in addition to starting and ending of the letter. He/she should be able to close envelope and write address of the addressee on the envelop/inland letter at the appropriate place.
- FL- 13.** Tells 3 major news of the day that comes on radio or TV or reads 3 main headlines from the daily news paper.
- FL - 15.** Should be able to fill the telegram form by writing message (minimum of 4 words) and address of both sender and receiver at the appropriate place.

Item No.	DOMAIN-VIII: SOCIAL- COMMUNICATION (SC)
SC -3.	The individual should use minimum of two statements such as “my name is _____” or “may I know your good name please” etc.
SC -6.	Should be able to recognize his own materials/home possessions like , clothes, cycle, TV, utensils etc. and protect it from being taken away by unknown people without permission.
SC -9.	Should be able to tell his/her likes or dislikes for any two of the listed options with justification. Eg: “I like to have tea as it relaxes me. Beer is bad for health.”
SC -10.	Should be able to tell with justification. “I am tired, I would like to go home on time today, if you feel you can stay back for work”.
SC -14.	The individual should provide or ask for assistance for a minimum of 2 situations e.g. dropping younger sibling to school or asking help for lifting the box.

CHAPTER VI

LIST OF MATERIALS

This chapter includes list of selected materials, which would be required for administering the BASAL-MR (Part A) to assess adult mentally retarded individuals. The assessor can prepare a kit as suggested by collecting the materials with the specifications given in this chapter. It is important that these materials are used according to the specifications, only for assessment purposes and not necessarily for training adult mentally retarded individuals. The list does not however include all materials needed for assessment as it is presumed that vocational or home setting would in any case have them. For example, fan, gas stove, utensils, mug, knife, gadgets etc. Also list of only those materials are given for items which can be stored as a kit and is transportable. Consumable items that cannot be stored (such as: flour, vegetables, fruits, pulses etc.) for long have not been included in the list of materials.

The abbreviations given in brackets in the following list of materials refer to the specific domain-item for which the material is to be used. For example, the code PA -5 against "comb, mirror" means that the said material is to be used during assessment of item 5 under the Personal care and appearance (PA) domain.

Item No.	DOMAIN - I: PERSONAL CARE AND APPEARANCE (PA)
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PA -5. Comb, mirror (6" x 4").

PA -6. Nail cutter, filer, small size scissors.

PA -10. Ribbon, hair clips, rubber band.

PA -14. Bandage/band-aid, thermometer.

Item No.	DOMAIN-II: FOOD MANAGEMENT (FM)
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FM -2.Cup, glass, bottle

FM -5.Cleaning cloth (12" x 12").

FM -8. Grater, peeler, knife.

Item No. DOMAIN-III: HOUSEHOLD TASKS AND RESPONSIBILITY (HR)

HR -2. Duster/cloth. (12" x 12")

HR -9. Buttons, hooks, needle, thread ,torn shirt/blouse.

HR -14. Pen/pencil, paper/notebook.

Item No. DOMAIN-IV: COMMUNITY AND LEISURE (CL)

CL -7. Postcard/envelops/inland letter, stamps, money order form.

CL -9. Pictorial menu card.

Item No. DOMAIN-V : SEXUALITY (S)

S -8. Anatomical pictures of private body parts of male and female.

S -13. Picture cards of various contraceptive measures used by both male and female.

S -15. Picture cards depicting stages of childbirth.

Item No. DOMAIN-VI: WORK (W)

W -1. Different coloured cards , different shapes/sizes of nuts and bolts, different textured pieces of cloth.

W -2. 25 envelops, 25 candles of same size (6 inches).

W -4. Paper, cloth, inch tape.

W -5. Envelope, stamps, gum, labels with an address on it, cello tape, candle, match box, plastic covers of (8" x 8").

Item DOMAIN-VII: FUNCTIONAL LITERACY (FL)
No.

- FL -6.** Flash cards of name, address.
- FL -8.** Flash cards of toilets, bus number, traffic signs.
- FL -9.** Calendar, hotel menu cards, telephone directory, time table of bus and train.
- FL -10.** Specimen forms of bank deposit and withdrawal, money order, employment application.
- FL -11.** Old electricity, water, telephone bills.
- FL -15.** Specimen telegram forms.

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CHAPTER VII

ADMINISTRATION AND SCORING OF BASAL-MR (Part A)

There are specific guidelines, which the users need to follow while administering and scoring BASAL-MR (Part A).

The BASAL-MR (Part A) is to be *administered individually* on each adult individual with mental retardation. The assessor/user should go through the entire scale and familiarise with the meaning of each item before beginning to administer the scale.

ADMINISTRATION OF BASAL-MR (Part A)

The following points need to be followed while administering the Scale:

1. Read each item within every domain in the scale to assess whether the given adult with mental retardation can or cannot perform that item.
2. As far as possible, use direct observational techniques rather than interview techniques to determine actual performance of the adult, i.e., how well the adult can or cannot perform the said item.
3. It is not essential that the user should complete the behavioural assessment of the adult using the scale within a single session. Two or more sessions may be required to assess the adult on certain items on the scale.
4. The user needs to administer all the items within a given domain for each and every adult being assessed on the BASAL-MR.
5. The items within each domain of the BASAL-MR (Part A) have been classified as far as possible on increasing level of difficulty. However, the user is advised to administer all the items on the scale. The present scale doesn't only focus on normal ways to perform an activity but also effective ways to accomplish the task.
6. Use the scale for each adult. Enter the performance of the adult and the score obtained on the scale for all the four occasions.
7. The user must refer to the glossary where ever the item in the scale is marked with an asterisk (*). This will help clarify issues related to the administration of

certain items. As the user gains experience in the use of the items the need for referring to the glossary will decrease.

8. The user must refer to the material in Chapter VI, where ever the item in the scale is marked with an (#) and use the material while administring BASAL-MR (Part A).

SCORING OF BASAL-MR (Part A)

Each adult with mental retardation may show different levels of performance on every item on the BASAL-MR (Part A). The six possible levels of performance under which each item can be scored are as follows:

SCORING: ADULT PERFORMANCE

Each adult with mental retardation may show different levels of performance on every item on the BASAL-MR (Part A). The six possible levels of performance under which each item can be scored are as follows: Use appropriate boxes in the scale to enter the scores obtained by the adult on each item.

Level One: Independent (Score 5)

If the adult performs the listed behaviour without any kind of physical or verbal assistance or clueing/modelling, it is marked as independent and given a score of 5.

Level Two: Clueing /modelling (Score 4)

If the adult performs the listed behaviour only with some kind of verbal hints (example, up, down, right, left, etc.) or gestural clues (example, pointing with fingers, shaking forefinger to hint "no" or having to show him how to do and then only he does, etc.), it is marked as "clueing/modelling" and given a score of 4. To continue the previous example, even after the trainer's verbal instruction to "undress" if the adult is unable to perform, and requires additional verbal clues such as (pull, open, bend etc) in order to perform the activity, then the adult's performance is at the level of clueing.

Level Three: Verbal prompting (Score 3)

If the adult performs the listed behaviour only with some kind of accompanying verbal statements (example, "keep holding paper with left hand as you cut", "now cut it into small pieces", etc.) it is marked as verbal prompting and given a score of 3.

Level Four. Physical Prompting (Score 2)

If the adult performs the listed behaviour only with any kind of accompanying physical or manual help (example, requires physical help in untying shoe lace, removing shoes from feet, etc.) it is marked as physical prompting and given a score of 2.

Level Five: Totally dependent (Score 1)

If the "adult does not perform the listed behaviour currently although he can be trained to do so (example, others have to place order in the restaurant and the adult makes no attempt to place order in the restaurant on his own), it is marked as totally dependent and given a score of 1.

Level Six: Not Applicable (Score 0)

If an adult is not able to perform the listed activity due to physical or sensory handicaps. For example an adult mentally retarded individual with visual impairment will not be able to read train timings or play computer games. Similarly the item "plays basketball" may not be applicable to an adult mentally retarded individual with cerebral palsy were his upper limbs are grossly affected it is marked as not applicable and given a score of 0.

TABLE : 7.1 SCORING OF THE ITEMS

RESPONSES	SCORING
Not Applicable	0
Totally Dependent	1
Physical Prompting	2
Verbal Prompting	3
Clueing/Modeling	4
Independent	5

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CHAPTER VIII

DEVELOPMENT OF BASAL-MR (Part B)

The following steps were taken to develop BASAL-MR (Part B)

- I. Applicability of existing problem behaviour checklist with adult mentally retarded individuals.
- II. Formation of item pool and preparation of BASAL-MR (Part B)
- III. Try out of BASAL-MR (Part B) and first revision
- IV. Pilot study of BASAL-MR (Part B) and second revision
- V. Final Study of BASAL-MR (Part B)
- VI. Sensitivity of BASAL-MR (Part B)
- VII. Reliability
- VIII. Validity

STEP I: APPLICABILITY OF EXISTING PROBLEM BEHAVIOUR CHECKLIST WITH ADULT MENTALLY RETARDED INDIVIDUALS.

A problem behaviour checklist (Peshawaria, R. 1990) was already being used in Behaviour Modification services at NIMH (though not essentially developed for adults with mental retardation). As a first step it was considered appropriate to conduct its feasibility with adults. This problem behaviour checklist has 88 items placed under 11 domains, i.e., physical harm towards others, damages property, misbehaves with others, temper tantrums, self-injurious behaviour, repetitive/stereotyped behaviours, odd behaviours, antisocial behaviours, rebellious behaviours, hyperactive behaviours and fears. This problem behaviour checklist was used with 44 parents (21 mothers and 23 fathers) of 44 adult mentally retarded individuals drawn from behaviour modification services of NIMH and Vocational Training Centre in Hyderabad. These 44 adults were reported to have behaviour problems by parents or trainers. In no case both the parents were interviewed to collect information about problem behaviour of any given 44 adults with mental retardation. The characteristics of 44 adults with

mental retardation their parents and also their family characteristics are presented in table 8.1, 8.2 and 8.3 respectively. This exercise helped in developing an initial item pool of problem behaviours which was relevant for adults with mental retardation.

TABLE : 8.1 CHARACTERISTICS OF ADULTS WITH MENTAL RETARDATION

CHARACTERISTICS		NUMBER (%) (N=44)
Sex	Male	30 (68.2)
	Female	14 (31.8)
Age	18-25 yrs.	28 (63.6)
	26-35 yrs.	16 (36.4)
Severity of mental retardation	Mild	15 (34.1)
	Moderate	24 (54.5)
	Severe	04 (09.1)
	Profound	01 (02.3)

TABLE : 8.2 CHARACTERISTICS OF PARENTS

CHARACTERISTICS		NUMBER (%) (N=44)
Relationship	Mother	21 (47.7)
	Father	23 (52.3)
Age	35-45 yrs.	12 (27.3)
	46-55 yrs.	23 (52.3)
	56-65 yrs.	09 (20.4)
Education	Upto 10 th Std.	37 (84.1)
	Inter and degree	03 (06.8)
	Above degree	04 (09.1)

TABLE : 8.3 CHARACTERISTICS OF FAMILIES

CHARACTERISTICS	Number (%) (N=44)
Family Type	
Nuclear	30 (68.2)
Joint	14 (31.8)
Family Status	
Intact	44 (100)
Income (per month)	
Rs.1,000/- to Rs.3000	21 (47.7)
Rs.3,001/- to Rs.5,000/-	14 (31.8)
Rs.5,001/- and above	09 (20.5)
Area	
Urban	43 (97.7)
Rural	01 (02.3)

STEP II: FORMATION OF ITEM POOL AND PREPARATION OF BASAL-MR (Part B)

The initial item pool consisting of 123 problem behaviours was formed. The items were selected based upon:

- a) Data reports of 44 parents of adult mentally retarded individuals as reported at step I.
- b) Review of the available problem behaviour scales such as Devereux Child Behaviour (dcb) Rating Scale (Spivack, G. and Spotts, J. 1966), Negative behaviours Assessment Scale, Auckland Branch of the New Zealand Society for the Intellectually retarded, Behavioural Assessment Scale for Indian Children with Mental Retardation BASIC-MR (Part B) (Peshawaria, R. and Venkatesan, S 1992)
- c) Problem behaviours in mentally retarded adults listed by experienced professionals working with adults having mental retardation.

Pooling the information from the above additional sources, 123 items (problem behaviours) were placed under 13 domains as shown at (table 8.4). The new

domains "Inappropriate sexual behaviour" and "Any other" were added. Keeping the problem behaviour checklist (Peshawaria, R. 1990) as the structure base the modifications were carried out as detailed below. The items were worded as far as possible in behavioural terms. A quantitative scoring system was also evolved to assign numerical scores for each subject's problem behaviour items as follows:

Score '0': *If the problem behaviour/item is not occurring at all.*

Score '1': *If the problem behaviour/item is occurring occasionally or sometimes.*

Score '2': *If the problem behaviour/item is occurring frequently or most of the times.*

TABLE: 8.4 DOMAIN WISE DISTRIBUTION OF ITEMS ON BASAL-MR (Part B)

S.No.	DOMAINS	NO. OF ITEMS
1.	Physical harm towards others	12
2.	Damages property	6
3.	Misbehaves with others	9
4.	Temper Tantrums	9
5.	Self-Injurious Behaviours	12
6.	Repetitive Behaviours	12
7.	Odd Behaviours	14
8.	Antisocial Behaviours	6
9.	Inappropriate Sexual Behaviours	18
10.	Rebellious Behaviours	7
11.	Hyperactive Behaviours	5
12.	Fears	8
13.	Any other	5
TOTAL		123

STEP III : TRY OUT OF BASAL-MR (Part B) AND FIRST REVISION

The problem behaviour scale BASAL-MR (Part B) consisting of 123 items classified into 13 domains was administered with 21 adult mentally retarded individuals reportedly having behaviour problems by their parents. The sample was drawn from general services of NIMH. 21 parents (8 mothers and 13 fathers) of these 21 adult mentally retarded individuals were interviewed using BASAL-MR (Part B) to collect information about problem behaviours in their adult children. The characteristics of 21 adults with mental retardation and their 21 parents along with their family characteristics are presented in table no.8.5, 8.6 and 8.7 respectively.

TABLE: 8.5 CHARACTERISTICS OF ADULTS WITH MENTAL RETARDATION

CHARACTERISTICS		NUMBERS (%) (N=21)
Sex	Male	14 (66.7)
	Female	07 (33.3)
Age	18 - 25 yrs.	18 (85.8)
	26 - 35 yrs.	02 (09.5)
	36 - 45 yrs.	01 (04.7)
Severity of Mental Retardation	Mild	08 (38.1)
	Moderate	06 (28.6)
	Severe	07 (33.3)

TABLE: 8.6 CHARACTERISTICS OF PARENTS

CHARACTERISTICS		NUMBERS (%) (N=21)
Relationship	Mother	08 (38)
	Father	13 (62)
Age	35 - 45 yrs	02 (09.6)
	46 - 55 yrs	15 (71.4)
	56 - 65 yrs	04 (19.0)
Education	10th Std and below	09 (42.9)
	Upto degree	10 (47.6)
	Upto PG	02 (9.5)

TABLE: 8.7 CHARACTERISTICS OF FAMILIES

CHARACTERISTICS		NUMBER (%) (N=21)
Family type		
	Nuclear	17 (80.9)
	Joint	04 (19.0)
Family status		
	Intact	21 (100)
Income (per month)		
	Rs.1,000/- to Rs.3000	10 (47.4)
	Rs.3,001/- to Rs.5,000/-	06 (28.5)
	Rs.5,001/- to Rs.10,000/-	05 (23.8)
Area		
	Urban	20 (95.2)
	Rural	01 (4.8)

Based on the results obtained the scale was revised. Details of the first revision are given at Table no.8.8.

TABLE : 8.8 SUMMARY OF BASAL-MR (Part B) FIRST REVISION

No. of items retained from the old checklist	85
No. of items deleted	8
No. of items modified	15
No. of items added	8
No. of items split	4
No. of items clubbed	2
No. of items shifted from one area to another	9

The total no of items following the first revision is 123.

FEW EXAMPLES OF ITEMS ADDED / DELETED / RETAINED BUT MODIFIED/ CLUBBED

Items added

- ★ Masturbates in public.
- ★ Insists on sleeping with others.
- ★ Touches members of opposite sex unnecessarily.

Items deleted

- ★ Sits with body up, body curled up.
- ★ Smears dirt/feces on self.
- ★ Makes sexual advances to members of opposite sex.

Items reworded

- ★ Threatens physical violence *Changed to* "verbally threatens to harm others".
- ★ Does not allow others to carry on their own activities *Changed to* "Interrupts when others are talking".

Clubbed items

- ★ Breaks object/glass & damages possession' toys *Clubbed As* "breaks object/glass/toys".

Items split

- ★ Touches others or own private parts in public was *Split into two items* "touches own private parts in public", and "touches others private parts in public".

Items shifted

- ★ "Makes obscene gestures" & "Exposes body parts inappropriately" *Shifted from* "Antisocial Behaviour" to Inappropriate Sexual Behaviour.

STEP IV: PILOT STUDY OF BASAL-MR (Part B) AND SECOND REVISION.

Pilot study was conducted using the revised BASAL-MR (Part B) having 123 items under 13 domains. A sample, of 20 adults out of 52 adults with mental retardation were drawn from three Vocational Training Centers/Special Schools in Hyderabad and in whom behaviour problems were reported by their parents/trainers. The characteristics of 20 adult mentally retarded individuals, their parents (20) and also the families are presented in table no.8.9, 8.10 and 8.11 respectively.

TABLE: 8.9 CHARACTERISTICS OF ADULTS WITH MENTAL RETARDATION

CHARACTERISTICS		NUMBER (%) (N=20)
Sex	Male	15 (75)
	Female	05 (25)
Age	18 - 25 yrs.	14 (70)
	26 - 35 yrs.	06 (30)
Severity of mental retardation	Mild	08 (40)
	Moderate	07 (35)
	Severe	03 (15)
	Profound	02 (10)

TABLE:8.10 CHARACTERISTICS OF PARENTS

CHARACTERISTICS		NUMBERS (%) (N=20)
Relationship	Mother	12 (60)
	Father	08 (40)
Age	35 - 45 yrs	04 (20)
	46 - 55 yrs	12 (60)
	56 and above	04 (20)
Education	Upto 10th Std	16 (80)
	Inter and degree	04 (20)

TABLE:8.11 CHARACTERISTICS OF FAMILIES

CHARACTERISTICS		NUMBER (%) (N=20)
Family Type	Nuclear	15 (75)
	Joint	05 (25)
Family status		
Intact		20 (100)
Income (per month)		
Rs.1,000/- to Rs.3000		11 (55)
Rs.3,001/- to Rs.5,000/-		05 (25)
Rs.5,001/- and above		04 (20)
Area	Urban	15 (75)
	Semi urban	02 (10)
	Rural	03 (15)

Parents (12 mothers and 8 fathers) of 20 adult mentally retarded individuals were interviewed individually using the revised BASAL-MR (Part B) consisting of 123 items. The overall scores obtained for the sample (N=20) in the pilot study is given at table 8.12.

TABLE: 8.13 RESULTS OF PILOT STUDY

TOTAL SCORE	MEAN (n=20)	SD
366	18.3	17.40

The pilot study helped to assess the feasibility of each item, which was found satisfactory. No parents reported any confusion or misunderstanding of the given items in terms of its content or language. This helped in finalizing the structure, format,

procedure of administration and scoring of the BASAL-MR (Part B). Two new behaviour problems were reported by the parents. Parents reported no difficulty in using the scoring system appropriately.

The summary of the revision is shown at table no.8.13.

Table : 8.13 SUMMARY OF BASAL-MR (Part B) SECOND REVISION

No. of items retained from the old checklist	120
No. of items deleted	0
No. of items modified	2
No. of items added	2
No. of items splitted	2
No. of items clubbed	0
No. of items shifted from one area to another	0

The 123 item scale was revised into a 126 item scale as shown at table 8.12. In this revision no new domain was added however 2 new items “verbally threatens to harm self” and “keeps watching members of opposite sex continuously” were added as these items were reported by some of the parents as major problems observed among their adult mentally retarded children. For better clarity items such as: “kisses/hugs/shakes hands unnecessarily” was split into two items i.e. “shakes hands/greets/touches strangers unnecessarily” and “kisses/hugs others excessively” respectively.

It was considered more appropriate to rename the domain VIII “anti-social behaviours” to “inappropriate social behaviours”. Items like “steals” was modified to “steals others articles knowingly”, “undresses in front of others” was changed to “undresses in front of others intentionally”. Hence the revised BASAL-MR (Part B) after the pilot study had 126 items instead of 123 items.

STEP V: FINAL STUDY OF BASAL-MR (Part B)

The final study of BASAL-MR (Part B) was combined with the final study of BASAL-MR (Part A) (see chapter IV) at the Vocational training unit, Vanasthalipuram, Hyderabad which was involved in training adult mentally retarded individuals. Out of the 25 adult mentally retarded individuals taken up for the final study of BASAL-MR (Part A) 17 mentally retarded adults reportedly had behaviour problems, which constituted the sample of the final study of BASAL-MR (Part B).

The final study consisted of the following steps.

- (a) Training of the vocational instructors in the use of BASAL-MR (Part B) and behavioural strategies.
- (b) Inter-rater reliability of BASAL-MR (Part B).
- (c) Baseline assessment of adult mentally retarded individuals using BASAL-MR (Part B).
- (d) Behavioural management of adult mentally retarded individuals.
- (e) Post-assessment of adult mentally retarded individuals.
- (f) Feedback

(a) TRAINING OF THE VOCATIONAL INSTRUCTORS IN THE USE OF BASAL-MR (Part B) AND BEHAVIOURAL STRATEGIES.

BASAL-MR (Part B) was introduced to the 4 vocational instructors along with BASAL-MR (Part A). They were also trained in strategies for training and management during the three days training programme (see Chapter IV). vocational instructors were trained in the administration and scoring of BASAL-MR (Part B). The methods used for training included live case demonstrations, didactic lectures, discussions, worksheets, individual case work with adults along with reporting and feedback.

(b) INTER-RATER RELIABILITY FOR BASAL-MR (Part B)

The inter-rater reliability was worked out by computing pearson'e correlation between the ratings given by the research staff member on 10 indivdiuals with mental

retardation with those of the ratings given by one vocational instructor specially trained to use this scale. The inter-rater reliability was also found to be high ($r=0.833$; $p<0.003$).

(c) BASELINE ASSESSMENT OF ADULT MENTALLY RETARDED INDIVIDUALS USING BASAL-MR (Part B)

Following the training and establishing of inter-rater reliability baseline assessment was conducted by the vocational instructors for identified 25 adult mentally retarded individuals. Out of 25 only 17 scored positive on BASAL-MR (Part B). The overall mean baseline scores of 17 adults with mental retardation were 7.82 and SD 9.01 as shown at Table-8.14.

(d) BEHAVIOURAL MANAGEMENT OF ADULT MENTALLY RETARDED INDIVIDUALS

Behavioural management programmes were developed for identified behaviour problems in 17 adult mentally retarded individuals and carried out for three months both at the vocational training centre by the vocational instructors and by parents at home. Supervision was provided by the research project team for the management programmes on weekly basis.

(e) POST-ASSESSMENT OF ADULT MENTALLY RETARDED INDIVIDUALS

Post-assessment was conducted using BASAL-MR (Part B) for the same 17 adult mentally retarded individuals following behavioural management programmes for three months. Care was taken that post assessment of the adults was not conducted by the same vocational instructors who had conducted the baseline assessment. The overall mean scores obtained were 2.53, and SD 3.43. Since no behaviour problems were reported in the "any other" domain during the pilot study or the final study hence this domain was removed in the final version of BASAL-MR (Part B).

(f) FEEDBACK

Feedback from the four vocational instructors was obtained following the use of BASAL-MR (Part A&B). All of them reported that they found the tool very useful, easy to administer and score, items were reported to be very relevant for adult functioning (for more details see Chapter IV).

TABLE: 8.14 FINAL STUDY: BASELINE SCORES ON ALL THE DOMAINS OF BASAL-MR (Part B) OF ADULTS WITH MENTAL RETARDATION

S. No.	DOMAINS	MEAN (n=17)	S.D
1	Physical harm towards others	0.88	2.00
2	Damages property	0.35	0.70
3	Misbehaves with others	0.82	1.88
4	Temper tantrums	0.47	0.80
5	Self-injurious behaviours	0.82	1.33
6	Repetitive behaviours	0.65	0.93
7	Odd behaviours	1.41	1.91
8	Inappropriate social behaviours	0.35	0.86
9	Inappropriate sexual behaviours	0.53	1.37
10	Rebellious behaviours	1.18	2.32
11	Hyperactive behaviours	0.35	1.46
12	Fears	0.00	0.00
13	Any other	0.00	0.00
TOTAL SCORES		7.82	9.01

STEP-VI SENSITIVITY OF BASAL-MR (Part B) TO BEHAVIOURAL CHANGES IN ADULTS WITH MENTAL RETARDATION

A follow-up assessment of the adults was conducted after a period of three months on the BASAL-MR (Part B) in order to determine the sensitivity of the scale to behavioural changes due to behaviour management programme. The results show a highly significant change from pre-test to the post-test scores which is shown at (Table-8.15) indicating that the scale is sensitive to behavioural change over time even within three months of intervention programme.

TABLE : 8.15 SENSITIVITY OF BASAL-MR (Part B) TO BEHAVIOURAL CHANGES

	MEAN (n=17)	SD	"t" value
Problem Behaviour Scores			3.31**
Pre	7.823	9.00	
Post	2.529	3.43	

(** $p = <0.01$)

STEP VII: RELIABILITY

A test retest reliability exercise was conducted on a sample of 10 adult mentally retarded individuals. The one week test retest reliability coefficient for BASAL-MR (Part B) was found to be ($r=0.85$, $p=0.003$). The inter-rater reliability was worked out by computing pearson'e correlation between the ratings given by the research staff member on 10 individuals with mental retardation with those of the ratings given by one vaocational instructor specially trained to use this scale. The inter-rater reliability was also found to be high ($r=0.833$; $p=<0.003$).

STEP VIII: VALIDITY

The construct validity of the BASAL-MR (Part B) was established by measuring the significant difference between the mean scores at pre and post test levels. This change was found to be statistically significant ($p= <0.01$) (Table 8.15). Besides, face validity for BASAL-MR (Part B) obtained from vocational instructors also supported the fact that the scale was cpaable of measuring all type of problematic behaviours they ahd encountered in their practice.

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CHAPTER IX

ADMINISTRATION AND SCORING OF BASAL-MR (Part B)

There are specific guidelines which the trainers/users need to follow while administering and scoring BASAL-MR (Part B) which are included in this chapter. The BASAL-MR (Part B) is to be administered individually on each person with mental retardation. The trainers/user should go through the entire scale and familiarise with the meaning of each item before beginning to administer the scale.

ADMINISTRATION OF BASAL-MR (Part B)

The following points need to be considered while administering the scale:

1. Administer BASAL-MR (Part B) as also the (Part A) on the adult with mental retardation. Do not presume or assume whether a particular person has or does not have behaviour problems.
2. Read each item within every domain in the scale and assess whether the given person with mental retardation has or does not have, the stated problem behaviour.
3. As far as possible, use direct observation techniques rather than interview techniques to determine if the client has or does not have the stated problem behaviour.
4. It is not essential to complete the behavioural assessment of the person using BASAL- MR (Part B) within a single session. Depending on the nature of problem behaviours observed or reported, adults may have to be assessed over few sessions of observation. In some cases, where direct observation of problem behaviours is not possible, information can be elicited using interview method and supplemented from key informants such as parents/caretakers.
5. Enter the performance of the individuals and the score obtained as you administer the scale for all four occasions that you assess and evaluate the client during the year.


SCORING OF BASAL-MR(Part B)

The following is the criteria of scoring which need to be used for BASAL-MR (Part B):

1. For the given person with mental retardation, check each item of the scale and rate them along a three point rating scale, viz. never, occasionally or frequently.
 - a) If the stated problem behaviour has “never” been observed or reported in the person, then give a score of 0.
 - b) If the stated problem behaviour occurs sometimes, that is, once in a while or now and then, it is rated “Occasionally” and given a score of 1.
 - c) If the stated problem behaviour occurs quite often or, habitually it is rated as “frequently” and given a score of 2.

Thus, for each item on the BASAL-MR (Part B) an adult with mental retardation may get any score ranging from 0 to 2 depending on the frequency of that problem behaviour. Enter the appropriate score obtained by the person for each item in the appropriate boxes.

2. The maximum possible score for a person on BASAL-MR (Part B) is 240.
3. Add the individual scores of the person on each item within a domain and express it as ‘obtained score’ for that domain. Convert it into percentage for each domain.
4. Calculate the total ‘obtained score’ for all the twelve domains and express it as Grand Total ‘obtained score’ for BASAL-MR (Part B). A lower score indicates fewer /less behaviour problems.
5. Convert the total obtained score into percentages by dividing the total obtained score with the maximum possible score i.e. 240 and multiply by 100.
6. Administer the BASAL-MR (Part B) according to the above procedure on four occasions each time along with BASAL-MR (Part-A).

- 
- a) The first or initial assessment of the person is done before starting the teaching or training/management programme. This is called as baseline assessment.
- b) Repeat the next three assessments at the end of every three months i.e. one quarter or after a predetermined interval as per policy.
8. Enter the obtained scores, percentages, grand total scores and percentages attained by the person at the end of each assessment of evaluation in the appropriate boxes. (See appendix i 'Specimen of BASAL-MR (Part B) profile'.

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CHAPTER X

NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED

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BEHAVIOURAL ASSESSMENT SCALES FOR ADULT LIVING - MENTAL RETARDATION BASAL-MR (Part A)

Authors: Reeta Peshawaria, D.K.Menon, Don Bailey, Debra Skinner,
Rahul Ganguly and Ch.Rajshekar

Name of the Adult/Client	:	Level of Mental Retardation	:
Age	:	Occupation Status	:
Sex	:	Associated conditions, if any	:
Address & Phone No	:	Informant	:

ASSESSMENT

Baseline Assessment Date	:	Assessed by	:
First Assessment Date	:	Assessed by	:
Second Assessment Date	:	Assessed by	:
Third Assessment Date	:	Assessed by	:

Instructions

1. All items of BASAL-MR (Part A) should be essentially administered with adult/client.
2. Each item should be scored based on the 6 levels of performance i.e., independent=5 ; clueing/modelling=4; verbal prompting=3; physical prompting=2; totally dependent=1, not applicable=0.
3. To score independent (5), the adult/client should pass all the required number of items given in the brackets. For example, in Domain I PA-11 if the client is able to perform only 1 out of the 2 required exercises and does the second exercise with clues/modelling the score should be given as "clueing/modelling" = 4 and not independent = 5.
4. If an adult with mental retardation, with associated motor/visual/hearing disability, uses a supportive aid/adaptation for movement/vision/hearing independently; then functional independence in the said activity/item is sufficient to pass the item in the domain. Hence a score of 5 should be given.

For example, in Domain I (PA), to score independent = 5 on item 1, the adult who uses the wheelchair (or any other mobility aid) should independently reach the toilet, transfer

self on to the seat, use toilet and then move out of it -on his own,using supportive devices wherever necessary.

5. The assessment score for each item should be entered in the appropriate boxes given on the right side of the scale i.e. Baseline assessment, first assessment, second assessment and third assessment .
6. For some items examples are given in the assessment scale. The assessor can use other examples during assessment, and note them in the blank spaces given.
7. When an item is scored 5 (independent), the expected level of performance of the individual should be that, which is normally expected from an ordinary average adult individual functioning in the given cultural setting in which the adult mentally retarded individual resides.
8. Scoring based on direct observation of performance level of the adult/client on items is the best method of assessment. However information can be obtained from key informants/caretakers in case direct observation is not possible.
9. Wherever space is insufficient, use extra sheets.
10. If any item is marked with an asterisk (*) then refer to glossary at chapter V for further clarification on administration for that given item and if any item is marked with the sign of (#) then refer to chapter VI on list of materials to be used for assessment for the given item.
11. The scale provides provision for assessing adult's performance level for four occasions only. Printed or photocopies of the BASAL-MR scales can be used for subsequent assessments giving due credit to authors on front page.

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline	1st	2nd 3rd

I PERSONAL CARE AND APPEARANCE (PA)

- | | | | | |
|--------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Uses toilet. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Brushes teeth. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Washes face/hands/feet. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Takes body/head bath. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Combs/styles hair. # | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Trims/cuts toenails/fingernails.# | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Uses (any two) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| a) powder | | | | |
| b) perfume | | | | |
| c) deodorant | | | | |

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline	1st	2nd 3rd

- d) after shave lotion
- e) nailpolish
- f) buttu/bindi
- g) oils hair/body
- h) cream/vaseline

others

☐☐☐☐

8. Cares for menstrual hygiene. (For women only)

or

Shaves beard as needed. (for men only)

☐☐☐☐

9. Dresses appropriate to weather conditions and occasions. *

☐☐☐☐

10. Gets hair cut or ties ribbon/rubber band /clips on hair.#

☐☐☐☐

11. Performs exercises (Any two)*

- a) walking
- b) jogging
- c) riding a bicycle
- d) riding an exercise bike
- e) participates in exercise
- f) participates in aerobics
- g) gymnastics
- h) practices yoga
- i) swimming
- j) meditation

others

☐☐☐☐

12. Follows regular sleep timings.*

☐☐☐☐

13. Takes medicines as per instructions*.

☐☐☐☐

14. Gives simple first aid to self/others. (Any two) #

- a) applies bandage/band aid
- b) applies antiseptics
- c) measures body temperature
- d) rubs ointment

Item No.	DOMAINS/ITEMS	ASSESSMENT Baseline 1st 2nd 3rd
-------------	---------------	------------------------------------

e) applies eye/ear/nasal drops

f) does simple massage

others

☐☐☐☐

15. Can tell the negative effect of common hazardous substances/situations*. (Any two)

a) pesticides

b) alcohol

c) drugs

d) smoking

e) naked electric wire

f) inflammable objects (petrol/gas leakage/crackers)

others

☐☐☐☐

I PERSONAL CARE AND APPEARANCE

Total obtained score

☐☐☐☐

II FOOD MANAGEMENT (FM)

1. Eats with hands/spoon/knife/fork.

☐☐☐☐

2. Drinks from cup/glass/bottle. #

☐☐☐☐

3. Sets table/mat for meals.*

☐☐☐☐

4. Serves food, snacks,tea to self/others.

☐☐☐☐

5. Cleans table/mat after meals.* #

☐☐☐☐

6. Cleans and washes rice/pulses/vegetables/fruits.*

☐☐☐☐

7. Kneads dough.

☐☐☐☐

8. Grates/peels/cuts vegetables/fruits.#

☐☐☐☐

9. Stores grocery items/vegetables/fruit.

☐☐☐☐

10. Stores cooked food.

☐☐☐☐

11. Washes dishes/cooking utensils.*

☐☐☐☐

12. Cleans kitchen.*

☐☐☐☐

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline 1st	2nd	3rd

13. Prepares food items which don't require cooking. (Any two)

- a) bread-butter/jam
- b) sandwich
- c) soft drink
- d) butter milk
- e) lemon juice
- f) salad

others

☐ ☐ ☐ ☐

14. Does home/kitchen activity. (Any two)

- a) mixing
- b) grinding
- c) pounding
- d) using kerosene stove/gas/chullah
- e) using washing machine
- f) using pressure cooker
- g) using mixer and grinder

others

☐ ☐ ☐ ☐

15. Prepares food items which require cooking*. (Any two)

- a) tea/coffee/hot milk
- b) rice
- c) roti
- d) sabzi/curry
- e) idli/upma/halwa

others

☐ ☐ ☐ ☐

II FOOD MANAGEMENT

Total obtained score

☐ ☐ ☐ ☐

III HOUSEHOLD TASKS AND RESPONSIBILITY (HR)

- 1. Empties garbage.
- 2. Dusts household items.#
- 3. Sweeps/washes/mops floor.
- 4. Cleans bathroom/toilet.*

☐ ☐ ☐ ☐
☐ ☐ ☐ ☐
☐ ☐ ☐ ☐
☐ ☐ ☐ ☐

Item No.	DOMAINS/ITEMS	ASSESSMENT Baseline 1st 2nd 3rd
----------	---------------	------------------------------------

5. Makes bed.* ☐☐☐☐
6. Washes clothes and puts them on line. ☐☐☐☐
7. Sorts, folds and puts away dry clothes. ☐☐☐☐
8. Irons cotton clothes. (Any two)
- a) shirt
 - b) blouse
 - c) pant ☐
 - d) petticoat
 - others ☐☐☐☐
9. Mends clothes.# (Any two)
- a) stitches buttons
 - b) stitches hooks
 - c) stitches torn clothing
 - others ☐☐☐☐
10. Helps in the personal care of others. (Any two)
- a) bathing
 - b) powdering
 - c) dressing/undressing
 - d) cutting/filing fingernail/toenail
 - others ☐☐☐☐
11. Does other household activities. (Any three)*
- a) fetching milk
 - b) fetching drinking water
 - c) fetching newspaper
 - d) watering plants
 - e) replacing bulbs/tubes
 - f) pruning grass/plants
 - g) caring for pets
 - h) leaving and bringing children from school
 - i) cleaning bike/car/scooter
 - others ☐☐☐☐

Item No.	DOMAINS/ITEMS	ASSESSMENT
		Baseline 1st 2nd 3rd

12. Cleans/sets place of worship. (Any two)

- a) setting and lighting candle/lamp/agarbathi
- b) making garland
- c) cleaning worship place
- d) applying vermilion/sandalwood paste

others

☐☐☐☐☐

13. Prays daily.*

☐☐☐☐☐

14. Prepares a daily personal schedule of activities.* #

☐☐☐☐☐

15. Does unexpected emergency chores. (Any two)

- a) Calls doctor/hospital (telephone/personally) in case of any medical emergency.
- b) Calls parents/neighbours in case of any household emergencies like theft/fire/medical emergency etc.
- c) Welcomes known people at home during absence of parents/guardians.
- d) Calls police station in case of theft.
- e) Calls fire station in case of fire

others

☐☐☐☐☐

III HOUSEHOLD TASKS AND RESPONSIBILITY

Total obtained score

☐☐☐☐☐

IV COMMUNITY AND LEISURE (CL)

1. Walks to familiar places in the same block/colony that does not require crossing road. (Any two)

- a) relatives/friends house
- b) shops
- c) temple
- d) play ground/garden
- e) school/work place

others

☐☐☐☐☐

2. Walks to or rides bike/cycle to familiar places that requires crossing streets, roads and unmarked cross section. (Any two)

- a) relatives/friends house

- b) shops
- c) temple
- d) play ground/garden
- e) school/work place

others

☐ ☐ ☐ ☐

3. Uses transport.* (Any one)

- a) city bus
- b) suburban train
- c) private taxi
- d) chartered bus
- e) autorickshaw
- f) cycle rickshaw

others

☐ ☐ ☐ ☐

4. Plans for city/out of city tour.*

☐ ☐ ☐ ☐

5. Handles community emergencies. (Any two)

- a) when lost reaches friends/relatives house
- b) raises alarm when threatened/harmed by strangers
- c) raises alarm when things are snatched
- d) locates public toilet, if needed
- e) locates police station, if needed

others

☐ ☐ ☐ ☐

6. Shops for desired item. (Any two)*

- a) personal hygiene/grooming items
- b) clothes/shoes
- c) fruits/vegetables/groceries
- d) medicines

others

☐ ☐ ☐ ☐

7. Uses post office.*#(Any two)

- a) mails letter in mailbox
- b) purchases stamps/inland letter/envelops
- c) sends money order/registered post/packages

others

☐ ☐ ☐ ☐

Item No.	DOMAINS/ITEMS	ASSESSMENT Baseline 1st 2nd 3rd
----------	---------------	------------------------------------

8. Uses bank.* (Any one)

- a) verifies amount in his/her account
- b) makes deposit upto Rs.500
- c) withdraws money upto Rs.500/-
- others

☐ ☐ ☐ ☐

9. Orders and eats food in restaurant/street vendors* #.

☐ ☐ ☐ ☐

10. Plays indoor games. (Any one)

- a) video games
- b) carroms
- c) card games
- d) table tennis
- e) puzzles/luddo/chess
- others

☐ ☐ ☐ ☐

11. Performs media related activities. (Any two)

- a) reading/viewing books,newspaper and magazines
- b) listening to radio
- c) using cassette player
- d) gossip over phone with friends/relatives
- e) watching television
- f) watching home videos
- g) using video cassette player
- h) using computer
- others

☐ ☐ ☐ ☐

12. Performs crafts activities/hobbies. (Any two)

- a) needle work
- b) weaving/basketry
- c) art/craft
- d) drawing/painting/calligraphy
- e) photography
- f) scrapbooks/photo album
- g) coins/stamps collection
- h) garden/grow indoor plants
- i) kite flying

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline 1st	2nd	3rd

- j) plays instrument
- k) singing
- l) woodwork
- m) mechanical/electrical works
- n) dancing

☐ others

☐☐☐☐

13. Plays team sports. (Any two)

- a) track/field events
- b) frisbee/guli danda
- c) soccer
- d) basketball
- e) hockey
- f) volleyball
- g) badminton
- h) judo/karate
- i) lawn tennis/badminton
- j) mountaineering
- k) trekking
- l) kabbadi

others

☐☐☐☐

14. Observes/participates in community outings. (Any two)

- a) sporting events outside home
- b) watching movies/cinema theatre
- c) fair
- d) watching street theatres
- e) picnic
- f) visiting zoo/museum/park
- g) library/community center

others

☐☐☐☐

15. Tours within the city/outside city.*

☐☐☐☐

IV COMMUNITY AND LEISURE

Total obtained score

☐☐☐☐

V SEXUALITY (S)

1. Closes/bolts door/draws curtain while using toilet. ☐☐☐☐
2. Bathes in private. ☐☐☐☐
3. Dresses/undresses in private. ☐☐☐☐
4. Sleeps separately in corner/bed/room. ☐☐☐☐
5. Knocks before entering others closed room. ☐☐☐☐
6. Tells names of known people who are male. (Any two) ☐☐☐☐
7. Tells names of known people who are female. (Any two) ☐☐☐☐
8. Tells names of private body parts to differentiate sex using pictures of male/female anatomy.# ☐☐☐☐
9. Follows norms of contact in different types of relationship.
 - a. hugging ☐☐☐☐
 - b. kissing ☐☐☐☐
 - c. shaking hands ☐☐☐☐
 - others ☐☐☐☐
10. Rejects unwanted sexual advances.* ☐☐☐☐
11. Fulfills sexual desires following norms.* ☐☐☐☐
12. Tells minimum age of marriage of both men and women. ☐☐☐☐
13. Tells about various contraceptive measures used by men and women (Any two) (one used by men & one by women).* # ☐☐☐☐
14. Choose or use medically acceptable form of contraception for self.* ☐☐☐☐
15. Tells the various stages of childbirth.* # ☐☐☐☐

V SEXUALITY

Total obtained score

☐☐☐☐

VI WORK (W)

1. Sorts objects /materials by. # (Any four)

a) size ☐
b) shape ☐
c) color ☐
d) number ☐
e) texture ☐

others ☐☐☐☐

2. Stacks materials in packages of 10/12. # (Any two)

a) envelopes ☐
b) candles ☐
c) books ☐
d) baskets ☐

others ☐☐☐☐

3. Weighs materials upto 1Kg/1litre. (Any two)

a) nails ☐
b) pulses ☐
c) rice ☐
d) paints ☐
e) milk ☐

others ☐☐☐☐

4. Measures materials upto 1 meter. # (Any two)

a) cloth ☐
b) paper ☐
c) rexene ☐
d) leather ☐

others ☐☐☐☐

5. Does stationary related work. # (Any two)

a) places label on envelope/packages ☐
b) places stamps on envelope/packages ☐
c) seals packages /cartons using tapes of minimum of 5kgs/5liters ☐
d) fills/empties materials from containers of minimum of 5kgs/5liters ☐
e) Seals plastic bags containing materials upto 1 kg ☐

others ☐☐☐☐

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline	1st	2nd 3rd

6. Cleans and oils tools. (Any two)

- hammer
- screwdriver
- pliers
- tester
- stapler
- punching machine
- paper cutter

others

☐☐☐☐☐

7. Reaches and leaves work place on time.

☐☐☐☐☐

8. Requests leave from work. *

☐☐☐☐☐

9. Takes instructions for work.

☐☐☐☐☐

10. Follows work schedule*.

☐☐☐☐☐

11. Completes required work for a day.

☐☐☐☐☐

12. Completes additional work for a day if required.

☐☐☐☐☐

13. Obtains /puts away tools/materials after completion of task.

☐☐☐☐☐

14. Tells and follows safety rules. *

☐☐☐☐☐

15. Responds to compliments/criticisms.*

☐☐☐☐☐

WORK

Total obtained score

☐☐☐☐☐

VII FUNCTIONAL LITERACY (FL)

1. Keeps money given safely.*

☐☐☐☐☐

2. Purchases items minimum of Rs. 100.*

☐☐☐☐☐

3. Verifies amount to be paid and change to be received out of Rs. 100/-

☐☐☐☐☐

4. Saves money from earnings/gifts.*

☐☐☐☐☐

5. ends/retrieves money.*

☐☐☐☐☐

6. Identifies his/her name and address.# □ □ □ □
7. Adjusts to written signs/information as per needs. (Any two)
- a) temperature of iron
 - b) flame of gas/kerosene stove
 - c) temperature of refrigerator
 - d) speed of fan, air cooler/conditioner
 - e) volume and particular station on television/radio set
 - f) operating elevators
 - g) setting clock
 - others □ □ □ □
8. Identifies and uses as per the written information/signs/pictures.# (Any two)
- a) public toilets(gents, ladies)
 - b) public buses (numerals) (2/3 local buses)
 - c) traffic signs (minimum 5)
 - d) STD/PCO booth □ □ □ □
9. Gets needed information by using # (any two)
- a) calendar to identify date/approaching dates
 - b) menus to order meals in restaurant/hospital
 - c) telephone directories to locate telephone numbers and address
 - d) timetable/display board for arrival/dep. schedule of train/bus at the railway station/bus stop.
 - others □ □ □ □
10. Fills the blank spaces of the forms with basic needful information. # (Any two)
- a) prints name
 - b) prints address
 - c) indicates gender
 - d) writes date
 - e) signs name
 - f) writes bank account number
 - others □ □ □ □

11. Identifies and makes payment on /before due date.# (Any one)

a) electricity bill

b) water bill

c) telephone bill

others

☐☐☐☐☐

12. Writes letter.*

☐☐☐☐☐

13. Tells/reads 3 major news of the day*.

☐☐☐☐☐

14. Tells and dials telephone numbers of any two known persons.

☐☐☐☐☐

15. Writes telegram.* #

☐☐☐☐☐

FUNCTIONAL LITERACY

Total obtained score

☐☐☐☐☐

VIII SOCIAL-COMMUNICATION (SC)

1. Uses gestures/sounds/words to indicate. (Any two)

a) hunger

b) thirst

c) sleep

d) pain

others

☐☐☐☐☐

2. Greets others by (Any two)

a) touching feet

b) saying namaste

c) shaking hands

d) hugging

e) smiling

f) waving hand

others

☐☐☐☐☐

3. Introduces self/ family members to others.*

☐☐☐☐☐

4. Sits/stands at an acceptable distance from other people when conversing.

☐☐☐☐☐

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline	1st	2nd 3rd

5. Takes others article with permission.

☐☐☐☐

6. Recognizes and protects his own material and home possessions.*

☐☐☐☐

7. Initiates talk with others by asking introductory questions (Any two).

a) what is your name?

b) how are you?

c) what do you want ?

d) how did you come?

e) whom do you want to see?

others

☐☐☐☐

8. Responds appropriately during conversation verbally/non verbally. (Any two)

a) yes/no

b) nodding head

c) o.k

d) laughing

e) smiling

others

☐☐☐☐

9. Expresses likes and dislikes*. (Any two)

a) food items

b) clothes

c) person

d) work place

e) work type

others

10. Expresses own impressions, feelings and thoughts to others during conversation*

☐☐☐☐

11. Tells a story/joke/incident

☐☐☐☐

12. Gives appropriate parting response. (Any two)

a) goodbye/bye bye

b) saying namaste

c) touching feet

d) shaking hands

others

☐☐☐☐

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline	1st	2nd 3rd

13. Attends/Participates in organized religious/family/social activities.(Any two)

- a) parties
- b) religious functions
- c) ceremonies
- d) festivals
- others

☐☐☐☐

14. Offers and asks for assistance.*

☐☐☐☐

15. Gives compliments. (Any two)

- a) shabash
- b) looking good
- c) well done
- d) nice work
- e) very good
- other

☐☐☐☐

VIII SOCIAL - COMMUNICATION

Total obtained score

☐☐☐☐

NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED

Manovikasnagar, Bowenpally, Secunderabad-500 009.

BEHAVIOURAL ASSESSMENT SCALES FOR ADULT LIVING - MENTAL RETARDATION BASAL-MR (Part B)

**Authors: Reeta Peshawaria, D.K.Menon, Don Bailey, Debra Skinner,
Rahul Ganguly and Ch.Rajshekar**

Name of the Adult/Client	:	Level of Mental Retardation	:
Age	:	Occupation Status	:
Sex	:	Associated conditions, if any	:
Address & Phone No	:	Informant	:

ASSESSMENT

Baseline Assessment Date	:	Assessed by	:
First Assessment Date	:	Assessed by	:
Second Assessment Date	:	Assessed by	:
Third Assessment Date	:	Assessed by	:

Instructions

1. Each item should be scored based on three levels of frequency of problem behaviour, i.e., Never, Occasionally and Frequently. Score 0 for Never, 1 for Occasionally, and 2 for Frequently.
2. Enter the appropriate numerical score of 0, 1, 2 against each item for the client, in the appropriate box, i.e., baseline, first assessment, second assessment and third assessment.
3. Add the total problem behaviour score for each domain and for all domains. Enter the scores in the profile sheet of BASAL-MR (Part B)
4. Use direct observation methods as far as possible to assess problem behaviours, however, when it is not possible, information can be obtained or supplemented from parents/care takers.

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline 1st	2nd	3rd

I PHYSICAL HARM TOWARDS OTHERS

1. Verbally threatens to harm others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Pushes others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Pinches others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Pulls hair/ear/body parts of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Bites others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Kicks others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Hits others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Attacks or pokes others with knife/scissors/blade/others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Throws objects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Presses others neck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Any other (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I PHYSICAL HARM TOWARDS OTHERS

(Maximum score 24)

Total obtained score

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

II DAMAGES PROPERTY

1. Tears/Pulls threads from clothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Tears book/paper/magazines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Breaks objects/glass/toys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Damages furniture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Any other (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

II DAMAGES PROPERTY

(Maximum score 12)

Total obtained score

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

I PHYSICAL HARM TOWARDS OTHERS

- | | |
|---|---------|
| 1. Verbally threatens to harm others | □ □ □ □ |
| 2. Pushes others | □ □ □ □ |
| 3. Pinches others | □ □ □ □ |
| 4. Pulls hair/ear/body parts of others | □ □ □ □ |
| 5. Bites others | □ □ □ □ |
| 6. Kicks others | □ □ □ □ |
| 7. Hits others | □ □ □ □ |
| 8. Attacks or pokes others with knife/scissors/blade/others | □ □ □ □ |
| 9. Throws objects | □ □ □ □ |
| 10. Presses others neck | □ □ □ □ |
| 11. Any other (1) | □ □ □ □ |
| (2) | □ □ □ □ |

I PHYSICAL HARM TOWARDS OTHERS

(Maximum score 24)

Total obtained score

--	--	--	--

II DAMAGES PROPERTY

- | | |
|--------------------------------------|---------|
| 1. Tears/Pulls threads from clothing | □ □ □ □ |
| 2. Tears book/paper/magazines | □ □ □ □ |
| 3. Breaks objects/glass/toys | □ □ □ □ |
| 4. Damages furniture | □ □ □ □ |
| 5. Any other (1) | □ □ □ □ |
| (2) | □ □ □ □ |

II DAMAGES PROPERTY

(Maximum score 12)

Total obtained score

--	--	--	--

Item No.	DOMAINS/ITEMS	ASSESSMENT			
		Baseline	1st	2nd	3rd

III MISBEHAVES WITH OTHERS

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Pulls objects from others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Interrupts when others are talking | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Makes loud noises when others are working or reading | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Takes others possessions without their permission openly | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Knocks things down | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Tell others what to do and wants his/her way (bossy) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Uses abusive language | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Any others (1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> (2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

III MISBEHAVES WITH OTHERS

(Maximum score 18)

Total obtained score

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

IV TEMPER TANTRUMS

- | | | | | |
|------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Cries excessively | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Screams | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Slams doors | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Bangs objects | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Stamps feet | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Kicks legs while lying on floor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Spits on others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Any others (1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> (2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

IV TEMPER TANTRUMS

(Maximum score 18)

Total obtained score

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline	1st	2nd 3rd

V SELF-INJURIOUS BEHAVIOURS

- | | | | | |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Verbally threatens to harm self | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Bangs head | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Bites self | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Cuts or mutilates self | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Pulls own hair | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Peels skin/wounds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Scratches self | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Hits self | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Puts objects into eyes/nose/ears | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Eats inedible objects | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Bites nails | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Any others (1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

V SELF-INJURIOUS BEHAVIOURS

(Maximum score 26)

Total obtained score

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

VI REPETITIVE BEHAVIOURS

- | | | | | |
|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Sucks thumb/fingers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Rocks body | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Nods head | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Makes peculiar sounds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Bites ends of pen/pencil | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Taps feet | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Item No.	DOMAINS/ITEMS	ASSESSMENT			
		Baseline 1st	2nd	3rd	
7.	Waves hands/shakes body parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Grinds teeth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Swings round and round	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Rotates objects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Any others (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VI REPETITIVE BEHAVIOURS		Total obtained score			
(Maximum score 24)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VII ODD BEHAVIOURS					
1.	Laughs to self	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Laughs inappropriately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Talks to self	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Talks too much	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Hoard unwanted objects (sticks, thread, pieces of old clothes, plastic bags, papers, empty cigarette packets, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Plays with unwanted objects excessively (Clothes, chappals, strings, faeces, water, dirt, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Picks nose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Stands too close to people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Shakes hands/greets/touches strangers unnecessarily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Smells objects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Does not sit with or talks to people/keeps aloof	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Sits, stands lies down for long periods of time without doing anything	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Item No.	DOMAINS/ITEMS	ASSESSMENT		
		Baseline	1st	2nd 3rd

13 Any others (1)

☐ ☐ ☐ ☐

(2)

☐ ☐ ☐ ☐

VII ODD BEHAVIOUR

Total obtained score

(Maximum score 28)

☐ ☐ ☐ ☐

VIII INAPPROPRIATE SOCIAL BEHAVIOURS

1. Lies or twists the truth to his own advantage

☐ ☐ ☐ ☐

2. Steals others articles knowingly

☐ ☐ ☐ ☐

3. Cheats in games

☐ ☐ ☐ ☐

4. Gambles

☐ ☐ ☐ ☐

5. Any other (1)

☐ ☐ ☐ ☐

(2)

☐ ☐ ☐ ☐

VIII INAPPROPRIATE SOCIAL BEHAVIOURS

Total obtained score

(Maximum score 12)

☐ ☐ ☐ ☐

IX INAPPROPRIATE SEXUAL BEHAVIOURS

1. Makes obscene gestures

☐ ☐ ☐ ☐

2. Exposes body parts inappropriately

☐ ☐ ☐ ☐

3. Touches others private parts in public

☐ ☐ ☐ ☐

4. Touches own private parts in public

☐ ☐ ☐ ☐

5. Undresses in front of others intentionally

☐ ☐ ☐ ☐

6. Uses vulgar language

☐ ☐ ☐ ☐

7. Touches members of opposite sex unnecessarily

☐ ☐ ☐ ☐

Item No.	DOMAINS/ITEMS	ASSESSMENT			
		Baseline	1st	2nd	3rd

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 8. Sits/lies on the lap of members of opposite sex in public | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Strips clothes of members of opposite sex in public | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Masturbates in public | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Hoards items of sexual interest related to members of opposite sex
(undergarments/accessories/condoms/others) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Insists on sleeping with others | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Inserts harmful objects into private parts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Peeps into others privacy | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Uses younger children for sexual satisfaction | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Kisses/hugs othersexcessively | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Keeps watching members of opposite sex continously | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Any other (1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

IX INAPPROPRIATE SEXUAL BEHAVIOURS

Total obtained score

(Maximum score of 38)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

X REBELLIOUS BEHAVIOURS

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Does not do what told to do | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Does opposite of what is requested | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Takes very long intentionally to complete a task. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Continues to argue | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Goes out of house/work place without informing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Any other (1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

X REBELLIOUS BEHAVIOURS

Total obtained score

(Maximum score 14)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

XI HYPERACTIVE BEHAVIOURS

- | | |
|--|---|
| 1. Does not pay attention to the task at hand | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2. Does not continue with the task at hand for required time | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3. Does not sit at one place for required time | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4. Any other (1) | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (2) | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

XI HYPERACTIVE BEHAVIOURS

(Maximum score 10)

Total obtained score

☐ ☐ ☐ ☐

XII FEARS

- | | |
|----------------------------------|---|
| 1. Fear of animals/birds/insects | |
| (1) Specify _____ | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (2) Specify _____ | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (3) Specify _____ | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 2. Fear of objects | |
| (1) Specify _____ | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 3. Fear of places | |
| (1) Specify _____ | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 4. Fear of persons | |
| (1) Specify _____ | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 5. Any other (1) | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| (2) | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

XII FEARS

(Maximum score of 16)

Total obtained score

☐ ☐ ☐ ☐

NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED

Manovikasnagar, Bowenpally, Secunderabad-500 009.

BEHAVIOURAL ASSESSMENT SCALES FOR ADULT LIVING - MENTAL RETARDATION

BASAL-MR (Part A)

PROFILE SHEET

Name of the Client: N K

Age: 21yrs

Sex: female

Level of Retardation: Severe

Associated conditions: nil

S. DOMAINS No.	Maximum Possible Score	Obtained score				Percentage			
		Base line	1 st	2 nd	3 rd	Base line	1 st	2 nd	3 rd
1. Personal Care And Appearance	75	48	50	54	56	64	67	72	74.6
2. Food Management	75	48	52	54	58	64	69.3	72	77.3
3. Household Tasks And Responsibility	75	48	54	56	60	64	72	74.6	80
4. Community And Leisure	75	40	45	48	50	53.3	60	64	66.6
5. Sexuality	75	49	51	53	55	65.3	68	70.6	73.3
6. Work	75	48	50	53	59	64	67	70.6	78.6
7. Functional Literacy	75	24	30	33	36	32	40	44	48
8. Social Communication	75	67	68	70	72	89.3	90.6	93.3	96
9. GRAND TOTAL	600	372	400	421	446	62	66.6	70.1	74.3

BASAL-MR (Part B)

DOMAINS	Maximum Possible score	Obtained score				Percentage			
		Base line	1 st	2 nd	3 rd	Base line	1 st	2 nd	3 rd
1. Physical Harm Towards Others	24	8	5	3	1	32	20	12	4
2. Damages Property	12	1	1	0	0	8	8	0	0
3. Misbehaves With Others	18	7	4	3	0	38	22	17	0
4. Temper Tantrums	18	2	1	0	0	11	5	0	0
5. Self-Injurious Behaviours	26	2	2	1	0	8	8	4	0
6. Repetitive Behaviours	24	2	1	0	0	8	4	0	0
7. Odd Behaviours	28	2	1	0	0	7	3.5	0	0
8. Inappropriate Social Behaviours	12	2	1	1	0	16.6	8.3	8.3	0
9. Inappropriate Sexual Behaviours	38	0	0	0	0	0	0	0	0
10. Rebellious Behaviours	14	9	5	4	1	64	35.7	28.6	7.1
11. Hyperactive Behaviour	10	6	3	2	1	60	30	20	10
12. Fears	16	0	0	0	0	0	0	0	0
GRAND TOTAL	240	41	24	14	3	17	10	5.8	1.2

NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED

Manovikasnagar, Bowenpally, Secunderabad-500 009.

BEHAVIOURAL ASSESSMENT SCALES FOR ADULT LIVING - MENTAL RETARDATION BASAL-MR (Part A) PROFILE SHEET

Name of the Client:
Age:
Sex:

Level of Retardation:
Associated conditions:

S. DOMAINS No.	Maximum Possible Score	Obtained score				Percentage			
		Base line	1 st	2 nd	3 rd	Base line	1 st	2 nd	3 rd
1. Personal Care And Appearance	75								
2. Food Management	75								
3. Household Tasks And Responsibility	75								
4. Community And Leisure	75								
5. Sexuality	75								
6. Work	75								
7. Functional Literacy	75								
8. Social Communication	75								
9. GRAND TOTAL	600								

BASAL-MR (Part B)

DOMAINS	Maximum Possible score	Obtained score				Percentage			
		Base line	1 st	2 nd	3 rd	Base line	1 st	2 nd	3 rd
1. Physical Harm Towards Others	24								
2. Damages Property	12								
3. Misbehaves With Others	18								
4. Temper Tantrums	18								
5. Self-Injurious Behaviours	26								
6. Repetitive Behaviours	24								
7. Odd Behaviours	28								
8. Inappropriate Social Behaviours	12								
9. Inappropriate Sexual Behaviours	38								
10. Rebellious Behaviours	14								
11. Hyperactive Behaviour	10								
12. Fears	16								
GRAND TOTAL	240								

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