Chapter Two

ORIENTATION TOWARDS CONCEPTUAL CLARITY

The problem of mental retardation is one with enormous psycho-social implications. Much of the confusion and misinterpretation that is associated with the concept of intelligence has spread to the study of mental retardation. The result is that the label, 'mentally retarded', is frequently misunderstood, not only by the general public but all too often by professionals as well. There are crucial disagreements among educators, psychologists, social workers and medical practitioners about who should be labeled mentally retarded and who should not. This is an important legal issue because, whenever special intervention programmes for the mentally retarded are spelt out, the kinds of people who are entitled to these services should be clearly specified. Hence, it is imperative that retardation be defined clearly, reliably and in such a way that all people who could benefit from special intervention programmes for the retarded be included, but excluding those people for whom the potential harm resulting from being so labeled would outweigh the benefits.

Attempts to define the phenomenon of mental retardation have ranged through the ages, from the quality of individual adjustment to the environment and culture, the performance of individuals on specifically designed tests of intellectual and adaptive behaviour, and finally to the theoretical
considerations involving the biogenic or psychogenic origin of mental retardation.

The AAMD Consensus

By far the most widely accepted current definition of mental retardation today is that adopted by the American Association of Mental Deficiency (AAMD, Grossman, 1973). As per the definition, 'mental retardation refers to significantly sub average, general intellectual functioning existing concurrently with deficits in adaptive behaviour, and manifested during the developmental period'. The underlying note of the definition emphasizes on the incurability and the irreversibility of the handicap. The problem of mental retardation, hence, presents a pervasive psycho-social problem. The dynamic problem faced by the multiple member team of medical and social work personnel, special educators and psychologists is to assign a legitimate definition for the concept of mental retardation, classify the retardates according to their functioning levels and growth potentials; and implement intervention strategies for the retardate's promotion of psychological growth, according to the retardate's needs and level of inculcating skills.

The present investigation deals with the assessment of the retarded child's cognitive, adaptive, social and psychological growth, which are in turn contingent upon the dynamisms and variables operative within the family and school milieu. The retardate category dealt in the present
investigation falls within the 'educably mentally retarded', (E.M.R.) category and hence it is imperative to outline definitional, classification and remedial measures to clearly isolate this group from the wide range of the retarded population.

**The Parameters for Classification and the Levels of Mental Retardation**

Mental retardation is subject to an interminable number of classifications, which satisfy the needs of a given discipline, service, or area of investigation. An extensive survey of literature, Appel (1964), Rabinow (1964), Hewett (1964), Shereenberger (1964), Baumeister (1964), Goldstein (1965), Garrison (1971), reveals that a rather wide variety of parameters have served for different classification schemes, both in historical and current perspectives.

Although used with varying frequency, five general parameters developed by the AAMD, Grossman (1961) for classification seem evident.

(a) **Severity of Symptoms**

Under this category the AAMD (1961) has developed a system of diagnostic classification of the retarded, based on the retardate's intellectual levels of functioning. Individuals with IQ's between two and three standard deviations below normal are labelled 'mildly retarded', those with IQ's between three and four standard deviations
below normal are called 'moderately retarded', those with IQ's between four and five standard deviations below average are referred as 'severely retarded', and those with scores greater than five standard deviations below normal are called 'profoundly retarded'. Stemming from the above diagnostic classification, educators classify retarded children into the categories of 'educable mentally retarded', the E.M.R. - a group that can be inculcated with minimal cognitive and adjustable skills and can be rehabilitated as semi sufficient and semi-productive members within the community. This group falls within the direct search light of special education and intervention programmes, the trainable mentally retarded, the T.M.R. - a group that is not usually incorporated into the special school milieu and can be inculcated with basic self care, social and simple repetitive and mechanical vocational activities, the severely mentally retarded, the S.M.R. - a group that is referred to as custodial, as they exist in a vegetative state, cannot be taught any basic psychological and psycho social skills, and are completely outside the purview of the special school influences.

(b) **Symptom Etiology**

Another parameter for classification is etiology of symptoms. This parameter focusses on an important manifest aspect of mental retardation. The symptomatical conditions of mental retardation are variously associated with disorders of metabolism or nutrition, disorders of infection
and intoxication, disorders of the brain, chromosomal disorders, gestational disorders etc.

(c) Syndrome Description

This approach to classification involves the description of various forms of retardation based on symptom grouping of physical and behavioural observations.

(d) Adaptive Behaviour

This is defined as the effectiveness or degree with which the individual meets the standards of personal independence and social responsibility expected of his age and cultural group. Since these expectations vary for different age groups, inadaptive behaviour varies at different ages. It is the deficiencies of the adjustive skills that usually determine the retardates retardation level and the nature of intervention programmes to be implemented to them.

(e) Educable Expectations

This approach to classification specifies IQ categories for certain groups of retarded individual and an emphasis on the development of educational programmes based on the IQ categories of the retardates. Under this classification the educable range between 59 to 75, the trainable between 20 to 49 and below 20 for the custodial.

Attempts at conceptual classification of the phenomena of definition and classification of mental retardation are
essential to comprehend the range of retardation symptoms prevalent, the kind of developmental potentials the various categories of retarded individuals possess, the kind of intervention programme to be implemented to them and the retardate's eventual adjustment and vocational rehabilitation within the wider community. Not all retarded children are capable of benefiting from efficacious intervention strategies. The E.M.R. category is the only one, from the range of affected retarded members, which can be benefited from programmed instructional methods, and progress to minimal cognitive and social success within the family and the community.

The present section incorporates a brief assessment of the two major intervention agencies afforded to the E.M.R. (the sample group within the present research framework) and an analysis of the primary and secondary characteristics of the retardate, capable of benefiting from systematic inculcation at the family and special school level.

**The Special School Educative Process**

In recent years there has been a clamouring demand for special schools to absorb 'low-functioning' children. Within the special school milieu, the educable mentally retarded children are given enriched stimulation and a programmed and systematic inculcation of cognitive, social and self help skills. It is only the E.M.R. group that is readily absorbed
in the special school or class and they are capable of developing the certain predicted levels of growth in all basic areas of functioning. The special class emphasizes the growth of social competence and adjustive skills and places lesser emphasis on activities which involve active cognitive intervention. Individualized appraisal of each retardate's growth pattern and growth potential is a major priority of the special class. This process of individualized attention is developed in group settings to provide a major impetus to inculcation of accepted modes of group interaction and development of social skills.

**Orientations in Special Education**

In organizing any educational programme for the E.M.R., the first task is to determine its basic orientation and goals. A review of literature reveals several orientations in this field. Kirk (1970) lists four major objectives of special education for the E.M.R. These are an emphasis on self realization of the retardate, appropriate development of human relationships, induction of economic efficiency and awareness of civic responsibilities. Johnson (1973) in his educational purposive programme outlines the major goals as: the development of social competence and social confidence through directed social experiences, development of occupational competence through efficient vocational guidance and training, development of emotional security and independence in the family and school milieu through effective mental
hygiene programmes and development of adequate health, sanitation, recreational measures which promote adequacy and allow the retardate to live with his own self in a state of equilibrium.

A Brief Analysis of the Different Systems and Approaches to Special Education

The field of education has always been characterized by a tremendous diversity of approaches, methods and theories. Experts in special education have proposed a number of different systems and approaches to teaching, and while each has had an impact, no one approach is dominant. Theories of special education are too numerous to review in detail, and so only a brief coverage of the important approaches to teaching the retarded is provided here. An inclusion of these systems and approaches is deemed necessary, so as to provide a direction in the understanding of the orientations of the present day special class and to provide a rationale for the inclusion of its specified goals, which in turn have their base in the following approaches.

Sequin's Physiological Method

Edourd Sequin's (1846, 1866) method was called the physiological approach because the sequence of instruction was organized to parallel what was then thought to be the general pattern of physiological development. The first step was education of the muscle system, a procedure that
is now called motor training. He emphasized physical activity, particularly encouraging those activities that satisfied the child's own needs and desires. Particular stress was placed on the training of the hands because of their importance in effective adjustment. He felt that one of the major problems with a mentally retarded child was that many sense impressions failed to reach the nervous system, and that this lack could be overcome through systematic exercises. He proposed that children be required to discriminate between different weights, textures, sizes, shapes, and so on. Auditory training was done through the use of music. Consistent with his idea of training the muscles first, Sequin (1846) proposed that reading be taught first by teaching the child to write.

**Montessori's Auto-Educational Method**

Maria Montessori's (1912) method is an auto-educational approach because the child is largely self taught. Montessori emphasized the fact that teachers and schools cannot directly teach, but they can only provide an environment that is conducive for the child to learn. Her approach is based on the assumption that children want to learn and have a natural drive to improve their own competency. Hence, her method is similar to the modern open class-room in which each child is engaged in activities of his or her own choosing, and the teacher plays a supporting role rather than a directing role.
Montessori placed a good deal of emphasis on the training of the senses as well. Some of Montessori's ideas have been incorporated into modern educational practices while others have been rejected. Her assumption that each child should work at his or her own pace on materials of his or her own choosing was considered a somewhat radical idea at the turn of the century but is now almost universally accepted. Similarly, her idea that education is only effective if it is enjoyable and should be based on the child's own interests has wide popular support.

Piaget's Contribution to Special Education

Piaget (1952) is a direct intellectual descendant of Maria Montessori. Both stressed the natural curiosity of the child and minimized the role of direct teaching, emphasizing that children had to discover relationships for themselves.

The first principle of education which derives from Piaget's theory is that children learn through action. Children learn about numbers and quality and space and time by playing with objects and with each other, not by listening to a teacher. A second principle is that children are naturally curious and are attached to experiences and objects from which they can learn. Thus, the ideal classroom is a relatively unstructured and permissive area in which children are permitted to choose for themselves what to do from a wide variety of different materials, with the teacher
taking a relatively passive role. A related implication is that individual differences should be encouraged and accepted.

Another principle is that children must learn primarily by discovering things for themselves. Knowledge that is explicitly taught is likely to be superficially learned and quickly forgotten. This is particularly true of the various logical rules on which Piaget has placed so much emphasis. Simply telling children that the amount of water remains the same when it is poured from one container to another is futile; it is necessary for children to discover this for themselves by pouring water back and forth.

A final principle is that teachers should not assume that children think in the same way that adults do. Virtually every parent and teacher has at one time or another tried to explain something to a child using adult logic, and the explanation was completely beyond the child. Such occurrences are difficult to avoid entirely, it is nearly as hard for an adult to think like a six year old as it is for a child to think like an adult. However, if teachers are made aware of the nature of children's thinking, the frequency of such problems in communication can be minimized.

The Unit Method

During the 1920's and 1930's, the philosophy of education began to shift away from instruction in formal disciplines and toward training practical skills and more applied knowledge. One manifestation of this movement that
was particularly popular in special education was the method of teaching through units or projects. Instead of dividing the instructional time for reading, so much time for arithmetic, and so on, much longer periods of time would be devoted to a unit of experience, a problem area selected from real life such as health, family life, or leisure time. The emphasis is on first hand experience and applied practical knowledge, and the assumption behind it is that students will learn practical skills such as how to plan a project, how to manage time, where to get information, and how to go about solving problems. The basic cognitive and socially adjusitive skills can be taught in connection with the units rather than independently in order to maintain interest.

The best known advocate of the unit approach to special education was Christine Ingram (1935), who described a number of possible units for retarded children of different levels. Among the suggestions which she made are the following:

1. The units should evolve from the real life experiences of the children and should be based on their interests.

2. The choice of the unit should depend on the children's level of physical, social and mental development.

3. The unit should develop both individual abilities and interests and group activity and cooperation.

4. The units should offer opportunity for the development of basic habits and attitudes.
5. The unit should develop interests in out of School activities. It should go beyond the classroom into the home and community.

6. The unit method, should include activities that utilize the basic cognitive and social adjustive skills.

The unit method, or at least variations on it, is still in wide use today, although few teachers use this method entirely. Johnson (1971) provides some up to date guidelines based on the foregoing suggestions on how to develop units for exceptional children.

The Modified Traditional Curriculum

It has only been in the past few years that most teachers of the mentally retarded have received much special training in special educational methods. Most teachers of special classes were trained in and had experience in regular classroom teaching, and thus, tended to use basically the same approach that was used to teach non retarded children. The difference between the special class and the regular class was not so much in what was taught or how it was taught, but in the rate at which material was covered. The special class teacher would spend more time on any given topic and would in general progress more slowly. Thus, less material was covered and the teacher would go into less depth on what was covered. This approach is often referred to as a watered
down curriculum. In other words, most of what goes on in most special education classes on a day-to-day basis is not very different from what is occurring in regular classes down the hall. Sinches and Bohr (1963), after reviewing more than 250 curriculum guides for the mentally retarded concluded that most represent little more than a reappraisal of the course of study used for normal children. Although this situation is sometimes criticized Fuchigami (1969), there is not necessarily anything wrong with teaching basically the same material to retarded children that is taught to everyone else, and since the learning characteristics of retarded children do not differ significantly from those of other children, there is no reason why methods effective with normal children would not be equally effective with the retarded. The main point emphasized is that the special education curriculum is often more simplified and less challenging, and thus, the students are not pushed to perform at their best possible level. The curriculum emphasis is on the maximizing of the adjutive skills and minimal emphasis on taks requiring cognitive intervention.

Perceptual Motor Training

There is a group of special educators whose methods of teaching are in a sense qualitatively different from other approaches to teaching slow learning children. These are the workers of the school thought of Strauss and Lehtiren (1947) who did research on brain damage. These people
doemphasize the teaching of the traditional subjects with cognitive intervention and place considerable stress on perceptual motor training.

Johnson's (1971) theory based on perceptual motor training laid heavy emphasis on the fact that development must always follow an orderly course, with the differentiation of motor patterns preceding perceptual development, and perceptual development preceding conceptual learning. Keppel describes a large number of exercises that are specially designed to provide remedial measures in the retardate's development, and the implicit assumption is that as the child's perceptual and motor skills are improved through training, the learning difficulties will clear up because they were based on the faulty perceptual development. A number of other theorists such as Silverstein (1964), (1965), Beck (1966), have advocated similar techniques.

Recent Innovations in Special Education

The recent trends in special education are aimed towards mainstreaming the E.M. retarded into normal classes. Once they have developed effective levels of social and cognitive skills and towards the break down of material to be taught into simple components which are thereby inculcated in a hierarchical fashion. This latter process is the task analysis method and is advocated by workers like Bloom (1971), Menolascino (1970), Smith (1966) etc. Another
innovation in the field of special education is in the process of diagnosis of retardation and a consequent plan of strategies to be used for intervention purposes. The emphasis now is not on simply labeling children but towards a finer analysis of the child's functioning, determining in minute details the retardate's specific skill areas, the growth potentials and discrepancies in predicted and achieved levels of growth.

Research has also been geared towards the utility of placing the EMR child in regular classes or in special classes within the regular school or in special classes in special schools, Baldwin (1958), Johnson (1971), Bactt (1968), Kern and Pfaella (1962), Goldstein (1965), Dunn (1968), Srivastava (1970), Mercer (1973), Baller (1936). The majority of the research has given support to the special classroom as the most efficacious in the social and personal development of the E.M.R. The research programmes propose that each E.M.R. child should go through an intensive and thorough diagnostic programme which would help evolve a prescriptive teaching programme that is best suited for the child's optimal development.

The ultimate aim and purpose of implementing intervention programmes for the E.M.R. is to facilitate their adjustment to the community at the adult level as social participants of some competent level. However, the special class inculcation process alone is not effective enough to
induce positive change and promote mental health within the retardate. An effective school intervention programme has to encompass an effective teacher-parent interaction session to measure the retardates developmental trend and behavioural deficits and evolve goals incorporating the family and school milieu, to promote progress in the retardates. Such a trend has been displayed by implemented intervention programmes by Edwards (1967), Loeb (1966), Jackson (1978), Baldwin (1955), describe the effective operation of a newly established 'early age intervention centre' for the E.M.R. children. The programmes involves monthly socio cognitive developmental profiles of the retardate and parent training programmes to help facilitate the retardate's growth. A number of stimulation programmes developed by Menolascino (1970) entitled 'Teacher Parent Planned Programmes for the Retarded' emphasize similar goals as Taylor (1964), Garrison (1971).

The direction leads, hence towards an integrated approach of the family and school personnel towards the effective rehabilitation of the retardate. The family milieu, however, dealing continuously with the retardate and realising its long term and irreversible nature often react in an adverse manner to the retardate. These tragic crises reactions hinder a systematic and efficacious handling of the retardate within the family milieu. Workers like Evans (1954), Loeb (1966), Beck (1966), working on E.M.R. mongoloids and their parental reactions report a finding of marital breakdown, severe marital disharmony, anxiety and
depressive reactions among a majority of the parent figures. The parents undergo a myriad of reactions which either facilitate a positive goal oriented approach in the retardate's rehabilitation or disallow the parents to implement any positive stimulation programme because of the overwhelming crisis perceived in the form of the retardate's presence.

THE FAMILY AS AN INTERVENTION UNIT

An Analysis of Parental Reactions

The detrimental effect of a retarded child on the family has recently been expressed with special poignance by Olshansky (1962, 1966) who indicates that mental deficiency is a family tragedy, and that most parents respond to the incident with "chronic sorrow". Families who wished to place their mongoloid children in institutes were apt to report that they were not able to give enough attention to their other children, that the emotional bond between the parents was strained that their normal social activities were disrupted, and that their other children were socially embarrassed (Kramm, 1963). Wolfensberger (1967a) cited a number of articles and studies most of which seemed to suggest that having a retarded child had an adverse effect on the family.

Barsch (1961), Beck (1966) compared mothers of retarded children, chronically ill children, neurotic children, and
healthy children. Mothers of retardates and neurotics showed higher levels of depression and difficulty in coping, with the affected child and a lower sense of maternal competence. Mothers with retardates scored higher in preoccupations with the child. All of the deficiency groups ranked lower in enjoyment of the child, but only the neurotic group was significantly lower in deriving satisfaction from relationships with others. An article by Edwards (1967), cited by Farber (1968b) indicated that having a retarded child early in a marriage retarded the father's chances of upward mobility more than having a retarded child later in marriage.

Farber (1964, 1968) has been very active in the investigation of the effects of retardates on their parents and siblings, and has recently summarized relevant work by himself and others, Farber (1968b) and Ryckman (1965). Farber and Ryckman concluded that the retarded child's siblings were affected adversely by the high degree of dependency of the retarded child. This dependency adversely affected the siblings' relationships with their mothers, in that increased responsibility was given to the siblings for the care of the retarded child. He also concluded that a normal girl who interacts less frequently or not at all with her retarded sibling.

The possible pervasiveness of the influence of a retarded sibling is indicated by Farber (1964) who related life goals to degree of interaction with the retarded
sibling. The authors suggested that the sustained interaction with the retarded sibling comes to be regarded as a duty, and that the normal sibling internalizes welfare norms and turns his life career toward goals which require dedication and sacrifice. The individuals who interacted less were less concerned with life goals involving interpersonal relations. Parents rated the individuals who interacted high, high in such traits as nervousness, moodiness, stubborness and anger symptoms. It might, of course, be that the higher interaction rate is caused by certain personality traits and value orientations rather than vice versa. The Farber and Jenne study is reminiscent of the position taken by Holt (1958) who said that families with retarded members gain in a spiritual and philosophical way of calm acceptance of painful realities and of Ingram (1953) who said that caring for the retarded child provides excellent character training for the siblings. Also, Mahoney (1958) suggests that the retarded child can make a positive contribution to family cohesiveness if only by providing a scapegoat for other family members.

The research findings of some retardation experts, as expressed in their writings, may be summarized as follows: (a) a retarded child is a traumatic event, which generates disappointment, grief, frustration and anger. This precipitates a crisis which leads to needs for emotional support and life-long counselling, and which causes chronic
sorrow, Olshansky (1962), Appel (1963), Begab (1963), Farber (1964) and Abraham (1958). This chronic sorrow is not a neurotic manifestation — but a natural and understandable response, Olshansky (1966). Failure to show grief may be a sign of pathology, Ross (1963), (b) The parents must however accept, love and cherish their child, Wolfensberger (1967a), and in this process they can expect to have no rewarding experiences, Silverstein (1964), (c) Wolfensberger (1967a) postulates that institutionalization may aggravate the parents' conflict as the decision to institutionalize is potentially emotionally self-destructive, and a hazard to the mental health of the family unit, World Health Organisation (1954). Such a decision can have disastrous consequences for both child and family including feelings of rejection and further deterioration of the retardates, Goodman (1964).

An analysis of the special school educative process and the commonly observed reactions within the family milieu of the retarded child, afford a brief insight in the variables operative within them, which in turn makes them effective or ineffective intervention agents in the promotion of the retardates growth. An understanding of these variables will be effective in developing similar goals of identifying progress or deterioration within the retardate in terms of the aforesaid factors within the family and school milieu, as is the specified aim of the
Present investigation.

The E.M.R. Child

The foregoing analysis of the school and family milieu brings into forefront the E.M.R. child who is the present focus of the family's negative hostility or positive nurturance and is also the present focus of the educators intervention programmes. As the present investigation relates variables in the family environment to the retardate's cognitive and psycho-social functioning level, self-concept, basic attitudes towards his self, family and school and the eventual vocational competence achieved, an analysis of the E.M.R. child on the aforesaid dimensions is included.

A focus on the special school element and the reactions of the family milieu of the retardate afford an insight on the nature of the environment the retardate functions in. The present investigation is geared towards an establishment of a relationship of the retardate's cognitive and psycho-social improvement/deterioration in school and his final vocational rehabilitation in the community with certain dynamic variables operative within the family milieu and the attitudinal framework of the retardate towards his family, school and self. Keeping these aims in mind a brief analysis of the retardate's basic characteristics, self concept and vocational rehabilitation factors are considered.
An Insight into the E.M.R.'s Basic Characteristics

The E.M.R. has been defined by educators as one who has potentialities for development in (a) minimum educability in the academic subjects of the school, (b) social adjustment to a point that he can get along with minimum supervision in the community, and (c) minimum occupational adequacy to such a degree that he can support himself partially, under certain controls or supervision or the adult level, in certain repetitave sheltered tasks requiring minimal cognitive intervention.

As regards physical characteristics like height, weight and motor co-ordination most retardates are below the level of the normal children. More handicaps of vision, hearing and motor co-ordination are found among the E.M.R. children. The E.M.R. child shows low performance on verbal and non-verbal intelligence tests and his IQ rates in the range from 50 or 55 to 75 (in the Standard Binet Scale). This implies a rate of mental development approximately one half to three fourths that of an average child. Retarded mental development includes slowness in maturation of specific intellectual functions needed for school work, such as being significantly low in memory for auditory and visual materials, generalizing ability, language ability, conceptual and perceptual abilities, imagination and creative abilities etc.
Behaviours and attitudes most frequently attributed to educable mentally handicapped include over aggressiveness, self devaluation, short attention span, poor memory, delayed language development and low frustration tolerance, Hewett (1964), Rabinow (1964), Beck (1966), Goldstein (1964), Appel (1964), Windle (1962). The concept of frustration proneness draws into realization the fact that the E.M.R. child is operating in a normal world, a world for which the retardate is inadequately equipped, particularly in those duties which call for cognitive intervention. Educators suggest the implementation of situations and techniques within the family and the school which would effectively reduce the number of frustrating situations and enhance the retardate's ability to withstand hitherto intolerable situations and consequently enhance the retardate's self concept and adjustive skills.

A characteristic of E.M.R. children related to frustration proneness is that of self devaluation. This characteristic is a result of imbalance between the retardate's competencies, intellectual, physical and social, and the demands of his environment. Studies reveal this to be a rather common reaction of the educably mentally
retardate to his environment. Self devaluation most frequently manifests itself in behaviours and attitudes signifying that the retardate has strong feelings of general unworthiness and that he holds his attitudes in low esteem, Farber (1968), Rothstein (1964), Cazden (1972). A tendency towards self devaluation is aided by the educable mentally handicapped child's limited ability to assess his capabilities and limitations realistically. Studies show that the E.M.R. children when confronted with a task, will more frequently, over or under estimate their abilities than their normal peers, Adams (1960), Boles (1959), Fredricks (1976). A chain of failing experiences may very well reinforce the retardate's feelings of unworthiness and establish strong anticipation of failure. The retardate who under-estimates his ability will often find that his finished work is substandard when compared with that of his peers. He may accept this as strong evidence of inferiority. This phenomenon has been studied in the special school by Simches (1963), Taylor (1964).

Personnel in interaction with the E.M.R. advocate that self devaluation as a characteristic has two implications for the adjustment of the E.M.R. child. First, there is its effect on classroom and familial performance and adjustment. This is an immediate problem wherein the child's feelings tend to intervene between himself and both academic and social learning to the extent that he works far below his
potential. Secondly, there is the effect of self devaluation on the retardate's self concept. This is a long term problem and one that has its most deleterious effects on the retardate's adaptive and cognitive skills.

Conflicts between the E.M.R. child's intellectual ability and the demands of academic and social situations often manifest themselves as disabilities in learning. Workers in mental retardation identify them as a tendency to oversimplify ideas and concepts, reduced ability in generalizations, short memory and attention spans and limitations in incidental learning, retarded language and speech skills, Bayley (1949), Ginzberg (1969), Stang (1957), Baumeister (1964).

The Retardate's Vocational Rehabilitation

The present investigation encompassed as one of its goals, the development of a follow up project of retardates who had left school earlier. This was geared to gain insight in the efficacy of the family to serve as a maintenance agent of skills inculcated within the retardate and the vocational and rehabilitative competence achieved by the retardate.

A review of literature reveals a scarcity of such projects undertaken in India. The present project was evolved to gain insight into the problems of the placement.
of E.M.R. children within the occupational framework of the society. A review of western literature displays some attempts in this direction. Studies by Windle (1962), Appel (1964), Goldstein (1964), Ingram (1953), Dayan (1964), postulate that many retardates after their school intervention programmes are dependent on parent figures and relatives, but a great many eventually make successful adjustments to society both socially and vocationally. In an evaluation of 36 follow up studies on retardates released from intervention programmes, published between 1941 and 1965, Eagle (1967) found that out of the sample studied of 7,436 E.M.R. retardates, only 39.6 per cent failed to find any vocational placement. In a series of follow up programmes by Charles (1966) (1968), Miller (1967), Kolstoe (1961), Baller (1961), postulated that the vocational placement of the E.M.R. children often led to ridiculing and teasing behaviour within the vocational milieu and this led to development of adverse reactions towards the work engaged in. The workers found a high drop out rate of the retardates in such cases.

Workers like Cottman and Newlyn (1966), Singer (1964), Kennedy (1966) etc. evolved principles of further intervention programmes for the E.M.R. out of school, involving active parental participation in developing training strategies for the retardate.
The issue of vocational placement of the E.M.R. was bought into international significance by Jackson (1978) when he presented an analysis of the present and future employment prospects of the E.M.R. school leavers. The implications of that analysis were that there may be a need to rethink the purpose of special education and to provide sheltered employment in self contained and self sustaining communities. These are however serious measures which should not be adopted without careful consideration of the arguments supporting them. Two major points of contention have been brought out by researchers, Appel (1966), Bloom (1964), (1967), Johnson (1970), Goldstein (1964) - and are (i) that there is little hard evidence to support the view that the overwhelming majority of adult subnormals do in fact satisfactorily adjust either in employment or in the community and (ii) that the competitive position of the E.M.R. in the employment market has worsened and is continuing to deteriorate.

There are two sources of information which indicate the degree of occupational adjustments of adults who have attended special schools. Both are recent studies, restricted to the first half of the previous decade and are almost representative of similar trends of research generated earlier. (i) Fredricks (1976) reported a follow up study
of a sample of 'mentally retarded young persons' in Aberdeen. This included 39 E.M.R. men and 28 E.M.R. women born between 1951 and 1952, who had attended special schools. They were interviewed when aged 22/23 and it was found that 79 per cent of the men were in full time employment, four individuals were unemployed, two were attending senior occupation centres, and two were in residential institutions. Of the women, 14 were working full time, seven were married and working part-time, two were unemployed, four were attending senior occupation centres and one was in a residential institution.

(ii) Data (unpublished) from the National Survey of Health and Development, Douglas (1964) is available for 18 men and 14 women, all E.M.R. school leavers, and all born around 1946. The data revealed nine men and three women to be full-time employed. Further it was revealed that 6 men were unemployed and 3 were in part-time occupation centres. Of the women representatives of the sample six were full-time housewives, three were unemployed and two were in institutions for life. It would appear from these studies that a considerable amount of the adults were self supporting at a time when the general level of unemployment was considerably higher than the sixties, Manpower Services Commission (1977).

Assessing the Evidence for Deterioration

Two studies of significance were compared to assess whether the competitive position of the E.M.R. school
leavers has worsened. Jackson (1978) reported a follow up study of E.M.R. leavers in Edinburgh. He found that out of 105 boys (31 per cent) were either unemployed for more than one third of the 3 year follow up period or averaged more than three jobs per year. Using equivalent criteria over a one-year follow up period Johnson (1970) found that 23 out of 70 boys (33 per cent) also fell into this non-adjusted category. The first group of sample retardates had passed out between 1959 and 1962 whereas the second group, Rodger (1978) had passed out in 1977.

The Emergence of the Present Research Focus

A review of the foregoing literature displays ample research in fields of employer receptivity, job placement factors of the E.M.R., vocational competence of the retardate, reasons for drop outs or failure. Except for a strong remedial of the family intervention programme and its dynamic effects on the maintenance of inculcated skills and consequent rehabilitation, very little research work has been done in this field. To fill up this critical research gap attempts were made to analyse the variables operative within the family milieu which would promote positive development of the retardate functioning within a part-time special school class milieu and of the retardate out of school and completely within the purview of the family milieu.
In the present chapter an attempt was made to arrive at certain conceptual classification regarding the definitions and classification inherent within the phenomenon of mental retardation. This attempt on conceptual clarity was undertaken to provide an insight into the needs and growth potentials of mentally retarded individuals and the consequent development of intervention programmes by educators and family personnel.

This chapter further included a brief overview of crucial elements of the special intervention programmes and of the dynamisms operative within the family milieu of a retarded child. This over-view presented an insight into the psycho-social setting comprising of the family and school milieu, the retardate functions in. An analysis of the E.M.R. child's basic characteristics, self concept factors and vocational competence factors were also attempted.

This over all analysis laid the basis of the present investigation and was implemented to obtain an insight into the inter-relationships of the variables within the school and family milieu operative in the psycho social performance, self concept and vocational rehabilitation factors of the E.M.R. child.