

**EFFECT OF VOCATIONAL TRAINING ON BEHAVIOURAL
SKILLS IN MILD INTELLECTUALLY DISABLED PERSON**

Dissertation

**Submitted to the Central University of Haryana
For the Fulfillment of the Degree of**

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Sciences**

In the Department of Education



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Declaration

This is to certify that the material embodied in the present work entitled “**Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person**”, is based on my original research work. It has not been submitted in part or full for any other diploma or degree of any University/ Institution deemed to be University and College/ Institution of National Importance. References from other works have been duly cited at the relevant places.

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(Anash Kumar Das)

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CHAPTER 1

1.1 **Conceptual Frame Work**

1.2 Intellectual Challenge/ Intellectual Disabilities

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CHAPTER 5

Findings, Result and Discussion

- 5.1 Findings, Result and Discussion
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SUMMARY

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1.1 Conceptual Frame Work

India is the seventh largest country in the world covering an area of about 37,87,782 sq. KMs. And a population about 1.130 billion people (World Fact Book, 2014), with many geographical, socio, cultural, economic, linguistic, religious variations. Historically, India has been an inclusive society. During the 17th century, community based programmes were the rule and not the exception for persons with disabilities, patronized by the state, and supported strongly by the practices of the prevailing religions, and localized in the communities, based on the specific needs, available expertise and productivity requirements. (Jayachandran, 2004)

Currently, in the independent India after the colonial rule, efforts are being made to recapture the efficacy of the past systems with the refined new developments and trends. The major breakthrough came with the enactment of three legislations for persons with disabilities by the Government of India as discussed in detail later in this paper. In addition, the constitution of India is amended (86th amendment) guaranteeing education as a fundamental right (Art. 21A, 2002). Subsequently, prevention and early detection of disabilities, education, employment, economic rehabilitation, community empowerment and community-based rehabilitation have all been given priority by the government through various schemes and also support to non government organizations. There has been significant development in the area of disability rehabilitation since then. However, considering the nature of the condition, it is essential to see what has been the value addition in the area of intellectual disabilities (Mental Retardation) and what more needs to be done.

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Since the human being evolved and started forming their assemblage the Persons with disabilities exists. When we talk of all the types of disabilities, an intellectual disabilities have a condition of incomplete development of mind, which is especially characterized by sub-normal intelligence, thus partially or totally restricting the person's ability to perform certain activities in their life. This is reflecting to impairment in cognitive, emotional or behavioural endowment.

One of the key abilities for human beings to lead an independent life is to take decisions independently, which persons with intellectual impairment are, unfortunately, not endowed with. Therefore they have special needs, which basically include activities for daily living (ADL); instrumental activities of daily living (IADL); reading, writing and arithmetic skills; extracurricular activities, namely sports and games, art and cultural activities; social activities; vocational and employment activities; independent living skills; and community integration; etc. Every activity of persons with intellectual impairment has a meaning in their life, which they have to acquire through individualized education plan supported by related services. viz. counseling services, early identification, audiology services, and assessment of disabilities in children, occupational therapy, orientation, medical services, and mobility services, parent counseling and training, physical therapy, psychological services, recreation, rehabilitation, school health services, social work services in schools, speech-language pathology services, and transportation.

Special Education is branch of Education that deals with the studies about individuals who have problem or special talents in thinking, reasoning, hearing, seeing, speaking, socializing etc. In other word, it is the study of individuals who are different

from average normal person. These individuals are generally called exceptional children. Exceptional children are defined as those “who require special education and related services to realize their full human potential”. A major goal of special education is to enable special children to live in most independent way possible. The concept of “Children with special educational needs” is of British handicap i.e. visual and hearing impairment, essential through charitable initiative. Original, provision for children with sensory and physical disability and intellectually challenged were made, and subsequently extended to those with emotional and behavioural problems.

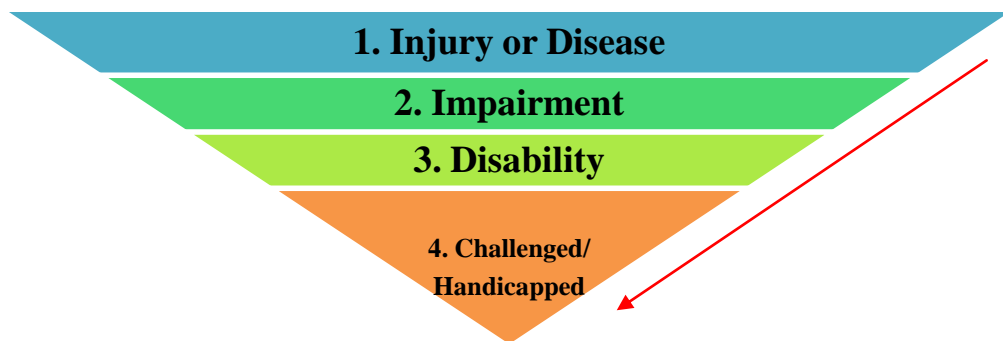
1.2 Intellectual Challenge/Intellectual Disabilities/Mental Retardation

There are many challenged condition which makes the normal function of an individual very difficult and leads to dependency. These conditions are increasing day by day because of the changing lifestyle and complicated environment. Challenged children are those children who do not have normal health status either physically, mentally or socially and they requires special care, treatment and education.

1.3 Concept of Challenged

According to WHO the sequence of events leading to disability and handicapped or challenged conditions are as follows:

Figure 1: WHO sequence of events leading to disability



1. Injury or Disease:

Accident or disease mean before birth, at birth or after birth in the person of the accident or illness causing physical, mental or emotional condition arises which are different from the normal case.

2. Impairment:

It defines as any loss or abnormality of psychological, physiological or anatomical structure or function, e.g. Loss of vision, loss of hearing, etc. Here primary impairment may leads to secondary impairment e.g. Defective hearing results in learning difficulties and poor school performance, and than impairment leads to disability.

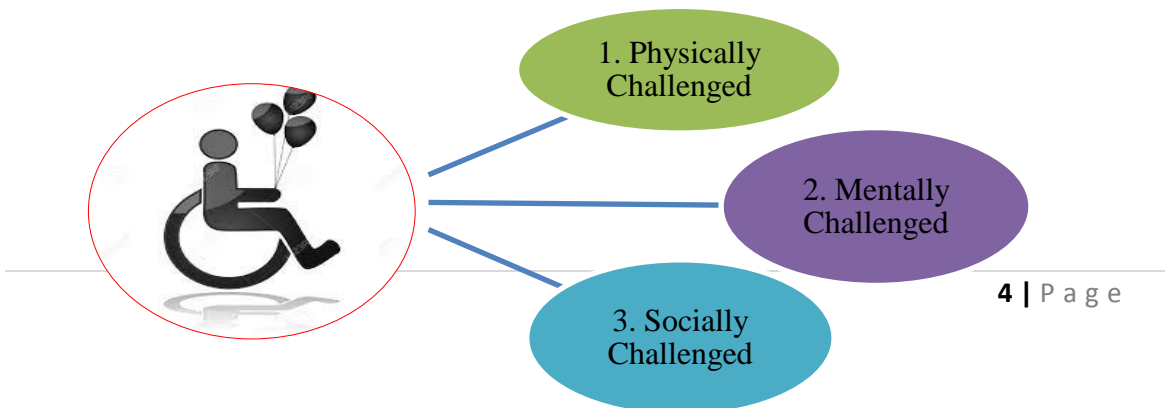
3. Disability:

It develops as the consequence of impairment. For example loss of limbs results in inability to walk. Disability is the inability to carry out certain day to day activities which are considered as normal for the age and sex.

4. Handicapped/Challenged/Disability:

Handicap is defined as a disadvantage for a given individual resulting from impairment or a disability that limits and prevents the fulfillment of a role which is normal for that individual, depending, on age, sex, social and cultural factors. It reflects that primary handicap may lead to secondary handicap condition e.g. Blindness leads to economical handicapped situation.

Figure No. 2 Classification of Challenged/Handicapped



1. Physically Challenged:

Physically challenged children are grouped according to their affected part of the body. These Physically challenged children include orthopedically handicapped, sensory handicapped, neurologically handicapped and handicapped due to systemic diseases.

Figure No. 3 Physically Challenged



2. Mentally Challenged

Mentally challenged is a condition of children is mental retardation. At least two third percent of Indian populations are mentally handicapped in any one form. The synonym for mentally challenged or mental retardation is Cognitive impairment. This term is used now a day's very commonly.

Figure no. 4 Mentally Challenged



3. Socially Challenged:

Socially challenged children are those having disturbed opportunities for healthy personality development and due to certain social factors leading to lack of achievement of full potentialities. Social disturbances are found in the form of broken family, parental inadequacy, loss of parents, poverty, and lack of educational opportunities, environmental deprivation and emotional disturbances as lack of tender loving care.

Figure No. 5 Socially Challenged



1.4 Intellectual Disability

Intellectual disability (ID), also called intellectual development disorder (IDD) and formerly known as mental retardation (MR). Mental retardation (MR) is developmental disability that first appears in children under the age of 18. It is characterized as a level of intellectual functioning (as measured by standard intelligence tests) that is well below average and results in significant limitations in the person's daily living skills (adaptive functioning).

The term MR as offensive and the term intellectual disability or intellectually challenged is now preferred by most advocates in most English speaking countries.

According to DSM-V-TR, a diagnosis of mental retardation can be made only when both the IQ, as measured by a standardized test, is sub-average and a measure of adaptive function reveals deficits in at least two of the areas of adaptive function. Mental retardation diagnoses are coded on Axis II in the DSM-V-TR. Mental retardation is one of the commonest diagnoses in children attending various psychiatric group in India as well as other developing countries, forming 30-50% of the attendance in the pediatric age group. It is a multidimensional problem and can be seen everywhere. These dimensions include psychological, medical, educational & social aspects, with the social aspects, with the social aspects being most important.

1.5 Definition of Mental Retardation/Intellectual Disabilities

According to Diagnostic Statistical Manual -5 (DSM-5) published in the year 2013 - American Psychiatric Association America “A disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains.”

According to Diagnostic Statistical Manual –IV Text Revision (DSM-IV-TR) - American Psychiatric Association America, “Significantly sub-average intellectual functioning– An intelligence quotient (IQ) of approximately 70 or below. Concurrent deficits or impairments in adaptive functioning in at least 2 of the following area: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skill, work, leisure, health, and safety. Onset before age 18 years”

According to American association on mental deficiency, in the year 1983, “Mental retardation refers to significantly sub average general intellectual functioning

(BELOW 70) resulting in or associated with concurrent impairments in adaptive behavior and manifested during the developmental period”.

According to Persons with Disability ACT in the year 1995 “Mental retardation means a condition of arrested or incomplete development of mind of a person which is specially characterized by sub-normality of the intelligence.”

According to American Association of Intellectual and Developmental Disability in the year 2002 “Mental Retardation is a disability characterized by significant limitation both in intellectual functioning and in adaptive behavior as expressed in conceptual, social and adaptive skills. This disability originates before the age of 18 years.”

1.6 Epidemiology of Mental Retardation

- The world population is estimated to be mentally retarded is 4% to 5 %..
- In India 5 out of 1000 children are mentally retarded (Indian express 13th march 2001). As per the report more than 20 million children on an average are suffering with mental retardation.
- Mental retardation is more common in boys than girls.
- Due to associated physical condition the Mortality is high in severe or profound mental retardation
- Common in the age group of 2-3 years. Peak in 10-12 years of age.
- Highest incidence-school-age children with the peak at the ages 10 to 14 years.
- 1.5 times more common among men that among women.
- Prevalence- 1% to 3%.

1.7 Classification of Mental Retardation

According to the Diagnostic Statistical Manual –V Text Revision (DSM-V-TR), mental retardation is defined as significantly sub average general intellectual functioning resulting in, or associated with, concurrent impairment in adaptive behavior and manifested during the developmental period, before the age of 18. The diagnosis is made regardless of whether the person has a coexisting physical disorder or other mental disorder.

Degree of Mental Retardation:

1. Mild
 2. Moderate
 3. Severe
 4. Profound
- Term significantly sub-average is defined an IQ of approximately 70.
 - Adaptive functioning can be measured by using a standardized scale, such as the Vineland Adaptive Behavior Scale.

Degrees of Severity of Mental Retardation:

- Borderline intellectual functioning, according to DSM-V-TR, is not within the diagnostic boundary of mental retardation and refers to a full-scale IQ in the 71 to 84 range that is focus of psychiatric attention.
- Mild mental retardation (IQ range, 50 to 70) represents approximately 85 percent of persons with mental retardation.
- Many adults person with mild mental retardation can live independently with appropriate and adequate support and raise their own families.
- Moderate mental retardation (IQ range, 35-50) represents about 10 percent of persons with mental retardation.
- They are challenged academically and often are not able to achieve academically above a second to third grade level.

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

- As adults, persons with moderate mental retardation may be able to perform semiskilled work under appropriate supervision.
- Severe mental retardation which comes in the category of Intelligence Quotient (IQ) which range from 20-35 comprises about four percent of individuals with mental retardation.
- In adulthood, persons with severe mental retardation may adapt well to supervised living situations, such as group homes, and may be able to perform work-related tasks under supervision.
- Profound mental retardation where I Q range below 20 constitutes approximately one to two percent of persons with mental retardation.
- Most individuals with profound mental retardation have identifiable causes for their condition.
- Self Care skills may be taught to the children with profound mental retardation and learn to communicate their needs given the appropriate training.
- The Diagnostic Statistical Manual –V Text Revision (DSM-V-TR) lists mental retardation, severity unspecified, as a type reserved for persons who are strongly suspected/ identified of having mental retardation, but which cannot be tested by standard intelligence tests or are too impaired or uncooperative to be tested.
- This type may be applicable to infants whose significantly sub-average intellectual function is clinically judged but for whom the available tests (e.g., Bayley Scales of Infant Development and Cattell Infant Scale) do not yield numerical IQ values.
- This type should not be used when the intellectual level is presumed to be above 70.

Table No. 1 “Mental Retardation” terminology used in other countries

Country	Term
India	Mental Retardation, Intellectual Disability
United States	Intellectual Disability
Australia	Intellectual Disability
Canada (English, French)	Mental Deficiency, Intellectual Handicap
England	Learning Disability, Intellectual Disability, Developmental Disability
France	Mental Deficiency, Mental Apraxia
Germany	Mental Handicap, Mental Retardation
Italy	Mental Delay, Mentally Deficient
Estonia	Mental Retardation
Puerto Rico	Mentally Slowed Down
Spain	Mental Delay

Figure No. 6 Prevalence

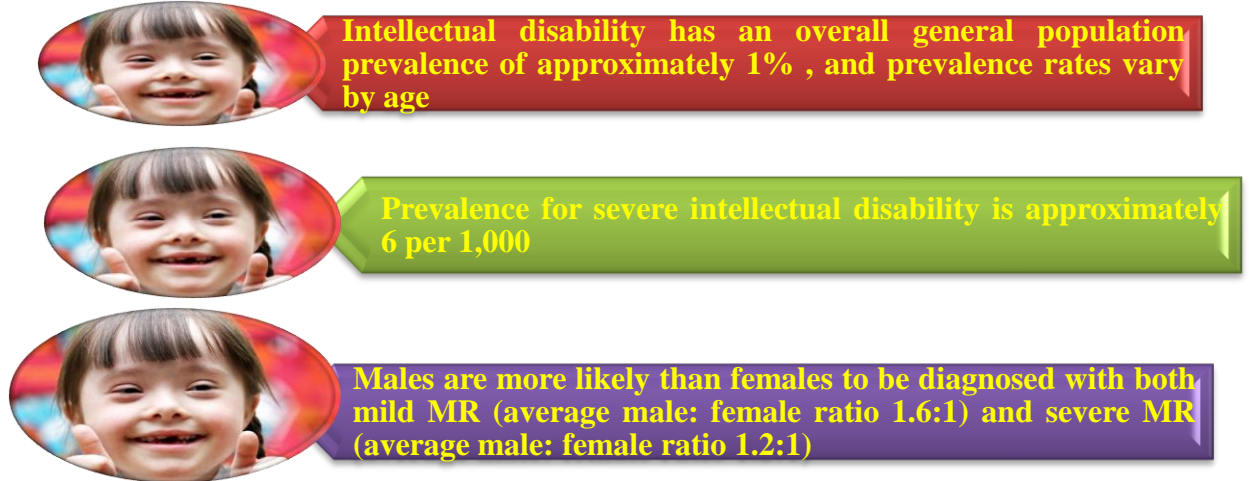


Figure No. 7: DSM V-TR Levels of Mental Retardatio

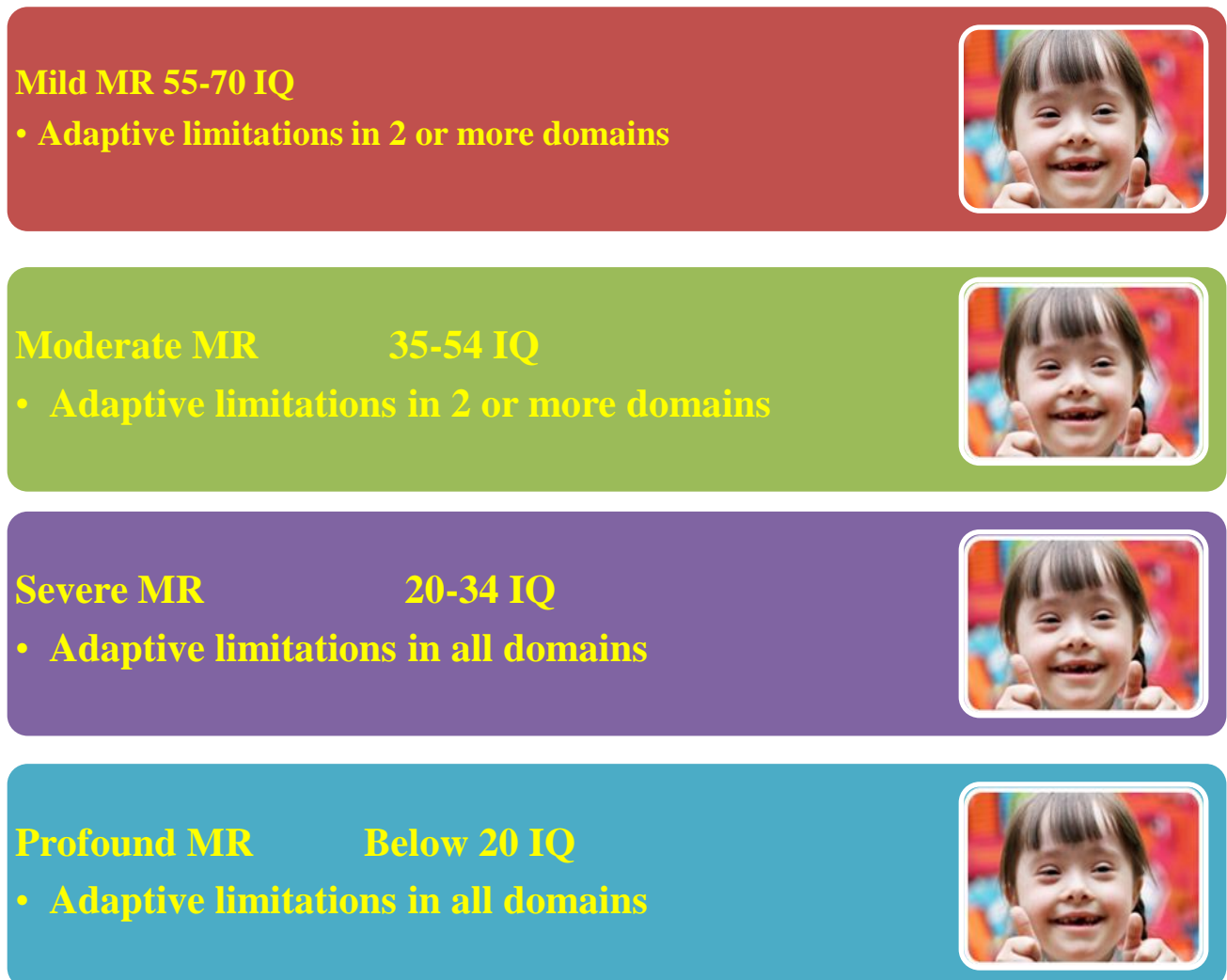


Table No. 2 Diagnostic Statistical Manual -5 (DSM-5)

	Conceptual Domain	Social Domain	Practical Domain
Mild	In preschool children, there may be no conceptual differences. For school-age children and adults, various difficulties in learning academic skill needed to meet age-related expectations. In adults, abstract thinking, executive function (e.g., planning), and short-term memory, as well as functional use of academic skills are impaired.	The individual is immature in social interactions compared with typically developing age mates. For example there may be difficulty in accurately perceiving peers' social cues. It has been noticed by peers' that there may be difficulties while regulating emotion and behavior in age-appropriate fashion.	In complex daily living tasks Individuals need some support in comparison to peers. In adulthood, supports typically involve grocery shopping, transportation, home and child care organizing, nutritious food preparation, banking and money management. Support is typically needed to raise a family.
Moderate	Throughout development, the individual's conceptual skills lag markedly behind in compare to peers. Ongoing assistance on a daily basis is needed to complete conceptual task of day-to-day life, and others may take over these responsibilities throughout the life time.	The friendships with typically developing peers are often affected by communication or social limitations. Significant social and communicative support is needed in work settings for success.	The individual can care for personal needs involving eating, dressing, elimination, and hygiene as an adult, although an extended period of teaching and time is needed for the individual to become independent in these areas, and repeated reminders may be needed.

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

<p>Severe</p>	<p>Caretakers provide extensive supports for problem solving throughout life. Attainment of concepts is limited (e.g., money, time, quantity).</p>	<p>The Spoken language is very limited in terms of grammar and vocabulary. Speech may be single words or phrases, but the communications are focused on day to day activities. Relationships with family members and other familiar persons are here a source of pleasure.</p>	<p>The individual requires support for all activities of daily living needs, which includes meals, dressing, bathing, and elimination. The individual requires supervision at all times. The individual cannot made responsible decisions regarding well-being of self or others.</p>
<p>Profound</p>	<p>Conceptual skills generally involve the physical world rather than symbolic processes. The individual use objects in goal-directed fashion for the self-care, work, and for the recreation. Motor and sensory impairments may prevent functional use of objects even when certain visual spatial skills are intact (e.g., it can match objects based on physical characteristics means seen visually, but cannot translate to appropriate use).</p>	<p>The individual has very limited understanding of gesture or speech, he or she may understand some very simple instructions or gestures, and expresses his or her own views/desires and emotions mostly through nonverbal, non symbolic communication. The individual enjoys relationships with well-known family members & caretakers primarily.</p>	<p>The individual is dependent on others for all aspects of daily living. Although, individuals without severe physical impairment may assist with some daily work tasks at home, like carrying dishes to the table. The simple actions with objects may be the basis of participation in few vocational activities with high level of ongoing support.</p>

Table No.3 ICD-10 (International Classification of Disease): Diagnostic Criteria for Mental Retardation:

Class	Degree	IQ
F ₇₀	Mild mental retardation	50-69
F ₇₁	Moderate mental retardation	35-49
F ₇₂	Severe mental retardation	20-34
F ₇₃	Profound mental retardation	<20
F ₇₈	Other mental retardation sensory, physical, behavioural impairments preclude standardized IQ testing.	
F ₇₉	Unspecified mental retardation	

Table No. 4 Severity of intellectual disability and adult age functioning

Severity	Mental age as adult	Adult adaptation
Mild	9-11 year	Reads at 4 th -5 th grade level; simple multiplication and division; writes simple letter, lists; completes job application; basic independent job skills (arrive on time, stay at task, interact with coworkers); uses public transportation, might qualify for driver's license; keeps house, cooks using recipes
Moderate	6-8 year	Sight-word reading; copies information, e.g., address from card to job application; matches written number to number of items; recognizes time on clock; communicates; some independence in self-care; housekeeping with supervision or cue cards; meal preparation, can follow picture recipe cards; job skills learned with much repetition; uses public transportation with some supervision
Severe	3-5 year	Needs continuous support and supervision; might communicate wants and needs, sometimes with augmentative communication techniques
Profound	<3 year	Limitations of self-care, continence, communication, and mobility; might need complete custodial or nursing care

Source: International Statistical Classification of Diseases and Related Health Problems, Tenth edition (World Health Organization).

Conceptual Skills: The Conceptual Skills includes Communication, functional academic, self-direction, money concepts

Social Skills: The Social Skills includes Interpersonal skills, self-esteem, naïveté/gullibility, self-governance (obeys rules)

Practical Skills: The Practical Skills includes Self-care domestic skills, work, health & safety

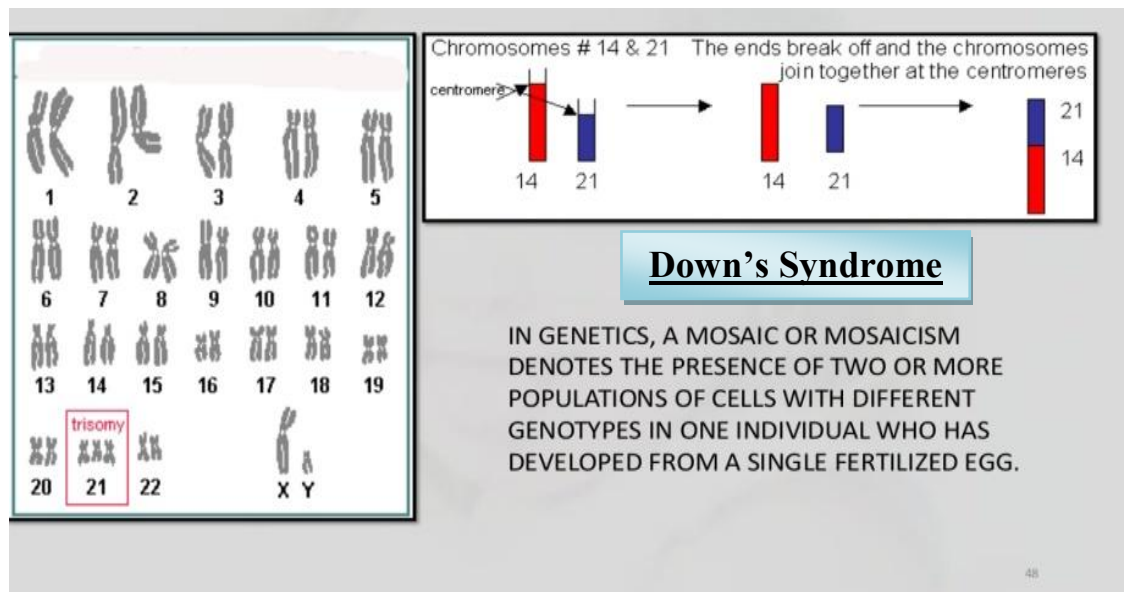
1.8 Types of Mental Retardation

- a) Down's Syndrome
- b) Fragile X Syndrome
- c) Microcephaly
- d) Phenylketonuria
- e) Hydrocephalus

a). Down Syndrome

Down's syndrome is the very common cause of mental retardation and malformation found in the newborn babies. It occurs because of the presence of an extra chromosome.

Figure No.8: Down Syndrome



b).

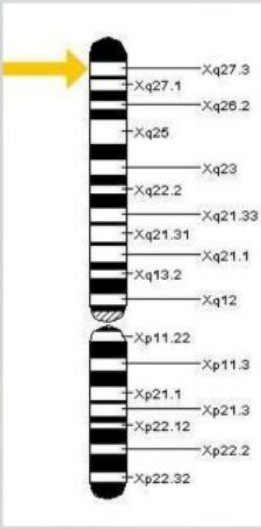
Fragile X Syndrome

Fragile X syndrome is an X chromosome defect which causes mental retardation and in this the wide range of associated signs and symptoms.

Figure No. 9: Fragile X Syndrome

FRAGILE X SYNDROME

- FRAGILE X SYNDROME IS THE SECOND MOST COMMON SINGLE CAUSE OF ID.
- THE SYNDROME RESULTS FROM A MUTATION ON THE X CHROMOSOME AT WHAT IS KNOWN AS THE FRAGILE SITE (XQ27.3).
- THE TYPICAL PHENOTYPE INCLUDES A LARGE, LONG HEAD AND EARS, SHORT STATURE, HYPER EXTENSIBLE JOINTS, AND POST PUBERTAL MACROORCHIDISM.
- THE MENTAL RETARDATION RANGES FROM MILD TO SEVERE.



50

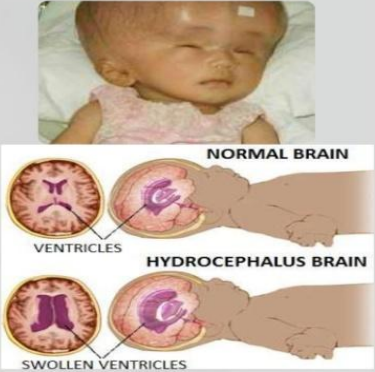
c). Hydrocephalus

An abnormal condition in which cerebrospinal fluid collects in the ventricles of the brain; in infants. It may cause abnormally rapid growth of the head and bulging fontanelles and small face; in adults it has been seen that the symptoms are primarily neurological.

Figure No. 10 Hydrocephalus

HYDRORCEPHALUS

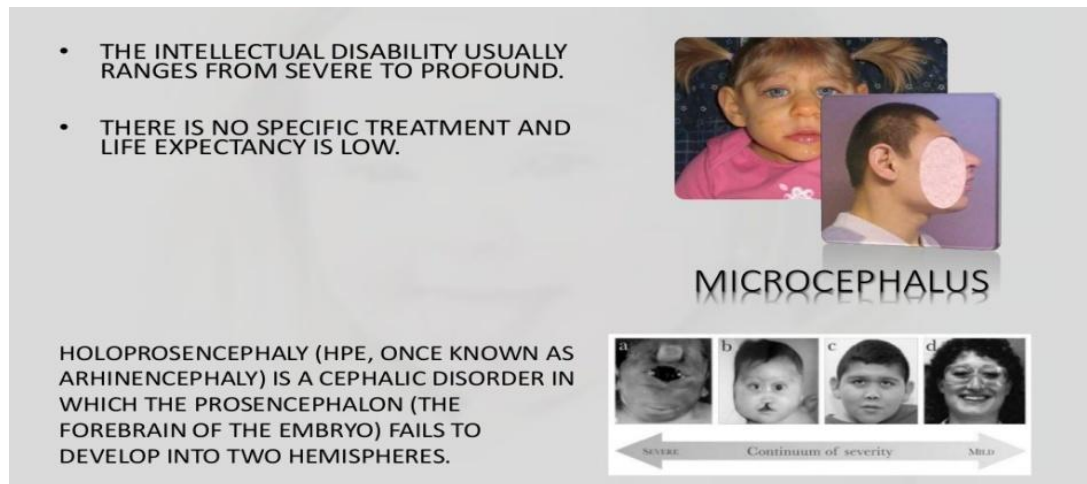
- RESULTS FROM AN ACCUMULATION OF CEREBROSPINAL FLUID INSIDE OR OUTSIDE THE BRAIN.
- THE DEGREE OF INTELLECTUAL DISABILITY DEPENDS ON HOW EARLY THE CONDITION IS DIAGNOSED AND TREATED.



d). Microcephaly

Microcephaly is a neurological disorder in which the distance around the largest portion of the head (the circumference) is less than and should normally be the case in an infant or a child. The condition can be seen at birth, or it can develop within the first few years following of the birth. The smaller than normal head restricts the normal growth and then the development of the brain.

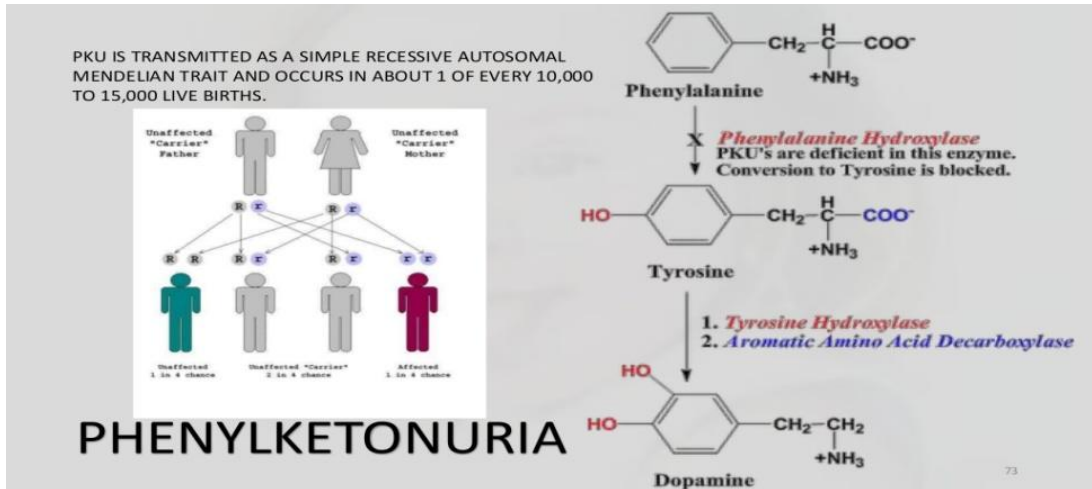
Figure No. 11 Microcephaly



e). Phenylketonuria

The inherited inability to metabolize which means process the essential amino acid phenylalanine due to complete or near complete deficiency of the enzyme phenylalanine hydroxylase. Most patients with Phenylketonuria are severely retarded, but some are reported to have borderline or normal intelligence. The Enzema, vomiting and convulsions occur in about a third of all patients. They frequently have temper tantrums and often display bizarre movements of their bodies and upper extremities, including twisting hand mannerism; their behavior sometimes resembles that of children with autism or schizophrenia.

Figure No.8: Phenylketonuria



f). Prader-Willi Syndrome

Prader-Willi syndrome is postulated to result from a small deletion involving chromosome 15, usually occurring sporadically. Its prevalence is less than 1 of 10,000. Persons with the syndrome exhibit compulsive eating behavior and often obesity, mental retardation, hypogonadism, small stature, hypotonia, and small hands and feet. Children with the syndrome often have oppositional and defiant behavior.

7. Cat's Cry (Cri-du-Chat) Syndrome

Children with cat's cry syndrome lack part of chromosome 5. They are severely retarded and show many signs often associated with chromosomal aberrations, such as microcephaly, low-set ears, oblique palpebral fissures, hypertelorism, and micrognathia. The characteristic cat-like cry caused by laryngeal abnormalities that gave the syndrome its name gradually changes and disappears with increasing age.

1.9 Special Education in India

The origin of special education in India is seen from the era of Gurukula education, which adhered to fundamental principles of special education like determining

the strength and needs of each individual, individualizations of teaching targets, individualized teaching components and methods to match the skills and interests, preparing the people to meet the societal expectation of their prospective roles. The versatile gurus are illustrious administrators, valiant warriors and pious priest of students based teaching learning process on their socio cultural background and capabilities. Researcher here encounter many valued roles assumed by people with disability in our epics and scriptures where many need based support networks have been mobilized to foster a positive social status and dignity for them.

When compared with U.K. and U.S.A in India the awakening of scientific progress and provision legislation came later. The Lunacy Act of 1912 was the earlier laws which prevailed during the British rule in India. This law does not differentiate between Mental Retardation and Mental Illness.

Growth of Special Education Centers:

In 1940, the first special school was started at Bombay, in Maharashtra. In 1941, a group of parents joined hands and started a private special school for children with intellectual impairment, known as the “school for children in need of special care”. The establishment of few residential centers followed this. In 1950’s many day care centers were established in various parts of the country and the number of special schools increased.

With the establishment of National Institute of Mentally Handicapped (NIMH), the teacher training centers increased rapidly over a period of 20 years. Currently there are number of centers offering diploma in Special Education and number of universities offering B. Ed. & M.Ed. Degree in Special Education(MR).

National Council for Education, Research and Training (NCERT): In 1974, the Ministry of Welfare Government of India started the Project Integrated Education of the Disabled under the NCERT, which has been doing a pioneering job in constructing an integrated setup.

National Policy on Education (1986)

After Independence, one important turning point was the National Policy on Education. The Policy for the first time included a section on disabilities (Section 4.9). The point made in this section includes- Education of children with mild disabilities will be in regular schools. Children with severe disabilities will be in special schools with hostel facilities in district head quarters. Vocationalization of education will be initiated. Teachers training programme will be oriented to include education of disabled children. All voluntary efforts will be encouraged. Regarding the handicapped population, the National Policy on Education, 1986 states that the objective should be to integrated the physically and intellectually challenged with general community as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence.

The National Institute for the Empowerment of Persons with Intellectual Disabilities (Divyangjan) Formerly National Institute for the Mentally Handicapped (NIMH):

One of the relatively recent and most significant developments in the field of Intellectual impairment was the establishment of the National Institute for the Mentally Handicapped (NIMH) in Secunderabad, in 1984, as an autonomous body under Ministry of Social Justice and Empowerment. The institute serves as an apex body with specific emphasis on training and research in the field of Intellectual impairment. the objectives of NIMH are to develop service models, generate human resources, conduct research and

disseminate information on intellectual impairment. Under Human Resources Development NIMH conducts training in Special Education offering Degree and Diploma courses. The institute supports parents to form associations to stimulate growth of services in their hometown.

Rehabilitation Council of India (RCI)

The Rehabilitation Council of India (1992) is a statutory body under the Ministry of Social Justice and Empowerment to regulate and introduce uniformity in human resources development in country. Under this act, every rehabilitation practitioners including special educators are expected to register with RCI. The training institutes are inspected by RCI to ensure maintenance of standards. The RCI is a major move, by the Government of India for quality assurance in the education, training and management of persons with disabilities. The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act 1995 (PWD Act)

This Act was responsible for bringing about major changes in the programmes for persons with disabilities in India. The Act has 14 chapters covering seven disabilities namely Blindness, Low-vision, Leprosy-cured, Hearing Impaired, Loco-motor Disability, Intellectual impairment, Mental Illness. Through this Act, the quality of life of person with disabilities will improve as the literacy level, employment; social security, suitable assistive devices and barrier free environmental are focused.

The National Trust for welfare of persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities, Act (1999)

This Act has made provisions for appointment of guardians for those who have applied, and residential facilities by organizations who maintain minimum standards

prescribed by the trust in terms of space, staff, furniture, rehabilitation and medical facilities.

Special Education Services:

There are some accepted procedures and settings for training children's problems. An examination of special education in school system reveals an incremental continuum or ordered array of special education classes designed to serve the individual needs of children. Special Educator agrees that to ensure free and compulsory education to all children in the age range of 6 to 14 years. (Ref. 86th amendment of the constitution, clause 21A) It is expected that SSA will provide quality elementary education to all children by 2010. SSA aims at enrolling and retaining children, especially the most vulnerable and disadvantaged ones in primary schools. The teacher training programmes have content coverage on inclusive education and establishment of resource rooms in regular schools. Special Teacher trainees at graduate level are given skills and competencies for inclusive education. Parallel, special teachers at diploma level are also prepared to work in special schools to cater to children with severe intellectually impaired. There are also efforts to convert the existing special schools as resource centers for inclusive education through SSA.

Four aspects are unique about special education: Specialized educators, special curricular content, special instructional methods, and special instructional material; prior to the mainstreaming trend, these four services were almost always provided to children within the context of special classes or schools. These classes and schools were categorized along a continuum reflecting their degree of separation from the mainstream. Resource rooms, self-contained classes, special day schools, and residential treatment

centers reflect this continuum. Resource room provides a relatively least restrictive environment than residential centers. The goal is to place a child in the least restrictive environment relative to the severity of his or her handicapped condition. Therefore, even with the current trend toward mainstream programmes, many exceptional children will receive some of their education in one or more of the special environments outside regular classes.

1.10 New Trends in Special Education

Today, greater stress on pre-vocational and vocational trainings and on practical life experiences is given. Supportive services are expected from the family and by the community in special education. The need of zero-rejection i.e. every child should get some kind of education irrespective of his/her disability. More emphasis is given on early identification and intervention. Providing quality management by employing qualified educators and use of Educational Technology is among the major trends in Special Education.

Vocational Training & Employment

It was believed that the person with intellectual impairment were not productive as their adaptive abilities were not commensurate with a person of average Intelligence. It was also believed that they were not to be brought to the notice of the community, they should be kept within the four walls and all that they needed were food, water, clothing and shelter.

I low ever, increase in awareness, development in the service models and advancements in the technology coupled with the strength of the rehabilitation legislation, gradually the persons with intellectual impairment who used to be engaged in

sheltered workshops, are now engaged in open employment with either some or no support.

Products involving simple operations based on paper, cloth and similar kinds of items were used for this purpose. These jobs are basically repetitive in nature, where safety was not a matter of concern, as machines were not used for any commercial application to the operations of a vocational unit and profit was regarded as something uncharitable in such settings. There was no need to restructure the work site and little adaptations were necessary in the job activity.

Right Based Approach

Due to self-advocacy movement, legislative measures and increasing networks of services, people now realize the existence and the special needs of the persons with intellectual impairment. There is however, a need to treat them as a citizen at par with others, which is their constitutional right. The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full participation) Act, 1995 makes it obligatory on our part to provide them with equal opportunity protect their rights and ensure conditions for full participation in the community.

The National Trust for the welfare of the persons with intellectual impairment to have better life through various schemes in the country these provisions can be realized with active support and participation of the community, parents, governments and NGOs.

Social Issues:

Families of persons with intellectual impairment are found to be stressed, and seek respite. Many a time, their major concern centers on the care and safety of their child and the anxiety of 'who will look after their child after the parent's time?' Though

National Trust aims to respond to this concern through providing guardianship, a lot more is yet to be done to streamline the process. Issues related to Rights of the person with intellectual impairment, sexuality and marriage remain unanswered. However, there are a few instances of legal support and justice to women with intellectual impairment who were sexually exploited. Government at Central and State level, provide a number of benefits and concession for persons with disabilities including those with intellectual impairment such as travel concession in buses and trains with an escort, aids and appliances, maintenance allowance in some states, scholarship for education and tax deduction for parents/guardian.

Community Based Rehabilitation (CBR):

Success of CBR lies in community participation. As noted in the ILO, UNESCO, WHO joint position paper (1994), CBR is implemented through the combined efforts of disabled people themselves, their families and communities and appropriate health, educational and vocational and social services. with over 70% of Indian population living in rural areas with varying socio, economic, geographical, linguistic conditions, and the most viable way of reaching out is through empowering the community members to take the responsibility of their community.

In India, the CBR programmes are mainly supported by the government, NGOs, and International NGOs. Government of India has initiated District Disability Rehabilitation Centers (DDRCs) in collaboration with the state governments in over 120 districts in the country which aims to provide total rehabilitation to persons with disabilities in the community. A number of NGOs with funding from various sources have implemented CBR programmes in the country for all disabilities comprehensively

including intellectual impairment also with remarkable success though the programmes are fragmented. A number of CBR programmes in the country train and empower the women groups and also persons with disabilities to be the torch bearers of CBR programmes to ensure sustainability of the programme. There are individual reports/case studies on CBR which are project specific.

As noted by Wirz and Thomas (2002), CBR has not developed sufficient published literature about planning, implementation and evaluation in the same way as other areas of service delivery such as primary health care, community development or income generation. It is also to be noted that CBR for disabilities other than intellectual impairment involves arranging for surgery where appropriate, supply of aids and appliances and assistive devices, education, linkages to funding sources for economic rehabilitation and guiding the disabled person towards independent living. CBR for persons with intellectual impairment involves, training the persons, empowering the families and reduce stress and cope with the condition of the individual with intellectual impairment. In other words, training is the main focus.

The CBR worker should be competent in training ranging from early intervention, activities for daily living, referral to school, vocational training and parental support to reduce stress. This demands a different orientation of the CBR worker to be successful in empowering the person with intellectual impairment and families and community in general.

Vocational Transition Models:

Comprehensive transition from school to work planning and implementation require participation from all relevant school and adult service providers as well as

parents and individuals with intellectual impairment. Comprehensive transition planning requires restructuring and rethinking of professional roles, this is not enough. Participation of family members of the persons with intellectual impairment must also be encouraged. Transition process must include the provision of quality services for all handicapped youth as they prepare to leave school.

Components of Transition Process:

Transition Plans may begin with a parent, school or any agency responsible for providing post school vocational services, but regardless of who initiates the plan, it should be prepared three to five years before the student leaves the school.

There is a need in India to make a nation-wide priority for transition of persons with intellectual impairment from school to work. Therefore, under the project, “transition from school to work” NIMH transition model has been development based on past experiences. The role of the community and parents has been given more importance and the same is highlighted in this model.

1.11 NIMH Transition Model

It is roughly calculated that about 70 lakh constitutes adults out of 170 lakhs of persons with intellectual impairment in India. About 3000 adults are currently receiving vocational training at 16 vocational rehabilitation centers and 200 non-governmental organizations in India. Majority of them do not attain the status of an employee and continue to remain as trainees. As a result there is no considerable change in quality of life and behavioral pattern expected of an adult enjoying the status of an employee.

Transition planning currently rank as one of the top priorities of special education and vocational rehabilitation programmes across the country. A model of transition process has been developed to suit to Indian context.

The flow chart of the NIMH Transition Model shows four stages of vocational training and employment for persons with intellectual impairment.

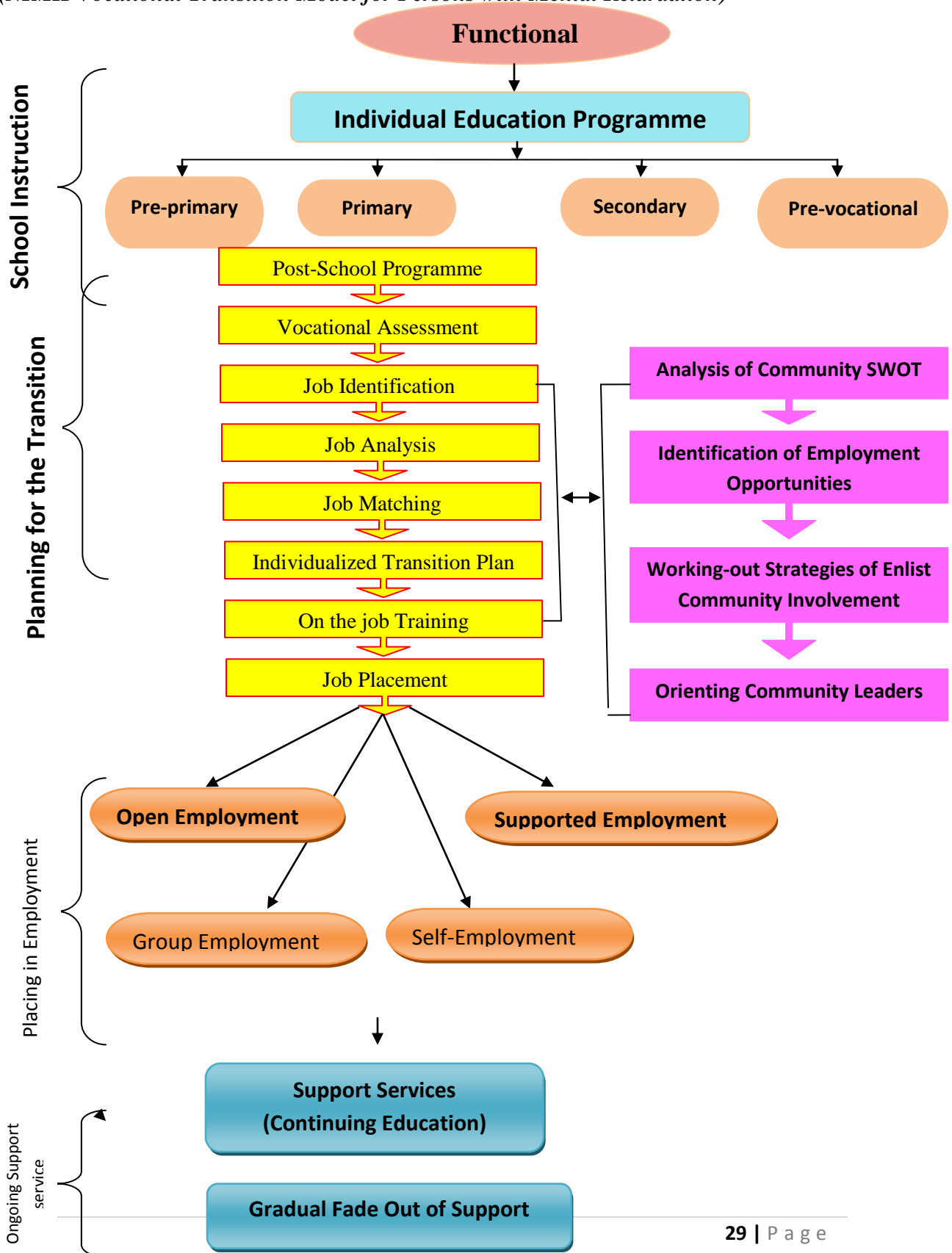
STAGE- I

System school instruction is the foundation of vocational training and employment. The special school curriculum includes the prevocational/occupational aspects. The special children are taught the daily living skills through the functional curriculum from pre-primary to pre-vocational level. The functional curriculum from pre-primary to pre -vocational level. The functional curriculum equips the children with special needs with necessary work readiness skills.

The main objectives of school based vocational curriculum are:

- It develops work habit, positive attitude, value towards work and daily living activities.
- It provides instructions and guidance for establishing and maintaining positive human relationship at home, school and at work.
- It develops the work skills among the students to be readily integrated physically, socially and economically in to the community.

Figure No. 13 Stages of Vocational Rehabilitation/ Vocational Education Programme (NIMH Vocational Transition Model for Persons with Mental Retardation)



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Development of School Based Vocational Curriculum:

Baine's ecology based curriculum (Ecology Inventory) helps to develop a school based vocational curriculum. An ecological inventory can be made by listing out all functional tasks performed by the non-handicapped persons in a particular environment. The steps to construct the curriculum:

- First of all identify the target group for whom curriculum is being designed.
- Select the target group functioning in the environment and sub-environment including the boundaries of the home, community, vocational and school environments and also predict the boundaries of the future environments.
- Identify the functional tasks that are performed by the non-handicapped and handicapped individuals through interviews, observations or by giving specially designed dairy to parents.
- Develop an inventory for particular handicapped individuals describing the special equipments, materials, conditions or adaptations and methods if necessary.

School Based Vocational Skill Training:

- Make the list of the daily activities an individual performs in a particular environment.
- Identify the pre-vocational and vocational activities associated with the selected daily living skills.
- Prepare the Individualized Training Programme for the student including the prevocational and vocational skills along with self help, motor, language, social, academics and recreational skills.
- Select the activities based on the age and ability level of the student.
- Encourage the parents and other family members of the non-handicapped persons to participate in training.
- Train in stimulated and natural settings.

Stage-II: This stage consists of

Community assessment:

- Analysis of Community- SWOT.
- Identification of employment opportunities.
- Working out strategies to enlist jobs in the community.
- Job identification.

Vocational Assessment:

- Family Assessment.
- Generic Skills assessment.
- Specific Skills assessment.

Individualized Transition Plan:

- Job analysis.
- Job matching.
- On the job training.

This model insists in identifying the possible jobs when the student reaches the final stage of schooling in consultation with the parents. The transition plan is suggested to be a part

of individualized Education Plan. This avoids unnecessary confusion of parents about the post-school programmes of their children with intellectual impairment.

Stage – III: Placing in Actual Job Sites:

The Placing in Actual Job Sites and learners are prepared for a employment right from the beginning of their schooling. As they reach the final stage, the search for the real job starts. The training continues in simulated settings and job sites. By the end of the training, as they leave the school, the students are placed in actual sites. It can be in one of the following types of employment. Open employment, Supported Employment, self or home based employment.

Stage – IV: Support Services:

The Support Services are the ongoing support services, which help the new employees to continue on-the-employment, are given importance in this model. Few ongoing support services are:

- To arrange for extensive vocational training.
- To observe them at their job sites.
- To provide additional remediation in academic subjects.
- To teach necessary skills needed to succeed in career.
- To liaison with the employer to bring in improvement in the performance.
- To lead them towards independent living and attain quality of life.
- To organize social warning exercises for better acceptability in the work community.

The transition model does not rely on prediction of the employability. It leads toward the beginning of the student's world of work from where they can aspire for better chances towards meaningful adult life with economic independence. The role of parents has been given prime importance in this transitional model.

Transition is a Partnership Action:

The transition process will not be successful unless school, community and families work together to ensure the delivery of appropriate services. Steps to establish partnership action are:

- Information exchange between schools and adult service agencies.
- The Staff development programme within the agencies and across the agencies to enable professionals to get to know each other and to promote a better working relationship.
- Joint planning for each student attending special education.

Importance of Parent Involvement:

The graduation of a child from school is milestone in any family. The role of the family as advocate and case manager for a young adult with intellectual impairment is critical during this phase. The service and resources here needs a long term vision. Only family is in a position to demand outcomes that enhances the individual's quality of life. They are the risk takers and financial planners. The family members specially the parents should begin a planning, which provides a vision of what his intellectually challenged son or daughter will be doing after 15 years and in future. The planning should include where the person will work, earn, recreate and live. Who will be the significant other in his or her life is a critical issue to be decided earlier.

An important factor for a smooth transition from school to work is the involvement of parents. They should be aware of how persons with intellectual impaired mild, moderate and severe, can be productive on a job through a supported work model

involving a proper employment match, the use of very systematic instruction and the ongoing support.

Plans for development in special and vocational education:

- The last two decades have seen significant progress in the areas of intellectual impaired in the country. However, considering the large population of the country, and the estimates of 58th Round of National Sample Survey Organization (NSSO) in 2002, which places 94/1, 00,000(0.094%) of the population to have intellectual impairment, the reach out with service provision is far from adequate.
- Though MSJ&E is the nodal Ministry for disability rehabilitation, Ministry of Health, Education, Labour and Rural development have major responsibilities, thus fragmenting the services. For comprehensive service provision, there needs to be convergence among the government departments.
- Awareness and education on Prevention and early detection and intervention should target the women in rural and urban areas so that the crucial early years of ‘at risk’ children get the right support at the right time. It should be one of the major focus areas in the agenda of empowering women.
- Parallel streams of special education (funded by MSJ&E) and inclusive education (funded by MHRD) hold the threat of substandard and poor quality education in both streams. Moreover, it will hamper the achievement of inclusion. There is a need for educational programmes monitored by one department of the government.
- Teacher preparation for Regular education programmes should include education of children with intellectual impairment to ensure inclusion.

- Evidence based best practices in CBR must be systematically documented and made available for those who need. Research and documentation in this area is the need of the hour.
- Employment and adult independent living should get a focus where by persons with intellectual impairment have safe, secure and dignified lives as contribution members of the society.
- Research, documentation and dissemination of information should be an ongoing process with wise use of technology.
- Empowering persons and families with intellectual impairment with focus on reduction of stress among the caregivers is a thrust area as the mothers are found to be stressed and many a time burnt out.

India is a signatory to a number of UN resolutions most of which have been responsible for development of various action plans and implementation in the country. To name few, the UN resolution 37/52 of 3rd December 1982 is a significant one, aiming to achieve full participation, equality and protection of rights of persons with disabilities. Asia Pacific Decade (1993-2002) extended for another decade (2003-2012) focusing on major policy areas gave a thrust to the programmes in the country. India is a signatory to Biwako Millennium Framework (2002) for action towards an inclusive, barrier-free and right based society for persons with disabilities. All of these have provided direction towards progress in the area of disabilities. It is hoped that through this conference a road map for viable programmes for persons with intellectual disabilities will be drawn and implemented, thus helping persons with intellectual disabilities lead a dignified life as proud citizens.

1.12 Rational of the Study

The programmed instructions through training have changed the life of the persons with disabilities. In the area of intellectual impairment, individualized instructions are essential for the vocational skill development and rehabilitation of intellectually impaired children. The child self-esteem is boosted. When he introduced with knowledge of vocational training (lamination skills) The suitable methods like demonstration, task analysis, drill with application of reinforcement in training has helped intellectually impaired persons. The researches have shows that the application of proper instructions methodology, equipments and techniques, reveals remarkable enhancement of skills in intellectually challenged persons. In this background the present problem is selected which includes programmed instructions for vocational training of the persons with intellectual impairment. The problem in other words can be framed as “Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person.”

1.13 Definition of the terms used in the study

Mild Mental Retardation:

Mental retardation means a condition of arrested or incomplete development of mind of a person which is specially characterized by sub-normality of the intelligence. Where as per the categories of the mental retardation mild mental retardation refers to the persons having range of I.Q. is between 55to70.

Vocational Rehabilitation:

Vocational Rehabilitation mean that part of the continuous and coordinated process of rehabilitation, which involves the guidance, vocational training and selective placement designed to enable a disabled person to secure and retain suitable employment.

About Lamination skills:

In the investigation the term Lamination Skills is used. This is one of the vocational skills. This skill was chose by the investigator because this skill requires less mental ability and more expertise in gross-fine motor skills. These types of skills are beneficial for the persons in inclusion and integrate them as a contributory and productive member of the society.

1.14 Need of the Study

The researcher had seen during the study of review of related literature that it is very difficult to connect the mentally retarded person with the main stream and can make the independent. Researcher has taken an initiative in the form of experimental research to trained Mentally Retarded children through continuous training of Lamination Skill. These people also needs to connect with the community-based common activities which are based on employment in the context of Mentally Retarded person. It is a need and requirement of the society that every individual must take part in the growth and development of the country. Researcher thought that a therapeutic atmosphere conducive to emotional, socio-cultural, physical, and spiritual growth as well as occupational activities must be made available and give them opportunities to learn skills, gain confidence, self-respect and economic gainfulness. This Lamination Skill is very technically handled activity and can use under the supervision. Vocational Training and

employment is major area in the empowerment of persons with intellectual disabilities. It explores the relationships between aptitudes and generic skills, as well as work traits and aptitudes. There is a really a need of Vocational Training Programme for Mentally Retarded person and therefore this study is justify to work on the Vocational Training on Behavioural Skills In Mild Intellectually Disabled Person.

1.15 Statement of the Problem

On the basis of various reviews of literatures the following problem is formulated “**Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person.**” This study is to develop managing skills for lamination machine in the subject for the purpose of vocational training.

1.16 Objectives of the study

The objectives of this research are as follows:

1. To develop the gross motor skills of Mild Intellectually Disabled Person.
2. To development of fine motor skills of Mild Intellectually Disabled Person.
3. To develop adequate social Interaction skills.
4. To prepare the adolescent (Mild Intellectually Disabled Person) for Pre Vocational Skills i.e. to handle lamination machine effectively.
5. To develop the Lamination Skill perfectly.

1.17 Hypothesis

The following hypotheses are formulated for present investigation work:

1. There will be significant difference between the average score of pre and post test for gross-motor skills.
2. There will be significant difference between the average score of pre and post test for fine-motor skills.

3. There will be significant difference between the average score of pre and post test for social interaction skills.
4. There will be significant difference between the average score of pre and post test for pre-vocational skills.
5. There will be significant difference between the average score of pre and post test for skills for lamination machine.

1.18 Delimitation

The current study is delimited to one case of Mild Intellectually Disabled Person. The sample taken was a purposive sample to enhance the lamination through vocational training. The subject taken was a 28 year old mild intellectually challenged student of TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs) of Jai Narain Vyas University, Jodhpur.

2.1 Review of Related Literature

The review of literature in this research is that researcher had seen many surveys, research articles and related literature. The vocational training programmes are providing by various institutions to acquaint students in a specialized area. The student gets employment in the related area and connects in the main stream of the growth and development of the county. Here researcher has reviewed the vocational training programmes for general students and for special students. For special children the vocational training programmes are prepared individualized. There are twenty one types of disabilities identified and government of India tried to connect them with the main stream of education and employment. (Right for Person with Disabilities Act 2016). The types of disabilities which earlier recognized and connected with the main stream have been increased from existing 7 to 21 and the Central Government had added more types of disabilities. The 21 disabilities are given below:-

1. Blindness
2. Low-vision
3. Leprosy Cured persons
4. Hearing Impairment (deaf and hard of hearing)
5. Locomotor Disability
6. Dwarfism
7. Intellectual Disability
8. Mental Illness
9. Autism Spectrum Disorder
10. Cerebral Palsy
11. Muscular Dystrophy
12. Chronic Neurological conditions
13. Specific Learning Disabilities

14. Multiple Sclerosis
15. Speech and Language disability
16. Thalassemia
17. Hemophilia
18. Sickle Cell disease
19. Multiple Disabilities including deaf blindness
20. Acid Attack victim
21. Parkinson's disease

Out of these disabilities the researcher has taken mental retardation (Intellectual Disability) type of children for the individualized vocational training programme. Here are the few researches reviewed by the researcher:

Albin, J.M. et.al (1994), finds that most rehabilitation organizations are adding supported employment to their existing array of services, rather than pursuing total changeover from facility-based to community-based employment support.

Das, H. (2011) indicated that the vocational rehabilitation and community based vocational rehabilitation for persons with intellectual impairment and associated disabilities is extremely pitiable in our country. Less than 5% of the adult population with MR is under any structured model of vocational rehabilitation. A very few sheltered workshops and work centers and a negligibly few are scattered examples of open, supported, self-employment options are available. The study evaluated the prevalent curriculum i.e. MDPS, FACP, BASIC-MR, BASAL-MR, CAPP, AAPEP-R etc. in relation to the skill requirement across the models of employment i.e. self employment, open, supported and sheltered. The analysis indicated the curriculum though had pre-vocational skills incorporated, however, failed to relate closely to the models of vocational rehabilitation. As in current context only sheltered workshops in urban area

and very few individuals are productively employed in rural area; the curriculum at school level needs major revision. Lack of transition from class to class, class to prevocational and prevocational to vocational; is highly evident in the study.

Gilson, S.F. (1998), reports the results of a 10-year effort to chart the growth of supported employment in areas such as the number and disability profile of participants, consumer outcomes, funding mechanisms, and program expenditures. The costs and outcomes for supported employment and sheltered employment are also compared. Strategies are presented to expand the utilization of supported employment and thereby increase employment opportunities available for persons with the most significant disabilities.

Gliner, J.A. Sample, P. (1996), shows statistically significant improvement for those who received the community life options intervention, although the subjective assessments and case study methods revealed change in quality of life among some participants. The discussion focused on the strengths and weaknesses of each method of evaluation and assessment of the impact of the intervention.

Griffin, D. K. (et.al.) (1996), indicated that there was a significant relationship between self-esteem and job satisfaction for both groups of subjects. In addition to the subjects worked in supported job reported significantly higher levels of job satisfaction. There was also an interaction between place of residence and place of employment when looking at self-esteem; those who lived in a semi-independent home and worked in supported employment employed reported the highest levels of self-esteem. The results were discussed that the social validity of supported-job for persons with mild mental retardation.

Heller, K.W. (1996), found that an admittedly “radical” position with regard to the deficiencies of sheltered work settings as contexts for communication. Communication in general and augmentative communication in particular. As being antithetical to the value system, opportunities, and types of relationships available in sheltered workshops. He finds that both augmentative and alternative communication (AAC) consumers and professionals have become increasingly concerned about the problems faced by persons with severe speech and writing impairments in the area of employment.

Jacobson, J. W. (1996), reviews treatments with utility. Supported workers were found to evidence lower occurrence of behaviors consistent with psychosocial deficits compared to sheltered workers, but both groups had little access to adjustment services. Literature on psychosocial rehabilitation treatment for psychosocial and social skills deficits in people with mental retardation is reviewed. It is concluded that adequate and appropriate assessment and technologies are available. However, actual treatment delivery is probably affected by limited resources, training needs of specialized clinicians in developmental services to improve skills in psychosocial rehabilitation procedures, and changing ideologies that discourage implementation of active, rather than exclusively ecological, rehabilitative practices.

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ideologies that discourage implementation of active, rather than exclusively ecological, rehabilitative practices.

Kirschenbaum, A. (1999) identified that staffs perceived work role, and their needs for support, supervision, and training in the areas of communication, environment adaptation, individual activation and training methods, with regard to learning disabilities and special needs. Conclusions: Care managers should focus upon preparation of staff support programmes to improve the quality and efficiency in this area of care.

McCuller, G.L. et.al.(1990) indicated that the workers in a majority of workshops receive classroom training on some array of social-vocational and job responsibility skills, and that training is conducted primarily by production staff. However, insufficient attention to the transfer or generalization of these skills from the classroom to community job sites would seem to limit the functional value of this training.

Parmenter, T.R. & Knox, M. (1991) indicate that only 42% were in open employment. Those with a moderate or service intellectual disability were generally in sheltered workshops, activity centers or at home. The majority of respondents indicated that work was an important part of their lives, not so much from an economic perspective, but especially as it afforded them a social outlet. The implications of the findings are discussed in the context of the current emphasis upon community-based rather than sheltered employment for people with disabilities.

Rani, U. (2011) finds the need of therapeutic atmosphere conducive to emotional, socio-cultural, physical, and spiritual growth as well as occupational activities that will give them opportunities to learn skills, gain confidence, self-respect and

economic gainfulness has to be created. To develop and create innovative programs in the management of intellectually challenged persons, there is need to train and orient social workers, other professionals of allied disciplines on the rehabilitation of the intellectually challenged and to involve a more dynamic community participation in the implementation of its rehabilitation programs and assist the intellectually challenged people to obtain employment thru self-employment, sheltered workshop or open employment.

Rao and Reddy (2002) revealed that in 2001 Census, the number of persons with visual disabilities made up almost half (48.55%) of all persons with disabilities, whereas with hearing disabilities comprised the smallest category at 5.76 percent. Most of the special schools are funded by Government of India. Various services are available across these centers. Vocational Training and employment is major area in the empowerment of persons with intellectual disabilities.

Suresh, A. Santhanam, T. (2010) identifies the generic skills, work traits and aptitude of people with mild and moderate intellectual impairment from regular and special schools. Further, it gives the relationships between the generic skills and the aptitudes, as well as work traits and aptitudes of people with mild and moderate intellectual impairment from different schools. The sample for this study consists of 19 persons with mild intellectual impairment and 26 with moderate intellectual impairment. Twenty-five persons had studied in regular schools before they started their vocational training, while the other 20 had studied in special schools. They were assessed for generic skills, work traits and aptitude. Analysis of variance (ANOVA), correlation co-efficient, and critical ratio between the co-relations were used on the data to test the hypotheses.

Wehmeyer (1994) found that there were significant differences in locus of control scores among individuals employed competitively, individuals employed full-time, respondents in sheltered environments, individuals currently unemployed, and all other groups. Individuals' unemployed and employed in sheltered settings perceived themselves as having less control than individuals employed competitively. These results were examined in light of quality of life findings, focusing on the need to include choice and control in programming for people with cognitive and developmental disabilities.

2.2 Analysis and Interpretation of Review of Literature

The studies directly related to person with disabilities were analyzed and found that most rehabilitation organizations are adding supported employment to their existing array of services, rather than pursuing total changeover from facility-based to community-based employment support. The vocational rehabilitation and community based vocational rehabilitation for persons with intellectual impairment and an associated disability is extremely pitiable in our country. It is less than 5% of the adult population with Mentally Retarded is under any structured model of vocational rehabilitation. A very few sheltered workshops and work centers and a negligibly few are scattered examples of open, supported, self-employment options are available. The study evaluated the prevalent curriculum i.e. MDPS, FACP, BASIC-MR, BASAL-MR, CAPP, AAPEP-R etc. in relation to the skill requirement across the models of employment i.e. self employment, open, supported and sheltered. The analysis indicated the curriculum though had pre-vocational skills incorporated, however, failed to relate closely to the models of vocational rehabilitation. As in current context only sheltered workshops in urban area and very few individuals are productively employed in rural area; the

curriculum at school level needs major revision. Lack of transition from class to class, class to prevocational and prevocational to vocational; is highly evident in the study. Strategies are presented to expand the utilization of supported employment and thereby increase employment opportunities available for persons with the most significant disabilities. Some where it has been seen that community life options intervention, although the subjective assessments and case study methods revealed change in quality of life among some participants. It focused on the strengths and weaknesses of each method of evaluation and assessment of the impact of the intervention. In some studies the self-esteem and job satisfaction is at the higher side. There was also an interaction between place of residence and place of employment when looking at self-esteem; those who lived in a semi-independent home and worked in supported employment employed reported the highest levels of self-esteem. One study shows that supported workers were found to evidence lower occurrence of behaviors consistent with psychosocial deficits compared to sheltered workers, but both groups had little access to adjustment services. Literature on psychosocial rehabilitation treatment for psychosocial and social skills deficits in people with mental retardation is reviewed. It is concluded that adequate and appropriate assessment and technologies are available. However, actual treatment delivery is probably affected by limited resources, training needs of specialized clinicians in developmental services to improve skills in psychosocial rehabilitation procedures, and changing ideologies that discourage implementation of active, rather than exclusively ecological, rehabilitative practices. Studies shows that care managers should focus upon preparation of staff support programmes to improve the quality and efficiency in this area of care. In the year 1990 McCuller indicated that the workers in a majority of workshops

receive classroom training on some array of social-vocational and job responsibility skills, and that training is conducted primarily by production staff. However, insufficient attention to the transfer or generalization of these skills from the classroom to community job sites would seem to limit the functional value of this training.

2.3 Research Gap

The researcher had seen during the study of review of related study that it is very difficult to connect the mentally retarded person with the main stream and can make the independent. It is an effort to make the busy in some positive activity under the supervision of family members of the employer. Researcher tried to find out the community-based common activity based employment for people with disabilities in the context of Mentally Retarded person. Researcher had decided to provide therapeutic atmosphere conducive to emotional, socio-cultural, physical, and spiritual growth as well as occupational activities that will give them opportunities to learn skills, gain confidence, self-respect and economic gainfulness. To develop and create innovative programs researcher had given a vocational training on Lamination Skill which is very technically handled activity and assist the intellectually challenged people to obtain employment thru self-employment, sheltered workshop or open employment. Vocational Training and employment is major area in the empowerment of persons with intellectual disabilities. It explores the relationships between generic skills and aptitudes, as well as work traits and aptitudes. Researcher had seen the research gap in this kind of Vocational Training Programme for Mentally Retarded person and so he has started working on the Vocational Training on Behavioural Skills In Mild Intellectually Disabled Person.

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3.0 Research Methodology

Human search is a shared search. Every searcher adds to the existing knowledge. Researcher has made the original contribution to the existing dimensions of knowledge. The advancement in knowledge is different in different realms, sometimes altogether new facts are discovered, for instance transition from plane geometry solid geometry or from Newtonian physics to Einsteinium physics or from Corpuscular theory of light, from Ptolemaic Geocentric conception of the universe to Copernican to knowledge may be made by the discovery of new relations of facts.

In simple terms “research means movements from the known to unknown”. Intellectual curiosity to know the truth is the propelling force behind taking up research. A method is a way in which an activity is done. It can be describe as step-by-step procedure followed in the execution of a sound methodology and setting of the study. From the above mentioned definitions it is clear that research is concerned with pure economic phenomena, it aims at finding out the old or new facts through scientific method, which is based on logic and systematic steps. Through research we can find out economics facts by means of scientific method only. Research Methodology is a way to systematically solve this research problem. It is a plan and process comparing research’s decision about how to proceed for collection of data, computing data and analyze this same for given study which aims at fulfilling the purpose of study without wasteful expenditure and time, money and energy.

3.1 Variables:

a. Independent Variable:

Independent variables are those variable which manipulated by investigator directly by the selection. In this research independent variable is vocational skill training.

b. Dependent Variable:

The dependent variable is measured in an experiment. Any change in behavioural dimension is also dependent variable. Dependent variable of the study consisted level of achievement in vocational skills and change in work behavior of intellectually disabled person.

3.2 Design of the Study

Single-subject research is experimental rather than correlation or descriptive, and its purpose is to document causal, or functional, relationships between independent and dependent variables. Single-subject research employs within- and between-subjects comparisons to control for major threats to internal validity and requires systematic replication to enhance external validity. Several critical features define this methodology. Each feature is described in the following sections and organized later in a table of quality indicators that may be used to assess.

An individual study is an acceptable example of single-subject research. Single-subject research methods offer a number of features that make them particularly appropriate for ties in special education research. Special education is field that emphasized the individual student as the unit of concern, active intervention, and practical procedures that can be used in typical school, home, and community contexts, special education is a problem-solving discipline, in which ongoing research in applied settings is needed.

In this investigation a set of independent variable includes Vocational Training. Before-after Design of research is used to observe the effect of 40 days training. It will be a pre and post design experiment in which child's skill development was assessed regarding the Gross Motor, Fine Motor, Social interaction, pre-vocational and lamination skills. The average scores of pre & post test sessions will reveal the effect of vocational training.

Table No. 5 : Research Design

Pre-Tests				TREATMENT	Post-Tests					
Test	Test	Test	Test		Test	Test	Withdrawal	Test	TREATMENT	Test
1	2	3	4		1	2	Withdrawal	3	TREATMENT	4

3.3 Sample:-

Sampling may be defined as the selection of some part of an aggregate or totally on the basis of which judgments or inference about the aggregate or totally is

made. In other words, it is the processes of obtaining information about an entire population by examine only a part of it.

3.4 Sampling Technique:

From different sampling techniques the investigators selected purposive sampling procedure for selection of the sample for the present study. Purposive sampling method in which, the investigator selected the sample intentionally from his choice. This is the reason why purposive sampling is considered as the best technique of selecting representative sample. One male intellectually challenged adult of 28 years of age of mild IQ level was selected for this study from TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs), Jai Narain Vyas University, Jodhpur.

3.5 Material Required

Lamination machine, paper, lamination sheet, pouch

3.6 Measuring Tool Used

Researcher has used a standardized scale namely Behavioral Assessment Scales for Adult Living- Mental Retardation (BASAL-MR). The above tool is created by NIMH- National Institute for the Mentally Handicapped (Secunderabad). The tool is having two parts first (BASAL-MR) Part-A which contains 120 items and 8 domains, and the second (BASAL-MR) Part B which consists of 106 items and 12 domains. In this tool the responses measured in the form of rating scale from Part-A 1 to 5 that is lowest to highest from physical prompt, verbal prompt, gestural prompt, occasional cues and independent. Part-B responses measured in the form of rating scale from 0 to 2 that is lowest to highest from Never, Occasionally and Frequently.

3.7 Standardization of Tool

In a research, a statistical analysis is an important aspect. The investigator employed qualitative and quantitative analysis of data. For the quantitative analysis parametric statistic is used. Mean differences and percentage of mean calculated for the all pre & post test, to find out the significance difference between pre-test and post test for the case, 't' value is calculate. An analysis of data is presented in following chapter; however, the tool is yet to be standardized.

3.8 Controls

1. The subject was selected purposefully.
2. Selection of subject was according to the interest and permission of the family members.
3. Subject selected for training has mild level of IQ.
4. The subject has no associated conditions.
5. Proper working environment was provided to the subject.

3.9 Data collecting procedure

Initially, the problem was selected from the vocational activities, and looking to the level and activity, the subject was selected purposefully; looking to the interest of the subject, his family's interest and his ability and level of performance in pre-vocational activities. Prior to selecting the subject it was taken care that subject has no associated condition which effects the overall training instructions & procedures. To know the performance level and to evaluate the knowledge of the lamination skills and operation of lamination machine pre-test of the subject was taken. Pre-evaluation was taken in four parts that is four continuous days. A scale consisting 40 items was formed. The rating was on the basis of level and the scores were collected from 0 levels starting from physical prompt to level 5 for independence.

After pre-test evaluation, training of 30 days was given for enhancing the skills in gross motor, fine motor, social interaction, pre-vocational and the main skill i.e. the lamination skill. The procedure of task analysis was adopted while training different skills to the subject. Techniques of skill training like application of reinforcement at appropriate places and whenever required, prompting, chining, shaping, modeling, were also applied to help subject to learn specific target skills.

Two post-evaluations were conducted after the treatment of 30 days. A withdrawal of 15 days was given thereafter. After withdrawal, a post-test was conducted. A training of 10 days was given to the subject after withdrawal. The final evaluation was accomplished after the withdrawal of 10 days to appraise the overall treatments given to the subject for development of various skills.

3.10 Scoring Procedure:

A standardized scale namely “Behavior Assessment for Adult Living Mental Retardation” (BASAL-MR) was used for the study. In this scale a set of 120 items and 8 domains were contained in part-A and a set of 106 items and 12 domains were contained in part-B, then the responses measured were in the form of rating scale from 1 to 5 that is lowest to highest from Physical prompt, verbal prompt, gestural prompt occasional cues and independent. Among the items present in the above mentioned scale the researcher has only used 40 items in pre-test and 40 items in post-test. The items used from the scale were those concerned with researcher’s vocation training on behavior skill and the skipped items were those concerned with extra vocational training.

3.11 Statistical Analysis procedure

In a research a statistical analysis is important aspect, the investigator employed qualitative and quantitative analysis of the data. For the quantitative analysis, parametric statistics is used. Mean difference and percentage of mean calculated for all pre and post test sessions, to find out the significance difference between pretest and post test for all the five categories ‘t’ value is calculated.

4 Analysis and Interpretation of the Data

The present study deals with the analysis of the data. The sample taken was a purposive sample to enhance the lamination through vocational training. The subject taken was a 28 year old mild intellectually challenged student of TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs) of Jai Narain Vyas University, Jodhpur. The qualitative & quantitative analysis & interpretation of data were done on the basis of objectives of the research.

4.1 Qualitative analysis

The present study deals with vocational, social and motor skills development in the subject. The sample taken is a purposive sample to enhance the lamination through vocational training. The subject taken was a 28 year old mild intellectually challenged student of TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs) of Jai Narain Vyas University, Jodhpur. The subject was selected from the pre-vocational group of the center. The sample has no exposure to the vocational training of lamination. Gross motor activity of the subject was normal. Fine motor movements were not up to the level of the expertise. No prior knowledge was seen regarding the use of the lamination machine; however, the subject has theoretical knowledge of what lamination machine is used for. The family members of the subject also took keen interest towards enhancing his skills in lamination. Subject was also willingly interested for taking part in the activity and the steps of the training enthusiastically. On the basis of the scale used by the investigator four evaluation tests in four constant days were conducted on the subject before the treatment of training to know the base level of the subject. After the treatment of 30 days continuously, two post tests were conducted to see the difference between pre and post exposure level of the subject. Withdrawal of 15 days was given to the subject and then third post-test was conducted on him. After third post test a treatment of 10 days was given to the subject and after this treatment, the final post-test was conducted on the subject to evaluate the significance of overall vocational training on him. The positive effects of vocational training in the subject were seen. The above training given to the subject proves that the training of

vocational skills as well as other skills like gross motor, fine motor and social interaction was too required for overall development of the subject in any vocation.

4.2 Quantitative Analysis

This sections deals with distribution of scores for different variables for mild intellectually challenged person. The mean is calculated for each category between pre and post test session's scores. Group 't' value calculated to know about the significance difference between pre post test sessions for the entire five variable.

Objective 1: To develop the gross motor skills of Mild Intellectually Disabled Person

Hypotheses 1 : There will be significant difference between the average score of pre and post test for gross-motor skills.

Figure-14: Gross Motor Skills of Intellectually Disabled Person

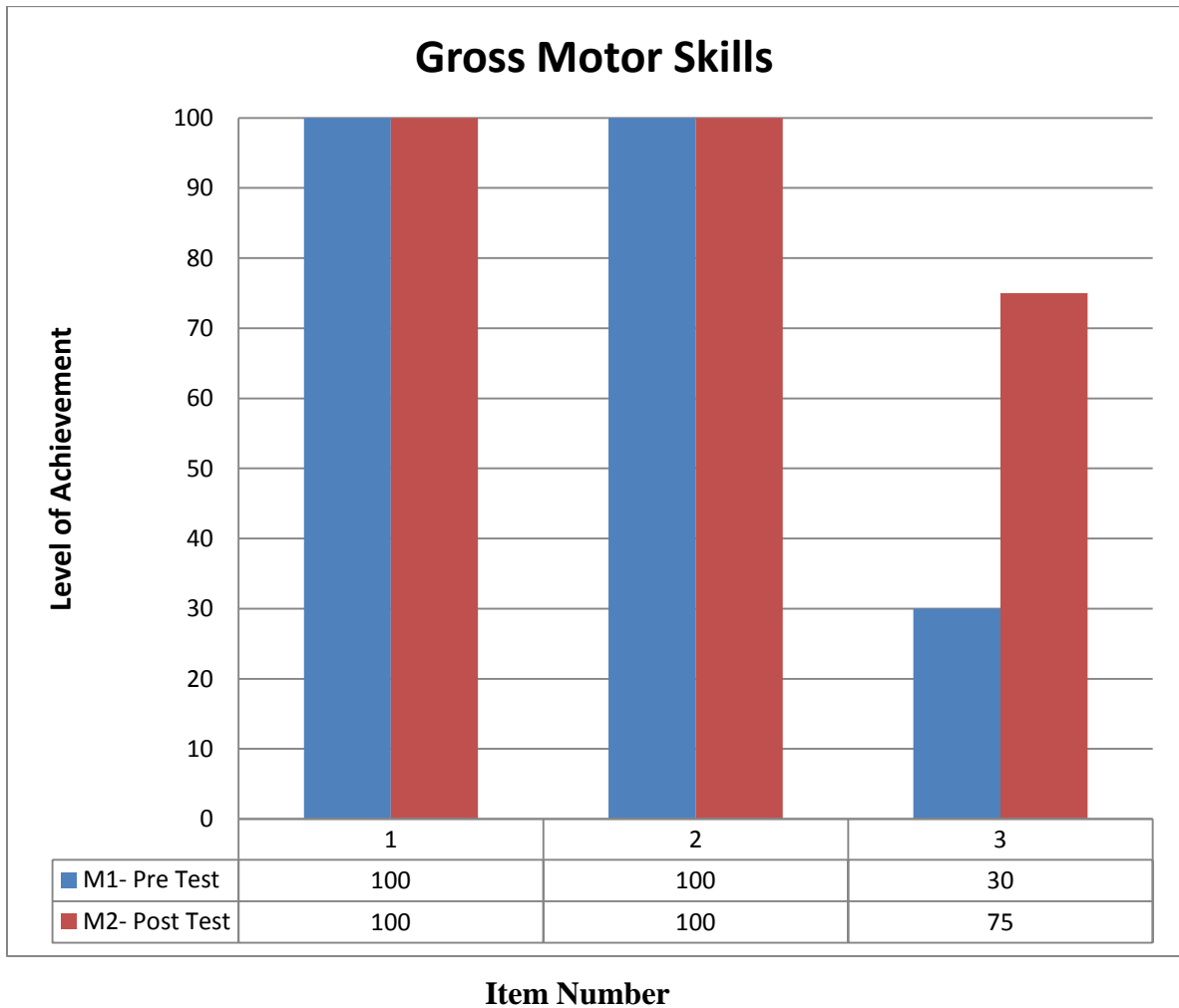


Table No. 6 Distribution of Scores For Different Variables (Gross Motor Skills) For Mild Intellectually Disabled Person

Post-Tests	% of Mean	100	100	75	91.67
	Mean of Test 1 & 4	5	5	3.75	13.75
	Test- 4	5	5	4	14
	TREATMENT				
	Test- 3	5	5	4	14
	TREATMENT				
	Test- 2	5	5	4	14
Test- 1	5	5	3	13	
TREATMENT					
Pre-Tests	% of Mean	100	100	30	76.67
	Mean of 4 Test	5	5	1.5	11.5
	Test- 4	5	5	2	12
	Test- 3	5	5	2	12
	Test- 2	5	5	1	1 1
	Test- 1	5	5	1	1 1
Item No.	1	2	3	Total	1 1

The above table & figure highlights the Mean score for Gross motor skills like “stands unsupported”, “pushes or pulls furniture as per requirement”. Total of sub-skills test containing **Mean= 11.50** and **Percentage of Mean= 76.67 %** for pre-test sessions. The table highlights the mean score for test sessions for total sub-skills containing **Mean=13.75** and **Percentage of Mean= 91.67 %**. It is clear from the table that the subject has enhanced the skills of Gross Motor activity like pushes & pulls furniture as

per requirement in his daily routine and in work situation. The first investigation treatment shows that the **Gross motor skills** tests for all items have obtained Mean= **3.83**, SD= **2.02**, S.E.M.= **1.66** on the pre-test sessions, whereas per post test sessions Mean= **4.50**, SD= **0.86**, S.E.M.= **0.50**. The calculated “t” value is 1 and it is not significant. Therefore, the formulated hypothesis “**There will be significant difference between average score of pre and post test for Gross Motor Skills**” is not accepted. It shows that no remarkable changes have been shown after the training as the subject had prior knowledge of gross motor skills.

Objective No. 2 To development of fine motor skills of Mild Intellectually Disabled Person.

Hypotheses 2: There will be significant difference between the average score of pre and post test for fine-motor skills.

Figure-15: Fine Motor Skills of Intellectually Disabled Person

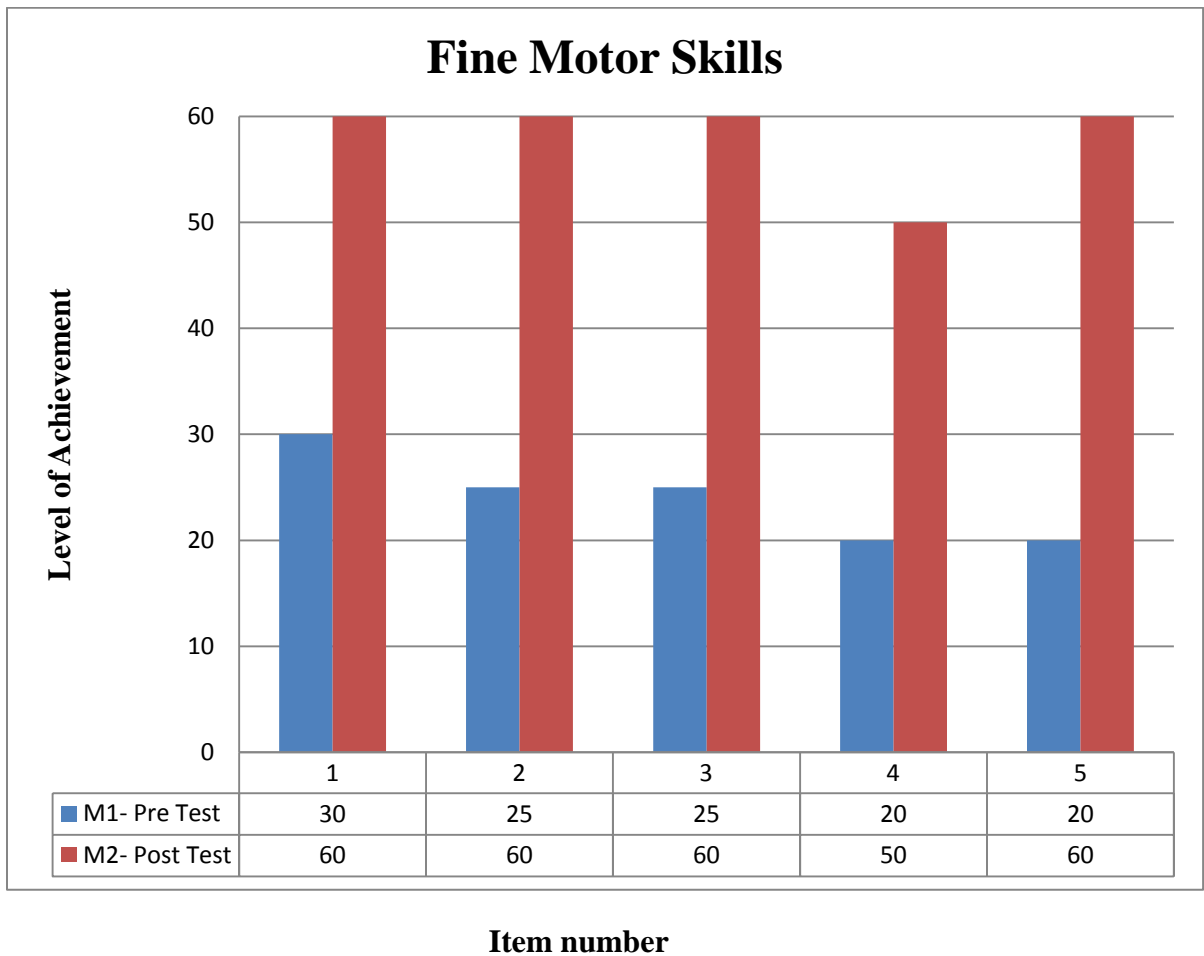


Table No. 7 Distribution Of Scores For Different Variables (Fine Motor Skills) For Mild Intellectually Challenged Person

Post-Tests	% of Mean	60	60	60	50	60	58
	Mean of Test 1 & 4	3	3	3	2.5	3	14.5
	Test-4	4	4	4	3	4	19
	Withdrawal						
	Test-3	3	3	3	3	3	15
	Treatment						
	Test-2	3	3	3	2	3	14
Test-1	2	2	2	2	2	10	
Treatment							
Pre-Tests	% of Mean	30	25	25	20	20	24
	Mean of 4 Test	1.5	1.25	1.25	1	1	6
	Test-4	2	2	2	1	1	8
	Test-3	2	1	1	1	1	6
	Test-2	1	1	1	1	1	5
Test-1	1	1	1	1	1	5	
Item No.	4	5	6	7	8	Total	1

The above Table & Figure 2 shows the Mean Score for Fine Motor skills like “use of a pair of scissors”, “use thumb and fingers to pick-up the object”. Total of sub-skills test containing **Mean= 6 and Percentage of Mean= 24%** for pre-test sessions. The table highlights the mean score for post test sessions for total sub-skills **containing Mean = 14.5 and Percentage of Mean= 58%**. It is clear from the table that the subject has

development of fine motor skills like folding the sheets as required, cutting the laminated sheets appropriately, uses fingers to operate the power switches and buttons on machines. These type of fine motor activities are not only helpful in upbringing the mental confidence of the subject but also helpful in his day to day life. The second investigation treatment shows that the fine motor skills tests for all the items have achieved **Mean= 1.20, SD=0.20 and S.E.M. = 0.09** whereas for post test sessions the **Mean=3.80, SD=0.44 and S.E.M. =0.20**. The significant difference between the mean of pre & post sessions (**t’ = 15.33 > p 0.01**). Therefore, the formulated hypotheses **“There will be significant difference between the average score of pre and post test for fine-motor skills.”** is accepted. It shows that continuous training plays important role in learning of fine motor skills. Training not only develops the practice and expertise on the particular skills but also develops to concentrate on a particular task for a long time.

Objective 3: To develop adequate social Interaction skills.

Hypotheses 3: There will be significant difference between the average score of pre and post test for social interaction skills.

Figure No. 16: Social Skills of Intellectually Disabled Person

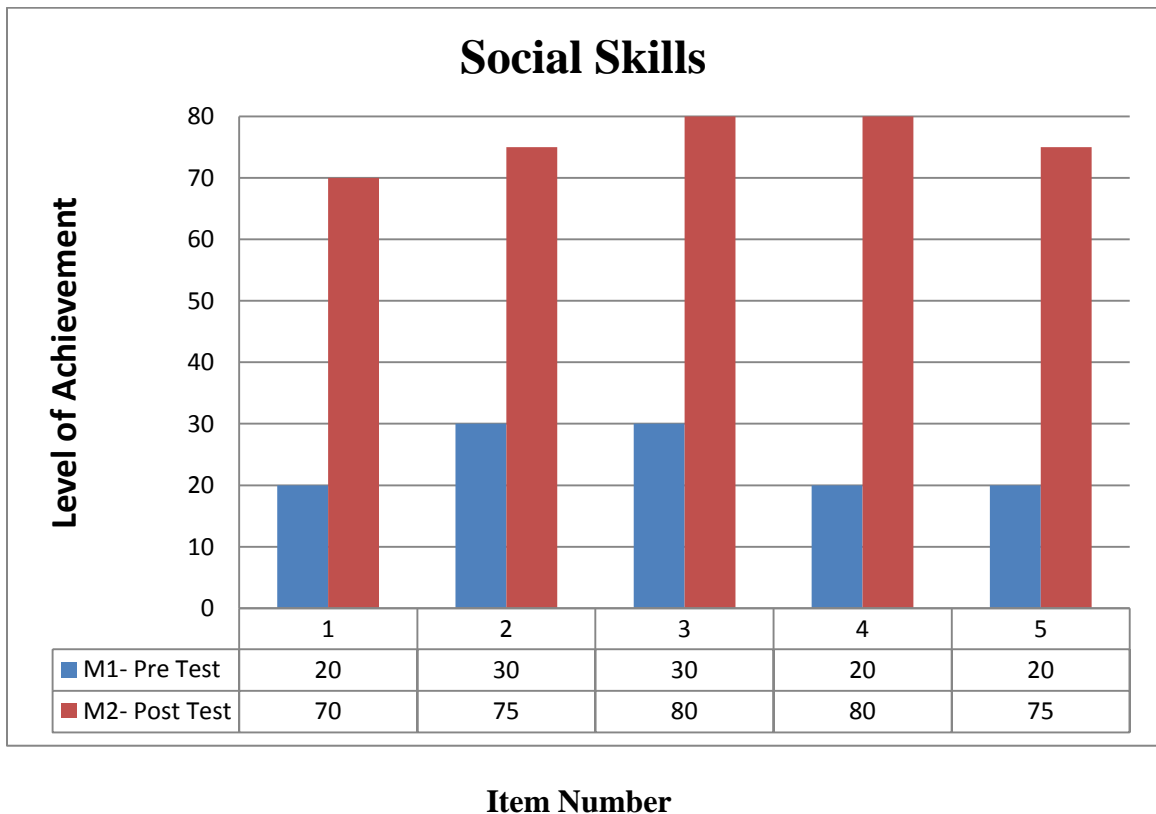


Table No. 8 Showing Mean scores of all pre and post test for Social Skills for Mild Intellectually Challenged Person

Post-Tests	% of Mean	70	75	80	80	75	76
	Mean of Test 1 & 4	3.5	3.75	4	4	3.75	19
	Test-4	4	4	5	5	4	22
	Treatment						
	Test-3	4	4	4	4	4	20
	Withdrawal						
	Test-2	3	4	4	4	4	19
	Test-1	3	3	3	3	3	15
Treatment							
Pre-Tests	% of Mean	20	30	30	20	20	24
	Mean of 4 Test	1	1.5	1.5	1	1	6
	Test-4	1	2	2	1	1	7
	Test-3	1	2	2	1	1	7
	Test-2	1	1	1	1	1	5
	Test-1	1	1	1	1	1	5
	Item No.	9	10	11	12	13	Total

The above **table & figure** indicated that Mean Score for Social skills like greets other upon meeting either verbally or non-verbally, Saying sorry, thank you, please at appropriate places and when required etc. total of sub-skills test containing **Mean= 6 and**

Percentage of Mean= 24% for pre-test sessions. The table highlights the mean score for post test sessions for total sub-skills containing **Mean= 19 and Percentage of Mean= 76%**. It is clear from the table that the subject has gained social skills like greeting the guests, unknown person using appropriate salutations, adjustment in environment. The third investigation treatment shows that the social skill tests, all the items have got **Mean= 1.41, SD=0.37, S.E.M. = 0.12** whereas for post test sessions the **Mean = 3.41, SD= 0.41 and S.E.M. = 0.13**. The significance difference between the mean of pre & post session (**t'=14.47 > p 0.01**). Therefore the formulated hypothesis **“There will be significant difference between the average score of pre and post test for social interaction skills.”** is accepted. It shows that after the training all the five items on social skills is enhanced through social skill training. These skills develop confidence in the subject to tackle with the environment and increase the perception of the happenings around their environment.

Objective 4: To prepare the adolescent (Mild Intellectually Disabled Person) for Pre Vocational Skills i.e. to handle lamination machine effectively.

Hypotheses 4: There will be signification difference between the average score of pre and post test for pre-vocational skills.

Figure No. 17: Pre-Vocational Skills of Intellectually Disabled Person

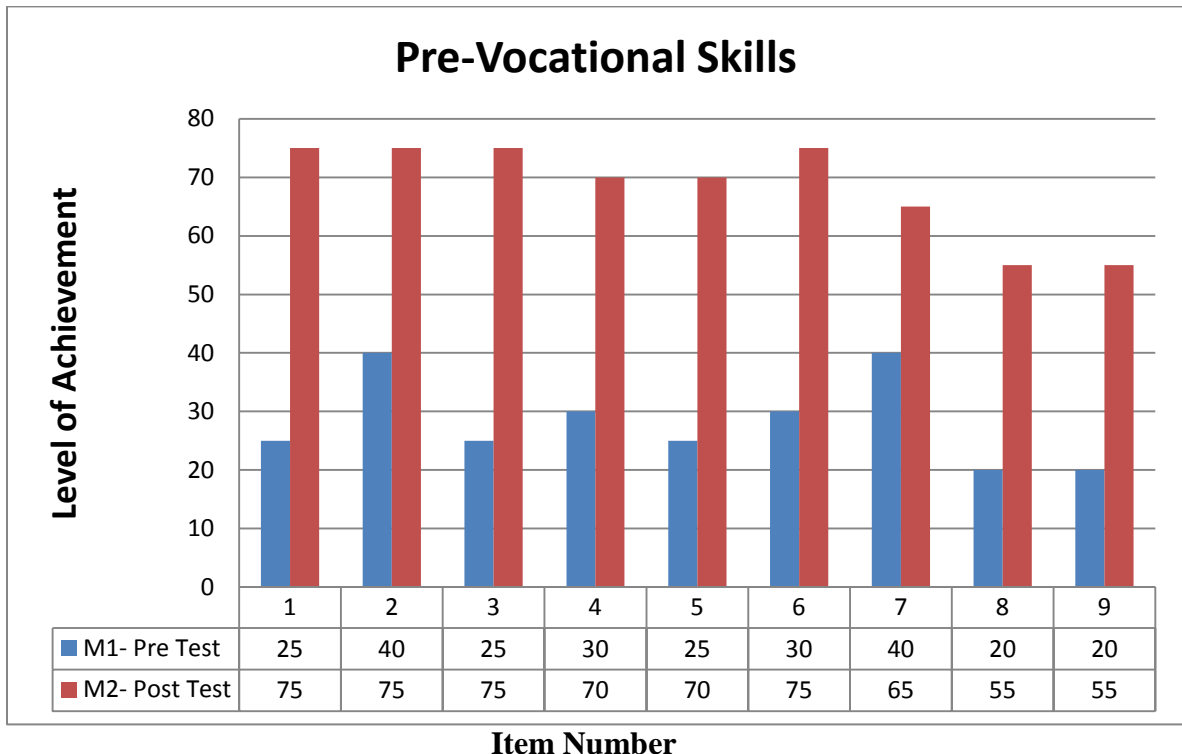


Table No. 9: Showing Mean scores of all pre and post test for pre-vocational skills

Table 4: Showing Mean scores of all pre and post test for pre-vocational skills												
Item No.	Pre-Tests					Post-Tests					Total	
	Test-1	Test-2	Test-3	Test-4	Mean of 4 Test	% of Mean	Test-1	Test-2	Test-3	Test-4		Mean of test 1 & 4
14	1	1	1	2	1.25	25	3	3	4	5	3.75	75
15	2	2	2	2	2	40	3	3	4	5	3.75	75
16	1	1	1	2	1.25	25	3	3	4	5	3.75	75
17	1	1	2	2	1.5	30	3	3	3	4	3.5	70
18	1	1	1	2	1.25	25	3	3	3	4	3.5	70
19	1	1	2	2	1.5	30	3	3	4	5	3.75	75
20	2	2	2	2	2	40	3	3	3	4	3.25	65
21	1	1	1	1	1	20	2	2	3	4	2.75	55
22	1	1	1	1	1	20	2	2	3	4	2.75	55
Total	11	11	13	16	12.75	28.33	25	25	31	40	30.75	68.33

The above table & figure specified that Mean Score for Pre-Vocational skills like “Follows three steps directions such as standup, open the flap cover, place the pouch in it.” Total of sub-skills test containing **Mean= 6 and Percentage of Mean= 24** for pre-test sessions. The table highlights the mean score for post test sessions for total sub-skills containing **Mean=14.5 and Percentage of Mean= 58**. It is clear from the table that the subject has improved the skills of Pre-vocational activities that the subject follows the sequence of activities in the routine work skills. Pre-vocational skills are those skills which are helpful and very essential prior to train the subject a vocation. Pre-vocational skills are the base for the vocational skills. The fourth investigation treatment shows that the pre-vocational skills tests for all the items have achieved **Mean=1.20, SD=0.27, S.E.M. = 0.09**. The significant difference between the mean of pre & post sessions (**‘t’ = > p 0.01**). Therefore, the formulated hypothesis **“There will be significant difference between the average score of pre and post test for pre-vocational skills.”** is accepted. It shows that continuous training plays vital role in learning of social skills. This skill is a pre-step towards the vocational independency. This type of training helps not only in vocational life but also in the subject’s daily life.

Objective 5: To develop the Lamination Skill perfectly.

Hypotheses 5: There will be significant difference between the average score of pre and post test for skills for lamination machine.

Figure No. 18: Lamination Skills of Intellectually Disabled Person

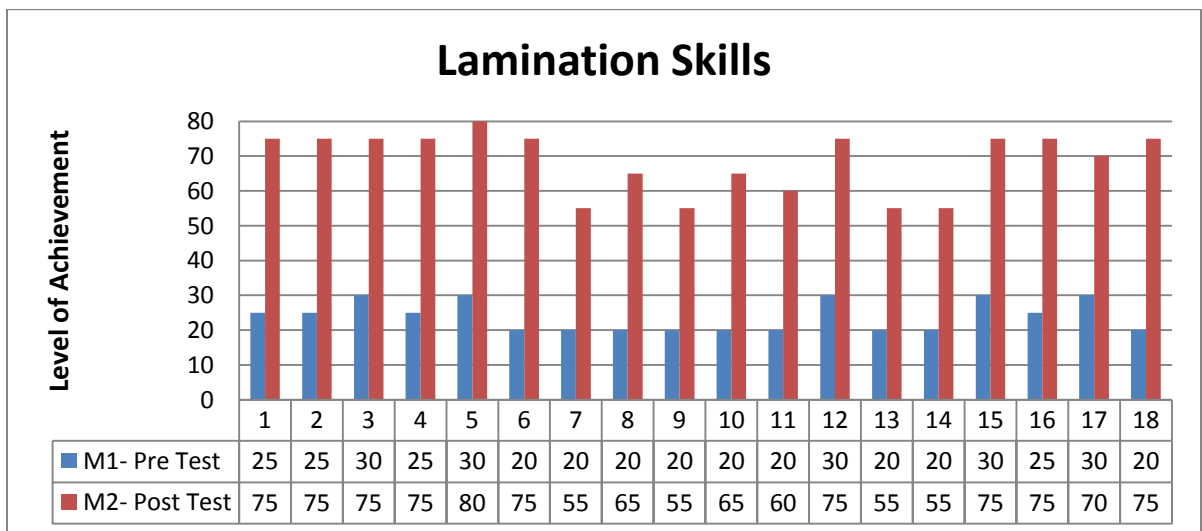


Table 10: Showing Mean scores of all pre and post test for Lamination Skills

Item No.	Pre-Tests						Post-Tests					
	Test-1	Test-2	Test-3	Test-4	Mean of 4 test	% of Mean	Test-1	Test-2	Test-3	Test-4	Mean of Test 1 & 4	% of Mean
23	1	1	1	2	1.25	25	3	3	4	5	3.75	75
24	1	1	1	2	1.25	25	3	3	4	5	3.75	75
25	1	1	2	2	1.5	30	3	3	4	5	3.75	75
26	1	1	1	2	1.25	25	3	3	3	4	3.75	75
27	1	1	2	2	1.5	30	3	3	4	5	4	80
28	1	1	1	1	1	20	2	3	4	4	3.75	75
29	1	1	1	1	1	20	2	2	3	4	2.75	55
30	1	1	1	1	1	20	2	3	4	4	3.25	65
31	1	1	1	1	1	20	2	2	3	4	2.75	55
32	1	1	1	1	1	20	2	3	4	4	3.25	65
33	1	1	1	1	1	20	2	3	3	4	3	60
34	1	1	2	2	1.5	30	3	3	4	5	3.75	75
35	1	1	1	1	1	20	2	2	3	4	2.75	55
36	1	1	1	1	1	20	2	2	3	4	2.75	55
37	1	1	2	2	1.5	30	3	3	4	5	3.75	75
38	1	1	1	2	1.25	25	3	3	4	5	3.75	75
39	1	1	2	2	1.5	30	3	3	4	4	3.5	70
40	1	1	1	1	1	20	3	3	4	5	3.75	75
Tota	18	18	23	27	20.5	22.7	46	50	66	80	61.75	68.61

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The above table & figure shows the Mean Score for Laminating Skills like “turn the temperature control to desired position” “cut the laminated sheet appropriately”. Total of sub-skills test containing Mean= 20.5 and Percentage of Mean= 22.78% for pre-test sessions. The table highlights the mean score for post test sessions for total sub-skills containing Mean= 61.75 and Percentage of Mean= 68.61%. it is clear from the table and the graphical presentation that the subject has improved the skills of lamination activities like folding the sheet according to the size of document, cutting the laminated sheet, if required, appropriately. The fifth investigation treatment shows that the lamination skills, tests for all the items have achieved $M= 1.16$, $SD= 0.21$, $S.E.M. = 0.12$. The significant difference between the mean of pre & post sessions ($t' = 26.60 > p 0.01$). Therefore, the formulated hypothesis “**There will be significant difference between the average score of pre and post test for skills for lamination machine.**” is accepted. It shows that continuous training plays vital role in developing “lamination” skills. Vocational skill is a step towards inclusion in the society. The subject will develop his skills more by practicing the steps in the training. These skills were not only helpful to subject in vocational aspects but also helps through enrichment of various behavioural skills to live life independently.

Table 11: Showing the significant difference between Pre and Post Test for all Sub-skills.

Sub-Skills		Mean	Standard Deviation	Standard Error Mean	“t”
Gross Motor Skills	Pre-test	3.83	2.02	1.16	1.00
	Post-test	4.50	0.86	0.50	
Fine Motor Skills	Pre-test	1.20	0.20	0.09	15.33
	Post-test	3.80	0.44	0.20	
Social Skills	Pre-test	1.41	0.37	0.12	14.47
	Post-test	3.41	0.41	0.13	
Pre-Vocational Skills	Pre-test	1.20	0.27	0.12	20.39
	Post-test	3.80	0.20	0.09	
Laminating Skills	Pre-test	1.16	0.21	0.05	26.60
	Post-test	3.32	0.46	0.12	

Table 11 represents overall Mean values and significant difference for respective categories (skills) for Pre and Post sessions. On **Gross motor skills** tests for all items have obtained Mean= **3.83**, SD= **2.02**, S.E.M.= **1.66** on the pre-test sessions, whereas per post test sessions Mean= **4.50**, SD= **0.86**, S.E.M.= **0.50**. The calculated “t” value is 1 and it is not significant. Therefore, the formulated hypothesis “There will be significant difference between average score of pre and post test for Gross Motor Skills” is not accepted. It reveals that no remarkable changes have been shown after the training as the subject had prior knowledge of gross motor skills. Though it was found the subject has shown improvement in the skills like using and movements of furniture as and when required.

On fine motor skills tests for all the items (i.e. 5 items) have achieved M= **1.20**, SD= **0.20** and S.E.M. = **0.09** whereas for post test sessions the M= **3.80**, SD= **0.44** and S.E.M. = **0.20**. The significant difference between the mean of pre & post sessions (**t’ = 15.33 > p 0.01**). Therefore, the formulated hypotheses “there will be significant difference between the average score of pre and post test for fine-motor skills.” is accepted. It shows that continuous training plays important role in learning of fine motor skills. Training not only develops the practice and expertise on the particular skills but also develops to concentrate on a particular task for a long time. Training of fine motor activities not only helps subject in his vocational life but also very helpful in his day to day life.

On social skill tests, all the items (i.e. 5 items) have got Mean= **1.41**, SD= **0.37**, S.E.M. = **0.12** whereas for post test sessions the Mean = **3.41**, SD= **0.41** and S.E.M. = **0.13**. The significance difference between the mean of pre & post session (**t’=14.47 > p**

0.01) Therefore the formulated hypothesis “There will be significant difference between the average score of pre and post test for social interaction skills.” is accepted. It shows that after the training all the five items on social skills is enhanced through social skill training. These skills develop confidence in the subject to tackle with the environment and increase the perception of the happenings around their environment. Social skill helps subject to develop his cognitive skills too and which helps the subject to move a step ahead on the way towards inclusion.

On pre-vocational skills tests for all the items (i.e. 9 items) have achieved **M=1.20, SD=0.27, S.E.M. = 0.09**. The significant difference between the mean of pre & post sessions (**t' = > p 0.01**). Therefore, the formulated hypothesis “There will be significant difference between the average score of pre and post test for pre-vocational skills.” is accepted. It shows that continuous training plays vital role in learning of social skills. This skill is a pre-step towards the vocational independency. This type of training helps not only in vocational life but also in the subject’s daily life.

On lamination skills, tests for all the items (i.e. 18 items) have achieved **M= 1.16, SD= 0.21, S.E.M. = 0.12**. The significant difference between the mean of pre & post sessions (**t' = 26.60 > p 0.01**). Therefore, the formulated hypothesis “There will be significant difference between the average score of pre and post test for skills for lamination machine.” is accepted. It shows that continuous training plays vital role in developing “lamination” skills. Vocational skill is a step towards inclusion in the society. The subject will develop his skills more by practicing the steps in the training. These skills were not only helpful to subject in vocational aspects but also helps through enrichment of various skills to live life independently. Subject has showed tremendous

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level of achievement in post training evaluation in the items like-setting the machine on required heat position, cutting the sheet according to the size of the paper, entering the pouch appropriately, cutting the laminated sheet appropriately when required.

5: Findings, Result and Discussion

The results have shown a tremendous change in pre and post evaluation scores. It was hypothesized that as the training goes on there will be significant difference between pre and post test evaluation. In the various categories the enhancement was found. Though in the Gross Motor skill there was no significant difference as the subject was good in gross motor activity and has prior knowledge of gross motor skills. However, in some of the items in gross motor skill has achieved good scores in post level evaluations. Fine motor skills have also scored notable increment in the post evaluation. The techniques of vocational skill training were adopted to help the subject learn more effectively and efficiently with his both mental and physical ability. Reinforcements were given at appropriate places and levels to boost up the motivation of the subject. Techniques like Modeling, Shaping, chaining and various prompts were also beneficial for edify the vocational skills while training.

Level of social interaction was also increased after the treatments given to the subject. These skills not only give self- confidence in the subject but also help them in their inclusion in the society. Basic knowledge of pre- vocational skills is also a prerequisite before giving vocational training. Subject has shown remarkable changes in post tests in pre-vocational skill. In vocational skill for lamination there is a noteworthy development in the subject's level of performance. The investigation divulges that apposite programmed instructions and training through techniques of vocational skills has given imperative changes in the subject.

The following researches are also supported by the above research work and its conclusion:

Rani, U. (2011) finds the need of therapeutic atmosphere conducive to emotional, socio-cultural, physical, and spiritual growth as well as occupational activities that will give them opportunities to learn skills, gain confidence, self-respect and economic gainfulness has to be created. To develop and create innovative programs in the management of intellectually challenged persons, there is need to train and orient social workers, other professionals of allied disciplines on the rehabilitation of the intellectually challenged and to involve a more dynamic community participation in the implementation of its rehabilitation programs and assist the intellectually challenged people to obtain employment thru self-employment, sheltered workshop or open employment.

Das, H. (2011) indicated that the vocational rehabilitation and community based vocational rehabilitation for persons with intellectual impairment and associated disabilities is extremely pitiable in our country. Less than 5% of the adult population with MR is under any structured model of vocational rehabilitation. A very few sheltered workshops and work centers and a negligibly few are scattered examples of open, supported, self-employment options are available. The study evaluated the prevalent curriculum i.e. Madres Developmental Programming (MDPS), Functional Assessment Checklists for Programming 1994 (FACP), Behavioural Assessment Scales for Indian Children with Mental Retardation (BASIC-MR), Behavior Assessment for Adult Living Mental Retardation (BASAL-MR), Computer Aided Process Planning (CAPP), Adolescent and Adult Psycho Educational Profile (AAPEP) etc. in relation to the skill requirement across the models of employment i.e. self employment, open, supported and sheltered. The analysis indicated the curriculum though had pre-vocational skills

incorporated, however, failed to relate closely to the models of vocational rehabilitation. As in current context only sheltered workshops in urban area and very few individuals are productively employed in rural area; the curriculum at school level needs major revision. Lack of transition from class to class, class to prevocational and prevocational to vocational; is highly evident in the study.

In the present research work aim and objective were acquaintance of the subject to use lamination machine was the major aim amongst all. Enhancement of gross motor & fine motor skills through practice method was the also an objective of the research. These skills are the basic requirement for the training of vocation. Adequate social skills are also prerequisites for the persons which helps intellectual impairment in inclusion and to make the subject a contributory member of society. Overall, the development was seen in appropriate and meaningful work attitude, behaviour and skill training through the treatment given to the subject. The gross motor skills in the subject, however, were already good, though the development was seen in the subject. In pre-vocational and vocational skills the subject has acquired a significant development of the skills through trainings.

This was a field experiment study in which before and after design used. This design was used to know the significant effect of training on the subject. To know the level of the subject four continuous evaluations was conducted. These evaluations show the effect of environment exposure on the effectiveness of the skills on subject. This evaluation also helps in know and control the extraneous variable on the efficiency of the working skills in the subject. A treatment of thirty days was given to the subject. This treatment, two post test evaluations were taken to evaluate the level of achievements in

the subject. A withdrawal of fifteen days was also given to know the difference. Withdrawal from the treatment showed effect on the working skills as the withdrawal was given; there was a decline in the effectiveness and work behavior in the subject. To remove this effect a treatment of 10 days was given to subject. After the treatment subject was assessed to know the significance of treatment and training in the working behavior and effectiveness of the subject. It was also revealed that techniques of vocational skills like application of reinforcement, modeling and prompts were useful for enhancing achievements in the level of skills.

It is concluded on the basis of this investigation that such type of systematic training or Individual Vocational training programme boost up rehabilitation and mainstreaming process for the persons with intellectual impairment. They get rehabilitation opportunities through such type of individualized vocational training programme and make them a reproductive and contributory member of society. It was observed that the vocational independence has made the attitudinal change of family members as well as in peer group and society member towards the subject.

On the basis of researcher's experience and findings it could be said that individualized vocational training programme, demonstration (method) encouragement and motivation, correction, error analysis and supportive supervision helps in building-up and enlarge the proper and required skill in persons with intellectual impairment.

5.1 Educational Implications

Implementation of Vocational Rehabilitations of Behavioral Skill on Intellectual Disabled Person is very essential. Intellectual disability (ID) is the most restraining disability for professional inclusion, mainly due to the lack of adaptive skills focused on

the work environment observed in people with ID. The aim of this study was to investigate the effects of a vocational training on the adaptive behavior of people with ID, and to assess the social impact of employability on the life of the employees with ID. For this purpose, researcher carried out an intervention study with longitudinal design of three stages. This study has great educational implications. It has shown the positive impact on the vocational educational training programme given to intellectually disabled child. In our country such kind of individual educational programmes are very much required. Government has introduced inclusive education at every level and given a place to twenty one kinds of disabilities. In this regard everyone gets chance to equal opportunities for education and employment. Person with disabilities can lead their life with dignity in the society. Mentally challenged person or intellectually challenged person can work in their specialized field under the supervision of normal person. In this way they can earn and feel good that they are not fully dependant. Here individual vocational educational programme plays an important role. Every special teacher educator and research scholars can prepare such programmes. In India very few cities have Vocational Rehabilitation Training Institute of Intellectual Disability Persons and their names are as follows:

1. National Institute for the Empowerment of Person with Intellectual Disabilities (Divyangjan) Formerly National Institute for the Mentally Handicapped (NIEPID/NIMH-1984) Secunderabad
2. National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD-2005) Kavalam Post Chennai, Tamil Nadu India
3. Swami Vivekanand National Institute of Rehabilitation Training and Research (SVNIRTAR-1975) Cuttack, Odisha

4. National Institute for the Mentally Handicapped Regional Centre, Lajpat Nagar, New Delhi
5. National Institute for the Mentally Handicapped Regional Centre, Noida, Uttar Pradesh
6. National Institute for the Mentally Handicapped Regional Centre, Kolkata, West Bengal
7. National Institute for the Mentally Handicapped Regional Centre, Navi Mumbai, Maharashtra
8. Composite Regional Centre, Nellore, Andhra Pradesh
9. Composite Regional Centre, Davangere, Karnataka
10. Teacher Preparation in Special Education and Higher Education for Persons with Special Needs (TEPSE & HEPSN-2006) Research Centre, Jodhpur Rajasthan

This Vocational Rehabilitation Training Institute of Intellectual Disability Persons are trying to achieve the objectives i.e. facilitating the children with various disabilities as per their capability. On the other hand the number of institutes are very less. Government needs to open many more and it is recommended to open at least one institute in every city.

5.2 National Importance of the Study

Several intellectually disabled person experience difficulties with regard to obtaining suitable vocational training and continued assistance. Findings amongst person with intellectually disabilities highlight the fact that the behavior, healthcare and rehabilitation welfare system should create a multidisciplinary coordinated system for the improvement of vocational rehabilitation services amongst intellectually disabled person. Because intellectually disabled person have multiple healthcare needs, healthcare policies and guideline should reorganize the proper healthcare system to make it respond

appropriately and safety to their needs. There is few major tools evidence which suggests that various early rehabilitation interventions may be feasible for person with mild intellectual disabilities. Research is, therefore, still needed, as experimental research evidence related to the effects of early rehabilitation intervention on the intellectually disabled person is rarest.

The following recommendations are made specifically with regard to vocational rehabilitation training, as intellectually disabled person have systematic vocational training programme needs. Vocational habilitation programme policy should thus reorient the vocational rehabilitation system to respond appropriately to these client needs.

a. Recommendations for vocational rehabilitation training

There is a real need for rigorous practice training based evidence to reinforce the increasing range of treatment training options for this group of rehabilitation service users. For this reason, rehabilitation education training should be incorporated into vocational practice. This will enable special educator and rehabilitation psychologist to equip intellectually disabled person with behavior skills to acquire basic life behavior skills and to manage activities for daily living. Since special educator and rehabilitation psychologist form part of the multidisciplinary team, it is important that rehabilitation and occupational therapists collaborate with the special educators in order to ensure that the habilitation of intellectually disabled person is done effectively and on an ongoing basis.

b. Recommendations for vocational education

Special educators of all categories, namely, Registered as a professional special educators with RCI, enrolled special educators and rehabilitation psychologists, need to

be educated, trained and equipped with rehabilitation education skills and knowledge in order to assist person with intellectual disabilities within institutional/ community based rehabilitation settings, with the aim of promoting their quality of life skills.

c. Recommendations for vocational rehabilitation research

There is a real dearth of rehabilitation research evidence concerning the effects of rehabilitation on intellectually disabled person. The knowledge gained will add to the experimental research knowledge base. Further research is still needed and should focus on the efficacy of specific vocational rehabilitation training service types provided to person with intellectual disabilities in India.

5.3 Implication of the study:

The findings of present research are rehabilitation beneficial in the area of vocational education. They reveal the following implications.

- Various types of vocational training programme be organized like- candle making, chalk making, caning of chairs, basket making, weaving, book binding, printing, making of envelopes, and greeting cards, etc. Participation of special school or special education centers intellectual disabled person in vocational education activity also needs to be increased in government national institutes.
- There is a need to finds out the vocational educations which influence the social achievement of person with intellectual disabled in positive manners. Such activities like Craft Exhibition, Group Vocational Work, Social Services etc.
- The person with intellectual disabled in vocational education activities does not enhance behavioural skills of the students of special schools in government and

private schools. So there is a need to change the attitude of the parents, teachers and person with intellectual disabilities towards vocational education activities.

5.4 Suggestion for further studies:

The following problems related to the present study needs further study:

- A study can be undertaken to know the vocational training programme and its influence on adolescent person with intellectual disability of special schools in government and private schools with reference social behavioural inculcation.
- A government and private special schools comparative study can be done to know participation of various adult age group of students of intellectually disability in vocational training programme.
- A comparative study can be made on vocational education programme and its pursuance on tribal and non-tribal intellectually disabled persons with reference to social behavioural inculcation in them.
- An analytical survey can be undertaken on the attitude of special educator trainees of vocational education institutions of different government and private and their vocational curriculum with reference to job placement activities.

Summary

Conceptual Frame Work

India is the seventh largest country in the world covering an area of about 37,87,782 sq. KMs. And a population about 1.130 billion people (World Fact Book, 2014), with many geographical, socio, cultural, economic, linguistic, religious variations. Historically, India has been an inclusive society. During the 17th century, community based programmes were the rule and not the exception for persons with disabilities, patronized by the state, and supported strongly by the practices of the prevailing religions, and localized in the communities, based on the specific needs, available expertise and productivity requirements. (Jayachandran, 2004)

Currently, in the independent India after the colonial rule, efforts are being made to recapture the efficacy of the past systems with the refined new developments and trends. The major breakthrough came with the enactment of three legislations for persons with disabilities by the Government of India as discussed in detail later in this paper. In addition, the constitution of India is amended (86th amendment) guaranteeing education as a fundamental right (Art. 21A, 2002). Subsequently, prevention and early detection of disabilities, education, employment, economic rehabilitation, community empowerment and community-based rehabilitation have all been given priority by the government through various schemes and also support to non government organizations. There has been significant development in the area of disability rehabilitation since then. However, considering the nature of the condition, it is essential to see what has been the value addition in the area of intellectual disabilities (Mental Retardation) and what more needs to be done.

Since the human being evolved and started forming their assemblage the Persons with disabilities exists. When we talk of all the types of disabilities, an intellectual disabilities have a condition of incomplete development of mind, which is especially characterized by sub-normal intelligence, thus partially or totally restricting the person's ability to perform certain activities in their life. This is reflecting to impairment in cognitive, emotional or behavioural endowment.

One of the key abilities for human beings to lead an independent life is to take decisions independently, which persons with intellectual impairment are, unfortunately, not endowed with. Therefore they have special needs, which basically include activities for daily living (ADL); instrumental activities of daily living (IADL); reading, writing and arithmetic skills; extracurricular activities, namely sports and games, art and cultural activities; social activities; vocational and employment activities; independent living skills; and community integration; etc. Every activity of persons with intellectual impairment has a meaning in their life, which they have to acquire through individualized education plan supported by related services. viz. counseling services, early identification, audiology services, and assessment of disabilities in children, occupational therapy, orientation, medical services, and mobility services, parent counseling and training, physical therapy, psychological services, recreation, rehabilitation, school health services, social work services in schools, speech-language pathology services, and transportation.

Special Education is branch of Education that deals with the studies about individuals who have problem or special talents in thinking, reasoning, hearing, seeing, speaking, socializing etc. In other word, it is the study of individuals who are different

from average normal person. These individuals are generally called exceptional children. Exceptional children are defined as those “who require special education and related services to realize their full human potential”. A major goal of special education is to enable special children to live in most independent way possible. The concept of “Children with special educational needs” is of British handicap i.e. visual and hearing impairment, essential through charitable initiative. Original, provision for children with sensory and physical disability and intellectually challenged were made, and subsequently extended to those with emotional and behavioural problems.

Intellectual Challenge/Intellectual Disabilities/Mental Retardation

There are many challenged condition which makes the normal function of an individual very difficult and leads to dependency. These conditions are increasing day by day because of the changing lifestyle and complicated environment. Challenged children are those children who do not have normal health status either physically, mentally or socially and they requires special care, treatment and education.

Diagnostic Statistical Manual -5 (DSM-5):

	Conceptual Domain	Social Domain	Practical Domain
Mild	In preschool children, there may be no conceptual differences. For school-age children and adults, various difficulties in learning academic skill needed to meet age-related expectations. In adults, abstract thinking, executive function (e.g., planning), and short-term memory, as well as functional	The individual is immature in social interactions compared with typically developing age mates. For example there may be difficulty in accurately perceiving peers’ social cues. It has been noticed by peers’ that there may be difficulties while regulating emotion and	In complex daily living tasks Individuals need some support in comparison to peers. In adulthood, supports typically involve grocery shopping, transportation, home and child care organizing, nutritious

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	use of academic skills are impaired.	behavior in age-appropriate fashion.	food preparation, banking and money management. Support is typically needed to raise a family.
Moderate	Throughout development, the individual's conceptual skills lag markedly behind in compare to peers. Ongoing assistance on a daily basis is needed to complete conceptual task of day-to-day life, and others may take over these responsibilities throughout the life time.	The friendships with typically developing peers are often affected by communication or social limitations. Significant social and communicative support is needed in work settings for success.	The individual can care for personal needs involving eating, dressing, elimination, and hygiene as an adult, although an extended period of teaching and time is needed for the individual to become independent in these areas, and repeated reminders may be needed.
Severe	Caretakers provide extensive supports for problem solving throughout life. Attainment of concepts is limited (e.g., money, time, quantity).	The Spoken language is very limited in terms of grammar and vocabulary. Speech may be single words or phrases, but the communications are focused on day to day activities. Relationships with family members and other familiar persons are here a source of pleasure.	The individual requires support for all activities of daily living needs, which includes meals, dressing, bathing, and elimination. The individual requires supervision at all times. The individual cannot made responsible decisions regarding well-being

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			of self or others.
Profound	Conceptual skills generally involve the physical world rather than symbolic processes. The individual use objects in goal-directed fashion for the self-care, work, and for the recreation. Motor and sensory impairments may prevent functional use of objects even when certain visual spatial skills are intact (e.g., it can match objects based on physical characteristics means seen visually, but cannot translate to appropriate use).	The individual has very limited understanding of gesture or speech, he or she may understand some very simple instructions or gestures, and expresses his or her own views/desires and emotions mostly through nonverbal, non symbolic communication. The individual enjoys relationships with well-known family members & caretakers primarily.	The individual is dependent on others for all aspects of daily living. Although, individuals without severe physical impairment may assist with some daily work tasks at home, like carrying dishes to the table. The simple actions with objects may be the basis of participation in few vocational activities with high level of ongoing support.

ICD-10 (International Classification of Disease): Diagnostic Criteria for Mental Retardation:

Class	Degree	IQ
F ₇₀	Mild mental retardation	50-69
F ₇₁	Moderate mental retardation	35-49
F ₇₂	Severe mental retardation	20-34
F ₇₃	Profound mental retardation	<20
F ₇₈	Other mental retardation sensory, physical, behavioural impairments preclude standardized IQ testing.	
F ₇₉	Unspecified mental retardation	

Severity of intellectual disability and adult age functioning:

Severity	Mental age as adult	Adult adaptation
Mild	9-11 year	Reads at 4 th -5 th grade level; simple multiplication and division; writes simple letter, lists; completes job application; basic independent job skills (arrive on time, stay at task, interact with coworkers); uses public transportation, might qualify for driver's license; keeps house, cooks using recipes
Moderate	6-8 year	Sight-word reading; copies information, e.g., address from card to job application; matches written number to number of items; recognizes time on clock; communicates; some independence in self-care; housekeeping with supervision or cue cards; meal preparation, can follow picture recipe cards; job skills learned with much repetition; uses public transportation with some supervision
Severe	3-5 year	Needs continuous support and supervision; might communicate wants and needs, sometimes with augmentative communication techniques
Profound	<3 year	Limitations of self-care, continence, communication, and mobility; might need complete custodial or nursing care

Source: International Statistical Classification of Diseases and Related Health Problems, Tenth edition (World Health Organization).

Conceptual Skills: The Conceptual Skills includes Communication, functional academic, self-direction, money concepts

Social Skills: The Social Skills includes Interpersonal skills, self-esteem, naiveté/gullibility, self-governance (obeys rules)

Practical Skills: The Practical Skills includes Self-care domestic skills, work, health & safety

Importance of Parents Involvement

The graduation of a child from school is milestone in any family. The role of the family as advocate and case manager for a young adult with intellectual impairment is critical during this phase. The service and resources here needs a long term vision. Only family is in a position to demand outcomes that enhances the individual's quality of life. They are the risk takers and financial planners. The family members specially the parents should begin a planning, which provides a vision of what his intellectually challenged son or daughter will be doing after 15 years and in future. The planning should include where the person will work, earn, recreate and live. Who will be the significant other in his or her life is a critical issue to be decided earlier.

An important factor for a smooth transition from school to work is the involvement of parents. They should be aware of how persons with intellectual impaired mild, moderate and severe, can be productive on a job through a supported work model involving a proper employment match, the use of very systematic instruction and the ongoing support.

Plans for development in special and vocational education:

- The last two decades have seen significant progress in the areas of intellectual impaired in the country. However, considering the large population of the country, and the estimates of 58th Round of National Sample Survey Organization (NSSO) in 2002, which places 94/1, 00,000(0.094%) of the population to have intellectual impairment, the reach out with service provision is far from adequate.
- Though MSJ&E is the nodal Ministry for disability rehabilitation, Ministry of Health, Education, Labor and Rural development have major responsibilities, thus

fragmenting the services. For comprehensive service provision, there needs to be convergence among the government departments.

- Awareness and education on Prevention and early detection and intervention should target the women in rural and urban areas so that the crucial early years of ‘at risk’ children get the right support at the right time. It should be one of the major focus areas in the agenda of empowering women.
- Parallel streams of special education (funded by MSJ&E) and inclusive education (funded by MHRD) hold the threat of substandard and poor quality education in both streams. Moreover, it will hamper the achievement of inclusion. There is a need for educational programmes monitored by one department of the government.
- Teacher preparation for Regular education programmes should include education of children with intellectual impairment to ensure inclusion.
- Evidence based best practices in CBR must be systematically documented and made available for those who need. Research and documentation in this area is the need of the hour.
- Employment and adult independent living should get a focus where by persons with intellectual impairment have safe, secure and dignified lives as contribution members of the society.
- Research, documentation and dissemination of information should be an ongoing process with wise use of technology.

- Empowering persons and families with intellectual impairment with focus on reduction of stress among the caregivers is a thrust area as the mothers are found to be stressed and many a time burnt out.

India is a signatory to a number of UN resolutions most of which have been responsible for development of various action plans and implementation in the country. To name few, the UN resolution 37/52 of 3rd December 1982 is a significant one, aiming to achieve full participation, equality and protection of rights of persons with disabilities. Asia Pacific Decade (1993-2002) extended for another decade (2003-2012) focusing on major policy areas gave a thrust to the programmes in the country. India is a signatory to Biwako Millennium Framework (2002) for action towards an inclusive, barrier-free and right based society for persons with disabilities. All of these have provided direction towards progress in the area of disabilities. It is hoped that through this conference a road map for viable programmes for persons with intellectual disabilities will be drawn and implemented, thus helping persons with intellectual disabilities lead a dignified life as proud citizens.

Rational of the Study:

The programmed instructions through training have changed the life of the persons with disabilities. In the area of intellectual impairment, individualized instructions are essential for the vocational skill development and rehabilitation of intellectually disabled person. The person self-esteem is boosted. When he introduced with knowledge of vocational training (lamination skills) The suitable methods like demonstration, task analysis, drill with application of reinforcement in training has helped intellectually impaired persons. The researches have shows that the application of

proper instructions methodology, equipments and techniques, reveals remarkable enhancement of skills in intellectually challenged persons. In this background the present problem is selected which includes programmed instructions for vocational training of the persons with intellectual impairment. The problem in other words can be framed as “Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person.”

Definition of the terms used in the study:

Mild Mental Retardation:

Mental retardation means a condition of arrested or incomplete development of mind of a person which is specially characterized by sub-normality of the intelligence. Where as per the categories of the mental retardation mild mental retardation refers to the persons having range of I.Q. is between 55to70.

Vocational Rehabilitation:

Vocational Rehabilitation mean that part of the continuous and coordinated process of rehabilitation, which involves the guidance, vocational training and selective placement designed to enable a disabled person to secure and retain suitable employment.

About Lamination skills:

In the investigation the term Lamination Skills is used. This is one of the vocational skills. This skill was chose by the investigator because this skill requires less mental ability and more expertise in gross-fine motor skills. These types of skills are beneficial for the persons in inclusion and integrate them as a contributory and productive member of the society.

Need of the Study

The researcher had seen during the study of review of related literature that it is very difficult to connect the intellectually disabled person with the main stream and can make the independent. Researcher has taken an initiative in the form of experimental research to trained Intellectually Disabled Person through continuous training of Lamination Skill. These people also needs to connect with the community-based common activities which are based on employment in the context of Intellectually Disabled person. It is a need and requirement of the society that every individual must take part in the growth and development of the country. Researcher thought that a therapeutic atmosphere conducive to emotional, socio-cultural, physical, and spiritual growth as well as occupational activities must be made available and give them opportunities to learn skills, gain confidence, self-respect and economic gainfulness. This Lamination Skill is very technically handled activity and can use under the supervision. Vocational Training and employment is major area in the empowerment of persons with intellectual disabilities. It explores the relationships between aptitudes and generic skills, as well as work traits and aptitudes. There is a really a need of Vocational Training Programme for Mentally Retarded person and therefore this study is justify to work on the Vocational Training on Behavioural Skills In Mild Intellectually Disabled Person.

Statement of the Problem:

On the basis of various reviews of literatures the following problem is formulated “**Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person.**” This study is to develop managing skills for lamination machine in the subject for the purpose of vocational training.

Objectives:

The objectives of this research are as follows:

1. To develop the gross motor skills of Mild Intellectually Disabled Person.
2. To development of fine motor skills of Mild Intellectually Disabled Person.
3. To develop adequate social Interaction skills.
4. To prepare the adolescent (Mild Intellectually Disabled Person) for Pre Vocational Skills i.e. to handle lamination machine effectively.
5. To develop the Lamination Skill perfectly.

Hypothesis:

The following hypotheses are formulated for present investigation work:

1. There will be significant difference between the average score of pre and post test for gross-motor skills.
2. There will be significant difference between the average score of pre and post test for fine-motor skills.
3. There will be significant difference between the average score of pre and post test for social interaction skills.
4. There will be signification difference between the average score of pre and post test for pre-vocational skills.
5. There will be significant difference between the average score of pre and post test for skills for lamination machine.

Delimitation

The current study is delimited to one case of Mild Intellectually Disabled Person. The sample taken was a purposive sample to enhance the lamination through vocational training. The subject taken was a 28 year old mild intellectually challenged student of

TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs) of Jai Narain Vyas University, Jodhpur.

Analysis and Interpretation of Review of Literature

The studies directly related to person with disabilities were analyzed and found that most rehabilitation organizations are adding supported employment to their existing array of services, rather than pursuing total changeover from facility-based to community-based employment support. The vocational rehabilitation and community based vocational rehabilitation for persons with intellectual impairment and an associated disability is extremely pitiable in our country. It is less than 5% of the adult population with Intellectually Disabled is under any structured model of vocational rehabilitation. A very few sheltered workshops and work centers and a negligibly few are scattered examples of open, supported, self-employment options are available. The study evaluated the prevalent curriculum i.e. MDPS, FACP, BASIC-MR, BASAL-MR, CAPP, AAPEP-R etc. in relation to the skill requirement across the models of employment i.e. self employment, open, supported and sheltered. The analysis indicated the curriculum though had pre-vocational skills incorporated, however, failed to relate closely to the models of vocational rehabilitation. As in current context only sheltered workshops in urban area and very few individuals are productively employed in rural area; the curriculum at school level needs major revision. Lack of transition from class to class, class to prevocational and prevocational to vocational; is highly evident in the study. Strategies are presented to expand the utilization of supported employment and thereby increase employment opportunities available for persons with the most significant disabilities. Some where it has been seen that community life options intervention,

although the subjective assessments and case study methods revealed change in quality of life among some participants. It focused on the strengths and weaknesses of each method of evaluation and assessment of the impact of the intervention. In some studies the self-esteem and job satisfaction is at the higher side. There was also an interaction between place of residence and place of employment when looking at self-esteem; those who lived in a semi-independent home and worked in supported employment employed reported the highest levels of self-esteem. One study shows that supported workers were found to evidence lower occurrence of behaviors consistent with psychosocial deficits compared to sheltered workers, but both groups had little access to adjustment services. Literature on psychosocial rehabilitation treatment for psychosocial and social skills deficits in people with mental retardation is reviewed. It is concluded that adequate and appropriate assessment and technologies are available. However, actual treatment delivery is probably affected by limited resources, training needs of specialized clinicians in developmental services to improve skills in psychosocial rehabilitation procedures, and changing ideologies that discourage implementation of active, rather than exclusively ecological, rehabilitative practices. Studies shows that care managers should focus upon preparation of staff support programmes to improve the quality and efficiency in this area of care. In the year 1990 McCuller indicated that the workers in a majority of workshops receive classroom training on some array of social-vocational and job responsibility skills, and that training is conducted primarily by production staff. However, insufficient attention to the transfer or generalization of these skills from the classroom to community job sites would seem to limit the functional value of this training.

Research Gap

The researcher had seen during the study of review of related study that it is very difficult to connect the mentally retarded person with the main stream and can make the independent. It is an effort to make the busy in some positive activity under the supervision of family members of the employer. Researcher tried to find out the community-based common activity based employment for people with disabilities in the context of Mentally Retarded person. Researcher had decided to provide therapeutic atmosphere conducive to emotional, socio-cultural, physical, and spiritual growth as well as occupational activities that will give them opportunities to learn skills, gain confidence, self-respect and economic gainfulness. To develop and create innovative programs researcher had given a vocational training on Lamination Skill which is very technically handled activity and assist the intellectually challenged people to obtain employment thru self-employment, sheltered workshop or open employment. Vocational Training and employment is major area in the empowerment of persons with intellectual disabilities. It explores the relationships between generic skills and aptitudes, as well as work traits and aptitudes. Researcher had seen the research gap in this kind of Vocational Training Programme for Mentally Retarded person and so he has started working on the Vocational Training on Behavioural Skills In Mild Intellectually Disabled Person.

Methodology

Human search is a shared search. Every searcher adds to the existing knowledge. Researcher has made the original contribution to the existing dimensions of knowledge. The advancement in knowledge is different in different reams, sometimes altogether new facts are discovered, for instance transition from plane geometry solid

geometry or from Newtonian physics to Einsteinium physics or from Corpuscular theory of light, from Ptolemaic Geocentric conception of the universe to Copernican to knowledge may be made by the discovery of new relations of facts.

In simple terms “research means movements from the known to unknown”. Intellectual curiosity to know the truth is the propelling force behind taking up research. A method is a way in which an activity is done. It can be describe as step-by-step procedure followed in the execution of a sound methodology and setting of the study. From the above mentioned definitions it is clear that research is concerned with pure economic phenomena, it aims at finding out the old or new facts through scientific method, which is based on logic and systematic steps. Through research we can find out economics facts by means of scientific method only. Research Methodology is a way to systematically solve this research problem. It is a plan and process comparing research’s decision about how to proceed for collection of data, computing data and analyze this same for given study which aims at fulfilling the purpose of study without wasteful expenditure and time, money and energy.

Variables:

a. Independent Variable:

Independent variables are those variable which manipulated by investigator directly by the selection. In this research independent variable is vocational skill training.

b. Dependent Variable:

The dependent variable is measured in an experiment. Any change in behavioural dimension is also dependent variable. Dependent variable of the study

consisted level of achievement in vocational skills and change in work behavior of intellectually challenged person.

Design of the Study

Single-subject research is experimental rather than correlation or descriptive, and its purpose is to document causal, or functional, relationships between independent and dependent variables. Single-subject research employs within- and between-subjects comparisons to control for major threats to internal validity and requires systematic replication to enhance external validity. Several critical features define this methodology. Each feature is described in the following sections and organized later in a table of quality indicators that may be used to assess.

An individual study is an acceptable example of single-subject research. Single-subject research methods offer a number of features that make them particularly appropriate for ties in special education research. Special education is field that emphasized the individual student as the unit of concern, active intervention, and practical procedures that can be used in typical school, home, and community contexts, special education is a problem-solving discipline, in which ongoing research in applied settings is needed.

In this investigation a set of independent variable includes Vocational Training. Before-after Design of research is used to observe the effect of 40 days training. It will be a pre and post design experiment in which child's skill development was assessed regarding the Gross Motor, Fine Motor, Social interaction, pre-vocational and lamination skills. The average scores of pre & post test sessions will reveal the effect of vocational training.

Table : Research Design

Pre-Tests				TREATMENT	Post-Tests					
Test	Test	Test	Test		Test	Test	Withdrawal	Test	TREATMENT	Test
1	2	3	4		1	2	Withdrawal	3	TREATMENT	4

Sample:-

Sampling may be defined as the selection of some part of an aggregate or totally on the basis of which judgments or inference about the aggregate or totally is made. In other words, it is the processes of obtaining information about an entire population by examine only a part of it.

Sampling Technique:

From different sampling techniques the investigators selected purposive sampling procedure for selection of the sample for the present study. Purposive sampling method in which, the investigator selected the sample intentionally from his choice. This is the reason why purposive sampling is considered as the best technique of selecting representative sample. One male intellectually challenged adult person of 28 years of age of mild IQ level was selected for this study from TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs), Jai Narain Vyas University, Jodhpur.

Material required

Lamination machine, paper, lamination sheet, pouch

Measuring tool used

Researcher has used a standardized scale namely Behavioral Assessment Scales for Adult Living- Mental Retardation (BASAL-MR). The above tool is created by

NIMH- National Institute for the Mentally Handicapped (Secunderabad). The tool is having two parts first (BASAL-MR) Part-A which contains 120 items and 8 domains, and the second (BASAL-MR) Part B which consists of 106 items and 12 domains. In this tool the responses measured in the form of rating scale from 1 to 5 that is lowest to highest from physical prompt, verbal prompt, gestural prompt, occasional cues and independent.

Standardization of Tool

In a research, a statistical analysis is an important aspect. The investigator employed qualitative and quantitative analysis of data. For the quantitative analysis parametric statistic is used. Mean differences and percentage of mean calculated for the all pre & post test, to find out the significance difference between pre-test and post test for the case, 't' value is calculate. An analysis of data is presented in following chapter; however, the tool is yet to be standardized.

Controls

1. The subject was selected purposefully.
2. Selection of subject was according to the interest and permission of the family members.
3. Subject selected for training has mild level of IQ.
4. The subject has no associated conditions.
5. Proper working environment was provided to the subject.

Data collecting procedure

Initially, the problem was selected from the vocational activities, and looking to the level and activity, the subject was selected purposefully; looking to the interest of the subject, his family's interest and his ability and level of performance in pre-vocational activities. Prior to selecting the subject it was taken care that subject has no associated condition which effects the overall training instructions & procedures. To know the

performance level and to evaluate the knowledge of the lamination skills and operation of lamination machine pre-test of the subject was taken. Pre-evaluation was taken in four parts that is four continuous days. A scale consisting 40 items was formed. The rating was on the basis of level and the scores were collected from 0 levels starting from physical prompt to level 5 for independence.

After pre-test evaluation, training of 40 days was given for enhancing the skills in gross motor, fine motor, social interaction, pre-vocational and the main skill i.e. the lamination skill. The procedure of task analysis was adopted while training different skills to the subject. Techniques of skill training like application of reinforcement at appropriate places and whenever required, prompting, chining, shaping, modeling, were also applied to help subject to learn specific target skills.

Two post-evaluations were conducted after the treatment of 30 days. A withdrawal of 15 days was given thereafter. After withdrawal, a post-test was conducted. A training of 10 days was given to the subject after withdrawal. The final evaluation was accomplished after the withdrawal of 10 days to appraise the overall treatments given to the subject for development of various skills.

Scoring Procedure:

A standardized scale namely “Behavior Assessment for Adult Living Mental Retardation” (BASAL-MR) was used for the study. In this scale a set of 120 items and 8 domains were contained in part-A and a set of 106 items and 12 domains were contained in part-B, then the responses measured were in the form of rating scale from 1 to 5 that is lowest to highest from Physical prompt, verbal prompt, gestural prompt occasional cues and independent. Among the items present in the above mentioned scale the researcher

has only used 40 items in pre-test and 40 items in post-test. The items used from the scale were those concerned with researcher's vocation training on behavior skill and the skipped items were those concerned with extra vocational training.

Statistical Analysis procedure

In a research a statistical analysis is important aspect, the investigator employed qualitative and quantitative analysis of the data. For the quantitative analysis, parametric statistics is used. Mean difference and percentage of mean calculated for all pre and post test sessions, to find out the significance difference between pretest and post test for all the five categories 't' value is calculated.

Analysis and Interpretation of the Data

The present study deals with the analysis of the data. The sample taken was a purposive sample to enhance the lamination through vocational training. The subject taken was a 28 year old mild intellectually challenged student of TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs) of Jai Narain Vyas University, Jodhpur. The qualitative & quantitative analysis & interpretation of data were done on the basis of objectives of the research.

Qualitative analysis

The present study deals with vocational, social and motor skills development in the subject. The sample taken is a purposive sample to enhance the lamination through vocational training. The subject taken was a 28 year old mild intellectually challenged student of TEPSE & HEPSN Center (Teacher Preparation in Special Education & Higher Education for Persons with Special Needs) of Jai Narain Vyas University, Jodhpur. The subject was selected from the pre-vocational group of the center. The sample has no

exposure to the vocational training of lamination. Gross motor activity of the subject was normal. Fine motor movements were not up to the level of the expertise. No prior knowledge was seen regarding the use of the lamination machine; however, the subject has theoretical knowledge of what lamination machine is used for. The family members of the subject also took keen interest towards enhancing his skills in lamination. Subject was also willingly interested for taking part in the activity and the steps of the training enthusiastically.

On the basis of the scale used by the investigator four evaluation tests in four constant days were conducted on the subject before the treatment of training to know the base level of the subject. After the treatment of 30 days continuously, two post tests were conducted to see the difference between pre and post exposure level of the subject. Withdrawal of 15 days was given to the subject and then third post-test was conducted on him. After third post test a treatment of 10 days was given to the subject and after this treatment, the final post-test was conducted on the subject to evaluate the significance of overall vocational training on him.

The positive effects of vocational training in the subject were seen. The above training given to the subject proves that the training of vocational skills as well as other skills like gross motor, fine motor and social interaction was too required for overall development of the subject in any vocation.

Quantitative Analysis

This sections deals with distribution of scores for different variables for mild intellectually challenged person. The mean is calculated for each category between pre

and post test session's scores. Group 't' value calculated to know about the significance difference between pre post test sessions for the entire five variable.

Table below represents the significant difference between Pre and Post Test for all Sub- skills.

Sub-Skills		Mean	Standard Deviation	Standard Error Mean	"t"
Gross Motor Skills	Pre-test	3.83	2.02	1.16	1.00
	Post-test	4.50	0.86	0.50	
Fine Motor Skills	Pre-test	1.20	0.20	0.09	15.33
	Post-test	3.80	0.44	0.20	
Social Skills	Pre-test	1.41	0.37	0.12	14.47
	Post-test	3.41	0.41	0.13	
Pre-Vocational Skills	Pre-test	1.20	0.27	0.12	20.39
	Post-test	3.80	0.20	0.09	
Laminating Skills	Pre-test	1.16	0.21	0.05	26.60
	Post-test	3.32	0.46	0.12	

The above table represents overall Mean values and significant difference for respective categories (skills) for Pre and Post sessions. On **Gross motor skills** tests for all items have obtained Mean= **3.83**, SD= **2.02**, S.E.M.= **1.66** on the pre-test sessions, whereas per post test sessions Mean= **4.50**, SD= **0.86**, S.E.M.= **0.50**. The calculated "t" value is 1 and it is not significant. Therefore, the formulated hypothesis "There will be significant difference between average score of pre and post test for Gross Motor Skills" is not accepted. It reveals that no remarkable changes have been shown after the training

as the subject had prior knowledge of gross motor skills. Though it was found the subject has shown improvement in the skills like using and movements of furniture as and when required.

On fine motor skills tests for all the items (i.e. 5 items) have achieved **M= 1.20, SD=0.20 and S.E.M. = 0.09** whereas for post test sessions the **M=3.80, SD=0.44 and S.E.M. =0.20**. The significant difference between the mean of pre & post sessions (**'t' = 15.33 > p 0.01**). Therefore, the formulated hypotheses “there will be significant difference between the average score of pre and post test for fine-motor skills.” is accepted. It shows that continuous training plays important role in learning of fine motor skills. Training not only develops the practice and expertise on the particular skills but also develops to concentrate on a particular task for a long time. Training of fine motor activities not only helps subject in his vocational life but also very helpful in his day to day life.

On social skill tests, all the items (i.e. 5 items) have got **Mean= 1.41, SD=0.37, S.E.M. = 0.12** whereas for post test sessions the **Mean = 3.41, SD= 0.41 and S.E.M. = 0.13**. The significance difference between the mean of pre & post session (**'t'=14.47 > p 0.01**) Therefore the formulated hypothesis “There will be significant difference between the average score of pre and post test for social interaction skills.” is accepted. It shows that after the training all the five items on social skills is enhanced through social skill training. These skills develop confidence in the subject to tackle with the environment and increase the perception of the happenings around their environment. Social skill helps subject to develop his cognitive skills too and which helps the subject to move a step ahead on the way towards inclusion.

On pre-vocational skills tests for all the items (i.e. 9 items) have achieved **M=1.20, SD=0.27, S.E.M. = 0.09**. The significant difference between the mean of pre & post sessions (**'t' = > p 0.01**). Therefore, the formulated hypothesis “There will be significant difference between the average score of pre and post test for pre-vocational skills.” is accepted. It shows that continuous training plays vital role in learning of social skills. This skill is a pre-step towards the vocational independency. This type of training helps not only in vocational life but also in the subject’s daily life.

On lamination skills, tests for all the items (i.e. 18 items) have achieved **M= 1.16, SD= 0.21, S.E.M. = 0.12**. The significant difference between the mean of pre & post sessions (**'t' = 26.60 > p 0.01**). Therefore, the formulated hypothesis “There will be significant difference between the average score of pre and post test for skills for lamination machine.” is accepted. It shows that continuous training plays vital role in developing “lamination” skills. Vocational skill is a step towards inclusion in the society. The subject will develop his skills more by practicing the steps in the training. These skills were not only helpful to subject in vocational aspects but also helps through enrichment of various skills to live life independently. Subject has showed tremendous level of achievement in post training evaluation in the items like-setting the machine on required heat position, cutting the sheet according to the size of the paper, entering the pouch appropriately, cutting the laminated sheet appropriately when required.

Result and Discussion

The results have shown a tremendous change in pre and post evaluation scores. It was hypothesized that as the training goes on there will be significant difference between pre and post test evaluation. In the various categories the enhancement was

found. Though in the Gross Motor skill there was no significant difference as the subject was good in gross motor activity and has prior knowledge of gross motor skills. However, in some of the items in gross motor skill has achieved good scores in post level evaluations. Fine motor skills have also scored notable increment in the post evaluation. The techniques of vocational skill training were adopted to help the subject learn more effectively and efficiently with his both mental and physical ability. Reinforcements were given at appropriate places and levels to boost up the motivation of the subject. Techniques like Modeling, Shaping, chaining and various prompts were also beneficial for edify the vocational skills while training.

Level of social interaction was also increased after the treatments given to the subject. These skills not only give self- confidence in the subject but also help them in their inclusion in the society. Basic knowledge of pre- vocational skills is also a prerequisite before giving vocational training. Subject has shown remarkable changes in post tests in pre-vocational skill. In vocational skill for lamination there is a noteworthy development in the subject's level of performance. The investigation divulges that apposite programmed instructions and training through techniques of vocational skills has given imperative changes in the subject.

The following researches are also supported by the above research work and its conclusion:

Rani, U. (2011) finds the need of therapeutic atmosphere conducive to emotional, socio-cultural, physical, and spiritual growth as well as occupational activities that will give them opportunities to learn skills, gain confidence, self-respect and economic gainfulness has to be created. To develop and create innovative programs in the

management of intellectually challenged persons, there is need to train and orient social workers, other professionals of allied disciplines on the rehabilitation of the intellectually challenged and to involve a more dynamic community participation in the implementation of its rehabilitation programs and assist the intellectually challenged people to obtain employment thru self-employment, sheltered workshop or open employment.

Das, H. (2011) indicated that the vocational rehabilitation and community based vocational rehabilitation for persons with intellectual impairment and associated disabilities is extremely pitiable in our country. Less than 5% of the adult population with MR is under any structured model of vocational rehabilitation. A very few sheltered workshops and work centers and a negligibly few are scattered examples of open, supported, self-employment options are available. The study evaluated the prevalent curriculum i.e. Madres Developmental Programming (MDPS), Functional Assessment Checklists for Programming 1994 (FACP), Behavioural Assessment Scales for Indian Children with Mental Retardation (BASIC-MR), Behavior Assessment for Adult Living Mental Retardation (BASAL-MR), Computer Aided Process Planning (CAPP), Adolescent and Adult Psycho Educational Profile (AAPEP) etc. in relation to the skill requirement across the models of employment i.e. self employment, open, supported and sheltered. The analysis indicated the curriculum though had pre-vocational skills incorporated, however, failed to relate closely to the models of vocational rehabilitation. As in current context only sheltered workshops in urban area and very few individuals are productively employed in rural area; the curriculum at school level needs major revision.

Lack of transition from class to class, class to prevocational and prevocational to vocational; is highly evident in the study.

In the present research work aim and objective were acquaintance of the subject to use lamination machine was the major aim amongst all. Enhancement of gross motor & fine motor skills through practice method was the also an objective of the research. These skills are the basic requirement for the training of vocation. Adequate social skills are also prerequisites for the persons which helps intellectual impairment in inclusion and to make the subject a contributory member of society. Overall, the development was seen in appropriate and meaningful work attitude, behaviour and skill training through the treatment given to the subject. The gross motor skills in the subject, however, were already good, though the development was seen in the subject. In prevocational and vocational skills the subject has acquired a significant development of the skills through trainings.

This was a field experiment study in which before and after design used. This design was used to know the significant effect of training on the subject. To know the level of the subject four continuous evaluations was conducted. These evaluations show the effect of environment exposure on the effectiveness of the skills on subject. This evaluation also helps in know and control the extraneous variable on the efficiency of the working skills in the subject. A treatment of thirty days was given to the subject. This treatment, two post test evaluations were taken to evaluate the level of achievements in the subject. A withdrawal of fifteen days was also given to know the difference. Withdrawal from the treatment showed effect on the working skills as the withdrawal was given; there was a decline in the effectiveness and work behavior in the subject. To

remove this effect a treatment of 10 days was given to subject. After the treatment subject was assessed to know the significance of treatment and training in the working behavior and effectiveness of the subject. It was also revealed that techniques of vocational skills like application of reinforcement, modeling and prompts were useful for enhancing achievements in the level of skills.

It is concluded on the basis of this investigation that such type of systematic training or Individual Vocational training programme boost up rehabilitation and mainstreaming process for the persons with intellectual impairment. They get rehabilitation opportunities through such type of individualized vocational training programme and make them a reproductive and contributory member of society. It was observed that the vocational independence has made the attitudinal change of family members as well as in peer group and society member towards the subject.

On the basis of researcher's experience and findings it could be said that individualized vocational training programme, demonstration (method) encouragement and motivation, correction, error analysis and supportive supervision helps in building-up and enlarge the proper and required skill in persons with intellectual impairment.

Educational Implications

Implementation of Vocational Rehabilitations of Behavioral Skill on Intellectual Disabled Person is very essential. This study has great educational implications. It has shown the positive impact on the vocational educational training programme given to intellectually disabled child. In our country such kind of individual educational programmes are very much required. Government has introduced inclusive education at every level and given a place to twenty one kinds of disabilities. In this

regard everyone gets chance to equal opportunities for education and employment. Person with disabilities can lead their life with dignity in the society. Intellectually Disabled person or intellectually challenged person can work in their specialized field under the supervision of normal person. In this way they can earn and feel good that they are not fully dependant. Here individual vocational educational programme plays an important role. Every special teacher educator and research scholars can prepare such programmes. In India very few cities have Vocational Rehabilitation Training Institute of Intellectual Disability Persons and their names are as follows:

1. National Institute for the Empowerment of Person with Intellectual Disabilities (Divyangjan) Formerly National Institute for the Mentally Handicapped (NIEPID/NIMH-1984) Secunderabad
2. National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD-2005) Kavalam Post Chennai, Tamil Nadu India
3. Swami Vivekanand National Institute of Rehabilitation Training and Research (SVNIRTAR-1975) Cuttack, Odisha
4. National Institute for the Mentally Handicapped Regional Centre, Lajpat Nagar, New Delhi
5. National Institute for the Mentally Handicapped Regional Centre, Noida, Uttar Pradesh
6. National Institute for the Mentally Handicapped Regional Centre, Kolkata, West Bengal
7. National Institute for the Mentally Handicapped Regional Centre, Navi Mumbai, Maharashtra
8. Composite Regional Centre, Nellore, Andhra Pradesh
9. Composite Regional Centre, Davangere, Karnataka
10. Teacher Preparation in Special Education and Higher Education for Persons with Special Needs (TEPSE & HEPSN-2006) Research Centre, Jodhpur Rajasthan

This Vocational Rehabilitation Training Institute of Intellectual Disability Persons are trying to achieve the objectives i.e. facilitating the children with various disabilities as per their capability. On the other hand the number of institutes are very less. Government

needs to open many more and it is recommended to open at least one institute in every city.

National Importance of the Study

Several intellectually disabled person experience difficulties with regard to obtaining suitable vocational training and continued assistance. Findings amongst person with intellectually disabilities highlight the fact that the behavior, healthcare and rehabilitation welfare system should create a multidisciplinary coordinated system for the improvement of vocational rehabilitation services amongst intellectually disabled person. Because intellectually disabled person have multiple healthcare needs, healthcare policies and guideline should reorganize the proper healthcare system to make it respond appropriately and safety to their needs. There is few major tools evidence which suggests that various early rehabilitation interventions may be feasible for person with mild intellectual disabilities. Research is, therefore, still needed, as experimental research evidence related to the effects of early rehabilitation intervention on the intellectually disabled person is rarest.

The following recommendations are made specifically with regard to vocational rehabilitation training, as intellectually disabled person have systematic vocational training programme needs. Vocational habilitation programme policy should thus reorient the vocational rehabilitation system to respond appropriately to these client needs.

d. Recommendations for vocational rehabilitation training

There is a real need for rigorous practice training based evidence to reinforce the increasing range of treatment training options for this group of rehabilitation service users. For this reason, rehabilitation education training should be incorporated into

vocational practice. This will enable special educator and rehabilitation psychologist to equip intellectually disabled person with behavior skills to acquire basic life behavior skills and to manage activities for daily living. Since special educator and rehabilitation psychologist form part of the multidisciplinary team, it is important that rehabilitation and occupational therapists collaborate with the special educators in order to ensure that the habilitation of intellectually disabled person is done effectively and on an ongoing basis.

e. Recommendations for vocational education

Special educators of all categories, namely, Registered as a professional special educators with RCI, enrolled special educators and rehabilitation psychologists, need to be educated, trained and equipped with rehabilitation education skills and knowledge in order to assist person with intellectual disabilities within institutional/ community based rehabilitation settings, with the aim of promoting their quality of life skills.

f. Recommendations for vocational rehabilitation research

There is a real dearth of rehabilitation research evidence concerning the effects of rehabilitation on intellectually disabled person. The knowledge gained will add to the experimental research knowledge base. Further research is still needed and should focus on the efficacy of specific vocational rehabilitation training service types provided to person with intellectual disabilities in India.

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Raw Data

Appendix- A

First Day Pre-Test of Gross Motor Skill				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
01	(PCA) Gross Motor Skill	First Day	Independent	5
02	(FM) Gross Motor Skill	First Day	Independent	5
03	(HTR) Gross Motor Skill	First Day	Dependent	1

Second Day Pre-Test of Gross Motor Skill				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
01	(PCA) Gross Motor Skill	Second Day	Independent	5
02	(FM) Gross Motor Skill	Second Day	Independent	5
03	(HTR) Gross Motor Skill	Second Day	Dependent	1

Third Day Pre-Test of Gross Motor Skill				
Item No	Domains	Pre-Tests	Performance	Pre-Tests Scores
01	(PCA) Gross Motor Skill	Third Day	Independent	5
02	(FM) Gross Motor Skill	Third Day	Independent	5
03	(HTR) Gross Motor Skill	Third Day	Physical Prompting	2

Fourth Day Pre-Test of Gross Motor Skill				
Item No.	Domains	Pre- Tests	Performance	Pre-Tests Scores
01	(PCA) Gross Motor Skill	Fourth Day	Independent	5
02	(FM) Gross Motor Skill	Fourth Day	Independent	5
03	(HTR) Gross Motor Skill	Fourth Day	Physical Prompting	2

First Day Post-Test of Gross Motor Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
01	(PCM) Gross Motor Skill	First Day	Independent	5
02	(FM) Gross Motor Skill	First Day	Independent	5
03	(HTR) Gross Motor Skill	First Day	Verbal Prompting	3

Second Day Post-Test of Gross Motor Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
01	(PCM) Gross Motor Skill	Second Day	Independent	5
02	(FM) Gross Motor Skill	Second Day	Independent	5
03	(HTR) Gross Motor Skill	Second Day	Modeling	4

Third Day Post-Test of Gross Motor Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
01	(PCM) Gross Motor Skill	Third Day	Independent	5
02	(FM) Gross Motor Skill	Third Day	Independent	5
03	(HTR) Gross Motor Skill	Third Day	Modeling	4

Fourth Day Post-Test of Gross Motor Skill				
Item No.	Domains	Post Tests	Performance	Post-Tests Scores
01	(PCM) Gross Motor Skill	Fourth Day	Independent	5
02	(FM) Gross Motor Skill	Fourth Day	Independent	5
03	(HTR) Gross Motor Skill	Fourth Day	Modeling	4

First Day Pre-Test of Fine Motor Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
04	(CL) Fine Motor Skill	First Day	Totally Dependent	1
05	(S) Fine Motor Skill	First Day	Totally Dependent	1
06	(W) Fine Motor Skill	First Day	Totally Dependent	1
07	(FL) Fine Motor Skill	First Day	Totally Dependent	1
08	(SC) Fine Motor Skill	First Day	Totally Dependent	1

Second Day Pre-Test of Fine Motor Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
04	(CL) Fine Motor Skill	Second Day	Totally Dependent	1
05	(S) Fine Motor Skill	Second Day	Totally Dependent	1
06	(W) Fine Motor Skill	Second Day	Totally Dependent	1
07	(FL) Fine Motor Skill	Second Day	Totally Dependent	1
08	(SC) Fine Motor Skill	Second Day	Totally Dependent	1

Third Day Pre-Test of Fine Motor Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
04	(CL) Fine Motor Skill	Third Day	Physical Prompting	2
05	(S) Fine Motor Skill	Third Day	Totally Dependent	1
06	(W) Fine Motor Skill	Third Day	Totally Dependent	1
07	(FL) Fine Motor Skill	Third Day	Totally Dependent	1
08	(SC) Fine Motor Skill	Third Day	Totally Dependent	1

Fourth Day Pre-Test of Fine Motor Skills			
Domains	Pre-Tests	Performance	Pre-Tests Scores
(CL) Fine Motor Skill	Fourth Day	Physical Prompting	2
(S) Fine Motor Skill	Fourth Day	Physical Prompting	2
(W) Fine Motor Skill	Fourth Day	Physical Prompting	2
(FL) Fine Motor Skill	Fourth Day	Totally Dependent	1
(SC) Fine Motor Skill	Fourth Day	Totally Dependent	1

First Day Post-Test of Fine Motor Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
04	(CL) Fine Motor Skill	First Day	Physical Prompting	2
05	(S) Fine Motor Skill	First Day	Physical Prompting	2
06	(W) Fine Motor Skill	First Day	Physical Prompting	2
07	(FL) Fine Motor Skill	First Day	Physical Prompting	2
08	(SC) Fine Motor Skill	First Day	Physical Prompting	2

Second Day Post-Test of Fine Motor Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
04	(CL) Fine Motor Skill	Second Day	Verbal Prompting	3
05	(S) Fine Motor Skill	Second Day	Verbal Prompting	3
06	(W) Fine Motor Skill	Second Day	Verbal Prompting	3
07	(FL) Fine Motor Skill	Second Day	Physical Prompting	2
08	(SC) Fine Motor Skill	Second Day	Verbal Prompting	3

Third Day Post -Test of Fine Motor Skill				
Item No.	Domains	Post -Tests	Performance	Post –Tests Scores
04	(CL) Fine Motor Skill	Third Day	Verbal Prompting	3
05	(S) Fine Motor Skill	Third Day	Verbal Prompting	3
06	(W) Fine Motor Skill	Third Day	Verbal Prompting	3
07	(FL) Fine Motor Skill	Third Day	Verbal Prompting	3
08	(SC) Fine Motor Skill	Third Day	Verbal Prompting	3

Fourth Day Post- Test of Fine Motor Skills				
Item No.	Domains	Post- Tests	Performance	Post- Tests Scores
04	(CL) Fine Motor Skill	Fourth Day	Modeling	4
05	(S) Fine Motor Skill	Fourth Day	Modeling	4
06	(W) Fine Motor Skill	Fourth Day	Modeling	4
07	(FL) Fine Motor Skill	Fourth Day	Verbal Prompting	3
08	(SC) Fine Motor Skill	Fourth Day	Modeling	4

First Day Pre-Test of Social Behavior Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
09	(1.PHTO) Social Behavior Skills	First Day	Occasionally	1
10	(1.PHTO) Social Behavior Skill	First Day	Occasionally	1
11	(1.PHTO) Social Behavior Skill	First Day	Occasionally	1
12	(DP,2.2) Social Behavior Skill	First Day	Occasionally	1
13	(DP,2.2) Social Behavior Skill	First Day	Occasionally	1

Second Day Pre-Test of Social Behavior Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
09	(1.PHTO) Social Behavior Skill	Second Day	Occasionally	1
10	(1.PHTO) Social Behavior Skill	Second Day	Occasionally	1
11	(1.PHTO) Social Behavior Skill	Second Day	Occasionally	1
12	(DP,2.2) Social Behavior Skill	Second Day	Occasionally	1
13	(DP,2.3) Social Behavior Skill	Second Day	Occasionally	1

Third Day Pre-Test of Social Behavior Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
09	(1.PHTO) Social Behavior Skill	Third Day	Occasionally	1
10	(1.PHTO) Social Behavior Skill	Third Day	Occasionally	2
11	(1.PHTO) Social Behavior Skill	Third Day	Occasionally	2
12	(DP,2.2) Social Behavior Skill	Third Day	Occasionally	1
13	(DP,2.3) Social Behavior Skill	Third Day	Occasionally	2

Fourth Day Pre-Test of Social Behavior Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
09	(1.PHTO) Social Behavior Skill	Fourth Day	Occasionally	1
10	(1.PHTO) Social Behavior Skill	Fourth Day	Frequently	2
11	(1.PHTO) Social Behavior Skill	Fourth Day	Frequently	2
12	(DP,2.2) Social Behavior Skill	Fourth Day	Occasionally	1
13	(DP,2.3) Social Behavior Skill	Fourth Day	Occasionally	1

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

First Day Post-Tests of Social Behavior Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
09	(9,10.PHTO) Social Behavior Skill	First Day	Frequently, Occasionally	3
10	(10,11A,PHTO) Social Behavior Skill	First Day	Frequently, Occasionally	3
11	(11B,2.2,PHTO) Social Behavior Skill	First Day	Frequently Occasionally	3
12	(12,2.3,DP) Social Behavior Skill	First Day	Frequently Occasionally	3
13	(13,2.4,DP) Social Behavior Skill	First Day	Frequently Occasionally	3

Second Day Post-Tests of Social Behavior Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
09	(9,10.PHTO) Social Behavior Skill	Second Day	Frequently, Occasionally	3
10	10,11A,PHTO) Social Behavior Skill	Second Day	Frequently, Occasionally	4
11	(11B,2.2,PHTO) Social Behavior Skill	Second Day	Frequently, Occasionally	4
12	(12,2.3,DP) Social Behavior Skill	Second Day	Frequently, Occasionally	4
13	(13,2.4,DP) Social Behavior Skill	Second Day	Frequently, Occasionally	4

Third Day Post-Tests of Social Behavior Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
09	(9,10.PHTO) Social Behavior Skill	Third Day	Frequently, Occasionally	4
10	(10,11A,PHTO) Social Behavior Skill	Third Day	Frequently, Occasionally	4
11	(11B,2.2,PHTO) Social Behavior	Third Day	Frequently, Occasionally	4
12	(12,2.3,DP) Social Behavior Skill	Third Day	Frequently, Occasionally	4
13	(13,2.4,DP) Social Behavior Skill	Third Day	Frequently, Occasionally	4

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Fourth Day Post-Tests of Social Behavior Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
09	(9,10.PHTO) Social Behavior Skill	Fourth Day	Frequently, Occasionally	4
10	(10,11A,PHTO) Social Behavior Skill	Fourth Day	Frequently, Occasionally	4
11	(11B,2.2,2.3,PHTO) Social Behavior Skill	Fourth Day	Frequently, Occasionally Frequently	5
12	(12,2.3,2.4DP) Social Behavior Skill	Fourth Day	Frequently, Occasionally Frequently	5
13	(13,2.4,DP) Social Behavior Skill	Fourth Day	Frequently, Occasionally	4

First Day Pre-Tests of Pre-Vocational Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
14	(DP,MWO) Pre-Vocational Skills	First Day	Occasionally	1
15	(MWO) Pre-Vocational Skills	First Day	Frequently	2
16	(MWO) Pre-Vocational Skills	First Day	Occasionally	1
17	(MWO) Pre-Vocational Skills	First Day	Occasionally	1
18	(MWO) Pre-Vocational Skills	First Day	Occasionally	1
19	(MWO) Pre-Vocational Skills	First Day	Occasionally	1
20	(MWO) Pre-Vocational Skills	First Day	Frequently	2
21	(MWO) Pre-Vocational Skills	First Day	Occasionally	1
22	(MWO) Pre-Vocational Skills	First Day	Occasionally	1

Second Day Pre-Tests of Pre-Vocational Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
14	(DP,MWO) Pre-Vocational Skills	Second Day	Occasionally	1
15	(MWO) Pre-Vocational Skills	Second Day	Frequently	2
16	(MWO) Pre-Vocational Skills	Second Day	Occasionally	1
17	(MWO) Pre-Vocational Skills	Second Day	Occasionally	1
18	(MWO) Pre-Vocational Skills	Second Day	Occasionally	1
19	(MWO) Pre-Vocational Skills	Second Day	Occasionally	1
20	(MWO) Pre-Vocational Skills	Second Day	Frequently	2
21	(MWO) Pre-Vocational Skills	Second Day	Occasionally	1
22	(MWO) Pre-Vocational Skills	Second Day	Occasionally	1

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Third Day Pre-Tests of Pre-Vocational Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
14	(DP,MWO) Pre-Vocational Skills	Third Day	Occasionally	1
15	(MWO) Pre-Vocational Skills	Third Day	Frequently	2
16	(MWO) Pre-Vocational Skills	Third Day	Occasionally	1
17	(MWO) Pre-Vocational Skills	Third Day	Frequently	2
18	(MWO) Pre-Vocational Skills	Third Day	Occasionally	1
19	(MWO) Pre-Vocational Skills	Third Day	Frequently	2
20	(MWO) Pre-Vocational Skills	Third Day	Frequently	2
21	(MWO) Pre-Vocational Skills	Third Day	Occasionally	1
22	(MWO) Pre-Vocational Skills	Third Day	Occasionally	1

Fourth Day Pre-Tests of Pre-Vocational Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
14	(DP,MWO) Pre-Vocational Skills	Fourth Day	Frequently	2
15	(MWO) Pre-Vocational Skills	Fourth Day	Frequently	2
16	(MWO) Pre-Vocational Skills	Fourth Day	Frequently	2
17	(MWO) Pre-Vocational Skills	Fourth Day	Frequently	2
18	(MWO) Pre-Vocational Skills	Fourth Day	Frequently	2
19	(MWO) Pre-Vocational Skills	Fourth Day	Frequently	2
20	(MWO) Pre-Vocational Skills	Fourth Day	Frequently	2
21	(MWO) Pre-Vocational Skills	Fourth Day	Occasionally	1
22	(MWO) Pre-Vocational Skills	Fourth Day	Occasionally	1

First Day Post-Tests of Pre-Vocational Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
14	(DP,MWO) Pre-Vocational Skill	First Day	Frequently Occasionally	3
15	(MWO,TT) Pre-Vocational Skill	First Day	Frequently Occasionally	3
16	(MWO,TT) Pre-Vocational Skill	First Day	Frequently Occasionally	3
17	(MWO,TT) Pre-Vocational Skill	First Day	Frequently Occasionally	3
18	(MWO,TT) Pre-Vocational Skill	First Day	Frequently Occasionally	3
19	(MWO,TT) Pre-Vocational Skill	First Day	Frequently Occasionally	3
20	(MWO,TT) Pre-Vocational Skill	First Day	Frequently Occasionally	3
21	(MWO) Pre-Vocational Skill	First Day	Frequently	2
22	(MWO) Pre-Vocational Skill	First Day	Frequently	2

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Second Day Post-Tests of Pre-Vocational Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
14	(DP,MWO) Pre-Vocational Skill	Second Day	Frequently Occasionally	3
15	(MWO,TT) Pre-Vocational Skill	Second Day	Frequently Occasionally	3
16	(MWO,TT) Pre-Vocational Skill	Second Day	Frequently Occasionally	3
17	(MWO,TT) Pre-Vocational Skill	Second Day	Frequently Occasionally	3
18	(MWO,TT) Pre-Vocational Skill	Second Day	Frequently Occasionally	3
19	(MWO,TT) Pre-Vocational Skill	Second Day	Frequently Occasionally	3
20	(MWO,TT) Pre-Vocational Skill	Second Day	Frequently Occasionally	3
21	(MWO) Pre-Vocational Skill	Second Day	Frequently	2
22	(MWO) Pre-Vocational Skill	Second Day	Frequently	2

Third Day Post-Tests of Pre-Vocational Skills				
Item No.	Domains	Post-Tests	Performance	Post- Tests Scores
14	(DP,MWO) Pre-Vocational Skill	Third Day	Frequently Occasionally	4
15	(MWO,TT) Pre-Vocational Skill	Third Day	Frequently Occasionally	4
16	(MWO,TT) Pre-Vocational Skill	Third Day	Frequently Occasionally	4
17	(MWO,TT) Pre-Vocational Skill	Third Day	Frequently Occasionally	3
18	(MWO,TT) Pre-Vocational Skill	Third Day	Frequently Occasionally	3
19	(MWO,TT) Pre-Vocational Skill	Third Day	Frequently Occasionally	4
20	(MWO,TT) Pre-Vocational Skill	Third Day	Frequently Occasionally	3
21	(MWO,TT) Pre-Vocational Skill	Third Day	Frequently Occasionally	3
22	(MWO,TT) Pre-Vocational Skill	Third Day	Frequently Occasionally	3

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Fourth Day Post-Tests of Pre-Vocational Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
14	(DP,MWO,TT) Pre-Vocational Skill	Fourth Day	Frequently Occasionally Frequently	5
15	(MWO,TT,RE) Pre-Vocational Skill	Fourth Day	Frequently Occasionally Frequently	5
16	(MWO,TT,RE) Pre-Vocational Skill	Fourth Day	Frequently Occasionally Frequently	5
17	(MWO,TT) Pre-Vocational Skill	Fourth Day	Frequently Occasionally	4
18	(MWO,TT) Pre-Vocational Skill	Fourth Day	Frequently Occasionally	4
19	(MWO,TT,RE) Pre-Vocational Skill	Fourth Day	Frequently Occasionally Frequently	5
20	(MWO,TT) Pre-Vocational Skill	Fourth Day	Frequently Occasionally	4
21	(MWO,TT) Pre-Vocational Skill	Fourth Day	Frequently Occasionally	4
22	(MWO,TT) Pre-Vocational Skill	Fourth Day	Frequently Occasionally	4

First Day Pre-Tests of Vocational (Lamination) Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
23	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
24	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
25	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
26	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
27	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
28	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
29	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
30	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
31	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
32	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
33	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
34	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
35	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
36	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
37	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
38	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
39	(WAB) Vocational Skill Behavior	First Day	Occasionally	1
40	(WAB) Vocational Skill Behavior	First Day	Occasionally	1

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Second Day Pre-Tests of Vocational(Lamination) Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
23	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
24	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
25	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
26	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
27	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
28	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
29	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
30	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
31	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
32	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
33	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
34	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
35	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
36	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
37	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
38	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
39	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1
40	(WAB) Vocational Skill Behavior	Second Day	Occasionally	1

Third Day Pre-Tests of Vocational(Lamination) Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
23	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
24	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
25	(WAB) Vocational Skill Behavior	Third Day	Frequently	2
26	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
27	(WAB) Vocational Skill Behavior	Third Day	Frequently	2
28	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
29	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
30	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
31	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
32	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
33	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
34	(WAB) Vocational Skill Behavior	Third Day	Frequently	2
35	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
36	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
37	(WAB) Vocational Skill Behavior	Third Day	Frequently	2
38	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1
39	(WAB) Vocational Skill Behavior	Third Day	Frequently	2
40	(WAB) Vocational Skill Behavior	Third Day	Occasionally	1

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Fourth Day Pre-Tests of Vocational(Lamination) Skills				
Item No.	Domains	Pre-Tests	Performance	Pre-Tests Scores
23	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
24	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
25	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
26	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
27	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
28	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1
29	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1
30	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1
31	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1
32	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1
33	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1
34	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
35	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1
36	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1
37	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
38	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
39	(WAB) Vocational Skill Behavior	Fourth Day	Frequently	2
40	(WAB) Vocational Skill Behavior	Fourth Day	Occasionally	1

First Day Post-Tests of Vocational(Lamination) Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
23	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3
24	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3
25	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3
26	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3
27	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3
28	(WAB) Vocational Skill Behavior	First Day	Occasionally	2
29	(WAB) Vocational Skill Behavior	First Day	Occasionally	2
30	(WAB) Vocational Skill Behavior	First Day	Occasionally	2
31	(WAB) Vocational Skill Behavior	First Day	Occasionally	2
32	(WAB) Vocational Skill Behavior	First Day	Occasionally	2
33	(WAB) Vocational Skill Behavior	First Day	Occasionally	2
34	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

35	(WAB) Vocational Skill Behavior	First Day	Occasionally	2
36	(WAB) Vocational Skill Behavior	First Day	Occasionally	2
37	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3
38	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3
39	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3
40	(WAB,IW) Vocational Skill Behavior	First Day	Occasionally Frequently	3

Second Day Post-Tests of Vocational (Lamination) Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
23	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
24	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
25	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
26	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
27	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
28	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
29	(WAB) Vocational Skill Behavior	Second Day	Occasionally	2
30	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
31	(WAB) Vocational Skill Behavior	Second Day	Occasionally	2
32	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
33	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
34	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
35	(WAB) Vocational Skill Behavior	Second Day	Occasionally	2
36	(WAB) Vocational Skill Behavior	Second Day	Occasionally	2
37	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
38	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
39	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3
40	(WAB,IW) Vocational Skill Behavior	Second Day	Occasionally Frequently	3

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Third Day Post-Tests of Vocational (Lamination) Skills				
Item No	Domains	Post-Tests	Performance	Post-Tests Scores
23	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
24	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
25	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
26	(WAB,IW) Vocational Skill Behavior	Third Day	Occasionally Frequently	3
27	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
28	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
29	(WAB) Vocational Skill Behavior	Third Day	Occasionally Frequently	3
30	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
31	(WAB) Vocational Skill Behavior	Third Day	Occasionally Frequently	3
32	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
33	(WAB,IW) Vocational Skill Behavior	Third Day	Occasionally Frequently	3
34	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
35	(WAB) Vocational Skill Behavior	Third Day	Occasionally Frequently	3
36	(WAB) Vocational Skill Behavior	Third Day	Occasionally Frequently	3
37	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
38	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
39	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4
40	(WAB,IW) Vocational Skill Behavior	Third Day	Frequently Frequently	4

Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person

Fourth Day Post-Tests of Vocational (Lamination) Skills				
Item No.	Domains	Post-Tests	Performance	Post-Tests Scores
23	(WAB,IW,AO) Vocational Skill Behavior	Fourth Day	Frequently Frequently Occasionally	5
24	(WAB,IW,AO) Vocational Skill Behavior	Fourth Day	Frequently Frequently Occasionally	5
25	(WAB,IW,AO) Vocational Skill Behavior	Fourth Day	Frequently Frequently Occasionally	5
26	(WAB,IW) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
27	(WAB,IW,AO) Vocational Skill Behavior	Fourth Day	Frequently Frequently Occasionally	5
28	(WAB,IW) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
29	(WAB) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
30	(WAB,IW) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
31	(WAB) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
32	(WAB,IW) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
33	(WAB,IW) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
34	(WAB,IW,AO) Vocational Skill Behavior	Fourth Day	Frequently Frequently Occasionally	5
35	(WAB) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
36	(WAB) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
37	(WAB,IW,AO) Vocational Skill Behavior	Fourth Day	Frequently Frequently Occasionally	5
38	(WAB,IW,AO) Vocational Skill Behavior	Fourth Day	Frequently Frequently Occasionally	5
39	(WAB,IW) Vocational Skill Behavior	Fourth Day	Frequently Frequently	4
40	(WAB,IW,AO) Vocational Skill Behavior	Fourth Day	Frequently Frequently Occasionally	5

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 ; cueing/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 "cueing/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

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- 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.
- 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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Item No. DOMAINS/ITEMS ASSESSMENT Behavioural - Ind. and

- 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

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.*

Total obtained score

Item No. DOMAINS/ITEMS ASSESSMENT Behavioural - Ind. and

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

- III HOUSEHOLD TASKS AND RESPONSIBILITY (HR)**
1. Empties garbage.
2. Dusts household items.#
3. Sweeps/washes/mops floor.
4. Cleans bathroom/toilet.*

Total obtained score

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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	DOMAIN/ITEMS	ASSESSMENT		
		Baseline	1st	2nd

I PERSONAL CARE AND APPEARANCE (PA)

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

(* Glossary, # Material; * # Glossary and Material)



- d) after shave lotion
- e) nailpolish
- f) burru/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)

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

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

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

(* Glossary, # Material; * # Glossary and Material)



- 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

- 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

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



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



13. Any others (1)
 (2)

VII ODD BEHAVIOUR
 (Maximum score 28)
 Total obtained score

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
 (Maximum score 12)
 Total obtained score

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

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7. Waves hands/shakes body parts

8. Grinds teeth

9. Swings round and round

10. Rotates objects

11. Any others (1)

(2)

VI REPETITIVE BEHAVIOURS
 (Maximum score 24)
 Total obtained score

VII ODD BEHAVIOURS

1. Laughs to self
2. Laughs inappropriately
3. Talks to self
4. Talks too much
5. Hoards unwanted objects (sticks, thread, pieces of old clothes, plastic bags, papers, empty cigarette packets, etc.)

6. Plays with unwanted objects excessively (Clothes, chappals, strings, faeces, water, dirt, etc.)

7. Picks nose

8. Stands too close to people

9. Shakes hands/greets/touches strangers unnecessarily

10. Smells objects

11. Does not sit with or talks to people/keeps aloof

12. Sits, stands lies down for long periods of time without doing anything

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Item No. **DOMAINS/STEPS** **ASSESSMENT** **INSTRUMENT** **NO.** **26** **1d**

III MISBEHAVES WITH OTHERS

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

III MISBEHAVES WITH OTHERS
(Maximum score 18)

Total obtained score

IV TEMPER TANTRUMS

1. Cries excessively
2. Screams
3. Slams doors
4. Bangs objects
5. Stamps feet
6. Kicks legs while lying on floor
7. Spits on others
8. Any others (1)
- (2)

IV TEMPER TANTRUMS
(Maximum score 18)

Total obtained score

V SELF-INJURIOUS BEHAVIOURS

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

V SELF-INJURIOUS BEHAVIOURS
(Maximum score 26)

Total obtained score

VI REPETITIVE BEHAVIOURS

1. Sucks thumb/fingers
2. Rocks body
3. Nods head
4. Makes peculiar sounds
5. Bites ends of pen/pencil
6. Taps feet

NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED
 Manovikasagar, 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

- 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.
- 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.
- 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)
- 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.

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ASSESSMENT

I PHYSICAL HARM TOWARDS OTHERS

- Verbally threatens to harm others
- Pushes others
- Pinches others
- Pulls hair/ear/body parts of others
- Bites others
- Kicks others
- Hits others
- Attacks or pokes others with knife/scissors/blade/others
- Throws objects
- Presses others neck
- Any other (1)
- Any other (2)

Total obtained score

I PHYSICAL HARM TOWARDS OTHERS

(Maximum score 24)

II DAMAGES PROPERTY

- Tears/Pulls threads from clothing
- Tears book/paper/magazines
- Breaks objects/glass/toys
- Damages furniture
- Any other (1)
- Any other (2)

Total obtained score

II DAMAGES PROPERTY

(Maximum score 12)

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Item No. **DOMAIN/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

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 (* Glossary, # Material, * # Glossary and Material)

Item No. **DOMAIN/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

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 (* Glossary, # Material, * # Glossary and Material)

ASSESSMENT

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.

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(* Glossary, # Material, * # Glossary and Material)

ASSESSMENT

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) STI/PCO booth

FUNCTIONAL LITERACY
Total obtained score

VIII SOCIAL-COMMUNICATION (SC)

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

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(* Glossary, # Material, * # Glossary and Material)

Item No. **DOMAINS/ITEMS** **ASSESSMENT**
Business Ed., 2nd, 3rd.

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

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(* Glossary, # Material, * # Glossary and Material)

6. Cleans and oils tools. (Any two)

- a) hammer
- b) screwdriver
- c) pliers
- d) tester
- e) stapler
- f) punching machine
- g) 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.*

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(* Glossary, # Material, * # Glossary and Material)

IV COMMUNITY AND LEISURE

- d) 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) kabhadi
 - 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

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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

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(* Glossary; # Material; * # Glossary and Material)

(* Glossary; # Material; * # Glossary and Material)



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



- 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

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

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(* Glossary, # Material, * # Glossary and Material)

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

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(* Glossary, # Material, * # Glossary and Material)

Item No. DOMAINS/TASKS ASSESSMENT No. (15, 20, 25, 30, 35, 40)

- 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.*

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(* Glossary. # Material. * # Glossary and Material)

Item No. DOMAINS/TASKS ASSESSMENT No. (15, 20, 25, 30, 35, 40)

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.*

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(* Glossary. # Material. * # Glossary and Material)

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.	DOMAIN/ITEMS	ASSESSMENT		
		Baseline	1st	2nd

1 PERSONAL CARE AND APPEARANCE (PA)

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

(* Glossary, # Material, * # Glossary and Material)



- d) after shave lotion
- e) nailpolish
- f) butt/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

(* Glossary, # Material, * # Glossary and Material)

Appendix 1

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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. No.	DOMAINS	Maximum Possible Score	Obtained score			Percentage		
			1 st Base line	2 nd Base line	3 rd Base line	1 st Base line	2 nd Base line	3 rd Base line
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		
		1 st Base line	2 nd Base line	3 rd Base line	1 st Base line	2 nd Base line	3 rd Base line
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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Appendix

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

Name of the Client: N K
Age: 21 yrs
Sex: female

Level of Retardation: Severe
Associated conditions: nil

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

BASAL-MR (Part B)

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

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THE DOMAINS/ITEMS ASSESSMENT

- XI HYPERACTIVE BEHAVIOURS**
1. Does not pay attention to the task at hand
 2. Does not continue with the task at hand for required time
 3. Does not sit at one place for required time
 4. Any other (1)
 - (2)

Total obtained score

XI HYPERACTIVE BEHAVIOURS
(Maximum score 10)

- XII FEARS**
1. Fear of animals/birds/insects
(1) Specify _____
 - (2) Specify _____
 - (3) Specify _____
 2. Fear of objects
(1) Specify _____
 3. Fear of places
(1) Specify _____
 4. Fear of persons
(1) Specify _____
 5. Any other (1)
 - (2)

Total obtained score

XII FEARS
(Maximum score of 16)

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

Total obtained score

IX INAPPROPRIATE SEXUAL BEHAVIOURS
(Maximum score of 38)

- X REBELLIOUS BEHAVIOURS**
1. Does not do what told to do
 2. Does opposite of what is requested
 3. Takes very long intentionally to complete a task.
 4. Continues to argue
 5. Goes out of house/work place without informing
 6. Any other (1)
 - (2)

Total obtained score

X REBELLIOUS BEHAVIOURS
(Maximum score 14)

Item No. **DOMAINS/ITEMS** **ASSESSMENT**

III MISBEHAVES WITH OTHERS

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

Total obtained score

III MISBEHAVES WITH OTHERS
(Maximum score 18)

IV TEMPER TANTRUMS

1. Cries excessively
2. Screams
3. Slams doors
4. Bangs objects
5. Stamps feet
6. Kicks legs while lying on floor
7. Spits on others
8. Any others (1)
- (2)

Total obtained score

IV TEMPER TANTRUMS
(Maximum score 18)

Item No. **DOMAINS/ITEMS** **ASSESSMENT**

V SELF-INJURIOUS BEHAVIOURS

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

Total obtained score

V SELF-INJURIOUS BEHAVIOURS
(Maximum score 26)

VI REPETITIVE BEHAVIOURS

1. Sucks thumb/fingers
2. Rocks body
3. Nods head
4. Makes peculiar sounds
5. Bites ends of pen/pencil
6. Taps feet

Item No. **DOMAINS/ITEMS** **ASSESSMENT**

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

- 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.
- 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 scores in the profile sheet of BASAL-MR (Part B).
- 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).
- 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.

ASSESSMENT

I PHYSICAL HARM TOWARDS OTHERS

- Verbally threatens to harm others
- Pushes others
- Pinches others
- Pulls hair/ear/body parts of others
- Bites others
- Kicks others
- Hits others
- Attacks or pokes others with knife/scissors/blade/others
- Throws objects
- Presses others neck
- Any other (1)
- Any other (2)

Total obtained score

I PHYSICAL HARM TOWARDS OTHERS

(Maximum score 24)

II DAMAGES PROPERTY

- Tears/Pulls threads from clothing
- Tears book/paper/magazines
- Breaks objects/glass/toys
- Damages furniture
- Any other (1)
- Any other (2)

Total obtained score

II DAMAGES PROPERTY

(Maximum score 12)

Item No. **COMMUNICATIONS** **ASSESSMENT**
 1987 Revised 1st. Ed. 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

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(* Glossary, # Material, * # Glossary and Material)

Item No. **COMMUNICATIONS** **ASSESSMENT**
 1987 Revised 1st. Ed. 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

Total obtained score

VIII SOCIAL - COMMUNICATION

89

(* Glossary, # Material, * # Glossary and Material)

Item No. **DOWNLISTERS** **ASSESSMENT**
Baseline III, 2nd, 3rd

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/litre. (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

84

(* Glossary; # Material; * # Glossary and Material)

6. Cleans and oils tools. (Any two)

- a) hammer
- b) screwdriver
- c) pliers
- d) tester
- e) stapler
- f) punching machine
- g) 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.*

85

(* Glossary; # Material; * # Glossary and Material)



- 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

(* Glossary, # Material, * # Glossary and Material)



- 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.* #

Total obtained score

FUNCTIONAL LITERACY

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.

(* Glossary, # Material, * # Glossary and Material)

Item No. **DOMAINS/STEPS** **ASSESSMENT**
Baseline: H1, 2nd, 3rd

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 1 Kg/ 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

84

(* Glossary, # Material, * # Glossary and Material)

6. Cleans and oils tools. (Any two)

- a) hammer
 - b) screwdriver
 - c) pliers
 - d) tester
 - e) stapler
 - f) punching machine
 - g) 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. *

85

(* Glossary, # Material, * # Glossary and Material)

Item No. DOMAINS/ITEMS ASSESSMENT (Marked as 200 500)

- 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/envelopes
 - c) sends money order/registered post/packages
 - others

(* Glossary: # Material, * # Glossary and Material)

Item No. DOMAINS/ITEMS ASSESSMENT (Marked as 200 500)

- 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/huddo/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

(* Glossary: # Material, * # Glossary and Material)

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) kabaddi

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

82

(* Glossary; # Material; * # Glossary and Material)

V SEXUALITY (5)

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

83

(* Glossary; # Material; * # Glossary and Material)

Appendix 7

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. No.	DOMAINS	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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Appendix 8

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. No.	DOMAINS	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

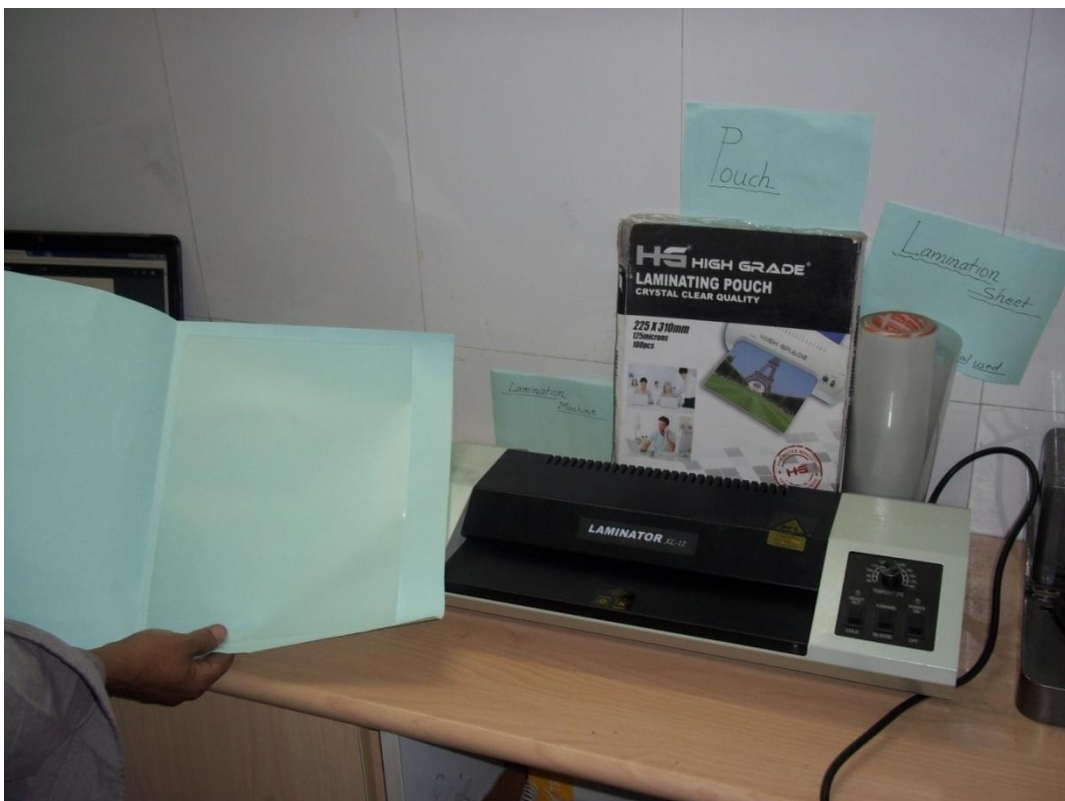
BASAL-MR (Part B)

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

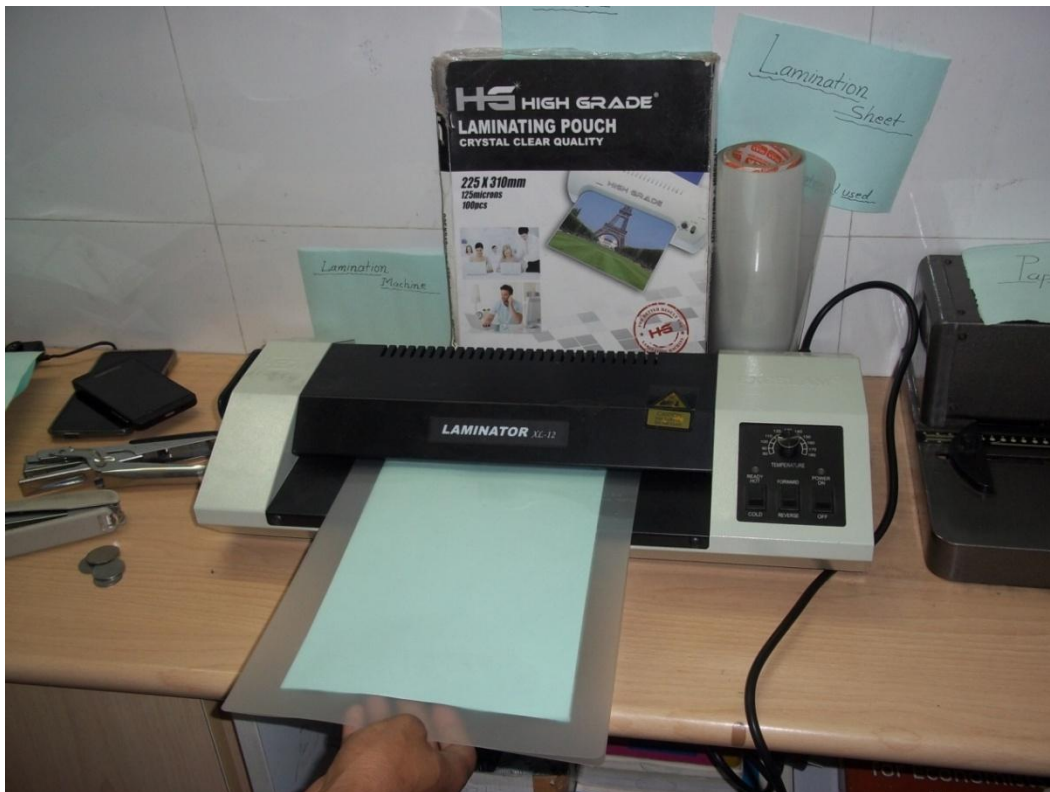
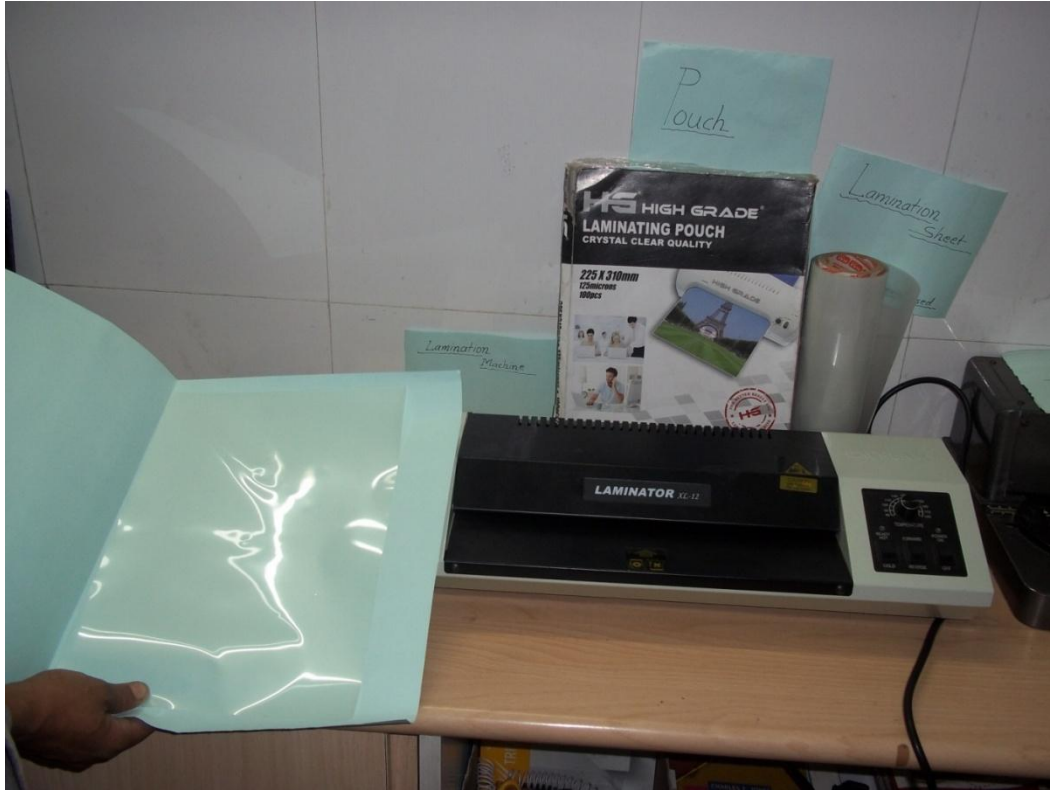
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Material Used for Experiment

Appendix- C



Effect of Vocational Training on Behavioural Skills in Mild Intellectually Disabled Person



Appendix- D

DETAILS OF RESEARCH ACTIVITIES DURING M.Phil PROGRAMME

1. Participation in Workshop:

- a. Contribution during the National Workshop on Examination Reform in Higher Education “Choice Based Credit System (CBCS): Potential and Challenges” held at Department of Education, Central university of Haryana, Mahendergarh, on November 09/11/2016.

2. Participation in Seminar/Symposium :

- a. Participated in the National Symposium on “Problems & Rehabilitation of Specially Abled Person in South Asia: Multiple Dimensions” organized by Department of Political Science, Jai Narain Vyas University, Jodhpur on 17th December 2016 & presented a paper titled “An overview of childhood disabilities and other special needs”.
- b. Participated in the DHE (Haryana) Sponsored National Seminar on “Contemporary Teacher Education System: Multi Disciplinary Perspective” organized by Rao Birender Singh College of Education, Rewari on 25th December 2016 & presented a paper titled “Effect of Spiritual Attitude of Parents of Mentally Challenged Children”.
- c. Participated in the MHRD (PMMMNMSTT) Scheme of National Seminar on “Inclusive Education: Past Present and Future” organized by Department of Education, Central University of Haryana on 28th February 2017 & presented a paper titled “Challenges Faced By School Teachers In Inclusive Education”.
- d. Participated in the MHRD (PMMMNMSTT) Scheme of National Seminar on “Inclusive Education: Past Present and Future” organized by Department of Education, Central University of Haryana on 28th February 2017 & presented a paper titled “Reflection on Persons with Disabilities Acts and Rules: An Implementation of Inclusive Education in India”.

3. Research Paper Publication

- a. Sharma, Sarika & Das, Anash Kumar. (2017), vishesht shiksha ke antargat wak chekissa shikshan me payi jane wali vikriti ewam uske arambik hastaship pravi pravidyon ka adhyan. *Shrinkhla Ek Shodhparak Vaicharik Patrika, A Multi-Disciplinary International Journal*, 4(7),64-69, P: ISSN No.: 2321-290X, E: ISSN No.: 2349-980X.
- b. Sharma, Sarika & Das, Anash Kumar. (2017), Effect of Spiritual Attitude of Parents of Mentally Challenged Children. *Periodic Research Multi-disciplinary Peer Reviewed International Research Journal* ,5(4),01-05, P: ISSN No. 2231-0045, E: ISSN No. 2349-9435.

TEPSE & HEP SN CENTRE
(Affiliated to Rehabilitation Council of India)
JAI NARAIN VYAS UNIVERSITY, JODHPUR

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Date: 02/02/2017

To Whom So Ever It May Concern

This is to certify that Mr. Anash Kumar Das M.Phil. Scholar, Department of Education, Central University of Haryana has collected Data for his M.Phil Research work from this institute. His topic for dissertation is "Effect of Vocational Training on Behavioural skills in Mild Intellectually Disabled Person". He had collected Data in the month of January 2017.

I wish him every success in life.

(Dr. Ravi K. Gunthey)

Coordinator
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Abbreviations

AAIDD	American Association of Intellectual and Developmental Disability
AAPEP	Adolescent and Adult Psycho Educational Profile
ADL	Activities for Daily Living
ANOVA	Analysis of Variance
AO	Any Other
APA	American Psychiatric Association
BASAL-MR	Behavior Assessment for Adult Living Mental Retardation
BASIC-MR	Behavioural Assessment Scales for Indian Children with Mental Retardation
CAPP	Computer Aided Process Planning
CBR	Community Based Rehabilitation
CL	Community And Leisure
CRC	Composite Regional Centre
CS	Counseling Services
CWSEN	Children with Special Educational Needs
DC	Disabilities in Children
DD	Developmental Disorder
DDRCs	District Disability Rehabilitation Centers
DEPWD	Department of Empowerment of Persons with Disabilities
DP	Damages Property
DSBVC	Development of School Based Vocational Curriculum
DSMMD	Diagnostic and Statistical Manual of Mental Disorders
EC	Exceptional Children
FACP	Functional Assessment Checklists for Programming 1994
FL	Functional Literacy
FM	Food Management
GST	Generic Skill Training

HEPSN	Higher Education for Persons with Special Needs
HTR	Household Tasks And Responsibility
IADL	Instrumental Activities of Daily Living
IC	Intellectually Challenged
ICD	International Classification of Diseases
ICP	Intellectually Challenged Person
ID	Intellectual Disabilities
IDP	Intellectually Disabled Person
IEP	Individualized Education Plan
IFSP	Individual Family Service Plan
IHP	Individualized Habilitation Programme
II	Intellectual Impairment
ILO	International Labor Organization
ILS	Independent Living Skills
IQ	Intelligence Quotient
ISCDRHP	International Statistical Classification of Diseases and Related Health Problems
ISF	Independent Skill Function
ITP	Individualized Training Programme
IVTP	Individualized Vocational Training Programme
IW	Independent Working
LA	Lunacy Act
MDPS	Madres Developmental Programming System
MDT	Multiple Disability Support
MHRD	Ministry of Human Resource Development
MR	Mental Retardation
MSJ&E	Ministry of Social Justice and Empowerment
MWO	Misbehaves with Others
NCERT	National Council for Education, Research and Training
NGOs	Non Governmental Organization

NIEPID	National Institute for the Empowerment of Persons with Intellectual Disabilities
NIMH	National Institute for the Mentally Handicapped
NPE	National Policy on Education
NSSO	National Sample Survey Office/Organization
NT ACT	National Trust Act 1999 (for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities)
OT	Occupational Therapy
PCA	Personal Care And Appearance
PHTO	Physical Harm Towards Others
PS	Psychological Services
PT	Physical Therapy
PWD	Persons with Disabilities
PWD ACT	Persons with Disabilities Act 1995 (Equal Opportunities, Protection of Rights and Full Participation)
RBA	Right Based Approach
RC	Regional Centre
S	Sexuality
SBVST	School Based Vocational Skill Training
SC	Social Communication
SES	Special Educational Services
SLT	Speech Language Therapy
SST	Specific Skill Training
ST	Speech Therapy
SWOTA	Strengths, Weaknesses, Opportunities, and Threats Analysis
TEPSE	Teacher Preparation in Special Education
TT	Temper Tantrums
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNESCO	United Nations Educational, Scientific and Cultural Organization
VRT	Vocational Rehabilitation Training

VT	Vision Therapy
VT	Vocational Training
VTE	Vocational Training & Employment
VTM	Vocational Transition Models
VTP	Vocational Training Programme
WAB	Working Appropriate Behavior
WHO	World Health Organization
