Chapter - 1

INTRODUCTION

“The best and most beautiful things in the world
cannot be seen or even touched.
They must be felt with the heart”

HELEN KELLER¹

Man has realized the need to have a body since the primitive era. During that age an individual required to have a strong and enduring body to manage his food and to fight against their enemies. They had to have the ability to hunt and to save them under unforeseen situation. These particular demands made them acquainted with the basic skill of living. One who possessed these qualities had to right to survive.

So from very early age human being had enough concentration on their body fitness. In ancient Athens, pupils were schooled to become productive member of democratic society. Given the pressure imposed on all male citizens to take an active part in debates, justice and local governmental plan.² But most

sorrow theme was that the attitude towards the disabled person was extremely negative in sense.

In the Stone Age, disabled people were not tolerated, as hunter gather tribes needed every individual to contribute to the livelihood of the tribes. Anyone who couldn’t contribute anything would have been banished. However, while the human evolution in ancient Bronze Age resulted in massive civilization but the Stone Age attitude of the empires towards the disabled person remained relatively unchanged. Disabled person in Bronze Age were often excluded, treated as savages and in some cases, even murdered.

In the ancient period the physically handicapped children had been considered as social deviants. In Sparta civilization a handicapped children had no right to lead his life. He was kept in mountain “Tagetus” to die. They had a cruel practice of treating disabled person as inferiors and left them to die, including children born from disabled parents particularly in Sparta. Spartan cultures dealt with building up of military might and war, not science and trade. When a child was born in Sparta city state, every new born child was assessed to determine if they were fit for war or physical training including girls. If the child was deemed ‘unfit’ for war or excessive physical exercise, he/she thrown

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off to ravine, left to be fed by wild vultures and other vicious animals or die all together from his/her injuries and starvation.  

In Rome the scenario was quite different, where conflicting attitude was shown in different classes of people. Like the Greeks, the Roman empires were firm believers of the concept “mens sana in corpore sano” means healthy body for healthy mind. Due to this concept, some disabled people were drawn in a river, some murdered in a ‘colosseum’. Particularly children from Patricians and noble classes since a disabled child cannot carry on a family name and fortune and children from peasant and farming family, since they were unable to meet the required physical demands with scarce resources. Furthermore if a person had a disability later in life, committing suicide was actually considered as an honourable thing specially those from Patrician families.

A few among Roman believed on compensation and social help to disabled because some of the greatest Roman empires carried out disability. Two relevant examples were Emperor Claudius who suffered from crippled, speech impairment and frequent illness and Emperor Julius Caesar who suffered from epilepsy. During childhood Claudius was kept out of the public eye since his family deemed him as an embarrassment, resulting in an entire childhood spent in isolation and seclusion. Since Claudius had a lot of spare time, he often

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6 Ibid.
7 Ibid.
studied many liberal arts. He eventually become a scholar, a rarity for disabled Roman citizens and composed most of his studies on history and even the Etruscan language. These skill combined with knowledge in government institution provided the basis for his rise up to power as emperor.  

While the Greek and Roman civilizations showed tremendous disregards for disabled persons, Ancient Egypt was one of few civilizations, which showed some reverence towards the disabled person. Person with some disabilities especially blindness and other with physical limitations were often revered for the other abilities. Believe it or not ancient Egyptian attitude towards disabled person clearly illustrated that they were active participants in Egyptian life and society. They had right to participate in labour force, using civic services associating with others, attended school, trade and even go to markets or buzzers. The main reason was, ancient Egypt was plagued with many disabilities, including blindness, lungs disease, dwarfism, cancer, malaria and so forth. It found evidence physically disabled persons in ancient Egypt often worked as musician, farmer, laundry attendants, physician, tool makers etc. It often showed blind person playing harp. For a person with no vision, being able to play a complex musical instrument, such as a harp, was truly a gift of skill and finesse.

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In particular, dwarfism was not considered a physical disability. The Egyptian attitude towards the disabled was so sensitive because the Egyptian had two revered dwarf Gods named Bes and Ptah and archaeological evidence shows that dwarfs were integrated into all aspect of Egyptian life. In other hand some disabled person in ancient Egypt went on to become great ruler as well. For example Thotmose-II was said to have both physical and development disability.

In Babylonians civilization (Modern Iraq) anyone who suffered a disability as a result of injuries, received financial and food compensation including potential lost wages and various rehabilitative costs. While disabled person were well looked after in ancient Babylon in terms of compensation and social assistance but often they were treated as in a manner similar to slave and women classes. They were not allowed to affiliate with someone from another class, not allowed to work otherwise their bosses had to face the death penalty under code of ‘Hammurabi’, no rights to stand up their oppressors when he/she did something wrong or unjust and lived in poverty since compensation level was not enough to sustain themselves.

In China disabled person were often treated as same manner as salves since they did not have the same rights as other citizens. For example, they did

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10 Ibid.
not have right to attend public school or received any education. Disabled Chinese had little or no education.

The studies on disabled people in medieval era were a newly emerging field. During medieval times, attitudes towards the disabled were conflicted. On the one hand, it was widely believed that disabilities such as deafness and mental illness were caused by demons. People with these disabilities were sometimes persecuted or even executed as witches.\(^{12}\) On the other hand, the Catholic Church had a tradition of helping the disabilities in their needs. Because people with disabilities often had great financial needs the Church provided assistance in the form of alms, as well as Church funded residential institutions.\(^{13}\)

In time of medieval age non-disabled people would not associate with disabled people for fear of being ostracized themselves. Contact with disabled person was assumed to bring bad luck to individual, his/her families and his/her community. He/she might even be considered to be cursed by Satan. Disabled children were considered the ‘children of Satan’ or were thought to be parents’ punishment for being involved with witchcraft.\(^{14}\)

In the same time different thoughts were strongly supported that some disabled people were revered as being in direct communication with God, such


\(^{13}\) Ibid., p.19.

as blind people and epileptics people who could not hear voices were also revered and were in position to become good leaders as it was thought that God was speaking to and guiding them.\textsuperscript{15}

A particular kinds of abuse of disabled women occurred during the Nazi era in Europe. Under Hitler’s regime, the deaf, along with other person with disabilities were persecuted, incarcerated and murdered. Dr. Horst Biesold\textsuperscript{16} reported that many deaf women underwent forced abortion and forced sterilizations in order to “block the creation of impaired life”. Women who were disabled were routinely denied their rights to marry, to have a family, to adopt and had control over their reproductive system.\textsuperscript{17}

Although disabled person are not subjected to some persecution levels as they did in Stone Age, ancient time, medieval and renaissance periods they were still exposed to active discrimination in many fronts in early modern era. These included denied right to proper health care in United State, little or no employment participation in Canada, forced sterilizations in Russia, no educational opportunities in China, and no rights to lead normal life style in Australia. To sum up forced sterilization, inappropriate medical care, physical abuse, and psychological abuse, social isolation, emotional deprivation, sexual


assaults, forced abortion and financial exploitation routinely took place with disabled person. Where fight for equal rights among the disabled person was far away in early modern era.

Indian past attitude was not differing too far from the international scenario. In Indian culture, when a child was born with a disability, it was accepted as one's fate or destiny. The belief in karma, or punishment for past deeds, underlies the accepting spirit. In some villages, people with disabilities were shunned, abused, or abandoned at birth, since parents were ashamed of their disabled child, could not envision a viable future for the child and fear for social isolation themselves. Many families were reluctant to report disability, particularly in view of the prevailing negative attitudes toward people with disability in most communities. Indians also considered their children as investments for the future. So, when a child was born with a disability, they could not see that child as a source of support or income in the future. Hence, they would rather spend their income on the healthy children, especially the male children.

Disabilities were not only problems for the person with the disability (PWD) but, in a real sense, person’s disability made that family disabled. The family coped with the demands and special needs of the person with the disability by providing daily care, rearranging the daily schedules and ensuring compliance with treatment. The stress was shared by the whole family,
especially the women in the household. Significant disruption of family routine, leisure and interaction could be expected.\(^{18}\)

These entire attitudes might be due to the religious beliefs, economic hardship, poor transport facilities and a lack of education which made it harder for the parents to access services for their child. Rehabilitation services were not easily available to the majority of the population in India; little help was sought for children with lifelong disabilities.

In Indian prospective while walking the street, it exposed one to people with leprosy, amputations or visual impairments who often used their impairments to solicit money. This type of contact might cause the person with a disability to be viewed as a person to be pitied, shunned or supported by charity. Negative attitudes resulted from this type of contact in which people with disabilities were viewed as inferior. Furthermore, most adult Indians had not attended school with people with disabilities since integration was only beginning to be implemented in Indian schools.\(^{19}\)

Women, much more than men, carried society's responsibilities cross on their backs especially in concern of disability in family. However, it was not uncommon for the male members of the family to leave the care of the person


with the disability to the women in the house. Hence, the mother, wife, sister or
doctor of the person with the disability took over the daily care. However, the
disabled women were burdened all through their lives was three times heavier
because of their gender, their disability and their being the most deprived group.
The most severe expressions of gender discrimination were found in the field of
disability, frequently cutting across social, economic, political and cultural
dimensions. Women and girls with disabilities were excluded from mainstream
gender equality programs. Children and young people with disabilities faced
overwhelming barriers to participation in education and skill development
programs. Despite international and national advocacy movements led by
dedicated and courageous feminists and disability activists, as well as the
support for women's issues extended by Indian policymakers and concerned
organizations, the plight of disabled girls and women remains virtually
unchanged. They continued to fall through the cracks in the elaborate network
of the country's services and plans.

Other than general people Government policies also over looked the
Physically Challenged, no reservation was meant for them in the past days.
Nobody thought regarding their health improvement and general fitness. Due to
lack of optimum fitness they did not take a challenged to normal life leading. At
the past time they used some helping aids which were quite poor in quality and
much weighty and not easy to use.
Time passed, Physically Challenged people at last succeed to bring changed in attitude of general people towards them. They also forced to modify the Government policies and act. These revolutions spread only for their strong believe that “DISABILITY IS PRIDE AND POWER IS INSIDE”

The needs and expectations of people with disabilities in India are changing, and in response, policies and practices in India have also slowly undergone change. During the last two decades, in India, as well as in most other countries of the world, there has been a growing realization that institutional-care for the disabled and Non–governmental organizations (NGOs) have played a major role in disability and disability services in India and are a just cause of pride.

Actually the needs of disabled in democratic society are not different from those normal children; such a child wants acceptance and recognition from his fellow students in the school. He wants the security that grows out of acceptance in the process of growing up and living with the social group. Bucher pointed out that the time has come when we must no longer neglect the differently abled people. Those people have the right to live, to work, to the best of their ability and to know the dignity which every human being is entitled to do. These are people who can and must be helped to help themselves. Recent

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court decisions have clearly affirmed, moreover that this is their constitutional right.

The term ‘handicap’ was became very controversial word during early stage of 19th century. Some people with disabilities did not like the term "handicap" because of a belief that it originally meant someone who could not work and went begging with their cap in hand. So cap in hand or hand(i) cap was sign of begging. This, however, appeared to not be the true origin of the word. It originated in a lottery game known as Hand in Cap in the 1600s which involved players placing money in a cap. It moved later into horse racing where it meant bringing the strongest competitors (a term to please the disabled!) back to the field by giving them extra weight to carry. In golf, it became the number of strokes a player could subtract from his score to give him a chance against better players, so a bigger handicap is actually an advantage in golf. Only in 1915 did it become a term to describe the disabled, when it was used to describe crippled children.22

The term "handicap" also means the loss or limitation of opportunities to take part in the life of the community on an equal level with others. It describes the encounter between the person with a disability and the environment. The purpose of this term is to emphasize the focus on shortcomings in the environment and in many organized activities in society, for example,  

information, communication and education, which prevent persons with disabilities from participating on equal terms.

World Health Organisation clearly constructed a bridge between the word ‘Handicap’ and ‘Disabled’. The term Disability is defined by World Health Organization in 1976, which draws a three-fold distinction between impairment, disability and handicap. A handicap is a disadvantage for a given individual, resulting from a disability, that prevents the fulfilment of a role that is considered normal (depending on age, sex and social and cultural factors) for that individual. A disability is any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being.23

Quite popular phrase Physical Disability is defined by World Health Organisation like “Disability is an umbrella term, covering impairment, activity limitation, and participation restrictions. Impairment is a problem of body function or structure; an activity limitation is difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus

disability is a complex phenomenon, reflecting an interaction between feature of a person’s body feature of the society in which he or she lives.”

During the 1970s, there was a strong reaction among representatives of organizations of persons with disabilities and professionals in the field of disability against the terminology of the time. The terms "disability" and "handicap" were often used in an unclear and confusing way, which provided poor guidance for policy-making and political action. The terminology reflected a medical and diagnostic approach, which ignored the imperfections and deficiencies of the surrounding society.

Changing in terminology still continued and the proposal suggested that disability covered the wider range of group and disability resulting only from impairment. So the new terminology originates according to the specific impairment like hearing impairment, visual impairment etc. According to World Health Organization Impairment is any loss or abnormality of psychological, physiological or anatomical structure or function. WHO has mentioned that impairment refers to physical or cognitive limitations that an individual may have, such as the inability to walk or speak.

The word ‘Disability’ refers as to belief that the person cannot be able to do particular work / job completely, means unable to do so, whereas it is the

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opposite meaning of abled. But trend proved that some of the disabled can perform the particular work/job to some extent. Where the word ‘disabled’ is inappropriate and refers the suitable word is ‘impairment’. Impairment means weakness which may indicate complete or some extend or particular percentage of weakness. So the word Impairment is established.

Revolutionary approach of changing terminology is still continuing. In twentieth century new terminology used ‘Challenged People’ keeping view of their challenging life style. They accept the life leading as a challenge. According to the American Heritage dictionary, Physically Challenged means physical lacking which limits one’s mobility. Physically Challenged widely refer physical disabled. So far physical disabled lead their life by challenge that’s why they awarded the term ‘challenged’. Controversy arises regarding the word ‘challenged people’. Better suggestion is given that to use the word ‘Special Needed People’. The clarification of use ‘Special Needed People’ rather than ‘Challenged People’ is not so transparent. It believes that the word ‘challenged people’ indicate the meaning that the life is a challenged before them and that challenged is accepted by them only, no ray of social responsibilities is reflected upon the word ‘challenged people’. Whereas the word ‘Special Needed People’ reflects the social responsibility and social accountability against impairment people. So the society widely accepts the

word ‘Special Needed People’. Now a day’s people also used the term ‘Differently Abled People’.

Over the years, many dedicated men and women have voluntarily given their time, wealth, skills and energies to provide caring services to add to or enhance already too–far–stretched statutory services for disabled person. The history of the disability movement in India over the last 50 years is a testimony to the commitment and determination of these individuals. Thousand of voluntary organizations in India are working for the cause of disability services and engaged in the service of disabled people. These range from the very professional, well managed, high profile national organizations that are immensely successful, to the well–meaning, small neighbourhood organizations, with much goodwill but lacking in hard resources.

As similar to N.G.O. and other voluntary organisation, Government of India in taking confidence with State Government formulated various act and constitutions in favour of disabled and formed a bunch of policies which benefit the disabled. Act and constitutional right help the disabled to protect injustice occurred on them and Government policies help to make their life leading more easily. Policies have versatile dimension. Like educational dimension – reservation of seat at the time of admission, scholarship, financial assistance and recruitment of ‘Special Needed Teacher’, provision for extra time and co-writer for the examination are provided. In case of professional dimension –
reservation of the post at the time of recruitment, special sitting arrangement, modern technological assistance are offered. In social dimension – financial assistance at the time of travelling, changing attitude towards disabled, social recognition, make the disabled as the part of society are suggested.

The government of India, with the assistance of the National Institute of Disability, Research and Rehabilitation (NIDRR), a U.S. government organization, has set up the National Information Centre on Disability and Rehabilitation in Delhi, an apex centre for information relating to various aspects of disability. Considerable emphasis is also given to vocational rehabilitation and its pivotal role in comprehensive rehabilitation services with a focus on training and employment of people with disabilities. There has been relentless advocacy for community care. It is generally recognized that those who have been in such institutions for a long time must be discharged, and those waiting to get admitted must be prevented from doing so.

‘ADD International’ is a UK-based development agency working as an ally to the disability movements in Africa and Asia. ADD works from a human rights perspective and since 1985 has played a key role in facilitating disabled people to come together to make decisions about their own lives and to campaign for their rights; basic rights that most people take for granted such as family life, means of earning a living, education, basic healthcare and respect from other members of the community.
The Rehabilitation Council of India (RCI) was set up as a registered society in 1986. On September, 1992 the RCI Act was enacted by Parliament and it became a Statutory Body on 22 June 1993\textsuperscript{27}. The Act was amended by Parliament in 2000 to make it more broad based. The mandate given to RCI is to regulate and monitor services given to persons with disability, to standardise syllabi and to maintain a Central Rehabilitation Register of all qualified professionals and personnel working in the field of Rehabilitation and Special Education. The Act also prescribes punitive action against unqualified persons delivering services to persons with disability.

In Indian prospective, category of Disability/Impairment has been provided by the Rehabilitation Council of India Act, 1992\textsuperscript{28} which are as follows:

**Hearing Impairment** means deafness with hearing impairment of 70 decibels and above in the better ear or total loss of hearing in both ears.

**Locomotors Disability** means a person’s inability to execute distinctive activities associated with moving, both himself/herself and objects, from place to place, and such inability resulting from affliction of either bones, joints, muscles or nerves.


Mental Retardation means a condition of arrested or incomplete development of mind of a person which is specially characterized by sub-normality of intelligence.

Visually Impairment means a person who suffers from any of the following conditions, namely total absence of sight, visual acuity not exceeding 6/60 or 20/200 (snellen) in the better eye with the correcting lenses and limitation of the field of vision subtending an angle of degree 20 or worse.

Orthopedic or Neurological Disorder means a person shall be deemed to be orthopedically or neurologically disabled if he/she has having disability of bones, joints or muscles leading to substantial restriction of the movement of the limbs or if he/she has any form of Cerebral palsy. Following Tables are clearly indicated the variation in impairment. Table 1 shows the various categories of Hearing Impairment.
# Table – 1

**Hearing Impairment Categories**

<table>
<thead>
<tr>
<th>Sl. no.</th>
<th>Category</th>
<th>Type of impairment</th>
<th>dB level and/or</th>
<th>Speech Discrimination</th>
<th>%age of Impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I</td>
<td>Mild hearing Impairment</td>
<td>2 to 40 dB in better ear</td>
<td>80 to 100% In better ear</td>
<td>Less than 40%</td>
</tr>
<tr>
<td>2.</td>
<td>II</td>
<td>Moderate hearing Impairment</td>
<td>41 to 55 dB in better ear</td>
<td>50 to 80% In better ear</td>
<td>40 to 50%</td>
</tr>
<tr>
<td>3.</td>
<td>III</td>
<td>Severe hearing impairment</td>
<td>56 to 70 dB Hearing impairment in better ear</td>
<td>40 to 50% in better ear</td>
<td>50 to 75%</td>
</tr>
<tr>
<td>4.</td>
<td>IV</td>
<td>(a) Total deafness</td>
<td>No hearing</td>
<td>No discrimination</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(b) Near total</td>
<td>91dB and above in better ear</td>
<td>No discrimination</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(c) Profound Hearing impairment</td>
<td>71 to 90 dB</td>
<td>Less than 40% in better ear</td>
<td>75 to 100%</td>
</tr>
</tbody>
</table>

(Pure on average of hearing in 500, 1000 and 2000 Hz by air conduction should be taken as the basis for consideration as per test recommendations)

Further, it should be noted that:

a) When there is only an island of hearing present in one or two frequencies in the better ear, it should be considered as total loss of hearing.

b) When there is no response (NR) at any of the three frequencies (500, 1000, 2000 Hz), it should be considered as equivalent to 130 dB loss for the purpose of classification of disability and in arriving at the average. This based on the fact that maximum intensity limits in most of the audimeters is 110 db and some audimeters have additional facilities for +20 dB for testing. Table 2 indicates the various categories of visual impairment.

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Table – 2

Visual Impairment Categories\textsuperscript{30}

<table>
<thead>
<tr>
<th>Category</th>
<th>Better eyes</th>
<th>Worse eye</th>
<th>Percentage impairment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category D</td>
<td>6/9 to 6/18</td>
<td>6/24 to 6/36</td>
<td>20%</td>
</tr>
<tr>
<td>Category I</td>
<td>6/18 to 6/36</td>
<td>6/60 to Nil</td>
<td>40%</td>
</tr>
<tr>
<td>Category II</td>
<td>6/60 to 4/60</td>
<td>3/60 to Nil</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>Or Field of Vision 110-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category III</td>
<td>3/60 to 1/60</td>
<td>F.C. to 1 ft to Nil</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Or Field of Vision 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category IV or Eyed Persons</td>
<td>F.C. at 1 ft to Nil</td>
<td>F.C. at 1 ft to Nil</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Field of vision 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6/6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not only Governmental act, N.G.O.s, NIDRR, ADD international, Rehabilitation Council of India, Doordarshan (TV) and All India Radio also ignited the rehabilitation movement in India for disabled. They telecast programs promoting prevention and rehabilitation of people with disabilities. Programming focuses on assistive devices available for persons with disabilities as well as on integration of children with disabilities in normal schools.

In fact disabled do not need pity but they need encouragement in their effort to overcome asset to the society instead of liabilities. They also have the right to grow up in the world which looks at them not with a score or pity or

\textsuperscript{30}Extracts from the Ministry of Welfare Notification No.4-2/83-HW.III dated 6.8.86, source: http://shodhganga.inflibnet.ac.in/bitstream/10603/1550/9/09_chapter1.pdf.
reducible but which welcomes them exactly as it welcomes everyone, which offer them identical Pringles and identical responsibilities.\textsuperscript{31}

At the end of 19\textsuperscript{th} century Society stepped forward for the physically challenged. Remarkable responsibility was played by doctors by checking “disabled” health conditions and suggested for betterment. Engineer helped them by inventing modern and sophisticated equipments which are easy to be used in daily life. IT sector presented them various unique softwares which closely tried to overcome the impairment of the individual. Physical Education opened a new branch, named Adopted Physical Education for the betterment and complete fitness of physically challenged.

Complete well-being refers mainly the five dimensions i.e. Physical Fitness, Physiological Fitness, Mental Fitness, Psychological Fitness and Social Fitness. Since Physical Education and Sports are mainly based upon motor skills. Psychomotor components are the great concern to physical activity. The psychomotor domain is concerned with muscular activity with those movements of the body, limbs or other body parts necessary for a given action. The psychomotor ability of an individual is an increasingly complex, Co-ordination of eye-hand- mind.\textsuperscript{32}

\textsuperscript{31} Henry Webb, “We Do Not Need Pity” Femina (22\textsuperscript{nd} June, 1981) p.21.

As the integral part of a total education system physical education has certain important responsibilities. Physical Education has been already planning and designing rehabilitation programme for handicapped population by adapting activities suitable for them. Adapted Physical Education refers to the modification of traditional physical activity to enabled individual with handicapped to have opportunity to participate safely, successfully and with satisfaction. In fact adapted physical education and recreational programme seem to be most natural way to exposing a child to situation in order to enable him to develop a great variety of skill and prepare him for acquiring rich learning experience.

Today with the change in time and the values the exceptional and disabled child needs Psychological traits such as self confidence, self regard, self consistency, and self respect in society. But most of the time, it has been observed that the people with special need under estimate their capabilities themselves because of psychological depression. The main thing is that how the needy child views himself as a person is extremely important to his total socio-psychological adjustment.\textsuperscript{33}

The renowned Psychologist Carl Rogers\textsuperscript{34} mentioned that everyone is born with innate capacity and capabilities – a sort of genetic blue print. The goal

of the life is to fulfil this genetic blueprint to become whatever each of us is inherently capable of becoming and resulting into a fully functioning person, people who are deprived from the opportunity of fulfilling their inborn potentialities become constructed, rigid and defensive. They feel themselves threatened anxious and experience considerable discomfort and uneasiness some of these people realize that they do not know who they are or what they want. But life itself is a continuous process of facing challenges. These challenges are different each time because the situation as well as the individual himself is kept on changing.

Exercise can provide the benefits for overall health to everyone, regardless of the limitation of Physical Disability. Modified exercise program for the physically disabled are especially important in the prevention of muscle atrophy and further physical disability and also for emotional wellbeing.

Physical Fitness, a basic part of Physical Education Programmes for Mentally retarded children, refers to the child’s ability to carry out his daily tasks without undue fatigue and enough energy in reserve to participate in leisure time activity and to meet unforeseen emergencies. Thus the optimal level physical fitness varies from person to person depending upon the life style involved. When he is physically fit, the individual is abled to withstand the
stresses of life, work, recreation and unexpected situations more ever physical fitness enables him to enjoy abundant life.  

Clarke and Clarke (1963) and Schunn (1967) emphasised on several principles those should be used as guidelines in developing physical fitness. These principles include the following.

1. The activity must be students tolerate level.

2. The over load principles must be applied to increase physical fitness.

3. The activities should be performed consistently and regularly according to a definite progression.

4. The physical status of the children should be retested at set times.

5. The child must be motivated to perform the activities well and to improve his status.

6. The activities should be of a reasonable length and allow for individual differences.

36 Ibid.
Various fitness clinics were organised for the Physically Challenged where successfully assisting various physical and neuromuscular disabilities to improved their muscular strength, endurance, flexibility, overall health and other motor ability. Fitness can improve by positive attitude of general people, by educational facilities, by new instrument, by involvement of computer.

In the preceding paragraphs, psycho-physiological states of disabled people have been discussed comprehensively. But not much literature has been found based on scientific investigation on variation of physiological and psychological qualities among different types of disabled children. Unveiling these differences may provide some guideline for the welfare of disabled children and with this vision in mind the research scholar undertook the present study.
Objective of the Study

The objective of the study was to compare the selected Psychological and Physiological variables between Deaf-Dumb, and Blind school going children.

The secondary objective of the study was to find out the relationship of selected Psychological and Physiological variables with their Physical Performance Capacity.

Delimitation

1. The study was delimited to individuals between the chronological ages 09 -13 years for male students only.

2. The study was further confined to the following Psychological and Physiological variables.

   Psychological Variables –
   1. Self Concept
   2. Self Confidence
   3. Intelligence
   4. Memory Retention

   Physiological Variables –
   1. Blood Pressure
   2. Vital Capacity
   3. Cardio Vascular Endurance
   4. Maximum Oxygen Uptake
Limitation

1. Research scholar had to take the help of Mediator for communicating to the children.

2. Brail Technique was adopted for answering the Questionnaires in case of Blind children.

3. Non availability of sophisticated instrument might have influenced the result of study.

4. Research Scholar was not an experienced person to tackle with the disabled children. Hence he had no direct control on the behavior of the subjects which might be considered as one of the limitations.

5. It was difficult for research scholar to control the daily life-habits; life-style and others individualized factors which might have affected the result of the study.
Hypothesis

1. It was hypothesized that there would be significant differences in Self Concept, Self Confidence, Vital Capacity, Cardio Vascular Endurance and Maximum Oxygen Capacity between Deaf-Dumb and Blind school going children.

2. It was also hypothesised that there would not be any significant difference in Memory Retention, Intelligence and Blood Pressure between Deaf-Dumb and Blind school going children.

3. It was further hypothesized that a significant relationship would be found between Physical Performance Capacity and Physiological variables of both, Blind and Deaf-Dumb school going children.

4. It was further hypothesized that there would not be any significant relationship between Physical Performance Capacity and Psychological variables of both; Blind and Deaf-Dumb school going children.
Definition and Explanation of the Terms

Self Concept – According to Baumeister\textsuperscript{37} Self Concept can be defined as "The individual's belief about himself or herself, including the person's attributes and who and what the self is". 

Self Confidence - Sport psychologists define Self-Confidence as the belief that an individual can successfully perform a desired behaviour.\textsuperscript{38}

Memory Retention – Memory Retention is the process where the long term memory stores information that can be later retrieved accurately for a specific purpose. The process of retention is not an exact science and a little unpredictable in its occurrence.\textsuperscript{39}

Intelligence - “Intelligence is the ability to solve problems, or to create products, that are valued within one or more cultural settings.”\textsuperscript{40}

Blood Pressure – Blood Pressure is defined as the “pressure exerted by the blood upon the walls of the blood vessels and especially arteries, usually measured on the radial artery by means of a sphygmomanometer, and expressed in millimeters of mercury either as a fraction having as numerator

\begin{footnotesize}
\textsuperscript{38} http://www.pponline.co.uk/encyc/self-confidence.html#ref
\textsuperscript{39} Margit Barreras, “Virtual Education in The K-12 Years - Learning, Retention and Technology”, Ezine Article, Source: http://EzineArticles.com/1095734.
\end{footnotesize}
the maximum pressure that follows systole of the left ventricle of the heart and as denominator the minimum pressure that accompanies cardiac diastole.\(^{41}\)

**Vital Capacity** - (VC) is the maximum amount of air that a person can expel from the lungs after first filling the lungs to their maximum extent; it is equivalent to the inspiratory reserve volume (IRV) plus the tidal volume (TV) plus the expiratory reserve volume (ERV). \((VC = IRV + TV + ERV)\)^{42}

**Cardiovascular Endurance** –It is the ability of the heart to provide oxygen to muscles during physical activity for a prolonged period of time.\(^{43}\)

**Maximum Oxygen Uptake (VO\(_2\) Max)** - \(VO_2\)max is the maximal oxygen uptake or the maximum volume of oxygen that can be utilized in one minute during maximal or exhaustive exercise. It is measured as milliliters of oxygen used in one minute per kilogram of body weight\(^{44}\)

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\(^{43}\) Tripod, General Fitness Guide, Source: http://generalfitness.tripod.com/id4.html

\(^{44}\) Sports Medicine, About Com, Source: http://sportsmedicine.about.com/od/glossary/g/VO2Max.htm
Significance of the Study

1. The study will highlight the differences in Psychological and Physiological abilities between the two groups involved in the study that will help the educationist in preparing systematic educational program for disabled children.

2. The study will be beneficial for those organizations which are responsible for organizing developmental, remedial and recreational program for the challenged children.

3. The study will help in identifying the need of a particular group while extending a special program in relation to strengthen their weak points and proper utilization and further improvement of their strong points.

4. The study will highlight the level of Physical Performance Capacity of Blind and Deaf-Dumb school going children, which will help to design their fitness program.