CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

Research in special education, as a subject of independent existence in literature on educational research, is a recent development (Jangira and Mukhopadhyay, 1991). The first review of research in special education in the Encyclopaedia of Educational Research (Mitzel, 1982) appeared in 1982. In India, this area had received attention from the Fourth Survey of Research in Education i.e. from 1988. The first three surveys did not identify sufficient researches to warrant independent review of trends (Jangira and Mukhopadhyay, 1991).

The research activity in special education in India has increased during the fifth survey. Upto the fourth survey sixty studies (including the education of the gifted) were identified (Jangira and Mukhopadhyay, 1991). The number of studies on education of children with physical and intellectual impairments during the fourth survey was forty four and around same number during the fifth and sixth survey period respectively. The scholars have explored different areas of the education of CwD like characteristics of the SwD, teaching-learning, teachers’ training, and family and community perceptions towards disability and PwD. Looking into the past researches, one can find considerable diversity in the focus of the study, theoretical and methodological orientation, and findings of the available literatures. It is thus of considerable significance to the present undertaking. A critical analysis of the related literatures available to the present undertaking would enable us to examine the strength and weaknesses of the theoretical as well as methodological perspectives used in analyzing the problems of CwD, theoretical soundness of the findings and the areas that have been given inadequate focus. In a nutshell, review helped investigator to arrive at the proper perspective of the present undertaking. Hence, an attempt has been made to review the available studies on SwD both in India and abroad.
Keeping in view the objectives and focus of the present undertaking, studies exclusively done on students with learning disability, students with emotional disability, slow learner, gifted students and students with other disability have been left out, and a total of ninety-two studies have been reviewed in this chapter. An attempt has been made to develop a wholistic perspective of the nature and findings of these studies and to draw implications for the present study. In view of the variation in the focus of the studies reviewed, they have been categorized in terms of the following aspects:

- Characteristics and personality
- Education and Training
- Problems and needs
- Parents, family and community
- Facilities

Further, studies related exclusively to each dimension have been discussed separately with regard to their focus, methodology and findings. However, there are also some studies, related to more than one dimension and their theme has appeared in the concerned sections. This dimensionwise discussion has paved the way for a final discussion of all the studies in order to bring out the implication of these studies. Through such a discussion, the rationale for the present study has been arrived at.

### 2.1.1 Studies related to characteristics and personality of CwD

A total twenty-four studies have been reviewed under this aspect focused on different aspects of personality and characteristics of CwD such as adjustment (Pandey, 1985; Banerjee, 1988; Sharma, 1988; Phoola, 1990; Chudasama, 1992 and Pradhan, 1993), personality (Singh, 1982; Pathak, 1984; Bala, 1985; Khan, 1988; Savitri, 1986; Lal, 1992; Vyas, 1995 and Kamthan, 2002), sociometric status (Hooda, 1993), creativity (Sharma, 1990; Gurnani, 1993 and Neelam, 1997), stress (Srivastava, 1981), self-concept (Upreti, 1988; Chudasama, 1992; Pradhan, 1993 and Rader, 2003).

Adjustment of the CwD has been studied by the Pandey (1985) whereas Banerjee (1988) investigated the adjustment of blind children and comparison of adjustment of CwD with

Except the study of Khan (1988) and Phoola (1990) which covered entire state of Rajasthan and Orissa respectively, all the studies were conducted within the boundaries of district level. All are survey type studies except the survey cum experimental type studies of Phoola (1990), Chudasama (1992) and ex-post facto study of Pradhan (1993). In terms of the sampling techniques, most of the researchers have adopted randomization in their studies. Most of the researches have selected samples through randomization drawn from Kinder Gartner (KG) to higher secondary school CwD of age 4-18 years except Gurnani (1993) who covered graduated PwD of age 25-40 years. For the purpose of data collection, standardized tests, inventories and scales have been used by the most of the researchers. However, studies of Pathak (1984) and Upreti (1988) have adopted questionnaires. Data have been analyzed by using quantitative methods in most of the researches. A brief discussion of the findings of these studies is presented below.

The study of Pathak (1984) on personality traits of children with orthopaedic handicap in integrated setting reveals that overall adjustment was average. Emotional adjustment was good, social and educational adjustment was average. Similarly, Chudasama (1992) also found that the normal students of standards VIII and IX were better adjusted than the physically handicapped students of standards VIII and IX, respectively. Pradhan (1993) found that, in general, handicapped children studying in integrated and segregated setting
did not differ from each other on their self-concept and overall adjustment. So it can be concluded that disability was affecting to SwD whether they are studying in integrated setting or segregated setting.

With regard to the personality traits of high and low creative physically handicapped Sharma (1990) found that among the physically handicapped students, boys were found to be more creative than girls. High-creative students achieved significantly higher mean scores on personality factors, interest, areas of fine arts, science and technical work, while the low-creative group had shown more interest in crafts. The study of the Gurnani (1992) reported that all the factors of creativity were highly correlated with each other and there was no significant difference between the two groups of physically handicapped persons concerning their scores on life values, personality factors and creativity. Similar trend was also found by the Neelam (1997) on creative potential of visually impaired students in relation to their self-concept and locus of control by reporting that no significant relationship was found between the originality factor of creativity and self-concept and flexibility factor of creativity and type of school as well as socio-economic status of visually impaired students. Thus it can be concluded that generally there is not much difference between the SwD and their normal counterparts in terms of their life values, personality factors and creativity.

On his study on physically handicapped children in Jammu province, Phoola (1990) found that physically handicapped were highly insecure. Poor academic achievement and physically disability were found highly related, and the physically handicapped showed poor relationship with parents, teachers and peer groups while the study of Vyas (1995) revealed that the blind and sighted students were similar in respect of superstition, self-concept and feeling of security-insecurity. However, the blind students were showed higher degree of Inferiority than Sighted students and the sighted students were possessing higher academic achievement than blind students.

Upreti (1988) has reported that normal children were found to be significantly more intelligent than the handicapped ones. Similarly, Lal (1992) reported that sighted and
blind boys differed significantly on the psychological needs, rejection-acceptance, unworthy-worthy, anxious-relaxed, withdrawn-participating dimensions. But the study of Khan (1988) reveals that there was a significant difference in the intelligence level among the lower primary, upper primary and secondary level blind children. So it can be said that the difference between the SwD and their normal counterparts in the intelligence as well as in psychological needs may be due to the affection of their disability and the need arising out of their disability. This difference may exists according to level of education and level of disability too.

With regard to the self-concept, Upreti’s (1988) study reveals that self-concept of normal children was significantly better than that of the handicapped children while the study by Khan (1988) reveals that blind children showed positive self-concept. The results of the study of Rader (2003) indicated that students with physical disabilities had higher levels of internal locus of control beliefs, greater opportunity for self-determination and higher levels of social self-efficacy. Based on the review of researches, Sharma (1988) reported that maladjustment in society, family, school, and unsuitable school settings are the most prominent factors which lead to academic retardation of the visually handicapped. Based on this finding, he suggested that after completion of primary education at special institutions, emphasis should be laid on placing the visually handicapped in integrated settings. These findings pave the way for further probing of the question whether the SwD are maladjusted at higher education too?

**Some Observations and Implications**

The review of studies in this section reveals that characteristics and personality of the SwD differed significantly from the normal students (Chudasama, 1992; Upreti, 1988) and difference exist because of the type of school (Pradhan, 1993), level of education (Khan, 1988) and category of disability (Pathak, 1984). Also they are maladjusted in school, family and society (Sharma, 1988) and some of the researchers tried to focus on maladjustment of the SwD. From the review, it was also observed that majority of the researchers have focused only on single category of disability while some of the researchers have compared SwD with the normal students and different variables related
to personality and characteristics. Unlike to single disability, it is equally important to study the adjustment among the students with different category of disability. Moreover, the reviewed studies reveals that majority of the studies have been covered only school age children so it is also important to focus on the adjustment of SwD studying at higher education level. But the available studies have not dealt upon this aspect. Also, none of the study covered background of the SwD, their qualification and achievement, description of disability, their activities outside the school and engagement with disability trust. By focusing on these information a comprehensive picture regarding the SwD can be obtained which can be helpful in whether the disability really affecting to their academic as well as personnel life. Thus there is need to study the comprehensive profile of the SwD then just mere describing their adjustment and personality characteristics only.

2.1.2 Studies related to education and training of CwD
Studies on this aspect have been divided into two categories. The first category is of studies related to the education and training of CwD and the second category include those studies which have developed test or materials for the education of the CwD.

Category I: Studies on Education and Training
The following are the studies conducted on education and training of CwD. They are by Bala (1985), Goel (1986), Jangira (1987), Muthiah (1989), Kapoor (1990), Mandke (1991), Sahoo (1991), Bharathi (1993), Lali (1995), Jagtap (1996), Emrey (1999), Laxminarayan (2001), Sherrod (2001), Webster (2001), Chan (2005), Cortner (2006), Laws (2008), Cui (2008), Dorman (2008), Landrum (2008), March (2008), Miceli (2008), Roberts (2008), Walker (2008) and Kirby (2009). It is observed here that most of the studies are of survey type and confined to the boundary of specified city or district of a state. But the study of Bala (1985), Sahoo (1991), Jagtap (1996) and Laxminarayan (2001) go beyond the city or district boundary. With regard to the sampling procedure, random and the purposive sampling has been the predominant method of sample selection. Also, most of the studies have been covered single category of disability and school age children. Very few studies Mutiah (1989) and Jagtap (1996) has covered all
the category of disability as a sample. Similarly, standardized tests and scales have been
the predominant methods of data collection. However, the studies of Emrey (1999),
Laxminarayan (2001), Sherrod (2001) and Cortner (2006) have used in-depth interviews
and participant observation techniques. Further, data analysis and reporting has been
done quantitatively in most of the studies. A brief discussion of findings of the studies is
presented here.

In his survey of vocational education system for the disabled in Tamil Nadu, Muthiah
(1989) found that the facility of free boarding and lodging is enjoyed mostly by
orthopaedically handicapped students. Medical attention is given to all mentally retarded
children. Disabled students found it difficult to cope up with the school programme
resulting in disciplinary problems. The vocational training imparted was not in
accordance with the interests and aspirations of the children. These instead reflected the
needs and requirements of the institutions.

Together with Mutiah’s study, several other studies highlighted the status of inclusive
education of the SwD in regular classrooms. The survey of Jagtap (1996) found that
Heads of the institutes had problems like lack of spacious resource rooms, lack of
teachers to teach CwD and unavailability of grant on time. Problems faced by regular
teachers were lack of training in how to deal with various disabilities, difficulty in giving
individual attention due to large number in class. He further reported that integration
helped CwHI in their socialization and in development of basic language skills; with
some help CwVI could cope with normal children and CwOI usually studied with normal
children. Attitude of CwD towards integration was positive and they preferred integrated
schools to special schools. But the study of Laxminarayan (2001) reported that the
inclusion of SwD was impacted by the situational conditions in traditional schools such
as outdated pedagogy, shortage of resources, large class sizes and vast and inflexible
curricula. March (2008) discussed implications for teacher preparation and professional
development so that educators are prepared to implement continuous process after
studying inclusive educational practices for SwD within the European Union and
identified critical issues that characterize inclusive education such as the participants’
understanding of inclusion, characteristics of the professional exchange, teacher preparation and professional development, curriculum adaptations as they relate to the content of learning, instructional approaches, the development and implementation of Individualized Educational Programme (IEP), and inclusive education as a process of systemic change. While studying the factors that determine a successful integration and transition of SwD into adult living, Cortner (2006) found that SwD were presented with many challenges and there were many factors that influenced their success in transitioning into adult living. The remediation they received in the special education classroom, as well as the special education support they received in the general education setting was helpful in helping the students in compensate and remediate their areas of disabilities. Vocational classes and job shadowing helped them to explore different careers and interests and helped to develop the students’ self-esteem. Individual teachers who expressed interest in them and gave the students help and support were recognized by the participants as an influential part of their transition. From these findings, it can be concluded that integrated education helped to CwD in their socialization and the positive attitude and support of teachers and their normal counterparts helped to SwD in successful integration into general education system. Also, supporting devices helped SwD for better learning at inclusive setting. The findings of the study of Landrum (2008) showed that SwD who were educated in the general education setting more closely represent their non-disabled peers academically than the students who were educated in a more restrictive setting. The study further showed that teachers were more willing to include SwD if teachers had experience with the disability or were provided with support. Similarly, the findings of the study of Kirby (2009) revealed that sixty six percent of the teachers identified technology as a key component of effective inclusion practices, sixty seven percent of the teachers cited improved quality of teaching following the provision of laptop computers, sixty eight percent reported that teaching methods changed significantly and fifty five percent of the teachers indicated that the initiative had contributed in a positive way to special education plan development.

In his study on examination of the legal rights and the status of children and YwD in regular classrooms in compulsory education from 1986 to 2006 in China, Cui (2008)
observed that legislative barriers obstructed the education of SwD in regular schools and classrooms. Twenty three percent of the children and youth with disability did not receive education. Disparities in education between municipalities and rural areas and developed and underdeveloped areas remained substantial. Ineffective administrative practices in LRC did not meet the aspirations and goals for implementing LRC. Problems in data collection and reporting prevented a better understanding of the academic status of children and youth strategies for a radical political and cultural change in the education system of the people of china are to have effective protection of human rights for citizens with disabilities enrolled in public education.

Two studies found on the comparison of SwD with their normal counterparts in scholastic achievement. Lali (1995) compared scholastic performance of the visually handicapped pupils studying under the Integrated System with that of the normal pupils in secondary schools of Kerala. He found that the significant difference was noticed majority in all subject at knowledge, understanding and application level between the secondary school SwD and their normal counterparts. These findings was also supported by Laws (2008) while examining SwD with their normal counterparts, he found that normal students continually outperformed their disabled counterpart in both language arts and maths across all grade levels.

Apart from the integration and scholastic achievement, studies also highlighted issues related to the education of CwD. Based on his study, Emrey (1999) addressed issues related to the school experiences unique to students with physically differences with particular emphasis on expressions of insensitivity and discrimination, access to facilities, services and social participation. He recommended for change within the school environment to enrich the lives of all with physical disabilities whereas the study of Sherrod (2001) focuses on significant factors that are accessibility, accountability; staff development; parental involvement; and funding which have impact on the access of Assistive Technology (AT) for SwD in educational settings to ensure a Free Appropriate Public Education (FAPE) in US.
Roberts (2008) measured effect of an after-school remediation programme on the academic achievement of SwD. He indicated that programme participants demonstrated improved achievement greater than non-participants in reading. Similarly, Chan (2005) indicates that SwD and students without disabilities benefited from the computer generated teaching technique in group. The result of the study of Doran (2008) revealed that co-teaching was more effective then small group classrooms for increasing academic achievement for SwD. If the academic achievement level of students in special education can be raised, then, they will be encouraged to go on to technical schools or four-year colleges, and prepare them for a career. These students will be contributing to society by holding jobs, paying taxes, buying homes and some may even own business and employ other people. They will become productive and successful citizens. So it can be said that, if taken proper care, the education level of SwD can be raised same as normal students.

Notwithstanding the inclusive education and scholastic achievement of school level SwD the studies have also college level SwD. The qualitative study of Webster (2001) aimed to give voice to SwD by investigating their vantage point on transitioning to and succeeding in college. Results of this investigation included identification of the skills, abilities, and knowledge that college SwD perceived by contributing to their transition to and success in college and the types of supports they viewed as important in sustaining their success. The purpose of the study of Miceli (2008) was to explore the associations between school programme and services, high school achievement characteristics, individual and household characteristics and enrollment in two and four year colleges among YwD. The result showed that individual and household, high school achievement and school programme characteristics significantly predicted college enrollment among YwD. Additionally, the study found that high school achievement characteristics such as graduating from high school, participating in extra-curricular activities, and experiencing financial management/responsibility had the most consistent, positive impact on the probability of enrolling in two and four year college. Additionally, characteristics such as disability category, household income, and parental level of education significantly impacted the probability of enrolling in colleges. The findings emphasize the importance of obtaining a high school diploma, participating in organized activities outside the
classroom, experiencing a level of autonomy or independence, and taking a leadership role in the transition planning programme while in high school for YwD. Walker (2008) studied minority and non-minority SwD in higher education and the university policies meeting with their needs. He found that SwD are often treated quite differently and have a very dissimilar college life compared to students without disabilities and SwD require different accommodations in order for learning to take place. He further reported that very few researches have looked about this issue.

Category II: Studies on Tests and Materials Development


Azad (1986) and Dutta (1986) studied the adaptation and effectiveness of the Portage home-based training programme for cognitive and motor development of young children with mentally retardation. Both studies followed a quasi-experimental time-series design. Both studies report improvement in CwMR on different measures accompanied by improvement in parents’ attitude.

Khader and Ramaa (1988) focused on improving the Kannada reading performance of Educable Mentally Retarded (EMR) children. The sample consisted of fifty eight EMR children attending grades III and IV in twenty three Kannada-medium general primary schools. The remedial treatment was attempted only on thirty six children from six schools. The comparison was made in control and experimental group on certain variables. The tools used included Kannada Oral Reading Test, Raven’s Coloured Progressive Matrices, Kamath’s Intelligence test, Reading Readiness Test, Letter Recognition Test, Kannada Word Recognition Test, and Reading Comprehension Test in
Kannada. The data were analyzed using ‘t’ test and Analysis of Co-Variance (ANCOVA). They found that the remedial reading programme was effective in improving the level of letter and word recognition and reading comprehension in Kannada among EMR children. Similarly, Liddoo and Dhar (1989) attempted to develop a learning model for SwMR using behavior modification techniques. The sample comprised 1,980 boys of fourteen to sixteen years age group from high and higher secondary schools of Srinagar city. The tools used were Cattell’s Culture Fair Intelligence Test, Stanford Binet Test, Vineland Social Maturity Scale, the parents’ comments and the teacher-comment check-list. They found that by and large, the subjects had improved and were doing better in their academic performance as well as in their socially adaptive behavior. Also Sharma (1988) explored the linguistic competence of the hearing impaired in IED and in special schools of Haryana and Delhi. The sample comprised forty eight SwHI from special schools and forty eight SwHI from the normal schools. The tools used including a Linguistic Competence Test in Hindi, Raven’s Progressive Matrices Test and a Questionnaire covering the socio-economic status, degree of hearing loss, age and sex of the selected sample. The case study approach was used to assess the linguistic competence of the hearing-impaired. Mean, Standard Deviation (SD), ‘t’ test and correlation techniques were used to treat the data. The study found that the teaching-aid method was found superior to the normal teaching method for the development of concepts among deaf children.

Muruganandam (1990) developed teaching-learning strategies in teaching science for CwVI. The sample comprised twenty seven CwVI of standard VI and VII of the Government school for the blind, Madurai and St. Joseph’s school for the blind, Pravai. Various tools including a Multi-Sensory Skill Test, Criterion Test and Reaction Scale were constructed and used. Also a specially designed teaching-learning material was prepared and used for teaching science. The collected data were treated with mean, SD and ‘t’ test. The study found that the CwVI learned more science concepts when they were taught through the specially prepared teaching-learning materials. The learning package on science teaching for CwVI was found effective.
Narayan (1990) compared effectiveness of adult and peer models on the learning and retention of performance skills in CwMR. The sample consisted of 150 CwMR including seventy five Educable Mentally Retarded (EMR) children with an IQ varying from fifty one to seventy and seventy five, and Trainable Mentally Retarded (TMR) children with IQ ranging from twenty five to fifty. All the subjects were matched for their chronological age, ranging from ten to fourteen years. The tools used included the Vineland Social Maturity Scale of Malin and a Skill Test. Mean and ANOVA were computed to treat the data. Major finding was peer modeling was significantly more effective than adult modeling in the learning of motor skills.

Mandke (1991) attempted to analyze whether single-modality (visual or auditor) stimulation to its maximum capacity reflects positively upon speck and language performance of hearing impaired individuals. The sample comprised forty children in the experimental group and twenty children in the control group. The children with severe hearing impairment and seven to nine years aged group were selected. The tools used were an audiometer and a self-evolved language test. The analysis of the data were done by using ‘t’ test and Analysis of Variance (ANOVA). The study found that there were significant differences in the case of the pre-test and post-test scores in both the experimental groups but not in the control group and the single-modality approach worked more effectively than the multisensory approach.

Based on the review of studies, a theoretical article of Rai (1991) attempted to explore effective cooperative learning strategies for promoting a constructive relationship, positive attitudes and integration between disabled and non-disabled peers in the regular classroom. It was found from the review that cooperative learning experiences promote a closer relationship between the disabled and the non-disabled. When learning situations are structured cooperatively and they work together, interact in positive ways, feel supported and encouraged to achieve in cooperative learning.

The experimental study of Dashti (1995) on relative effectiveness of training techniques to bring out behavioural changes among mentally retarded aimed to study the influence
of the three training techniques on the types of task upon the behavioral change of the mentally related individuals. The study was carried out on a purposively selected 270 boys and girls suffering from mental retardation of various levels of different institutions of Ahmedabad city. A specially formulated score table (a detailed check-list on five point scale) was used for recording the observations. The data were analyzed through 3 X 3 X 3 X 2 factorial design, ANOVA and t-test. The major findings were: (i) Three main effects, i.e., Training Technique (A), types of Mental Level (B) and Types of Task (C) were found to be significant whereas Sex (D) was found to be insignificant with respect to the behavioural change in the subjects under study. (ii) Interaction of A X B, A X C, B X C, A X B X C and A X C X D were found to be significant, whereas the other interactions were insignificant. (iii) Instruction-Demonstration technique was the most effective technique for giving training to the mentally retarded individuals to bring about behavioral change. (iv) When the mentally retarded child is taught through Instruction–Demonstration technique, he developed Self-confidence, Security and Warmth and Feels Relaxed, so learning became better and one can find behavioral change in him.

The purpose of the study of Reddy (1993) was to find out the effect of Physical Education program on motor behavior and selected coordinative abilities of deaf and dumb students. It was hypothesized that there would be a significant effect of Physical Education program on the motor behavior and selected coordinative abilities of deaf and dumb students. Sixty students of Government Lady No fee Secondary School for deaf, New Delhi were selected as a sample by random sampling method. Distance Perception Test, Bass Kinesthetic Test, Kinesthetic Obstacle Test, Accuracy Test, Bass Stick Test, Modified Bass Test, Rhythm Run dance Test and Nelson Speed of movement Test were used for data collection. The data were analyzed with the help of t-test. The findings of study were: (i) There was a significant effect of Physical Education Program on kinesthetic perception. The regular program helped the subjects to perceive their body movements, developed precision, alertness of mind and body. (ii) The whole results showed that the students improved significantly in coordinative abilities after their active involvement in physical activity, which comprised of gymnastics, athletics and yoga.
Pillay (1995) measured effect of Individualized Training Programme (ITP) on communication skills, and certain associated variables in the mentally retarded. Survey cum experimental method was adopted. 180 CwMR were selected as a sample. Screening records, personal data sheets, check-list-cum-rating scales were prepared to measure the pre and post-experiment performances in oral, reading, writing, motor and socio-emotional skills. The major findings of the study were: (i) The EMR group had significantly higher scores than the TMR children for oral, reading, writing, motor and socio-emotional skills. (ii) The experimental groups had significantly higher scores than the control groups in post tests and measurement, within the subgroups – EMR, early intervention, and late intervention groups – in oral, reading, writing, motor and socio-emotional skills. (iii) The effect of ITP in early intervention group was higher than the late intervention group in oral, reading, writing, motor and socio-emotional skills.

The objectives of the experimental study of Mann (2000) were: (i) To assess level of intelligence among trainable and EMR children. (ii) To develop an educational package for mentally retarded children in 6-18 years age group with IQ scores ranging between forty to seventy. (iii) To evaluate the impact of educational package. Fifty trainable and EMR children in the age group of seven to eighteen years were taken randomly from the Rohtak and Hisar Districts of Haryana. Keeping in view the exiting level of knowledge, an educational package was planned and developed for imparting training on different skills i.e. motor, self care, communication, social and pre-academic skills. A kit consisting of various teaching aids and materials that provided education was prepared to enhance knowledge regarding different skills. Simple tabular analysis was used to find out the number and frequency of performance of children on different skills. To find out the difference between pre and post intervention performance, paired t-test was used. Frequencies were computed to study the socio-personal, economic and home environment factors affecting intelligence level of respondents. The main findings were: (i) Most of the parents of retarded children were educated up-to graduation and most of the mothers were housewives and fathers were engaged in service. It was also found that most of the retarded children belonged to low - income group and lived in the middle class area. (ii) Most of the retarded children had one to two friends and they spent one to
two hours inside the home and three to four hours outside the home while playing. (iii) Significant mean difference was found between pre and post intervention performance of experimental group. Improvement in all the concepts was noticed after giving exposure to intervention to the experimental group. However, the aspect of meal time activities, dressing, receptive language, expressive language, writing and community orientation showed much improvement. (iv) Personal and economic factors of educable and TMR children such age, sex, education, occupation, income and nearby area off residence were found to be positively associated with exiting level of intelligence.

The purpose of the experimental study of Lal (1999) was to study the impact of Alternative and Augmentative Communication (AAC) system in the curriculum of teacher training in special education and its effect on language development of CwMR. Thirty randomly selected learners with severe to moderate mental handicaps and speech and language delay from three special schools of Mumbai were selected as a sample. The tools used for the study were: Kamat Binet Test of Intelligence, Sequin Form Board, Language Assessment Tool, The Makaton Vocabulary, The Makaton Training Module, Teacher’s Behavior Scale for Language Teaching, Children Language Acquisition Test (CLAT) and Reaction Scale. From these the Makaton Training Module, TEBSLAT, CLAT and RS were developed by the researcher. The reliability coefficient of reaction scale (RS) was 0.769 (Split-half Method). The statistical techniques used for data analysis were MANOVA and Pearson’s Product Moment Coefficient. The findings of study were: (i) The use of AAC system was effective in enhancing language and communication skills of learners with severe to moderate mental handicaps. (ii) Learners using AAC system gained significantly higher on semantic skills in comparison to learners in control group. (iii) Use of AAC system was effective in enhancing syntactic skills of learners with severe to moderate mental handicaps. (iv) In comparison to learners of the control group, the experimental group learners who were taught with AAC technique showed significantly higher gain on pragmatics. (v) Training and practice of AAC system influenced the student teachers in favor of need based language intervention program.
The study of Sherrod (2001) focuses on access to Assistive Technology (AT) for SwD in educational settings to ensure a FAPE, based on the perspective of three agencies that advocate on behalf of students and their families.

The purpose of the study of Shaw (2002) was to determine the effects of three delivery models, resource room, co-teaching, and support facilitation on the reading. The sample consisted of 231 students with mild to moderate disability. Their achievement was measured through the results of a nationally normed achievement test. The data was analyzed through ANOVA and ANCOVA. The results revealed that any of models did not have a significant impact on the achievement of these students.

Gaddis (2005) examined the effects of inclusion on the academic achievement of disabled and non-disabled students involved in two types of model of instruction. The study included fifty four special education students and 604 general education students enrolled in grade one, two and three of Eastern Shore of Maryland. The Gates MacGinitie Reading Assessment and Comprehensive Test of Basic Skills were administered. The assessment data was found signification difference in the academic achievement of disabled students and non-disabled students.

Hoffman (2008) examined the plans of YwD to enroll in two or four year college or university. The findings emphasize the importance of providing YwD access to a general education curriculum and a course of study that will allow them to be prepared for two or four year college. The findings regarding aspirations also indicate that developing transition goals and a course of study prior to entering high school will provide opportunities for YwD who aspire to attend higher education to take the necessary course work.

Saxon (2008) conducted an ethnographic study on two service delivery models a co-teaching model where students receive all academic services within the classroom and a pullout model where students receive extra academic services in a separate resource room. Through observation, interviews of teachers and students and document analysis,
this study looks at the culture of two classrooms, specifically how student access the
general curriculum, how students interact with peers and teachers, and how teachers
approach instruction for SwD. Findings reveal that teachers are ensuring students’ access
to the curriculum through interaction with them, effective instruction, and use of IEP
goals and accommodations. Findings also reveal that students in both classes interact well
academically and socially with their disabled counterpart with keeping in mind their
disability, aligning IEP goals with the general fourth curriculum. Despite the lack of
success in statewide the overall impression of these classrooms is that each service
delivery model was appropriate for the students it serviced. This suggests that it is
possible to successfully integrate SwD, regardless of the type and severity of special
needs as long as the classrooms and the school have the capacity to do so.

The purpose of the study of Dorman (2008) was to measure the effectiveness of the
California High School Exit Exam (CAHSEE) remediation programme. The study was
made up of casual-comparative, descriptive and qualitative methods. Data collected
through compiled result and interviews with special education teachers. The study
concluded that curriculum alone cannot help special education students to improve their
performance but they require more robust intervention that includes district/site support,
regular review of assessment data, training and intervention beyond the classroom.

**Some Observations and Implications**

Examining the studies on education and training of CwD under two categories in this
section, it is observed that all the studies reviewed under two categories are focusing only
on the school going SwD except the studies of Webster (2001), Miceli (2008) and Walker
(2008). The former group of studies has mainly concentrated on education of the SwD in
general schools and comparison of the scholastic achievement with the normal
counterparts of the SwD while the later group has focused effectiveness of the developed
methods and materials. It should be remembered here that while investigating the
education and training of PwD, all the levels of education should be studied in order to
understand the reality and success of their integration at different level. For example, the
available studies did not answer questions such as: What is their academic achievement?
Whether the developed models or materials benefited to this group of students for further education? What are the reasons for their success and failure in education? What are their educational needs? How does the change affect their academic life through grades and stages? How do they fare at higher education level? Hence, the available studies are very much limited in their scope.

All the studies taken together have addressed education and training of students with single disability. It could be due to the difference in the nature of different kind of disability. But this reason cannot be applicable to the inclusive classroom where all students are seemed as equal. Even many studies reported that integration helped to the SwD in their socialization and their normal counterparts and teachers showed positive attitude towards the integration. However, the academic differences could lead dissimilar academic life compared to their normal counterparts. But largely researches have looked over this issue. Some of the aspects coming in the way of their school education are: lack of teachers’ training to cope up with various disabilities, outdated pedagogy, shortage of resources, large class sizes and vast and inflexible curricula. But the academic achievement, difficulties and needs at higher education level have not been explored in the studies reviewed in this section.

Apart from the inadequately explored area mentioned above, the most crucial aspect i.e. use and/or benefit from the developed methods/materials in the further education have been neglected by most of the studies. All the experimental studies on methods/material development reveal that the performance of the SwD were improved but still no study has answered the question that whether the SwD benefitted in further education from the developed methods/materials? In most of researches, parametric statistics have been widely used. Jangira and Mukhopadhyay (1991) noted that the data relating to CwD neither fulfill the normality assumption nor random selection but the researchers have merely tested significance which leads the results much beyond than the desired. So taking random or purposive sample from a cross section would not yield their true educational status. For instance, different courses and different location of the institutions obviously influence their academic life.
3.2.3 Studies related to the problems and needs of CwD


Pathak (1984) studied CwD in normal schools. The major objectives of the study were (i) to study the personality traits, adjustment and aspirations of Cwd in normal schools, (ii) to study their sociometric status in the classroom and (iii) to suggest ways to achieve better integration with normal children. The sample was consisted of twelve to eighteen year aged seventy nine orthopaedically disabled boys of thirty two higher secondary and secondary schools of three districts viz. Udaipur, Banswara and Jodhpur of Rajasthan. The tools included the Personality Questionnaire by Kapur and Mehrotra, Adjustment Inventory by Sinha and Singh, Aspiration Questionnaire and a personal data bank. Percentages were calculated for data analysis. The study revealed that most of the CwD came from families with poor economic background and sixty three of the seventy nine children’s fathers had studied only upto higher secondary or below. Overall adjustment of the CwD was average. Emotional adjustment was good but the social and educational adjustment was average. The few problems which CwD faced were fear of the school, difficulty with classroom learning, dissatisfaction with teachers, ridicule by other children and inability to participate in co curricular activities.

Dharap (1986) investigated the problems of the education of the CwMR in the special schools of Maharashtra and some of the neighbouring states. The tools used were visits, interview schedules, questionnaires and observation. Some case studies of CwMR were made. The study revealed that the mentally retarded deprived of certain facilities that were given by government to the other approved categories of handicapped children; parents of the children had unrealistic expectations about their children, and there were misunderstandings between the teachers and the parents and that the society at large lacked awareness about the mentally retarded and the possibilities of rehabilitation of these children.
Banerjee (1988) studied the adjustment problems of blind students in secondary schools of West Bengal. The sample comprised visually handicapped adolescents in the age-group of twelve to eighteen years belonging to rural and urban locations. The tools used included an Adjustment Inventory developed by the researcher and a personal data sheet. The collected data were evaluated using a three-point scale. The major finding was the group of visually handicapped adolescents varies with age and onset of the handicap in their adjustment to the interacting environment.

Pandey (1991) conducted a study of the disabled in the rural society of eastern Uttar Pradesh with special reference to Bahraich, Deoria, Pratapgarh and Ballia. The sample comprised 400 male and female disabled of all age-groups with 400 heads of families and 400 neighbours. The tools used included Schedules, Interviews, Discussions and Observations. The percentage method was used to treat the collected data. The study revealed that the disabled were living in a critical condition, most of the people did not want to mix with the disabled, educational level of the disabled was poor as they belonged to the poorer sections of society and 13.7 percent of the disabled were economically engaged in different occupations.

Bharati (1993) studied psycho-social problems of mentally retarded and the role of self-help groups. The sample comprised fifteen mentally retarded individuals within the sample of 150 non-institutionalized cases living in and around Banglore city. Binet Kamath’s Intelligence Test for Indian Children by Kamath, Development Screening Test by Bharathraj, Vineland Social Maturity Scale adapted by Malin, Socio Economic Status Scale by Srivastava, Parental Attitude Scale by Bhatti, Check List to assess the Psycho – Social Dimensions by NIMHANS, Behavioural Scale by Vijay Human Service, Coloured Progressive Matrices by Raven and Opinionnaire and Interview Schedule were also developed by Researcher for data collection. The data were analyzed by Chi – Square Test and t-Test. The findings of the study were (i) Significant difference exists in psycho-social dimensions between institutionalized and non-institutionalized groups. (ii) Parents of institutionalized subjects are from a higher socio-economic class and had significantly better knowledge and orientation towards mental retardation as compared with parents of
non-institutionalized subjects. (iii) The self-help group programme had a positive impact on the mental maturity, social maturity and also lead to more favourable parental attitudes.

Maddex (1994) studied the functional relationship between educational problems and the current instructional environment. Classroom observation and interviews were conducted with each student and teacher using The Instructional Environment Scale and students’ achievement was measured by report card grades and Iowa Tests of Basic Skills. The variables like Instructional Presentation, Classroom Environment, Teacher Expectations, Cognitive Emphasis, Motivational Strategies, Relevant Practice, Academic Engaged Time, Informed Feedback, Adaptive Instruction, Progress Evaluation, Instructional Planning, and Students Understanding were measured through the qualitative instrument Instructional Environment Scale. The results of the study suggested that certain instructional environmental variables may be important in determining whether SwD are successful in regular classrooms.

Sudarsan (1999) studied issues and challenges encountered by the resource teachers, regular teachers, school administrators, CwVI and non-disabled children in the teaching-learning situations in Integrated Education Programmes. One of the objectives of the study was to identify different learning problem of CwVI in the integrated set up. The study adopted both Quantitative and Qualitative research methodology. A total of 300 visually disabled and same numbers of non-disabled children of integrated programs were selected randomly from urban and rural areas. The investigator developed Teacher Attitude Scale; Student Attitude Scale; School Administrator Attitude Scale; Observation and Questionnaire tools and established reliability and validity. The data were analyzed with the help of content analysis, t-test and correlation techniques. The major findings were: (i) There was significant difference between attitude scores of CwVI on the basis of level of schools. (ii) The CwVI felt happy when they were provided with learning materials in Braille form.
Chandara (2001) investigated problems and needs of SwVI at secondary Level in Andhra Pradesh based on their socio-economic and educational status with special reference to their interests, aspirations and achievements. The objectives of the study were: (i) To know the personal profile of SwVI and their socio-economic status, educational levels, occupational levels of the family members of the SwVI at secondary school level in Andhra Pradesh. (ii) To know the interests, aspirations, achievements and awareness of SwVI at secondary school level in Andhra Pradesh. (iii) To know the opinions of the SwVI at secondary school level in Andhra Pradesh regarding their problems, pedagogical practices and attitude of parents, school staff, peer-group, government and society towards them. (iv) To know the physical facilities, equipment and other requirements at secondary schools for the SwVI in Andhra Pradesh.

The students of special schools for the visually impaired under different managements at secondary levels constitute the sample of the study. The total population of 207 students was selected through multi-stage random sampling from eighth, ninth, and tenth classes. The tools used were Questionnaire for the SwVI to know the personal profile (Part-A), Opinionnaire for the SwVI with regard to interests, aspirations and achievements (Part-B), and Check list for physical facilities available in secondary schools for SwVI (Part-C). The researcher personally interviewed the respondents and collected the responses. The researcher also personally collected the data regarding the physical facilities available at secondary schools meant for SwVI in Andhra Pradesh. The data were analyzed with the help of content analysis technique. The findings of the study were: (i) There was a significant difference in the personal profile of the SwVI in which they had the diversified backgrounds. They varied in parental background, like, their educational qualifications, occupational levels, economic levels and other life orientations. (ii) Majority of them had similar opinions on aspirations, interests and achievements. (iii) Region, caste and income levels played a vital role in giving opinion on interests, aspirations, and achievements. But sex played a little role on responses in some aspects. (iv) Majority of the visually impaired schools had adequate physical facilities in three regions.
Skivington (2007) studied cultural meaning and preparation of adults with disabilities in Cuernavaca, Mexico. The result indicates that the adult life of a PwD is a very difficult one. Corruption, societal rejection and inadequate school service are some of the challenges that this population faces.

**Some Observations and Implications**

Examining the studies on problems and needs of the CwD under this section, it is observed that the reviewed studies have mainly concentrated in finding out the problems of school going CwD and covered only single category of disability. From the reviewed study, it is also revealed that the problems of the SwD who are pursuing higher education are neglected till date as no any study found on SwD in higher education in India. It should be remembered here that most of the students without disability also facing problems in higher education so the SwD could have more problems at higher education level then the school level. Generally, the SwD are having different problems based on their disability but some common problems also may be affecting to the students with different disability as the result of the study of Skivington (2007) indicates that the adult life of a PwD is a very difficult one. But the available studies do not seem to have viewed the problems from this perspective. They are very much limited in their scope and hence the findings cannot generalize to all SwD as the findings of the single category of the disability cannot be generalized to other category of disability.

All the studies taken together have pointed out only the educational problems of the school going students with single category of disability. The hindrances of education among the CwD are fear of the school, difficulty with classroom learning, dissatisfaction with teachers, ridicule by other children and inability to participate in co curricular activities (Pathak, 1984); lack of certain facilities (Dharap, 1986); poor educational level (Pandey, 1991) and inadequate school services (Skivington, 2007). These factors responsible for the education have not been thoroughly explored. The studies mentioned, have not considered the difficulties arising out of course selection, lack of interaction in classroom, irregularity in attending classes, family factors and responsibility, unsuitable teaching methods of teachers, difficult subjects, lack of educational necessities, lack of
availability of the references and other materials related to disability, inadequate library facility. Although the educational problems have been studied by most of the research workers, the lacuna still remains when other factors not studied simultaneously. In such a situation taking random sampling from a cross section of different CwD (as most of the studies have adopted this method) in order to find out the educational problems of SwD, would not yield their real problems. Furthermore, other problems like financial, social and health related problems have not been explored in the studies reviewed in this section.

Apart from the inadequately explored area mentioned above, the most crucial aspect i.e. their needs for overcoming their problems have been neglected by most of the reviewed studies. Needs are arising out of the particular problems. For instance, the students with different category of disability will have different needs based on their category and problems. Moreover, it is pertinent to note that these differences in the problems and needs of SwD are significant not merely among the students with different category of disability but also within the students with same category of disability.

A close analysis of the methodologies adopted by the scholars reveals that they are based on a macroscopic perspective in nature as most of the studies are survey type using randomization and fails to take into account the differences that prevail among the students with different categories of disability. Also most of the studies have reported similar findings. In other words, their perspective lacks sensitivity to the specific individual needs of the students with different disability which was arising due to diversities of problems among them with respect to different factors. Perhaps the basic assumption behind such an approach could be the previous studies have focused only on the problems of school going children with single category of disability that might be unable to express their needs regarding their problems. The studies revealed problems of poor education level, difficulties in learning and lack or inadequate facilities but no any researcher tried to focus on the reasons behind these problems of SwD and what they needs to overcome their problems. Moreover, these problems are general problems so it
is necessary to conduct micro level studies adopting open-ended questionnaire which would be sensitive to varying needs of SwD in order to understand their problems.

3.2.4 Studies related to parents, family and community of CwD

The attitude and role of parents, family and community in the life of CwD has been studied by Lata (1985), Mukhopadhyay and Sharma (1990), Panda (1991), Camardese (2002), Cox (2003), Sharma (2004), Alwell (2005), Cortner (2006), Cook (2007) and Landrum (2008). It can be observed from these studies that most of the studies are large scale surveys covering many districts and regions of a specified state except the study of Sharma (2004) which was covered Baroda city only. Randomization has been the predominant means for sample selection. Standardized scales and questionnaire has been invariably used for data collection purpose. A brief discussion of findings of these studies presented here.

Attitude of the parents, teachers and community members has been mentioned by few researchers. Lata (1985) in her study on the impact of parental attitude on social, emotional and educational assessment of handicapped and non-handicapped students found that parental attitude did not differ for normal and handicapped students. The study of Mukhopadhyay and Sharma (1990) found that the teachers had a positive attitude towards equal educational opportunity for disabled children in integrated classrooms. Similarly, the study of Panda (1991) reported that attitude is dependent upon sex of the people, whether they are teachers, parents or community members and female showed favourable attitudes towards normal, CwHI, CwVI and CwMR. Cortner (2006) found that individual teachers who expressed interest in them and gave the students help and support were recognized by the participants as an influential part of the successful transition of the CwD from school to college. Based on the findings of his study, Cook (2007) focused on providing training from other faculty members to the teachers and providing easily accessible, comprehensive information for working with college SwD. Thus it can be observed here that most of the studies have came to a conclusion that attitude of the different people towards PwD did not differ and they showed positive attitude but the study of Cook (2007) recommends training to the teachers for working with college SwD.
Camardese (2002) examined the perspectives of students, parents and teachers regarding the social implications of inclusion. The result of his study revealed that inclusion classroom may provide an environment that is conducive to appropriate coping skills related to self-control and may benefit from incorporating the pro-social skills of helping others by providing situations for SwD to assist others. Further, his study recommended cooperative learning, cross-age peer tutoring and structured group activities in classroom practices. Cox (2003) examined faculty-student relationships, disability disclosure decisions and accommodation effects on adjustment for college SwD and found that institutional accommodations were a better predictor of students in case of adjustment than were faculty attitudes. The result of the study of Sharma (2004) revealed that majority of undergraduate parents were having greater needs. Regarding hostel admission, parents reported that learning can increase by placing the child in the hostel and child will get exposure. Alwell (2005) argued that given current social and political contexts impacting educational opportunities, transition outcomes, adult services and barriers imposed by vestiges of attitudes which marginalize PwD, we are not yet in an era of inclusion and community membership. The findings of the study of Landrum (2008) showed that SwD who were educated in the general education setting more closely represent their non-disabled peers academically than the students who were educated in a more restrictive setting. The study also showed that teachers were more willing to include SwD if teachers had experience with the disability or were provided with support.

It can be observed from the review of studies under this section, that researchers have studied attitudes of other members towards SwD. But they have not given attention on the attitude of SwD towards other members of the society. Though some scholars have examined the relationship of SwD with other students, parents and teachers, but they have not examined the socialization of the SwD in detail. Also it is still unanswered question that what kind of social problems SwD are facing? This question needs to investigation as SwD have to deals with many people during their study like their peers, teachers, parents and other members.
3.1.5 Studies related to facilities for CwD

In order to know the expansion and growth of education and development of PwD, it is necessary to analyze the facilities provided to them and its utilization. Hence the studies conducted on the various facilities regarding the CwD are reviewed in this section.

Implementation and evaluation of the various schemes related to PwD has been studied by Mandal (1974), Rane (1983), Cawasji (1985), Singh and Prabha (1987), Jagtap (1996), Tillmann (2000) and Cui (2008). While the study of Shivaji (1995) and Reddy (2001) have critically appraised structural and functional aspects of organizations and training and rehabilitation services. The study of Hoffman (2008) examined the plans of YwD to enroll in two or four year college. It can be observed here that most of the studies are surveys. Random and purposive sampling was used most while the interview, questionnaire and other standardized tests have been the predominant tools for data collection. A brief discussion of the findings of these studies is presented below.

The study of Mandal (1974) on evaluation of the scholarship scheme of the GOI for the physically handicapped in Bihar reveals that the scholarship came as a great help for most of the SwD and there was poor awareness of the facilities among the guardians of the handicapped children. His study further reveals that employers were not always fair in selection and inadequate training and employer’s reluctance to engage handicapped persons were considered to be the major obstacles to their employment. The study of Rane (1983) brought out several deficiencies in IED in Maharashtra state, like inadequate assessment procedure, lack of training of general teachers, heads of institutions and educational administrators; inadequate adaptive teaching-learning aids, and inadequate monitoring and evaluation were highlighted. Similar findings have also been reported by Singh and Prabha (1987). They found that the facilities granted by the government were not availed of by the schools and the schools were utilizing only thirty three percent of the resources allotted. They further found that the admission policy was defective, lack of communication between physically handicapped students and their non-handicapped class-fellows, out of a provision for 400 students only 130 were on the rolls, and the
allotments were received in the schools at the end of the session were the major deficit for achieving IED in Bihar.

Reddy (2001) in his study on training and rehabilitation services for the PwD in Andhra Pradesh found that integrated training for the PwD benefited more than the segregated training in the vocational rehabilitation centers. Most of the employers and head of the educational institutions were not following the reservations for the PwD. The enrollment of rural PwD was very poor due to poverty, illiteracy of their parents and lack of awareness among the rural disabled. The government was not giving importance to the PwD for imparting vocational training and rehabilitation, and the society was not giving any importance to the trainee PwD just because of their disability. Based on the findings of his study, he concluded that village wise surveys must be conducted specially to identify the deformity cases i.e. orthopaedically impaired, visual impaired, hearing impaired and mentally retarded, the vocational rehabilitation centers must equip to train the four categories of the PwD based on their educational background. There must be guidance and counseling center in each and every vocational rehabilitation center and the vocational rehabilitation centers must offer innovative trades. The present reservation facilities for PwD in the field of employment and education must be enhanced according to their population ratio, and the governmental and non-governmental organizations must provide health, safety measures and special facilities, like, toilets, rest rooms, aids and appliances in their respective offices.

The study of Sherrod (2001) on access of AT for SwD in educational settings to ensure a FAPE revealed that accessibility, accountability, staff development, parental involvement, and funding were the factors that impact on AT and these factors determine the extent to which AT is made available to CwD in the state of New Jersey. Qualitative analysis of the data of House’s (2004) study revealed that students lacked a technical understanding of special educational services. The findings of his study suggest that these students were not fully aware of their positions as individuals with disabilities nor did they able effectively access and use the educational resources and supports listed in the IEP.
Based on the data analysis of questionnaire and literature review, DiFulgo (2005) concluded that there has been significantly increased interest in addressing the needs of SwD, programmes and services for the SwD and colleges are making greater efforts to ensure that all educational programmes and services offered to SwD. He further concludes that more research on accommodation, services and the level of support given to SwD relative to the disability they possess is needed. The ethnographic study of Saxon (2008) revealed that normal students in both classes interact well academically and socially with SwD through the developed service delivery model. The study further suggests that it is possible to successfully integrate SwD, regardless of the type and severity of special needs as long as the classrooms and the school have the capacity to do so.

The findings of the study of Cui (2008) on examination of legal rights and the status of children and YwD in regular classrooms in compulsory education from 1986 to 2006 in China revealed that legislative barriers obstructed the education of SwD in regular schools and classrooms. Twenty three percent of children and YwD did not receive education. Disparities in education between municipalities and rural areas and developed and underdeveloped areas remained substantial. Problems in data collection and reporting prevented a better understanding of the academic status of children and youth strategies for a radical political and cultural change in the education system of the people of china are to have effective protection of human rights for citizens with disabilities enrolled in public education. The study on minority and non-minority SwD in higher education and the university policies by Walker (2008) found that the students with physical disabilities are often treated quite differently and have a very dissimilar college life compared to students without disabilities and SwD require different accommodations in order for learning to take place. He further reported that very few researches have looked into this issue.

Hoffman (2008) examined the plans of YwD to enroll in two to four year college. The findings emphasize the importance of providing YwD, access to a general education curriculum and a course of study that will allow them to be prepared for two to four year
The findings regarding aspirations also indicate that developing transition goals and a course of study prior to entering high school will provide opportunities for YwD who aspire to attend higher education to take the necessary course work. The study of Miceli (2008) found that youth characteristics such as disability category, household income, and parental level of education significantly impacted the probability of enrolling SwD in colleges. The finding of this study emphasized on the importance of obtaining a high school diploma, participating in organized activities outside the classroom, experiencing a level of autonomy or independence, and taking a leadership role in the transition planning programme while in high school for YwD.

The facilities and services available to the SwD have been studied by Bala (1985) Mutiah (1989) and NCPEDP (2001). It can be observed here that all the studies are surveys. Random and purposive sampling was used most while the interview, questionnaire and other standardized tests have been the predominant tools for data collection. A brief discussion of the findings of these studies is presented below.

Bala (1985) compared educational facilities for physically handicapped and normal children. She found that the facilities available in the institutions for handicapped children were quite inadequate as compared with those provided in the schools for normal children. Based on the survey of vocational education for disabled, Mutiah (1989) found that facility of free lodging and boarding is enjoyed mostly by all the handicapped children but the vocational training imparted was not in accordance with the interest and aspirations of the CwD. The study also revealed that the SwD found it difficult to cope up with the school programmes resulting in the disciplinary problems. NCPEDP (2001) measured status of SwD in higher education in India. The study found several deficiencies in Indian higher education. In comparison to three percent reservation quota of SwD, only 0.3 percent of PwD were enrolled in higher education institutions, majority of the higher education institutions were not providing any general or special aid/equipment facilities to the SwD.

Some Observations and Implications
The review of studies on the facilities of CwD reveals that despite of quantitative expansion of facilities and the introduction of various provisions and programmes, the SwD have benefited the least. Perhaps the main reason for this can be lack of awareness among them and guardians regarding the facilities available and unavailability of the proper facilities that are meant for them. The review further reveals that the facilities available were not fully utilized, shortage of trained teachers, inadequate facilities for the CwD (Bala, 1985) and majority of the higher educational institutions were not providing general or special facilities to the SwD (NCPEDP, 2001). These findings give birth to certain questions like: What are the different facilities available to CwD? What is their help-seeking behavior in their difficulties? How do they manage their problems from the facilities or supporting services available to them? But the available studies have not provided answers to these questions and failed to provide any valid reasons in this regard. Perhaps analysis of available facilities, supporting services, help-seeking behavior of SwD and their needs can answer these questions validly and thereby providing suggestions for implementation of required facilities suited to the students with specific disability.

2.2 IMPLICATIONS OF THE RELATED LITERATURE FOR THE PRESENT STUDY

From the review of studies under five sections in this chapter, it can be observed that several studies on CwD have shown that even though efforts were made to raise education of CwD but the result have remained far from the expectations. Education among the CwD is still lagging far behind the children with no-disability in India. Perhaps the slow growth of the education of CwD is due to the late research attention in this field as the first three surveys of educational research could not locate any study in this field. Also, perhaps poverty, illiterate parents, no strict implementation of the government policies and acts, lack of knowledge regarding the policies, provisions and facilities among them could be reasons for low growth of their education. The review of related studies reveals that few studies focused on the general education of the CwD. However, efforts have been made to study the school level CwD in integrated setting but those studies focuses on comparison of CwD with their non disabled counterparts in the different variables.
Some Survey studies on SwD have been conducted with a view to study the PwD in different region, their education, facilities, problems and adjustment. In spite, research on SwD leaves much to be desired at higher education level. Research findings from survey studies are no doubt valuable but they are not of a quality that allows a comprehensive understanding of the problems of SwD. The qualitative studies are valuable as they offer some sensitive insights but they do not yet, provide answers to any of the issues that confront those who are responsible for the education of CwD. For instance, the low enrolment of CwD in higher education indicates that the higher education system is not functional to the needs of CwD. This gives rise to the certain basic questions like whether the higher education institutes follows the policies and acts enacted for the PwD? What kind of facilities they offer to the SwD for pursuing higher education? In India, not many study offer insight into these questions. Although, NCPEDP (2001) throws light for addressing these questions but not providing comprehensive picture regarding their enrollment due to low response rate.

SwD are entering into higher education after completion of schooling whether it is special or general and various studies have been conducted on school going CwD, but from the review of studies, not many study focused on the SwD, their problems and needs at higher education level. The survey of NCPEDP (2001) revealed that enrolment of SwD in Indian universities was less compared to three percent reservation quota. Also, from Gujarat, only VNSGU, Surat had responded so the true picture regarding the enrolment of the SwD in the Gujarat could not emerge. The study of Pandey (1991) reveals poor educational level, low academic achievement and poor relationship of SwD with teachers, peers and parents. The study of Phoola (1990) and Pathak (1984) reveals that most of the SwD wanted to continue study up to the post-graduation level but not many have tried to study the SwD in higher education. Also, the question raised, whether the SwD have the same problems in higher education that the studies of Panday (1991) and Phoola (1990) revealed, still remains unanswered.

However, few researchers (Webster, 2001, Miceli, 2008 and Walker, 2008) have focused their studies on the college going SwD. But these studies are limited in their scope and
suffer from certain methodological limitations. Therefore, it is very difficult to generalize the findings of the studies to college/university going SwD. Some researchers have developed methods/materials for the improvement of the education of this group of students but none of the researchers have tried to find out whether the developed method/materials helped to SwD in their further education? Also their help seeking behaviour and the different types of problems faced by them are not conducted in India. The various needs of these groups of students are also still uncovered. Hence, it is necessary to study the SwD at higher education level and the reasons of their academic success or failure alongwith their problems and needs.

The review of studies also reveals that majority of the studies are limited in their scope. Also most of the studies are focused only on school age going children with single category of disability. Even the themes chosen by the scholars for research are broad and general rather than pointed and specific. Besides, these studies also suffer from certain methodological limitations. Very few studies are micro level studies with intensive analysis of the problems of SwD. Great importance has been given to the single category of disability ranging from six to eighteen year age group. Standardized tools used by the most of the researches reviewed under the five sections. Also the field studies conducted are of shorter duration. The descriptions of the results have been presented in quantitative forms using statistical analysis.

In the light of the review of previous studies and the methodologies used therein, it has been thought of to undertake a study on SwD pursuing higher education and focusing on their problems, needs and reasons of their success or failure.

The chapter II presented the critical review of the related literature of the present investigation. In the light of the review of previous studies and the methodologies used therein, it has been thought of to undertake a study on SwD focusing on their various problems, needs and reasons of their success and failure at higher education level. To take appropriate stand for the present study, the methodologies used has been discussed in the next chapter.