Review of literature
Chapter II
REVIEW OF LITERATURE

This chapter contained a review of the socio-psychological researches on stress, self-esteem, social-emotional adjustment and behavioural problem among the sensory impaired and non-impaired adolescents grouped under following sections:

II.1. Researches on visually impaired adolescents
II.2 Researches on hearing impaired adolescents
II.3 Comparative studies on sensory impaired adolescents
II.4 Researches on adolescent with no impairments.
II.5 Background and psychosocial variables

Summary

The occurrence of disability was known to induce certain changes in the person’s appearance, capabilities, and functional skills, which altered the impaired person’s view of himself or herself to accommodate self-perceived physical or mental changes, yet with a difference by disability type. Numerous studies (Wright, 1960; Shontz, 1971; McDaniel, 1976) had independently concluded that; (1) though specific disabilities had different effects; these were not associated with identifiable personality types, e.g., deaf persons were not characterized by a particular personality syndrome; nor were amputees, and blind persons, etc.; (2) there was no simple relationship between severity of disability and the degree of psychological impairment, e.g. blind were not necessarily less well adjusted than the deaf; and; (3) there existed a wide range of individual reactions to disabilities, e.g. two persons with very similar handicaps often demonstrated entirely different types of responses in the given situations.

II.1 Research on Visually Impaired Adolescents
Persons who lost their sight at birth or later underwent extensive perceptual, behavioural, cognitive, and emotional changes in their life but
not to the same extent. They needed to be assessed for their capabilities and difficulties for educational or rehabilitation intervention. Meighan (1970) administered Tennesse Self-Concept Scale (TSCS) to a sample of visually handicapped (blind and partially sighted) adolescents and found their self-concept to be extremely low, compared with the normal group. In another study, Williams (1971) compared a sample of blind adolescents on Bill's High School Index of Adjustment and Values, and noted quite different results, as the blind subjects showed significantly positive self-concepts. To measure adjustment to disability Orkan-Lecka (1980) administered Disability Acceptance Scale and the Blind Basic Rehabilitation Rating Blank to blind secondary school students studying in integrated and special school setting. She found that the level of adjustment to disability was much higher in integrated setting than in special school setting. Ishtiaq and Kamal (1981) designed a study to assess the socio-psychological factors associated with blindness (N=20, aged 14 to 20 years). They revealed that broken homes, neglect by parents, and malnutrition complicated the process of adjustment in the social climate in which they lived and moved.

Agarwal and Powar (1981) reported no significant difference in the level of stress of blind and sighted school students. Qadari and Hussain (1982) studied handicapped and non-handicapped students on certain social and psychological dimensions. The sample included 20 blind and 20 normal students studying in VII to IX classes at Aligarh. Results revealed that most of the blinds came from psychologically broken homes and suffered emotional maladjustment. A majority of them had no interest and liking either for curricular, or co-curricular activities. They differed significantly from normals on all the factors included viz, parents' attitudes, their adjustment to each other, subjects' attitudes towards home, school and other places, their interest in studies, liking for play and regularity in class attendance, etc.
Sinha (1982) examined the personality adjustment and social-emotional and educational adjustment of 50 male blind and 50 normal sighted children aged 7 to 22 years. Blind children were from a special school in Patna. He administered Hindi version of Sinha and Singh’s Adjustment inventory orally to the blind students. The results indicated that blind children were as good in adjustment as others, as all the respondents were residents of hostel living in similar physical, social environment, and interacted with one another within the same peer group. The world around them was very small. Blind children even without interacting with the outer world, had adjusted to the situation well, where each one was sympathetic to other having similar disability.

Hasan, Khan and Khan (1983) probed into self-reported perceptions towards blindness of 56 blind and 56 sighted adolescents (aged 14-19 years). Content analyses of the responses showed that the blinds did not rate their life any more negative than the sighted. Blind adolescents also reported no significant psychosocial problems. In another administration of Sinha and Singh Adjustment Scale, Sastry (1985) found no significant difference in the degree of adjustment of the 30 partially visually handicapped, 30 totally blind and 30 normal male students. She also reported significant inverse relationship between alienation and adjustment. Teare (1985) studied behaviour adjustment of 23 partially visually handicapped and blind students. He used Child Behaviour Checklist and made own observations. Results revealed that behaviour problems were as much influenced by cognitive ability as by visual functioning. Pandey (1985) studied affectional deprivation, ego strength and adjustment pattern among 40 visually handicapped children (32-M, 8—F; 20-congenitally blind, 20- postnatal blind). He found 10 (25%) students having poor adjustment and appeared immature.

Yamamoto, Soliman, Parsons and Davis (1987) studied stressful life events in the lives of 1814 (3rd through 9th grade) children in six countries. They reported going blind was perceived stressful universally.
Shukla (1987) had a sample of 32 boys and 28 girls, aged 6-16 years having visual handicaps. He asked teachers to rate students' behaviour on Rutter 'B' Scale, and on Behaviour questionnaire. He noted that urban students exhibited more behaviour disorders in classroom situations than the rural students. Jangira (1987) reported that visually disabled children were neither isolated nor were they below average in achievement.

Tanksale (1988) studied the problems of social adjustment and rehabilitation of the blind and identified some important factors of blind persons' personal adjustment. She found family and socio-economic status as significant predictors of personal adjustment. Early age of onset, educational level and social relations were significantly related to their total adjustment. However, gender and type of blindness were not significantly correlated with blind persons' personal adjustment.

Das (1988) studied psychosocial profiles of blind adolescent girls by using a 34-item self-made questionnaire. All the students were between 14 to 16 years of age and in classes VIII and IX. Each had at least two siblings, and all had their onset of blindness before 5 years of age. Results showed that blind students had highly positive relationship with their family members, but lacked the intimacy they shared with their blind friends. They preferred to stay at the school rather than at home. Though they liked integration, they preferred special school for the blind. Benarjee (1988) measured the level of maladjustment, home environment, school environment and peer relationship of some blind secondary school students. They noted that more blind students were maladjusted than the sighted. Nearly, 1/5th of students had moderate level of maladjustment with home environment, school environment and peers of opposite sex. The percentage of blind children maladjusting to home environment was one and half times more than those not adjusting to the school environment.
In a study of adjustment and academic achievement of visually handicapped secondary school students (9th - 12th), Haider (1990) studied 56 integrated and 106 residential students. He reported no significant difference in the educational adjustment of special and integrated students. However, special school children showed slightly better emotional adjustment than the integrated students. On the whole, residential visually impaired students were better adjusted, both socially and educationally.

Despite the concern for self-esteem in blind children, there was little evidence to prove that they had consistently lower self-esteem than the sighted children regardless of age (Obiakor, 1986, Obiakor and Stile, 1990). A study of the self-esteem of blind (N=57) and sighted disabled young people (N=101) aged 9 to 18 years in the first Pan American Victory Games showed no differences in self-esteem of the blind and the disabled sighted youth athletes (Sherill, Hinson, Gench, Kennedy and Low, 1990). However, the unexpressed feeling of loss of sight was frequently associated with helplessness, inferiority, mobility related stress and anxiety, depression, loss of self-efficacy, and poor performance (Dodds, Bailey, Pearson, and Yates, 1991).

Erin, Corn and Wolffe (1993) examined the learning and study skills of 106 high school students having visual impairments. They found differences in skills by the students' grade point averages, and not by their preferred reading medium, type of school placement, or plan to attend college. The strategies used by students having visual impairments were very similar to those used by sighted students. Inadequate information about the nature of orientation and mobility services, combined with a sense of isolation were found to be the major causes of stress and anxiety (Seybold, 1993). It was felt that sharing fears and anxieties in peer groups helped in reducing stress and feelings of isolation. Erwin (1993) reported no significant differences between
integrated and specialised blind children in their social behaviour and participation.

Dodds, Ferguson, Ng, Flannigan, Hawes and Yates (1994) examined the concept of adjustment (Nottingham Adjustment Scale) from a cognitive viewpoint, on a sample of 469 clients (predominantly males) aged 21-48 years. Results revealed significant positive correlations of self-esteem with anxiety-depression attitudes towards blindness, locus of control, disability acceptance, self-efficacy and attributions. All had a positive attitude towards blindness, a feeling of internally being in control of their lives, the acceptance of the present state of disability, a feeling to be able to affect changes in their lives and feel responsible for their success but not failure. This suggested a high sense of self-worth and well-being in the blind where there was no psychological distress.

Beaty (1994) studied psychosocial adjustment and academic success of visually impaired adolescents. All subjects were administered the Coppersmith Self-esteem Inventory, the Social Provisions Scale and a Student Information Questionnaire for demographic data. No significant differences in psychosocial adjustment were found between visually handicapped and not handicapped. However, the visually handicapped scored slightly higher than the non-handicapped students on self-esteem and academic performance.

Beach, Robinet and Hakim-Larson (1995) identified a negative relationship between self-esteem and independent living skills of the visually impaired. They also reported that persons with higher self-esteem had significantly more formal education than those had lower self-esteem. This suggested higher education enhanced self-esteem. In another study, Bharadwaj (1995) measured personality factors of blind and normal children between 8 to 14 years of age. He used Cattell's Children Personality Questionnaire adapted in Hindi. Results showed that the blind children were more reserved and shy in nature in
comparison to the normal children. Jackson and Lawson (1995) administered the Family Environment Scale developed by Moos and Moos (1976) to 76 visually impaired persons aged 18 years onwards, indicated that the total family environment strongly influenced these person's adjustment to vision loss.

Jindal-Snape, Kato and Maekawa (1998) reported that children having visual impairments showed deficits in social skills that placed them at risk for problem behaviours. Sharma, Sigafoos, and Carroll (2000) assessed social skills of 200 visually impaired students (118 boys and 82 girls) aged 6-16, studying in three residential schools in northern India. They used the Matson Evaluation of Social Skills with Youngsters (Matson, Heinze, Helsel and Kapperman, 1986). They also supported the above findings indicating that these students had problems in developing social skills, and the deficits in that resulted in some behavioural problems.

In a noting study, Rosenblum (2000) conducted interviews with 10 visually impaired adolescents and their best friends to find out the impact of vision impairments on their lives. He found that regardless of the age of onset, almost all the participants had negative feeling towards their own impairments and wished they were sighted. Majority of them reported communication gap between them and their parents and received differential treatment from their parents as compared to their normal siblings. Adolescents who had a visually impaired sibling found him/her a sense of comfort, a role model and a source of information. Many of them had problems in establishing friendships resulting in a complex psycho-social profile.

II.2 Research on Hearing Impaired Adolescents
Deafness per se did not affect the emotional and social development of the individual. Rather, a series of limitations rooted in the social image of the deaf caused irreparable harm to the person. A number of intrinsic
(e.g. linguistic limitations and the psychological impact of deafness) and extrinsic (e.g. educational and social experiences, attitudes of parents and classmates, etc.) variables were relevant in building their self-concept and self-esteem, and their psycho-social adjustment process.

Meadow and Schlesinger (1971) reported that the prevalence of emotional disturbance in the deaf school age population was five times higher than the hearing children, and the behaviour problems were frequently noticed by their teachers. In another study Reivich and Rothrock (1972) noted that deaf children and young adults between the age of 6 and 20 showed more behaviour problems than their hearing counterparts. Freeman, Malkin and Hastings (1975) found hearing-impaired children as more egocentric, stubborn and emotionally unstable with poor frustration tolerance, temper outbursts and impoverished awareness of social nuances. In contrast, Jensema and Trybus (1975) found only 10% of the deaf children experiencing educationally significant emotional problems, but Bolton (1976) reported hearing-impaired as having more abnormal personality characteristics and less adequate adjustment compared with hearing children. Kolvin, Fundudis, Spuy, Tweddle, and George (1979) found five times more deaf children experiencing behavioural disturbances than their hearing counterparts, whereas, Meadow and Trybus (1979) found 3-6 times more deaf children having behavioural problems than their hearing counterparts.

Chess and Fernandez (1980) closely examined four symptoms of behavioural disturbance, namely; impassivity, hyperactivity, rigidity and suspiciousness. They noted that seventy five percent of the deaf children included, displayed none of these symptoms, as compared to 94% of the hearing children. Impassivity was found more often in 25% of deaf children, and 6% of the hearing children. In a sample of 200 deaf students aged between 10 to 15 years, Ferrugia and Austin (1980) investigated their maturity, social and emotional adjustment and self-
esteeem. They administered Meadow/Kendall Social-Emotional Adjustment Inventory for Deaf Students. Results revealed that hard of hearing and deaf students in public schools demonstrated lower levels of self-esteem than deaf students in residential schools and hearing students in public schools. Secondly, deaf students in public schools showed lower levels of social and emotional adjustment and mature behaviour than the residential deaf students, hard-of-hearing, and hearing students.

Antia (1982) studied social interactions of 32 partially mainstreamed hearing impaired and 84 hearing children in grades one through six in five urban schools by using the method of analysis of Behaviours in Classroom, developed by White (1978). Results showed that hearing-impaired children interacted less frequently with their peers and more frequently with the teachers than the hearing children. Hearing-impaired children interacted more frequently with children of their own category, and the oral communication did not affect frequency of interaction. It was concluded that physical proximity or integration was necessary, but was not the sufficient condition for promoting interaction between hearing impaired and hearing students.

Feinstein (1983) used his experience of clinical consultations and group therapy with early adolescent deaf boys, to contend that problems in communication exerted a profound effect on their development. Communication also affected family life, peer group processes, and academic adjustment. Subjects having on going problems in the social fabric of their home and school, experienced narcissistic vulnerabilities and shame due to deafness. The language processing affected the peer group at a time when it was particularly important to development. Mendelson and Rozek (1983) asserted that deafness, as a disability could become a powerful organizing force in various problem areas in the family, especially in the families with high degree of unsolved conflicts, while the deafness itself was denied as a problem. Problems arose from
lack of adequate communication between family members, the lack of recognition of this development, and the consequent lack of effort to address it. The poor language created many other maladaptive patterns.

Gregory, Shanahan and Walberg (1984) compared 514 mainstreamed hearing impaired students with a comparable sample of normal hearing students on demographic characteristics, motivation and academic achievement. They indicated that hearing impaired manifested greater academic difficulties, took fewer academic courses, evidenced less school motivation and appeared less goal oriented. The hearing-impaired students scored significantly lower on indices of academic achievement and motivation than those in the hearing group. They also found the hearing-impaired significantly older than their normal hearing classmates.

Preisler (1984) examined the communicative strategies used by 15 deaf students in social interactions with other deaf children. Subjects (N=5) with early sign language experience communicated more effectively than subjects (N=10) with late sign language experience, seven of whom had received oral/aural training. Orally trained deaf students did not know many fundamental rules of social communication. Barnum (1984) contended that due to the inherent differences between oral-aural and visual-manual languages, particularly the medium through which they were learnt, the overwhelming majority of deaf children could not learn English effectively. If these children received their education through speech reading, written English or manual forms of English; they subsequently achieved closed to the non-impaired. Research showed that native signers did better academically, starting at about 5th grade level, and maintained that advantage throughout their school years. It was thus suggested that classroom teachers should reinforce in deaf children positive feelings about themselves and the language and allow them to feel proud of their culture.
Weisel (1985) found the deaf college students (N=45) perceiving the display of disgust better than the normal students. They were also capable of perceiving the emotional contents like the display of happiness, sadness etc. better than the normal students.

Davis, Shepard, Stelmachowikz , and Gorga (1986) examined the impact of degree of hearing impairment, age and other factors on educational achievement and personality of 40 hearing impaired children between 15 to 18 years having an IQ of 85 to 125. They used the Missouri Children's Picture Series (Sines, Pauker and Sines, 1974) and Child Behaviour Checklist - (Achenbach and Adelbrock, 1983). Results revealed that age and degree of hearing loss did not significantly account for poor educational performance. The hearing-impaired children showed more aggressiveness, impassivity, and immature tendencies than the normal students. They also had significant behaviour difficulties and social problems related to adjustment to school, especially in making friends.

Zwiebel (1987) investigated the cognitive development of three groups of Israeli deaf children (6-14years) and 101 hearing children. The three deaf groups were, 23 deaf children with deaf parents and siblings (DPDS), 76 deaf with hearing parents and deaf siblings (HPDS), and 144 with hearing parents and siblings (HPHS). They completed Draw-a-Person Test, and a non-verbal intelligence test. Teachers also evaluated them. DPDS group was found superior to other deaf groups, and comparable to hearing children on most of the intelligence test sub-scales. Results indicated the environmental factors being responsible for the cognitive superiority of deaf children of deaf parents.

Watkins (1987) studied the effects of early and late intervention, preschool and no preschool training on social and emotional adjustment, academic achievement and language of 92 hearing impaired students. She used Meadow/Kendall Social-Emotional Assessment Inventory for
Deaf Students and Woodcock and Johnson Psycho Educational Battery to measure social and emotional adjustment and academic achievement. Significant group differences were found on academic achievement, social adjustment and self-image, but not on emotional adjustment. Murphy and Newlon (1987) administered the Revised VCLA Loneliness Scale to a sample of 170 hearing impaired students, and assessed their adjustment to disability and loneliness. They found inverse correlation between loneliness and adjustment to disability. No significant difference was found between hard of hearing and deaf group on loneliness and adjustment by years in school or gender. Aplin (1987) measured social and emotional adjustment of 19 male and 23 female (7-16 years age) hearing-impaired children in ordinary and special schools on Bristol Social Adjustment Guide (Stott, 1963). The Rutter Children’s Behavior Questionnaire was also completed by the teachers. Significant differences in level and distribution of maladjustment were found between hearing-impaired students in ordinary schools and in special schools on both BSAG and RCBQ. There was a trend for boys to be more maladjusted on BSAG than girls in both type of schools. Boys in ordinary school were significantly more maladjusted than girls on the RCBQ. No significant relationship was found for age, social class and maladjustment in any of the schools. Jangira (1987) investigated sociometric choices relating small group work, like academic, managerial and play among hearing-impaired students. He reported most of these students were near average or above average in academic achievement.

In a study on adolescent deaf, Hooper (1988) found that boys showed significantly lower self-esteem than girls. Weisel (1988) investigated hearing status of parents, achievement, social-emotional adjustment, self-image and motivation by comparing 31 hearing-impaired children of hearing-impaired parents (HIC-HIP), and 93 hearing impaired children of normal hearing parents (HIC-HIP). They administered Meadow/Kendall Social-Emotional Assessment Inventory, Ortar Test of Reading Comprehension (Ortar and Bar Schachar, 1972), and a Parent
Questionnaire. Results revealed that HIC-HIP group performed significantly better than HIC/NHP on nearly all the variables: reading comprehension, emotional adjustment, self-image and motivation for communication. There was no difference on social adjustment despite the lower socio-economic status of the HIC-HIP group. The findings highlighted the strong influence of hearing status of parents.

Hearing-impaired students often had negative social experiences, e.g. difficulty in social relationship, in the mainstream school setting (Davis, Elfenbein, Schum and Bentler, 1986; Foster, 1988). Mertens (1989) examined the school placement along with the positive and negative social experience of 36 female and 13 male hearing-impaired high school students. They used a self-made 18-item questionnaire that included demographic information and questions about their educational and social experiences. They found the social experience of students in special schools to be significantly more positive than the mainstreamed students, who had more negative experiences in areas of social interaction and friendship. However, a few studies also reported such students having positive or at least not negative social experiences (Ladd, Munson, and Miller, 1984; Mertens, 1986; Kluwin, Wismann-Horther, and Kelly, 1989).

An experimental speech-reading course was designed by Scott, Metz, Rohland and Samar (1989) in order to provide the hearing-impaired students with real life communication experiences. The course was administered along with traditional speech reading courses. Results indicated that this course succeeded in enhancing students' own perceptions of communication in real life situations. Some other researchers (Raymond and Matson, 1989) refuted the finding of higher incidence of emotional behavioural problems in deaf and hard of hearing students. Vernon and Andrews (1990) observed that the distribution of many of the psychological disorders among the deaf and hard of hearing population was in the same proportion as the hearing.
Cates and Shontz (1990) studied the role taking ability and social-emotional adjustment of 14 male and 9 female deaf children (7-14 years of age). They administered Meadow/Kendall Social-Emotional Assessment Inventory for Deaf and Hearing Impaired Students - the School Age Form (1983) and found that the performance on role taking tasks correlated positively with the ratings on social-emotional adjustment, self-image, communicative effectiveness and role taking skills. Kapoor (1990) compared the normal and deaf students on cognitive functioning and perspective taking ability, and found that irrespective of the hearing status, the higher the performance of children the higher were the ratings of the teachers. In case of the deaf, educational grade and for the normal group socio-economic status contributed significantly to academic achievement.

In another study of non-verbal intelligence and academic achievement of 48 prelingually hearing-impaired students, Pheleps and Branyan (1990) reported significant relationship between cognitive ability and academic achievement on both the K-ABC Nonverbal IQ, and the WRAT-R achievement subsets. Watson, Henggeler, and Whelan (1990) examined the role of some of the characteristics of 75 deaf youths and their family systems in predicting their adjustment. Results revealed that youth having higher social competence demonstrated better communication skills. Children having greater hearing loss had more behavioural problems, and their parents reported more emotional difficulties, and poorer family functioning. Erdman and Demorest (1990) and Hallberg and Carlsson (1991) were of the view that higher levels of education portend better adjustment to hearing impairment.

Reddy, Ramamurti and Reddy (1991) undertook a comparative study of sources of stress among 30 hearing impaired and 30 orthopaedically handicapped boys and girls (aged 11-17 years). They revealed that boys had significantly more stress in emotional, language, personality and self-concept, and financial areas than the girls. Older boys and girls
experienced higher stress. The adjustment and behaviour of 23 hearing-impaired (9 male – 14 female), and 23 hearing children (aged between 8-11 years) were compared by Arnold, and Atkins (1991). They used Bristol Social Adjustment Guide and Rutter's Children Behaviour Questionnaire. The differences between the hearing-impaired and the controls were not significant, despite the high rate of maladjustment among the former. Parental care (as perceived by teachers) was found positively related to the adjustment of children.

Prasad and Sunanda (1992) administered Attitude to Future Questionnaire (Ramamurti, 1968) to the deaf (aged 10-69 yrs.) and some physically disabled persons. They reported a gradual decline in positive attitude of the hearing disabled towards personal future with age and increasing duration of disability. An increase in positive attitudes was also noted with increase in level of education. Chovan and Roberts (1993) obtained self-appraisals of 35 moderate to profound deaf residential students aged 9 to 19 years, their achievement outcomes, and teachers' reports of social-emotional adjustment in academic setting. Meadow/Kendall Social- Emotional Adjustment Assessment Inventory for Deaf and Hearing-Impaired Children was used. Significant positive correlations were noted between reading appraisals and social adjustment. Reading achievement also correlated positively with self-concept and self-esteem.

Desselle (1994) explored the relationships among the family's method of communication, self-esteem and the deaf child's level of academic achievement. They tested 53 severe to profound deaf residential students aged 13 to 19 years within the average range of IQ on modified Self-Esteem Inventory (MSEI) (Kelliher, 1976). A positive relationship was found between the family's total communication method (including speech, finger spelling and sign) and the child's self-esteem. The higher the reading level, the higher was the self-esteem.
Frustenberg and Doyal (1994) investigated the level of hearing loss, the performance outcomes and emotional-behavioural functioning of deaf and hard of hearing students aged 11 to 21 years in a variety of educational placements. Results showed that deaf and hard of hearing students scored within the normal range on the outcome competencies and emotional behavioural functioning. Statistically significant correlations were found between the performance outcomes and emotional-behavioural functioning. Multiple regression analyses revealed the emotional behavioural score to be a statistically significant predictor for four outcome categories. Mainstreamed students scored higher on all outcome measures, than students under other programmes. There was no difference in emotional behavioural functioning between the two groups, indicating that the degree of hearing loss did not matter. Van Eldik (1994) examined the behaviour problems of 41 deaf Dutch boys (6-11 years) studying in normal schools, by using Achenbach's Child Behaviour Checklist completed by parents. Overall, deaf boys had more behaviour problems than their hearing counterparts. Internalizing as well as externalizing of behaviour problems emerged with greater frequency in the deaf group. Younger deaf boys showed more behavioural problems than older ones.

Jyothi and Reddy (1996) compared the adjustment and self-concept of 230 hearing impaired and 230 normal hearing students, by administering the modified version of Bell's Adjustment Inventory and Osgood's Semantic Differential Scale. Results revealed that the hearing-impaired differed significantly from normal hearing students in three areas, viz., health, emotionality, and masculinity-femininity. The hearing-impaired exhibited better adjustment, but showed significantly lower self-concept than the hearing children. In an extensive study, Stinson, Whitmire and Kluwin (1996) administered Social Activity Scale, Emotional Security Scale and Perceived Social Competence Scale, to 220 class X, XI and XIII hearing impaired students (Mean age=16.5 years, 17.9 years, age 18.6 years respectively) in a mainstreamed and in a
special school setting. The results suggested that mainstreamed students, although surrounded by hearing peers, perceived more emotional security in the company of hearing-impaired peers than the hearing peers. Their participation in school and social activities also increased, indicating the possibility of good social adjustment in future in a special school setting.

Vostanis, Hayes, and DuFeu (1997) administered Hindley's Parents' Checklist, Achenbach's Child Behaviour Checklist, Hindley's Teacher Checklist, and Achenbach's Teachers Report Form to 46 severe to profoundly hearing-impaired children (up to 16 yrs. of age). They found that Asian children showed less behavioural and emotional problems at school than home. Asian Children were significantly behind in school performance than others, because of the use of another language at home. In another study these Vostanis, Hayes, DuFeu and Warren (1997) found that maladaptive school functioning was the best predictor of school related behavioural and emotional problems. Vostanis, Hayes, DuFeu and Warren (1997) used Achenbach's CBCL and Hindley et. al's the Parent Checklist to find out behaviour and emotional problems of 47 primary and 52 secondary deaf students, and parents of 84 children, and children other than having deafness problems. On CBCL a very high rate of social maladjustment was found in deaf as compared to hearing children and those with other impairments. The findings also indicated high rates of behavioural and emotional problems in deaf children.

To study the adjustment to hearing impairment and differences in socio-demographic variables, Demorest and Erdman (1998) administered 25 scales of Communication Profile to 1008 hearing impaired and other disabled students. They noted that the hearing impaired faced fewer problems in personal adjustment, and felt consistently less disabled than other students. Higher educational level facilitated their personal adjustment. Females were slightly lower in several areas of personal
adjustment. A trend analysis suggested possible no linearity in the relationship between age and adjustment to hearing impairment, with adjustment being poorer among the youngest and oldest population. Calderon and Greenberg (1999) examined maternal problem solving skills and adjustment of 36 deaf children (29 girls and 9 boys, aged 8-15 years). The child outcome score was derived by using teacher ratings on the Social-Emotional Assessment Inventory (Meadow, 1983), The Health Resource Inventory (Weissberg, Gesten and Ginsberg, 1981) and the Walker problem Behaviour Identification Checklist. The findings revealed that older children had lower levels of socio-emotional adjustment. The maternal problem solving skills were the most salient coping mechanism associated with child adjustment. However, the maternal and teacher-rated child adjustment was not inter-related. Powers (1999) investigated educational outcomes of eleven 16-year-old deaf students in mainstream programmes in England in 1995 and 1996. Data on exam results, communication competence, and social acceptance were collected by questionnaires and analysed against several background factors. All background factors investigated contributed an effect of about 20% on examination results. Relatively strong predictors of examination success were family socio-economic status, presence of additional learning difficulty, language taken, age of onset of deafness, and parents' hearing status. Degree of hearing loss did not appear to have an important effect on examination success, but was linked to other variables.

11.3 Comparative Studies on Sensory Impaired
The preceding review on visually and hearing impaired students revealed that while blindness intervened between man and inanimate objects resulting in passiveness, and restricted mobility, deafness raised a communication barrier between man and man provoking them to make strenuous efforts by concealing their disguised disability resulting in lower self-esteem, heightened stress and impulsive behaviour (Mayer-Gross, Slater, and Roth 1969). However, literature failed to indicate as to
which type of sensory impairments were more disabling. This section thus included comparative researches on visual and hearing impaired.

Battle and Blowers (1982) in a longitudinal study compared the self-esteem and perception of ability scores of different types of physically impaired students in special and integrated classes. They reported that disabled students in special classes experienced greater gains in self-esteem and perception of ability than those in regular classes. Coleman (1983) noted that the mildly handicapped preadolescents placed either in a resource room or in a self-contained classroom reported higher self-concept on the Piers-Harris Children's self-concept Scale (Piers-Harris, 1969) than their counterparts who attended regular classes.

Bala (1985) in a comparative study examined the mental make-up and educational facilities of 500 physically handicapped (12-18 years old visual, hearing, and orthopaedically handicapped) and 500 normal children in Haryana. Some personality traits, values, self-concept, mental make-up and adjustment were investigated. She used the High School Personality Questionnaire of Cattell, the Allport-Vernon and Lindzey Inventory of values, the Deo Personality Wordlist, the Jalota General Mental Ability Test, the Bhatia Battery of Performance Test, the Sinha and Singh Adjustment Inventory. Results revealed that the adjustment of deaf children was socially, emotionally and educationally less stable, they had poor home and health adjustment, and were less intelligent. In personality characteristics deaf children were deliberate, inactive, phlegmatic, prudent and tender minded. She reported that visually handicapped were restrained, worried and untidy. They possessed poor ideal, social and perceived self-concept and had poor home, health, emotional and educational adjustment in comparison to other two categories of handicapped students. The adjustment of deaf children was socially, emotionally and educationally less stable; and they had poor home and health adjustment. In personality characteristics, they were deliberate, inactive, phlegmatic, prudent and tender minded. Both the
handicapped groups differed significantly from the normal children in personality traits. These students were more reserved, serious, withdrawn, dependent, apprehensive, shy and had weak superego.

Loeb and Sarigiani (1986) investigated effects of sex, race, severity of handicap, and age of onset on students' self-concept, self-esteem, locus of control, level of expectation, and academics. They administered Nowicki-Strickland Children's Locus of Control Scale (Nowicki-Strickland, 1973), Piers-Harris Children's Self-Concept Scale (Piers-Harris, 1969), a Q-sort technique to assess self-concept, and a Tower building Task to measure level of expectation to 64 hearing-impaired, 74 visually impaired, and 112 non-impaired students. Among them 118 were males and 132 were females (aged between 8-15 years). Parents' and teachers' ratings on personality, and structural observational measures were also included. Results revealed that type of handicap and sex produced significant main effects on overall self-esteem. The children with hearing-impairments were lower in self-esteem than the visually impaired and non-sensory-impaired students. The other two groups did not differ on self-esteem. Boys had higher self-esteem and were less anxious than girls. There was no significant interaction effect of type of handicap and gender on self-esteem. For locus of control there was neither significant main effect nor any interaction effect of these two independent variables. Results also indicated that hearing-impaired children with late age of onset were less satisfied with themselves than children with early onset. The hearing-impaired children differed significantly from other two groups on level of expectation and with severity of hearing loss their level of expectation, and actual performance decreased. On the other hand, the visually impaired children showed better self-concepts. The hearing-impaired children were more sad than the other two groups. The teachers described them as having more problems with schoolwork, shyness (particularly with females), getting along with other children and adults, and lacking confidence. The severely impaired were more aggressive, had more problems in getting
along with others and lacked confidence. Parents of both hearing-impaired and visually impaired reported their children having more educational problems than the parents of non-impaired children. Although the three groups did not differ significantly on their overall intellectual or school performance, lower score of hearing-impaired children on certain items of Peirs-Harris indicated that their academics were a greater challenge for them due to their hearing loss.

Lutman, Brown, and Coles (1987) found no gender differences in self-reported disability, but the younger persons experienced higher disability feeling than the older ones. Agarwal and Kaur (1988) administered psychometric measures of stress (Sinha’s W.A. Self Analysis Anxiety Scale), strain and locus of Control to 45 hearing and 40 visually impaired children (aged between 6 to 16 years) of both sexes studying in special schools. They found that the older blind students who had late age of onset were more stressed than the hearing impaired students. Intelligence and academic achievement were only moderately related to school adjustment, but very significantly to peer acceptance. Health and emotional adjustment were found as the best predictor of stress.

To study social network, social support friendships and adjustment, WenzGross and Siperstein (1993) administered Hightower et. al's Teacher-Child Rating Scale for Children’s Adjustment to 106 IV-VI grade physically impaired (blind, deaf, and crippled) and normal children. They defined adjustment in terms of behavioural problems in the classroom and depressive mood. In both the measures students with impairments exhibited more problems than the normal group.

Dote-Kwan and Hughes (1994) found the overall home environment of the visually impaired children more favourable than those of other handicapped children, regardless of the socio-economic status of the families, or the visual acuities of the children. They claimed that this
was probably because of these families receiving early intervention services.

Vostanis, Bickerton, Cumella, Chung, Winchester and Doran (1996) studied maladaptive behaviours of 94 special school children and 15 integrated sensory impaired and crippled school children (74 boys and 35 girls). They all were rated by their teachers by Aberrant Behaviour Checklist. Results revealed strong agreement between parents' and teachers' rating of consistently high rate of maladaptive behaviour, particularly irritability, hyperactivity, poor concentration and self-injurious behaviour in physically disabled students.

Taking 229 students Cambra (1996) analyzed the perceptions of personality descriptors of the deaf, the blind and individuals with no sensory impairments. He used Semantic Differential Technique. It was reported that students believed that the blind were more hard working, attentive and confident than the deaf, and were more attentive, thoughtful and prudent than those having no sensory impairment. The deaf were perceived as more reserved, dependent, solitary, quicker but nervous, unsure, imprudent and impulsive than the blind. Both differed in their profiles from those having no sensory impairment in that the latter were seen as more pleasant, more independent, more active, kind and social. Mulderji (1997) in a review article on peer relations and friendship in physically and sensory disabled children mentioned that these children experienced a higher than average level of social and emotional difficulties, like loneliness which was associated with negative patterns of self-perception and low self-esteem.

Thus, a number of comparative studies of visually and hearing impaired and non-impaired attempted to study different psychosocial variables and their significant contribution to academic performance in diverse and different ways. Though perspectives differed from study to study, yet gave a global picture of the strong relationships among these variables and
their contribution to academic performance of sensory impaired adolescents. However, a majority of studies highlighted that the visually and hearing impaired exhibited more stress, less adjustment, and more behavioural problems. Some other studies however contradicted these making it necessary to review researches on students without any impairment to have a clearer picture.

II.4 Research on Adolescents with no Impairments

This section contained a review of the psychosocial researches related to stress, self-esteem, adjustment, and behaviour problems, and classroom behaviour, of adolescents without any impairment in order to understand the differences between them and the sensory impaired students' psychosocial and educational functioning.

a) Psycho-social variables

Research on psychosocial variables e.g. stress, self-esteem, social-emotional adjustment, behavioural problems, etc., which emerged during 1940s, was stimulated by the desire to understand breakdown in adaptive behaviour of persons in extreme situations. These have been studied in detail to understand the dynamics of performance and behaviour of the

Dohrenwend and Dohrenwend (1974), Susser (1981) and Mechanic (1974) suggested that social stress, actual or perceived, acted as precursor to psychological distress/well being and exercised a strong and direct impact on physical and mental health. Cox (1978) gave a comprehensive account of the behavioural, psychological and health effects of stress. The subjective effects included anxiety, aggression, apathy, boredom, depression, fatigue, frustration, guilt and shame, irritability and bad temper, moodiness, threat, tension, nervousness, loneliness and low self-esteem. The behavioural effects included accident proneness, drug taking or smoking, emotional outbursts, excessive eating or loss of appetite, excitability, impulsive behaviour, impaired
speech, restlessness, and trembling. The cognitive effects included the inability to make decisions and concentration, frequent forgetfulness, hypersensitivity to criticism, mental blocks and performance deficits. The psychological effects were seen as increased blood sugar level, sweating, dilation of pupils, ‘a lump in the throat’, numbness and finagling in the parts of the limbs.

Newcomb, Huba and Bentler (1981) in a longitudinal study administered a 39-item life event questionnaire to 1,018 male and female adolescents drawn from the 7th through 9th grades. Three years later they were retested when students were in 10th, 11th and 12th grades. Results revealed seven interpretable dimensions of stress: family/parents, accidents/illness, sexuality, autonomy, deviance, relocation, distress/anxiety and maladjustment. The experience of stress was found constant over time. No significant gender differences were found (Coddington, 1976); but when specific items were considered, girls reported more accident/illness and distress events than males, and the latter reported more deviance behaviour. Some meaningful associations were found among specific stress events (depression, anxiety, maladjustment) and health and psychological qualities. Srivastava and Naidu (1982) reported a curvilinear inverted U relationship between stress and performance for high as well as low impulse control subjects. They found that moderate stress was facilitative and conducive for efficient functioning of the organism. The high impulse control subjects however, did not show a decline in performance with increased stress.

Lashley (1983) mentioned that frustration or irregularity in the life situations of children was associated with behavioural problems like, physical and verbal aggression, destructiveness, temper tantrums, defiance, lack of cooperation, passiveness, lying and stealing.

Shanmungasundaram (1983) found girls outperforming boys in school. Similar findings were reported by Mishra (1986), Veeraraghavan (1986),

Swearingen and Cohen (1985) administered the Junior High School Life Experiences Survey, a 39 items self-report measure specifically designed for young adolescents, to 79 seventh and eighth grade boys and girls on two occasions having a 5 months gap. The analysis revealed a significant positive relationship between stress and each measure of psychological distress, namely, anxiety and depression, also considered as two major factors in maladjustment. The number of positive life events did not correlate significantly with any variable. Multivariate hierarchical regression analysis indicated a stress-buffering pattern for positive life events: i.e. as positive events increased, the relation between negative events and state of anxiety was positive. Grossman, Wirt and Davids (1985) in an extensive study of a sample of 328 eighth and ninth grade Anglo and Chicano adolescents reported a relationship between being a girl and having higher self-esteem; and between high socio- economic status and high self-esteem.

Kumari and Prakash (1986) conducted a study on a sample of 255 students (126 males and 129 females). Data were collected by information schedule, General Health Questionnaire and Life Events Scale. The results indicated that number of life event experiences were different for different age groups and males experienced less life stress than females. Thomson and Vaux (1986) found parental stress having only minimal impact on adolescent's adjustment, whereas the adolescents' stress had a significant impact on their parents' adjustment. Rutter (1986) found that the early adolescent psychopathology of stress,
depression and maladjustment were frequently associated with behaviour problems. Johnson (1986) noted the relation between negative major life events, and emotional and behavioural maladjustment in children and adolescents.

Cohen, Burt and Bjorck (1987) investigated long-term effects of negative events on young adolescents’ psychological functioning (depression, anxiety, and self esteem), the methodology being similar to Swearingen and Cohen’s (1985) but with a larger sample of 112 seventh and eighth grader boys and girls. Results revealed that girls scored significantly higher than boys on anxiety at Time 2. At time 1, seventh graders reported significantly more negative events than the eighth graders. Significant negative correlations were found between stress and self-esteem at both the occasions. Regression analysis revealed that self-esteem was a significant predictor of stress at both occasions.

Findings on adults emphasized negative events as significant predictors of psychological functioning (Williams, Ware, and Donald, 1981; Nelson and Cohen, 1983; Cohen, McGowan, Fooskas and Rore, 1984).

Compas, Davis, Forsythe, and Wagner (1987) used the Adolescent Perceived Event Scale on 658 male and female adolescents aged between 12 to 20 years. They found significant relationship of daily stressful events, to behaviour problems and psychological symptomatology. They reported that young adolescents and females perceived more stressful events than older ones and males. Their negative event scores were found significantly related with their total behavioural problems. Positive self-esteem and good behavioural and emotional adjustment significantly enhanced mood (Rosenberg, 1985; Taylor and Brown, 1988), resulted in more adaptive learning strategies in the classroom (Covington, 1989), and moderated stressful life events (DeLongis, Folkman, and Lazarus, 1988). Smith, Smoll and Ptacek (1990) noted stressful life events being associated with a variety of negative physical and psychological
outcomes. In a longitudinal study of high school students, Allgood-Merten, Lewinsohn and Hop (1990) found that self-esteem and body image accounted for the gender differences in depression. They also reported the significant relationship between self-esteem and stress. Harper and Marshall (1991) reported significant negative association between the number of problem/hassles adolescents faced and their self-esteem.

Avison and Mcalpine (1992) selected older adolescents (aged 15-20 years of which, 88.3% were 17-19 years old) to investigate the gender differences in stressful life experiences, psychosocial resources (such as mastery, social support and self-esteem) and depressive symptoms. Analyses indicated that females were more stressed and depressed and had lower level of self-esteem. Grannis (1992) found the frequency of stressors being related to external locus of control, self-reported distress and lower grade point average. Girls appraised stressors as more upsetting than boys, and received higher grade than boys, despite having comparable reading scores and the same locus of control. Price and Hooijber (1992) reported gender as a significant predictor of anxiety and age of depression. Females tended to be more anxious than males and older persons were more depressed than the younger persons. Roberts and Monroe (1992) found no gender difference in the impact of self-esteem and depression on academic pursuits.

Okayasu, Shimada, Niwa, Mori and Yatomi (1992) analysed the stressful activities in the daily life of 670 junior high school students. They found that stressful daily activities were composed of five main factors: school work, club activities, relationships with teachers, relationships with peers, and school regulations. Biggs (1992) noted negative effect of stress on students' social adaptation, personal development and academic attainment. Similarly, Felsten and Wilcox (1992) reported that reduction in stress had favourable association with adjustment and decreased anxiety (decreased symptomatology). Budheu (1993) in a
cross-cultural study found no gender differences in anxiety levels of adolescents (aged 16-18 years) in India and in United States. Das (1994) found the female college students having significantly higher stress, anxiety, mental weakness, depression and obsessive compulsiveness than the males. No significant gender differences were found in academic performance. Age was positively related to stress and education of parents was negatively related to stress.

Hartup (1995) revealed significant relationships between friendships, depression and school adjustment in a group of young adolescents. Stake, Huff, and Zand (1995) administered Rosenberg's (1989) 10-items self-esteem scale to a sample of 92 female and 78 male undergraduates. They found that after the negative events, low trait self-esteem students predicted reports of larger negative shifts in global self-evaluation, more pervasive negative shifts across areas of self evaluation, and more negative affect. After positive events high trait self-esteem predicted more positive affect. Berndt (1996) reported significant relationship between the quality of preadolescent friendship and indices of socio-emotional adjustment such as self-esteem. Karunanidhi, Nandhini, and Priscilla (1996) administered the Money Problem Checklist and self-esteem Scale to 179 adolescents; (108 boys and 71 girls) aged 14 to 16 years. Results indicated that girls perceived less number of problems and higher level of self-esteem than boys, while adjustment to schoolwork was of high concern and a more pressing problem for boys. There was a significant relationship between perceived problems and self-esteem. Adjustment to schoolwork, curriculum and teaching procedures proved to be good predictors of self-esteem in girls.

VanEck, Nicolson and Berkhof (1998) reported significant positive correlation of perceived stress with trait anxiety, chronic difficulties and negative life events. They also found significant effect of stressful daily events on mood. Shimada (1998) in a study of 1,306 junior high school students indicated four main factors underlying psychological
stress, namely, irritability and anger, depressive and anxious responses, physical responses (such as headaches, dizziness, stomachaches) and feelings of helplessness.

Dubois, Bull, Sherman and Roberts (1998) investigated global self-esteem and emotional, behavioural and academic adjustment of 213 young adolescents drawn from seventh through ninth grade students. They used the self-esteem Questionnaire (SEQ; Dubois et al. 1996) a self-report measure consisting of 42 items spread over 5 domains, and Achenbach Behaviour Checklist to assess emotional and behavioural adjustment. Higher global self-esteem was significantly associated with fewer internalizing and externalizing problems (as rated by adolescents and parents) and exhibited a positive correlation with academic achievement. Global self-esteem also correlated significantly with behavioural and emotional adjustment. Jose, Anna, Cafasso, Bryant, Chiker, Gein and Zhezmer (1998) compared self-reported intensity of stressful experiences, coping and depression between 270 Russian and 270 American early adolescents, 10 to 14 years of age. Results revealed that both Russian and American adolescents reported equal major life stress, but Russians reported greater everyday life stress and were more depressed. The important finding was of a significant positive association between stress and depression.

Arnett (1999) collected the evidence indicating the adolescents showed high rates of problem behaviours, including recklessness, norm breaking, antisocial behaviour; experienced more stress and conflicts; and tended to be more volatile emotionally than either children or adults. Fordham and Stevenson (1999) investigated associations among shyness, perceptions of friendship quality, and indices of adjustment related to internalising problems (such as, low self-esteem, loneliness and anxiety) in a group of young children (8-11 yrs. old). They found older children (10 to 11 years) perceiving their friendship to be high in terms of positive quality, and lower conflict/betrayal, and these were significantly
associated with high global self-worth and lower trait anxiety. They also reported significant links between global self-worth and other indices of adjustment (perception of social support, loneliness and anxiety). Thus, it was envisaged that the links were bi-directional and became mutually reinforcing.

Saad (1999) administered Rosenberg's self-esteem Scale to 1560 (11th and 12th grade) Israeli-Arab adolescents. The results revealed significant relationship between (a) global self-esteem and academic self-esteem, and (b) self-esteem and family and peer relations. There were no significant differences between males and females, and between the two grades on self-esteem scale.

Thus the above researches pointed out strong and consistent relationships among stress, self-esteem, adjustment, classroom behaviour and behavioural problems.

b) Academic Performance:
In an educational setting, researches strongly evidenced that deep seated anxiety, mental and physical exhaustion, depression, low self-esteem, overt conduct disorders and other behaviour problems contributed to high rate of academic failures.

Murphy (1980) found that stress having significant effect on performance but no significant interaction effect of stress and anxiety on performance. Tiwari, Morbhatt and Morbhatt (1980) administered anxiety and aspiration scales to 200 male and 200 female adolescents (mean age = 16.2 years). Results revealed that the effects of anxiety on achievement and aspiration did not differ by gender. Anxiety had a negative relationship with achievement. Contractor (1981) found significant negative correlation between examination marks and anxiety. Harris (1982) noted a direct negative impact of stress on task performance.
Jindal and Panda (1982) administered the Rosharck Test to high and low achieving students aged over 14 years. Results indicated that low achieving boys had a high level of general anxiety. Low achievers, irrespective of sex were more anxious than high achievers. Girls in general, were more anxious than boys only about things concerning their bodily function. Chadha (1982) noted the negative effects of stress on performance of university students in an attention tasks. However, the effects of stress and anxiety were independent of gender. Barnes, Potter and Feidler (1983) predicted the effect of interpersonal stress on the academic performance of 186 military cadets. The results showed that interpersonal stress generated by competing demands for attention decreased the power of intellectual ability test to predict academic performance (GPA). Findings also suggested that the cognition associated with different sources of stress played a significant role in determining the impact of stress on performance. Abrol (1983) investigated the effect of stress and anxiety on psychomotor performance of 40 high and low anxious undergraduates, under stress and non-stress conditions. Results revealed that performance under stress was significantly and adversely affected and, the performance of high anxious students was also significantly lower than the low anxious students. Sood (1983) found the high-test anxious and high stress group having poorer performance in comparison to high-test anxious - low stress group, and low-test anxious and low stress groups.

Singh, Nigam and Singh (1984) revealed that high achievers were more anxious than the low achievers. Fontana and Dovidio (1984) found negative relationship between stress (regardless of controllability), and school performance in a group of 72 male and 78 female senior high school students. Ranganathan (1987) noted negative relation between stress and academic achievement of school children. Swick (1987) found the academic experiences of college students very stressful. Mecan, Sahani, Dipboye and Phillips (1990) found somatic tension was negatively related to grade point average of adolescent undergraduate
students. Important relationships were found between perceived control of time management and self-reported performance and stress. Felsten and Wilcox (1992) reported that stress was directly related to increased symptomatology and decreased grade point average of 146 undergraduate men. They also revealed that situation specific mastery beliefs reduced appraisal of stress and were associated with better psychological adjustment. In 192 females Corr and Kumari (1998) found that low impulsive students showed better performance than high impulsive students under stressful conditions, irrespective of time of day. Thus, a majority of studies showed negative relation between stress and performance.

Self-esteem was important to educators both because it was gratifying to the students and also it aided personal development (Rosenberg 1965). Studies by Roger (1978) and Wylie (1979) showed that academic marks tended to be highly correlated to self-esteem. In a study, Reitzes and Mutran (1980) looked into the factors influencing educational expectations and academic performance. They found that back ground characteristic and expectations of significant others influenced academic performance through identity, self-esteem and self-concept.

Marsh, Smith, and Barnes (1985) reported no gender differences in academic self-esteem; but found it positively related to academic achievement. Marsh, Parker, and Barnes (1985) using responses by students in Grades 7-11 to the SDQII, reported that self-concepts for most of the SDQII scales showed a decline in Grades 7-9 and then leveled off and increased in grades 9-11. Though Skaalvik (1986) strongly suggested that boys have slightly higher general self-esteem than girls as measured by context free-instrument, yet his study of 231 sixth grade Norwegian Students revealed that girls had a substantially higher level of achievement and higher success expectations. There were no gender differences in achievement or success expectations in Mathematics or in general academic self-esteem. Self-esteem of high achievers was found to
be better than the achievers passing through remedial classes (Kinney and Mark, 1988). Renick and Harter (1989) found in a study of 86 students in grades 3 to 8 high correlations between scholastic or academic competence and global self-worth feeling.

Roberte (1990) revealed that girls had greater dependency on external evaluation than boys; therefore girls had lower self-esteem than boys. Hoge, Smit, Hanson (1990) in a longitudinal study predicted changes in self-esteem of sixth and seven grade students' school experiences. School climate, evaluation and feedback from teachers had significant effects on self-esteem.

II.5 Background and Psychosocial Variables

A number of researches both Western and Indian advocated the facilitative role of higher socio-economic background of children on their psychological well-being and academic achievement. A child from higher socio-economic background would get proper and regular encouragement, family environment with less anxieties and better facilities in comparison to a child coming from a lower socio-economic status, some of the determinants of a student's psycho-social and educational functioning (Ushasree, 1980; Shukla, 1984; Mishra, 1986; Srivastava, Singh and Thakur, 1980; Das, 1994; Krishnamacharu, 1989; Kapoor, 1990). Grossman, Wirt and Davids (1985) found a negative correlation between self-esteem and low socioeconomic status. Gore found high school males and females (N=1208) from low socio-economic backgrounds more vulnerable to a wide range of stresses and reported deficits.

❖ SUMMARY

The preceding review of research showed that despite the substantial research on vision and hearing impairment of children, any tangible and conclusive information about the type of sensory impairments which caused more disabbling feeling, manifested in stress experience, self-
esteem feelings, adjustment and behavioural problems, was not provided. The major emphasis was on students’ adjustment, schooling and intervention programmes. Researches on hearing impaired focused primarily on


- **communication and social interaction** (Antia, 1982; Feinstein, 1983; Mendelson and Rozek, 1983; Preisler, 1984; Barnum, 1984; Watkin, 1987; Mertens, 1989; Scott, Metz, Rohland, and Samar, 1989; Desselle, 1994 and Demorest and Erdman, 1998) and

- **behavioural problems** (Meadow and Schlesinger, 1971; Freeman, Malkin and Hastings, 1975; Jensema and Trybus, 1975; Kolvin, Fundudis Spuy, Tweddle, and George, 1979; Meadow and Trybus, 1979; Chess and Fernandez, 1980; Prior, Glazner, Sanson, and Debelle, 1988; Raymond and Matson, 1989; Watson, Henggeler and Whelan, 1990; Frustenberg and Doyal, 1994; van Eldic, 1994; 1997; Vostanis, Hayes, DeFue, 1997; and Vostanis Hayes and DeFue, 1997).

On the other hand, researches on visually impaired emphasized on

- **psycho-social adjustment** (Williams, 1971; Istiaq and Kamal, 1981; Qadari and Hussain, 1982; Sinha, 1982; Sastry, 1985; Teare, 1985; Tanksale, 1988; Haider, 1990; Dodds, Ferguson, Ng, Flannigan, Hawes and Yates, 1994; Beaty, 1994 and Jackson and Lawson, 1995) and

The lack of empirical evidence on behavioural and psychosocial impact of sensory impairments has resulted in inadequate knowledge about the scientific basis for the understanding of adjustment problems experienced by these adolescents. In India very few researches have been undertaken in the field of the visually and hearing impaired adolescents. Especially, the vital role played by various psychosocial variables e.g. stress, self-esteem adjustment, behaviour problems etc. to bring out differences in academic performance was virtually unexplored.

1. Since stress had been found associated with a wide variety of psychological and physical problems of children, it was of crucial importance when assessing the emotional status and academic performance of adolescents, irrespective of their impairment status. As role of stress in psychological and behavioural functioning became clearer, the relevance of studying psychosocial dynamics of academic outcomes became more compelling. Review of researches on visual and hearing-impaired students revealed that sources of stressful experiences and adjustment failures were different for two categories of sensory impaired students. Therefore, their academic performance differed. However, it was difficult to deduce whether sensory impairment affected students' perceptions of positive feelings about themselves or if psychosocial variables were significant contributors to their academic performance. Though few studies, comparing students with sensory impairment and without any impairment, tried to focus on academic performance, these did not take into account the relationship with many important psychosocial variables, like, stress, self-esteem, social-emotional adjustment, etc. and failed to provide a holistic picture of these students performance.

2. Among adolescent group class VIII and X students constituted the most sensitive groups as both of them were in a transitional phase of their academic career. Awareness about careers, social roles etc.
suddenly changed when students stepped in class VIII, the beginning of secondary education. This awareness became stronger in class X, the gateway to the job world. Studies on educational level differences in stress, self-esteem, adjustment and behavioural problems were scanty. They did not focus on students ready to face Board examination (Class X), and who were not required to sit in any Board examination (Class VIII). How these two groups differed in their stress experience, self-esteem, adjustment, was not clear. Further, whether these differences in interaction with nature of impairment and gender also affected these psychosocial variables needed to be explored.

3. Existence/non-existence of gender differences was considered as a reflection of the socialization process. However, a majority of studies on sensory impairment were restricted to the effects of impairment only. Efforts were missing on any conclusive picture regarding the academic performance of females especially, in studies on impairment. The studies, thus neglected the cruciality of gender variations.

4. The relationship between background and psychosocial variables had been explored extensively among non-impaired adolescents, however, with a little emphasis on educational level and gender variations. It correlated positively with nearly every kind of positive adaptation outcome, including health, self-esteem, adjustment, social functioning, morale and academic success (Griffith, 1996; Reynolds, Mavrogenes, Bezruczko, Hagemann, 1996) of students having no impairments, but not systematically on impaired students' psycho educational functioning. Erdman and Demorest' s (1998) study was the only perspective study on hearing-impaired, which reported little or no impact of socio-economic-status on their self-esteem. Not a single study showed relationship between background variables and psychosocial variables or academic performance in case of the visual impaired students.
5. The measurements taken in about ninety-five percent of the studies reviewed, were exclusively either self-ratings or teacher ratings or observational. To provide a more comprehensive and an integrative picture of the students' academic performance as a function of interactions of many psychosocial variables, the combination of all three types of measurements was needed.

The present study of psychosocial dynamics of academic performance of adolescents those having sensory impairments and those not having it, was an attempt to fill up above-mentioned gaps to some extent.