SUMMARY

Any impairment in auditory perception causes hearing impairment. It is the main sensory pathway through which speech and verbal communication develops. If a child hears imperfectly, he is likely to speak incorrectly. Hearing also influences learning and other aspects of maturation. Early detection of hearing impairment is important for the child’s overall development.

The main aim of education of the Hearing Impaired is the social integration into the individual’s own family, through which integration into the hearing world can be expected for the vast majority of such persons. Many hearing impaired and deaf individuals can be educated in regular schools, provided the communicative skills have been developed in time, the parents are cooperative and qualified assistance is available. There is two types of hearing loss i.e. Prelingual–deaf and post lingual-deaf. Prelingual deaf child is the one who is born with little or no hearing. His impairment is marked before speech and language pattern are acquired. Post lingual-deaf child is the one who becomes deaf owing to environmental forces. His hearing impairment is marked after he has attained speech and language pattern.

Parenting is a process that includes nourishing, protecting and guiding the child through course of development. Parent involvement is
consistently ranked high among the key components of effective schools by researchers, practitioners and policy makers and as a result is one of the brightest prospectuses for the future of public education. Parenting as the rearing of a child or children, especially the care, love and guidance given by a parent. Parenting as the style of child upbringing refers to a privilege or responsibility of mother and father, together or independently to prepare the child for society and culture use in raising their children. Parenting is a term that summarizes behavior used by the mother or father to raise a child. The parent’s role is to provide the child with a safe, secure, nurturing, loving and supportive environment, one that allows the youth to develop the knowledge, values, attitudes and behaviours necessary to become an adult, making a productive contribution to self, family, community and society. Parenting is a complex activity that includes many specific behaviours that work individually and together to influence child outcomes. Although parents may differ in how they try to control or socialize their children and the extent to which they do so, it is assumed that the primary role of all parents is to influence, teach and control their children. Parenting pattern can be classified into two categories i.e. fathering and mothering.

Cognitive stimulation is a process of utilization of planned stimuli to arouse the mental activities for learning like recognition, comprehension, memory and thinking etc. There is no doubt that a specific parenting behavior influences the development of a child, increases comfort of the child and confidence level but it also has a significant impact on stimulating the mental activities of a child. Cognitive stimulation is a system of permanent quality of motivation which draws upon neo-behavioral, cognitive and information- processing theories. It includes the instructional strategies which are used by the parents to affect the cognitive level of the children. So, that the child may not feel disheartened at a particular point of difficulty. Parents can have a major impact on children’s lives by taking an interest in the children learning
and by showing that they believe in the children. This kind of support can make the critical difference that helps children succeed in school and achieve their goals. Parents can give such support in many different ways, beginning with the child’s first years of life and continuing throughout adolescence. Parents have such a monumental influence on the development of child’s views. Parental cognitive stimulation exerts the major influence on the development of the child from birth to maturity.

Cognitive behaviorism is an attempt to combine the behavioral and cognitive perspectives into a more comprehensive theory. Cognitive behaviorists believe that the environment exerts strong effects on behavior, but that it does so through the influence of thought. In combine the cognitive and behavioral perspectives, cognitive behaviorists believe that a more comprehensive and useful conception of human behavior and its causes will emerge. The behavioral perspective stress present stimulus conditions and previous learning particularly the rewarding and punishing consequences of previous aggressive acts. Cognitive behaviorists have emphasized the importance of modeling in the learning of aggression. There is substantial evidence that viewing televised aggression can increase the tendency to behave aggressively. Cognitive Behavior Therapy is based on the idea that how we think (cognition), how we feel (emotion) and how we act (behavior) all interacts together. Specifically, our thoughts determine our feelings and our behaviour. Therefore; negative thoughts can cause us distress and result in problems. In therapy, the latter example could be identified as a self-fulfilling prophecy or problem cycle and the efforts of the therapist and client would be to work together to change this. This is done by addressing the way the client thinks in response to similar situations and by helping they think more flexibly, along with reducing their avoidance of activities. If, as results, they escape the negative thought pattern, they will already feel less depressed. They may, hopefully also
then become more active succeed more often and further reduce their depression. Cognitive behavior therapy is a kind of psychotherapy used to treat, depression, anxiety disorders, phobias, delusional disorder and other forms of mental disorder. It involves recognizing unhelpful or destructive patterns of thinking and reacting then modifying or replacing these with more realistic or helpful ones. Its practitioners hold that typically clinical depression is associated with negatively biased thinking and irrational thoughts. Characteristics Behavioral treatments are based primarily on two sets of principles (Reynolds, 1968). One set governs changes in operant behavior, or voluntary behavior, and the other govern respondent behavior or reflexive behaviour.

**Statement of the Problem**

**PARENTING, COGNITIVE STIMULATION AND COGNITIVE BEHAVIOUR OF HEARING IMPAIRED CHILDREN**

**Objectives**

The investigator formulated the following objectives keeping in mind the significance of the problem and the research work already done in the area.

1. To find out the level of cognitive behaviour of hearing impaired children and normal children of Punjab

2. To study the cognitive stimulation of hearing impaired children and normal children given by parents

3. To find out the parenting pattern of hearing impaired and normal children of Punjab
4. To explore the interactive impact of cognitive behaviour and cognitive stimulation on academic performance of hearing impaired children and normal children

5. To prepare and standardize cognitive stimulation scale for parents

6. To prepare and standardize cognitive behaviour scale for children.

**Delimitations**

1. The study was delimited to the hearing impaired and normal children of 8-12 years as the study required school going children.

2. 10 schools from the 5 districts constituted the sample as only these districts of Punjab have schools for hearing impaired children.

**Hypotheses**


2. Cognitive Stimulation given by parents to hearing impaired children is less than cognitive stimulation given to normal children.

3. Parenting of hearing impaired children are better than normal children.

4. There is no interactive effect of cognitive stimulation and cognitive behaviour on the academic performance of hearing impaired children and normal children.

**Methodology**

The study was conducted on the children who were hard of hearing and normal children and the parents of these children. Thus, it
necessitated to collect data from hearing impaired children, normal children and from the parents of these children.

The data were collected from Bathinda, Patiala, Ludhiana, Jalandhar, and Amritsar districts of Punjab, because these districts have schools for deaf children. The children who were in the age group of 8-12yrs were the respondents of the present study. The investigator selected sample of 499 children (258 normal children and 241 hearing impaired) and from 499 parents of these children. Parenting scale by Bhardwaj was used to reveal the influence of parenting. The investigator selected sample of 500 children (250 normal children and 250 hearing impaired). The data related to academic achievement of the respondents were collected from the records of the schools of the concerned children. The scores obtained by 499 children in their previous class were considered their academic achievement of that year. These percentages were further used to analyses the interactional impact of cognitive stimulation, cognitive behavior and parenting on academic performance of children.

Stratified random sampling technique was applied to collect the data. To test the significance of the variables under study, statistical techniques i.e. mean, quartiles, correlation, t-test and ANOVA was apply.

Main Findings
After applying appropriate statistical techniques, the result has been presented below;

Cognitive Behaviour of Hearing Impaired Children and Normal Children of Punjab.

Subjects were divided into three groups. The first group comprised of those subjects whose scores were 86.5 and below, the second group comprised of those subjects whose scores ranged from 87-
136; in the third group subjects having scores 137 and above were included.

It shows that 26.11 percent of normal children have poor level of cognitive behaviour, 48.50 percent have average level of cognitive behaviour and 25.37 percent of children of 8-10 have good level of cognitive behaviour whereas 9.67 percent normal children of 11-12yrs have poor level of cognitive behaviour, 39.51 percent have average level of cognitive behaviour and 50.80 percent of them have good level of cognitive behaviour. It indicates that with the increase of age, the level of cognitive behaviour also changes in case of normal children.

It has been observed that 51.49 percent hearing impaired children have poor level of cognitive behaviour, 44.77 percent have average level of cognitive behaviour and 3.73 percent of them have good level of cognitive behaviour and age group 11-12yrs, 0.93 percent of hearing impaired have poor level of cognitive behaviour, 75.70 percent of them have average level of cognitive behaviour and 23.36 percent of hearing impaired children have good level of cognitive behaviour. It also indicates that there is increase in level of cognitive behaviour with the increase in age.

The values of mean for normal children and hearing impaired children have been found to be 107.62 and 87.60 respectively and values of S.D are 32.36 and 30.78 respectively. The t-value being 2.74 has been found to be significant at 0.01 level. It indicates that there is significant difference in the cognitive behaviour of normal and hearing impaired children.

The values of mean for normal children and hearing impaired children have been found to be 135.17 and 120.51 respectively and values of S.D are 40.33 and 34.56 respectively. The t-value being 2.97 has been found to be significant at 0.01 level. It indicates that there is significant difference in the cognitive behaviour of normal and hearing impaired children. Thus, the hypothesis no 1 which states that cognitive
behaviour of hearing impaired children is poor than normal children, stands accepted. It may be concluded that hearing impaired children and normal children are differ in their cognitive behaviour in respective of their age.

Hearing impaired children are physically deficient than normal children. To overcome their deficiency, they put more efforts to cop up with the normal children that are why they involve themselves into lot of cognitive activities. Hearing impaired children spend more time on the activities which require less physical activity like working on computer. Through net they get a lot of exposure. Hearing impaired children have special schools, from where they learn according to their skill and ability and become expert in that particular area. That’s why hearing impaired children are differ from normal children.

**Cognitive Stimulation of Parents of Hearing Impaired and Normal Children**

The objective of the study was to know the level of cognitive stimulation given by parents of normal and hearing impaired children. The scores of cognitive stimulation of the parents of children were calculated. On the basis of Q1 and Q3 values, three groups to know the level of cognitive stimulation were formed i.e. low level of cognitive stimulation group (LCS), average level of cognitive stimulation group (ACS) and high level of cognitive stimulation group (HCS). The first group comprised of those subjects whose scores were 83 and below, the second group comprised of those subjects whose scores ranged from 83-131 and in the third group subjects were having scores 132 and above.

It has been found that 17.44 percent of normal children have low level of cognitive stimulation (LCS), 55.03 percent have average level of cognitive stimulation (ACS) and 22.48 percent of children
have high level of cognitive stimulation (HCS). The mean value and S.D have been found to be 106.96 and 34.06 respectively for the scores on cognitive stimulation scale.

The scores of the parents of hearing impaired children on the scale were calculated and the mean value and S.D of the cognitive stimulation scores have been found to be 105.49 and 35.44 respectively. It has been observed that 25.72 percent parents of hearing impaired children give less cognitive stimulation, 46.47 percent of them give average level of cognitive stimulation and 27.8 percent of them give high level of cognitive stimulation.

In order to find out the mean difference in the scores of cognitive stimulation of the parents of normal children and parents of hearing impaired, t-test was applied. It indicates that the mean score of cognitive stimulation of the parents of normal children is 106.96 and the parents of hearing impaired children are 105.49 and values of S.D were found to be 34.06 and 35.44 respectively. The t-value of 0.63 has been found to be insignificant at 0.05 level of significance.

It has been revealed that there is no significant difference in the cognitive stimulation of the parents of normal children and parents of hearing impaired children. Thus, in the light of the result, the hypothesis which states that cognitive stimulation given by parents to hearing impaired children is less than cognitive stimulation given to normal children, stands rejected. It may be concluded that parents of both groups have no difference in cognitive stimulation whether the child is hearing impaired or normal. Parents give equal stimulation to them.

**Parenting of Hearing Impaired Children and Normal Children**

The third objective of the study was to explore the difference in parenting of normal children and hearing impaired. Scores of parenting
variance in academic performance of hearing impaired children and normal children

The fourth objective of the study was to explore the interactive impact of cognitive behavior and cognitive stimulation on academic performance of hearing impaired children and normal children. The
values of sum of squares and mean squares between groups have been found to be 237.39 and 118.69 respectively and the value of sum of squares and mean squares among subjects have been found to be 89.52 and 44.76 respectively. The F-value being 0.77 has been found is insignificant at .05 level of significance. It revealed that there is interactive effect of cognitive stimulation and cognitive behaviour on academic performance of normal children so there is no impact of cognitive behaviour and cognitive stimulation on academic performance of normal children.

The values of sum of squares and mean squares between groups have been found to be 1902.54 and 951.27 respectively and the value of sum of squares and mean squares among subjects have been found to be 729.59 and 364.79 respectively. The F-value being 2.84 has been found is insignificant at .05 level of significance. It revealed that there is interactive effect of cognitive stimulation, cognitive behaviour and academic performance of hearing impaired children. The fourth hypothesis of the study states that there is no interactive effect of cognitive stimulation and cognitive behaviour on the academic performance of hearing impaired and normal children. The finding of the study has not supported, the said hypothesis stands rejected.

Conclusions

In view of the analysis of the data of the present study, the following conclusions have been drawn.

1. 26.11% normal children have poor cognitive behaviour of group 8-10yrs, where as 51.49% hearing impaired children have poor level of cognitive behaviour of the same group.
2. 25.37% normal children have good cognitive behaviour of group 8-10yrs where as 3.73% hearing impaired children have good level of cognitive behaviour of the same group.
3. 9.67% normal children have poor cognitive behaviour of the children of 11-12yrs but 0.93% hearing impaired children have poor level of cognitive behaviour of the same group of children.

4. Good cognitive behavior has been found in 50.80% normal children of group 11-12yrs of age where as only 23.36% hearing impaired children have good level of cognitive behaviour of the same group.

5. There is significant difference in cognitive behaviour of both groups of normal children and hearing impaired children.

6. It has been explored that 17.44% of parents of the normal children provide low level of cognitive stimulation but 25.72% parents of the hearing impaired children exhibit low level of cognitive stimulation.

7. The study revealed that 22.48% of parents of normal children give high level of cognitive stimulation where as 27.8% parents of the hearing impaired children provide high level of cognitive stimulation.

8. No significant difference exists between the cognitive stimulation provided by the parents of normal children and the parents of hearing impaired children.

9. There is no significant difference in the parenting pattern of hearing impaired children and of normal children.

10. No significant interactive impact of cognitive behaviour and cognitive stimulation on academic performance of hearing impaired children and normal children.

**Suggestions**

1. Such type of study can be conducted on adolescent.
2. Other factors like physical, emotional, social and religious should be explored among different type.
3. It is suggested that case studies of suffering parents should be conducted of exceptional children.
4. The studies on emotional aspects of the parents of special children are needed to be conducted.
5. The studies on social deprivation and emotional violence of handicapped should be a big concern of the researchers.

**Implications**

1. There should be counseling cells to render special help to the affected parents.
2. Government should provide free adequate educational and other facilities to hearing impaired children.
3. Special learning package should be prepared so that education can be imparted to these children effectively.
4. Parents should be educated about the care giving aspect of their children.
5. Counselling regarding economic opportunities should be given to such children and their parents.
6. Parents are to be made aware regarding new innovations related to the benefit of special children to lead a normal life.