NORMATIZATION OF SCALE OF EARLY COMMUNICATION SKILLS FOR THE HEARING IMPAIRED ON INDIAN POPULATION

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DISSERTATION SUBMITTED AS PART FULFILMENT FOR THE SECOND YEAR M Sc. (SPEECH AND HEARING) TO THE UNIVERSITY OF MYSORE ALL INDIA INSTITUTE OF SPEECH AND HEARING, MYSORE - 6

1993

To My

BAPU, MUMMY, JOE AND RAJU

For being the pillars of my strength

CERTIFICATE

This is to certify that the Dissertation entitiled 'Normatization Of Scales Of Early Communication Skills For The Hearing Impaired On Indian Population" is bonafide work, done in part fulfilment for the second year degree of Master of Science (Speech and Hearing) of the student with Reg. No. M9123.

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DECLARATION

I hereby declare that this Dissertion entitled 'Normatization Of Scales Of Early Communication Skills For The Hearing impaired On Indian Population' is the result of my own study under the guidance of Dr. (Mrs.) Prathiba Karanth Prof. and H. O. D. of Speech Pathology, All India Institute Of Speech And Hearing, Mysore, and has not been submitted earlier at any University for any other Diploma or Degree.

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1993

ACKNOWLEDGEMENTS

My sincere thanks to my Guide Dr. (Mrs.) Prathiba Karanth, Prof. and H.O.D. of Speech Pathology, A.I.I.S.H., for the able guidance, excellent supervision and understanding my 'short forms' along with the illegible writing

Thanks to Dr. (Miss.) S. Nikam, Director, A.I.I.S.H., for permitting me to conduct this study.

Thanks to Mrs. Indira Prakash, Mrs. Prema, and Mrs. Geetha for helping me to find the schools for the study.

Thanks to Mr. Premkumar and Mr. Gururaj for helping me to sort out the files.

Thanks to the TINYTOTS and OLDER CHILDREN for patiently and joyfully have having undertaken the tasks given to them.

Thanks to Mr. Chandra and Mr. Balaraju for helping me with the translations.

Mrs. Usha K. R., thanks a lot to you to appear at the last but the right scene to sort out my confusions and puttting them in order.

Thanks to The Liberarian, Mr. Govindarajan and his staff, especially to Mr. Ramesh Babu for helping me to guide to the right books.

I am at loss of words for you, My Bhayyaji, for everything you have done for me. My only prayer is let God always be with you.

Dear Sheebs, thanks a lot for penning me a few words of encourgagement and support when I really needed them.

Kiran, Prema and Mahesh - thanks for your bubbly jokes which kept my spirits high and tight even when I was depressed.

Thanks to all my Class Mates, especially to Sanyo, Joth, Bhu C. S., Patro and Santosh for wishing me success.

Murali and Hari - thanks for being GREAT PALS.

The three Masquateers - Animesh, Suresh and Krishna - Thanks for keeping my moods alert.

Bapu, Mummy, Joe and Raju - you all mean a lot to me. Thank you for being there whenever I needed you.

Thanks to The Institute Center for Computer Studies and specially to Mr. Mohan Krishna C. for the neat and speedy typing in a short span of time.

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INTRODUCTION

The art of communication has metamorphosised from one species to the other and from one generation to another. From smoke signals to coded messages we now talk in terms of 'bits' and 'bytes'. The same has been true for the verbal language system. Caveman communicated using differential "cries", while the neolithicman became more socialized and formed rudimentary speech. The modren man has become more sophisticated and civilized with the complex use of language.

The acquisituin of verbal language begins from the birth cry of the child and continues up to the pre-teen years. Thus, it acquires its first language in several stages namely, the prevenbal stage, single word, 2 word-, 3 word-, refinement - & complex-structure formulations, until it reachs the stature of adult like language at 8 to 9 year of age.

Verbal language acquired in the early childhood years provide the formulation for all later language development. Any interference with the development of the foundation, will interfere with all subsequent learning processes. Thus early language development is highly influenced by parent-child interactions. Variables such as a normal child born to deaf parents a deaf child born to normal hearing parents or a deaf child born to deaf parents, early identification, extent intervention & use of amplification system, all contribute to cognitive development of a child. This is especially so in hearing impaired children.

Deafness cannot be described as a language disorder in the same way as for e.g. developmental dysphasia or dyslexia, since deaf children (unless they have additional difficulties) have no intrinsic impairment in their language tearing abilities. Neither can deafness be described as a speech disorder. Since a deaf child's speech mechanism is unimapired and the difficulties cannot be equated with those of children who have orofacial anomalies or dysarthria. Their only impairment is a sensory one & yet this influences all the levels of language.

To some extent the way in which the language of deaf children is described - whether phonetic, phonological, syntactic, semantic or pragmatic terms are used - depends on the theory of normal language acquisition that is held and on whether it is assumed that the deaf children do infact acquire language in the same way as hearing childern do. Whatever the theory of language acquisition there is little doubt that children have to experience language in their environment before speech is acquired.

A number of important variables influence the child's early linguistic experiences in the family e.g., the parents of the child may or may not know of the deafness at an early stage. If early diagnosis has taken place, further variables include the professional intervention and the usefulness of sound amplification to the child.

Approximately 1 in 20 deaf children are born to deaf parents (Wall and Lawson, 1980) and their early experiences are very different from those of the deaf child born into a hearing

family. The deaf parents are unlikely to experience the mourning, grieving, sense of toss, denial, guilt, possible rejection and anxiety for their deaf child, (Mundel & Feldman 1987) that hearing parents may undergo when learning their child is deaf.

Research (Gregory & Mogford 1981) suggests that hearing parents do in fact alter their behaviour towards their deaf infants. There is tendency for the hearing individuals to produce exaggerated & distorted speech patterns when talking to a deaf child. The child may thus be deprived of normal auditory & visual models of speech production.

Wood et al (1986) Found that adults behaviour towards the is likely to be based on what the child can express, negotiate & communicated, without taking into account what the child knows, thinks & feels. The result is that the normal processes of adult child communication & interaction are restricted.

There is a small portion of deaf children who are born to deaf parents who use sign language. These children have the opportunity to acquire sign language in infancy & early childhood through a similar natural process to that of spoken language acquisition.

Brasel & Quigley (1977) Reported that deaf children of British sign language using deaf parents generally develop linguistic skills in English which are superior to those of deaf children of hearing parents. The nature of the linguistic experience provided by the educational environment has an important influence on the language development. Thus, qualified teachers, a well equiped set up & the mode of teaching goes a long way in providing the hearing impaired child with a conducive learning environment.

Mow, the question arises whether we are justified in using a test standardized on hearing population when actually there are many variables, as we have seen above, affecting the language acquisition abilities of the hearing impaired child. It is important to be able to compare the language level of a hearing impaired child not only with his normal peer but also with a hearing impaired child from his socio cultural background, both for purposes of assessment and rehabilitation.

REVIEW OF LITERATURE

The vehicle of language in all its existance is the ultimate expression of human communication. Structuralistic approach, Naturalistic and Pragmatic approach are just some of the theories of language acquisition developed through the years.

For those who are deprived of normal language development, indeed this human tool is not to be taken for granted. To help them realize the tremendous potential of speech & language aspects of language development before plunging into the necessities of language assessment in general and assessment of the language of the hearing impaired in particular.

NORMAL LANGUAGE DEVELOPMENT :

Studies on child language acquisition reveal that the child goes through various stages until the development of adequate speech & language.

These stage include :-

- 1. Freverbal Stage
- 2. Single-Word Stage
- 3. Two-Word Stage
- 4. Three-Word Stage
- 5. Refinement Stage
- 6. Complex Form Stage

PREVERBAL STAGE (0 - 10 mths)

The preverbal infant operate primarily as a social being strongly concerned about his comforts, (Kretschmer .R. R. Jr. &

Kretschmer .L.W, 1978). It has been suggested that during the preverbal stage the child is learning about segments that tend to concentrate around syllabic differentiations.

Although there are some indications that children learn the general rote of stress and intonational patterns rather early there is also evidence to suggest that complete mastery of intonational system is not accomplished until children much older. During the preverbal period, according to (Bates 1976) the child develops elementary knowledge an οf performatives, propositions and persupposition, but this knowledge exists only at the sensorymotor level, as defined in piagetian terms.

Vocalization of infants during the preverbal stage, if viewed as speech practice and not language practice can be seen as strikingly similar to the speech of older children.

SINGLE WORD STAGE: (10 - 24 mths)

From the preverbal stage the child moves into a period of speaking almost entirely in single words. Huttenlocher (1974) reports that early meaning acquisition to focus on proper names. The child's semantic fields seem to parallel those found in adults, but the basis upon which such categories are organized do not seem to be the same as for adults.

The single-word stage can be seen as the period extending from development of basic concepts such as, existance, non-existence & recurrence sophisticated usage, including experiencer, possersor and stative-locations.

TWO-WORD STAGE: (24 - 42MTHS)

This stage can be seen as a continuation from the single-word stage. It is during the two-word that the child begins to combine the semantic notions developed during the single-word stage into meaningful relations. The child proceeds from simple semantic concepts such as functional relations to more complex concepts embodied by so-called grammatical relations, whether use of two-word combinations rejects genuine systematic understanding is still subject to considerable debate. [Kretschmer R.R. Jr., Kretschmer .L.W (1978)].

REFINEMENT & COMPLEX SENTENCE DEVELOPMENT-THREE WORD & BEYOND (42 MTHS & BEYOND)

Children who have passed through the two word stage may begin to adhere rigidly to N-V-N word order in their comprehension of utterances, even when it seems inappropriate as in passive like constructions (deVililliers & deVilliers, 1972). This rigidity in comprehension is interpreted by researchers as the over learning of a syntactic rule that had not been used with great certainty during the two word stage.

As the child moves into & beyond the three word stage, he begins to work on both linguistic refinement & linguistic complexity. Refinements are defined as linguistic units that semantically explicate basic linguistic relations. The process is brought about by imitation & modality refinement. Complex sentence operations might develop simultaneously or slightly after initiation of refinement of basic modes within the deep structure. This child begins to develop complex operations such as co-

ordination, relativization and complementation. It can thus be seen that the process is not one day's job but repeated attempts of the child with improvement at every stage and each stage developing on the previous one.

But, how do we know at what level a child is when he is brought to our clinics? For this we need to make use of the language assessment tools.

IMPORTANCE OF LANGUAGE ASSESSMENT

Language assessment is an important but complicated process. Complicated because of the difficulty in adequately evaluating many aspects of language performance, or determining whether the sample of behavior any relationship to a child's generally demonstrated capabilities or not.

The type of sample desired depends upon the specific purpose of the test. Tests are generally designed to accomplish one or both of the following goals:-

- 1. Rank individuals: In using these tests the examiner compares the score of a given child with the scores of other children who have taken the test & determine where that child's scores falls within the distribution of scores. For e.g. Norm-referenced tests.
- 2. Describe regularities of performance.

It has many instances of a specified type of behaviors the goal of identifying the specific behaviors the child does or does not possess. The interest in these tests is not how the child ranks relative to a group children, rather the question is whether or not the child knows the specific objectives that the tester has chosen to be important to know. For e.g. :- Criterion referenced tests.

According to Patrica (1991) the needs for language assessment are as follows :-

In comparative outcome research it maybe essential to comfort for language level across the groups studies in order adequately to investigate the influence of other factor on development.

In Experimental research involving different group of subjects, frequent language ability to be taken into account in the interpretation of findings.

In Evaluative studies of therapeutic effects necessitated the adequate matching of groups prior to treatment as well as valid outcome measures to document the effects of treatment.

For clinical purposes early and reliable identification of children with language impairment is important.

TRENDS IN ASSESSMENT LANGUAGE DEVELOPMENT

The diversity of tests reflects the variety of approaches one may take to the study of Language development.

As concepts of theories of Language involve, the tools available to clinicians change accordingly bearing testimony to the fact that the clinical practice of speech Language patterns are interwinied with basic developments in theory and research.

Some 30 to 40 years ago, when Language was defined primarily in terms of count and tally proceeds, diagnostic tests consisted mainly of phoneme and vocabulary counts, measures of the length and number of utterances and various type - token ratios.

e.g. :- Test of Language Development - Darley

In 1950's there were two approaches to Language necessity. Firstly the normative approach as taken by Johnson and Spriesterbach (1952). Their emphasis was on how normal children of different ages performed on measures such as mean sentence length in words, rate of speech used, sentence structure and ratings verbal output. The second approach was pathology, based cm a medical model, the goals of assessment were to identify the "disease" underlying cause of the persuarating symptoms. Disordered language was viewed as one of a clusters of symptom that could lead the clinician to diagnosing the problem.

E.g. :- Assessment of Auditory disorders in children

myklebust (1965).

The decade of 1960's brought new trends in language assessment, impact of behaviouristic movement shifted the emphasis from deviant language behavior as a symptom of an underlying to a view that the disordered language itself was the problem.

For e.g.:- Illinoise Test Of Psycholinguistic Abilities - Kirk and McCarthy(1981)

The auditory language processing framework grew out of the behavior and presented a view that language processing begins with the stimulus and proceeds two various steps until it is stored in memory. Thus, the test batteries or specific tests have been designed to test child's audinory processing abilities.

For e.g. :- Test of auditory comprehension of language - Carrow & wool folk (1973).

Late in 1960's due to the influence of Chomsky's view of the nature of language the test focus changed from words of phonemes to focus on sentence as the fundamental unit. They also attempted to probe the child's understanding and use of the grammatical rule systems. This lead to inguistic approach to language assessment.

For e.g. :- Bochem's Test of Basic Concepts - Bochem (1971)

Carrow's Elicited Language Inventory - Carrow (1974)

Developmental Analysis of Sentences- Leel (1974)

Northwestern Syntax Screening Test - Leel (1971)

Linguistic analyses of children's phonology, morphology and syntax have led the research away from the behavior way of thinking to a more Mentalistic approach, that is, we are no longer talking about language as made up of responses pulled from represented repertoire. We know talk about linguistic rules which children and adults use to understand and produce language. This brings the emergence of language to the semantic emphasis.

For e.g. :- Bankson's Language Screening Test - Bankson (1977).

In this same time, as result of focus on semantics, there was a renewed interest in Piaget's congitive theory, leading to a cognitive emphasis in assessment. The focus became one which asked whether the language impaired child had the necessary prerequisite cognitive knowledge for language learning. This type of assessment can be used with non-verbal children who cannot be assessed by procedures built on linguistic structure models. Language pathology reasoned that if normal children expressed a given set of interests as different stages in their development, we need to find out, whether language impaired children also express them.

For e.g. Scale For Early Communication Skills. Jean .S. Moog and Ann .V. Green.

The approaches to assessment were based on the various aspects of interaction.

For e.g. :- Talking to Children : Ferguron and Snon (1977)

A second perspective to emerge in 1980's was one which examined language in terms of its event contexts. For e.g. Duchman (1988) and Land and Rucha (1988) opined that the selection of language assessment instrument should be guided by the assessment questions we are asking for: The probable questions are :- a) Does this child have a language problem? b) What is causing the problem? c) Vhat are the regularities in the child's language performance? d) Vhat are the areas of deficit? e) Mhat is recommended for this child?

EFFECTS OF HEARING LOSS ON COMMUNICATION

The sequential development of language skills in normal children is typically, first listening, speaking, then reading & writing.

It must be recognised that there are numerous variables which influence the development of language by hearing impaired individuals & those with normal hearing. The impaired may often have poorer vocabulary than normal and they may show a general lag in academic progress. (Goetzinger, 1962).

Perhaps the most devasting influence of the hearing loss is for individuals is, the social influence and its effect on the individual's personality. Additional factors which influence language development of hearing impaired children include the hearing of parents, intelligence, psychological adjustment and preferred mode of communication.

The profoundly and severely deaf children of average intelligence, as a result of difficulty in comprehension and expressing language, suffer from severe academic retardation. (Quigley and Kreschmer, 1982) The effects of milder hearing acquired at an early age have resulted in a condition described as "Minimal auditory deficiency" which is characterized by learning language problems. The effect of middle ear problems on the acquisition that due to the experience auditory sequential memory, reading and other related language skills (Katz, 1985)

LANGUAGE ACQUISITION IN THE HEARING IMPAIRED CHILDREN

The bulk of early literature on Language acquisition and development in hearing impaired children deals with early language acquisition, emphasizing the effects of preschool experiences of hearing impaired children or the linguistive performance of order deaf children. However with the development of better tools for measurement of language the studies were conducted on the phonology, syntax and semantics.

Heider and Heider (1940), reported that the total number of words used by deaf is similar to hearing poems in the written composition and less in the spoken Language (Brammon, 1968). The frequency with which different classes of words are used also differed from the hearing children.

It was found that the language used in the structured was different from that of unstructured. When the sentences were elicited, the deaf tended to use a greater proportion of nouns, verbs and articles in the utterances and very few adverbs, pronouns, prepositions and question forms (Bramman, 1968). In the less structured samples, articles and main verbs (particularly the verb to be) are also omitted (Taylor, 1969).

Majority of the studies paint that the syntax used by the deaf is different from that used by hearing press only one study conducted by Hess (1972) found no difference behavior hearing

impaired & their peers are the syntactic's development (Quigley et at, 1976) compared the syntactic knowledge of deaf children aged 10 to 18 yrs and found that the syntax develops similarly for the deaf but at a greatly retarded rate.

The average sentence length is shorter for deaf children that for their hearing peers; fever compound and complex sentences are used and sterobyge caxier phrases & sentences frames are common (Simmons, 1962). Blanton (1968) concluded that deaf individuals (1) have excellent visual memory but do not use syntax as do the hearing individuals to aid in usual memory of sentences, (2) Know sentence frames & can determine the form class that should be inserted in a sentences paw, but do not understand, the use of meaning of specific words.

Ιt can be conctuded that the sentence structure and vocabulary are stereotypical! and include many grammatical errors. Deaf children may know what they need to know about objects in the word & many know how to interact with others events in order to communicate, but they may not know the conventional used for communication in their community. In other words, it appears the the deaf children do learn something of the language as it is written, but possibly do not learn language as a vehicle for coding content or for a particular use.

ASSESSMENT LANGUAGE OF HEARING IMPAIRED

Historically, informal techniques were used by teachers of the deaf to assess the language of their hearing impaired students with little consistency with in or across programs.

The Severely delayed language and communication skills of many prelingualy hearing impaired children, the absence of available language instruments designed for and standardized on the hearing impaired and the lack if training language assessment technique and procedures by teacher and professionals dealing with deaf contributed to the minimal use of formalized assessment procedure with the hearing impaired children.

Behavioral difficulted ranked second with problems such as hyperactivity, attention span and motivational difficulties (Abrahman 1985).

The most often used approaches to the language assessment however can be categorized as involving the use of norm-referenced test or informal descriptive assessment as have already been mentioned.

The Scale Of Early Communication Skills For Hearing Impaired (Jean .S. Moog and Aun .V. Green, 1975) are designed to evaluate speech and language development of the hearing impaired children between the ages 2 to 8 yrs 11 mths. The instrument is divided

into 4 scales - Receptive Language Skills (RLS), Expressive Language Skills (ELS), Nonverbal Expressive Skills (NES) and Nonverbal Receptive Skills (NRS). The scale is completed by the child's teacher or a person who knows to evaluate language.

There are two levels of items for the receptive and expressive skills. 'A' level items describe the use of skill within a structured situation, while 'B' level items represent the use of the skill in a spontaneous manner. The items are scored independent of each other. Each item must receive on of the following ratings:-

- + Child demonstrates the skill enough to indicated that he
 is capable of performing at that level. The child must
 demonstrate facility with the skill in several instances.
- + Child has demonstrated the skill on occasions often enough to indicate that it may be emerging, but not sufficiently often to fulfill the criteria necessary for being rated at this level.

Child does not demonstrates the skill or it has occurred only by accident.

The receptive scale is designed to provide a device for observing and recording in a consistent manner a behavioral description of the level at which the child is comprehending speech. The five major levels represent steps in the acquistion of receptive language skills which could also be used as guidelines teaching.

The expressive scale is designed to provide a device for observing and recording in a consistent manner a behavioral description of the level at which the child initated speech and spontaneously uses speech for communicating. The nine major levels represent steps in the acquisition of expressive language skills which could be used as guidelines for teaching.

The Nonverbal receptive scale enables the teacher to describe the extent to which the child makes use of nonverbal cues in comprehending what is said to him. A child's ability to respond to nonverbal cues is a valuable tool in his learning to understand speech. As the child acquires the skill of comprehending words, combining this skill with the ability to effectively use gestues and situational cues is essential in order to function adequately in the talking community.

Nonverbal expressive skills enables The the teacher to the extent to which the child uses nonverbal cues describe and for making himself understood. For the child who is gestunes not or not talking very much, the ability to use nonverbal talking, and cues to supplement his vocalizations and words he knows is necessary in order to communicate effectively. The child's skill in making himself understood may serve to motivate him to learn to talk more.

The test was standardized on 372 hearing impaired children. Most of them were enrolled in classes for the hearing impaired. The validity was found to be good and reliability was found to range from 0.76 to 0.91.

The SECS has been normalized on the western population since, this cannot be applied directly on the Indian population there is a need of a normative sample on the hearing impaired in India.

In India's few attempts have been made to test the language ability of the hearing impaired children.

3D LAT & HARD OF HEARING

Developed by Usha K.R. (1986) this test explores the performance of 28 hearing impaired children on 3D LAT. age group considered was 18 - 36 mths. The results indicated that when a comparison was made with the data collected on normal (Geetha .H, 1984) the hearing impaired children on the three dimensions showed very poor performance on the items for both with in age groups and across the reception, age groups between expression and cognition the results showed that the latter was better that the former. On the cognitive items, greater variability was seen in general as compared to the normal The hard or hearing children performed better children. on the cognitive dimension than on the Receptive and Expressive scales, supporting the notion of cognitive development is free oflinguistic development, at least in the early years. When the scores on all the three dimensions were compared on the basis οf non-verbal performance, subjects were found to perform better on the Receptive and Cognitive items than on the Expressive items. On the verbal scale, a good correlation in the positive direction was seen for cognition. A poor correlation was seen in the positive direction for expression. On the nonverbal scale, a good correlation was seen in the positive direction for a!i the three dimensions in the case of hard hearing impaired.

NEED FOR THE STUDY

Just as we would not compare the performance of a child speaking French to the norms of English speakers, we cannot use the performance of a dissimilar geographic or social group to judge the normalcy of a child.

The standardized population generally does not include individuals who deviate from the "typical" in anyway. If the clinician is seeking a test determine ranking for a particular child, it is important to choose one which was standardized with a population similar in cultural background of the child.

It has been seen that typically there are several behaviors, reported to be normal at each age level. The language acquisition hearing impaired has been reported to be different from his peers with normal hearing so, an individual child should be observed or directed to perform these behaviors and then scored accordingly to which age group his or her score is closest to.

In the same manner for arual rehabilitation of the hearing impaired a standardized sample on the hearing impaired poputation needs to be constructed. An attempt is made in this study towards that direction. Such an adaptation Would help in comparing the Indian hearing impaired child with his peers rather than English speaking children.

This would lend the test to be used along with other standardized tests on the Indian poputation.

It could also be used in schools, clinics and either educational centers for the benefit of the hearing impaired children.

CURRENT STUDY

METHODOLOGY

The present study is intended to provide a normative measurement of SECS that could be used for the hearing impaired children of India.

In the process of obtaining this, the original SECS was first translated into Kannada and Telugu. The procedures for administration & scoring were similar to that used in the original scale. In the analysis the percentile ranks & z scores were obtained.

TRANSLATION OF ORIGINAL FORMAT INTO KANNADA AND TELUGU

The original SECS is in English, which cannot be directly applied for the Indian population. This test was hence translated into Kannada & Telugu since the data was collected from Mysore & Hyderabad respectively. This translation would also benefit the teachers and or mothers who helped in the data collection.

The translations were done by the senior clinicians, who are well versed with Kannada & Telugu. The formats are given in Appendix - A & B respectively. The english test format has been enclosed in Appendix - C.

ADMINISTRATION OF THE ADAPTED SCALES

The SECS was administrated using the format as described in the original scale. The subjects were required to point to or give a verbal response to questions.

SUBJECT SELECTION

Hard of hearing children ranging from 2 years to 8 years, 11 months were selected as the subjects of this study.

The criteria for selection was :-

- 1) The child should have congenital hearing impairment before the development of speech & language.
- 2) The degree of toss may range from Moderate to profound.
- 3) The child should not have any other associated problems.
- 4) He/She should have normal developmental milestones.
- 5) Mother tongue or language used by the child was not used as a criterion.

All 76 subjects included in the study wore hearing aids, from at least 6 months prior to the day of testing. In the lowest age group however 4 months criteria was considered. Hearing evaluation was done using conventional methods, however for the lower age groups behavioral observation audiometry or conditioning was done.

The subjects were selected from :-

- 1) Hellen Keller School for the deaf, Mysore
- 2) Hyderabad Special School, Hyderabad.
- 3) N.K. Gyanappayya Rotary school for physically handicapped, Sakleshpur.

The distribution of children according to age groups is given in the Table A. The mean & standard deviations of hearing levels has been presented in Table - B.

-3.2TABLE A
DISTRIBUTION OF SUBJECTS

AGE GROUP	MALES	FEMALES	TOTAL
2.0 TO 2.11	5	5	10
3.0 TO 3.11	4	6	10
4.0 TO 4.11	4	6	10
5.0 TO 5.11	7	5	12
6.0 TO 6.11	8	5	13
7.0 TO 7.11	7	4	11
8.0 TO 8.11	5	5	10

TABLE B

AVERAGE HEARING LEVELS OF SUBJECTS

AGE GROUP	<u>N</u>	HEARING	HEARING LEVEL*			
	-	MEAN	STD DEVIATION			
2.0 TO 2.11	10	83.99	4.42			
3.0 TO 3.11	10	84.64	3.21			
4.0 TO 4.11	10	90.18	7.79			
5.0 TO 5.11	12	90.00	7.94			
6.0 TO 6.11	13	80.53	7.63			
7.0 TO 7.11	11	90.1	6.68			
8.0 TO 8.11	10	96.36	11.77			

(* - Includes speech frequency average (500, 1000 & 2000 Hz) in the better ear. For the younger age group the hearing level was obtained by Behaviour Observation Audiometry or Conditioning.)

TEST PROCEDURE

Each child accompanied by mother and /or teacher was tested in a quiet room free from distractions. Instructions given to the children were as follows :-

" I am going to ask you to show me some pictures. Point to them when I name them. Next I will tell a sentence & you should repeat after me, shall we start *.

The mother and teacher were given the translated test format and were asked to go through it. They were then explained the procedure for scoring. These ratings formed the 'B' score of the scale. The examiner's ratings constituted the 'A' score.

Children were evaluated on four dimensions.

- 1) Receptive language skills
- 2) Expressive language skills
- 3) Nonverbal receptive language skills
- 4) Nonverbal expressive language skills.

SCORING THE DATA

Each item would receive one of the following ratings.

- + Child demonstrates the skill sufficiently to indicate that
 he is capable of performing at that level. The child must
 demonstrate facility with the skill in several instances.
- <u>+</u> Child has demonstated the skill on occasion; often enough to indicate that it may be emerging but not sufficiently often to fulfill the criteria necessary for being rated at this level.

Child has not demonstrated the skill or it has occured only by accident.

Depending on the age of the child the time taken for evalution varied from 6min - 14 min. The data for the entire sample was collected over a span of 3 months.

Responses marked as '+' received one point; 1/2 point to each '+' rating while, o for '-' was given.

These points were added to obtain the raw scores for :-

Receptive skills

Receptive 'A' scale

'B' scale

combined receptive (A + B + non verbal receptive).

Expressive skills

Expressive 'A' scale

combined 'B' scale

Expressive (A + B + nonverbal expressive)

The 'A' scale & 'B' scale have been rated independently. A '+' rating would always proceed a ' \pm ' or '-' since the items have an heirarchical order.

ANALYSIS

The raw scores of each scale were considered to calculate the mean and standard deviations. These were then converted into percentile ranks & standard scores.

CALCULATION OF PERCENTILE RANK

The raw score was first rank ordered. The cumulative frequency and percentile ranks were then calculated & tabulated.

CALCULATION OF STANDARD SCORES

The z scores were first obtained by subtracting the mean value for the age group from each scale and dividing the result by the standard deviation for the age groups. These z scores were then converted into standard scores with a mean of 50 and standard deviation of 10.

RESULTS AND DISCUSSION

Age Group	VERBAL			Nonverbal		Combined		
	Receptive		Experts i ve					
	А	В	А	В	R	E	R	E
2 - 2.11	3.0	2.5	2.8	2.8	1.8	1.6	7.5	7.3
3 - 3.11	3.5	3.3	4.4	3.9	2.3	1.9	8.9	10.2
4 - 4.11	4.0	3.6	4.5	4.4	2.5	2.4	9.9	11.4
5 - 5.11	4.1	4.2	5.8	5.2	2.4	1.9	10.4	13.5
6 - 6.11	4.6	4.5	6.6	6.2	2.4	1.8	11.5	15.0
7 - 7.11	3.9	4.2	4.6	4.4	2.5	2.5	10.2	11.5
8 - 8.11	4.3	4.3	5.2	5.2	2.8	2.8	11.4	13.4
-								

As can be seen in table 1 the combined expressive scores than combined receptive scores on the verbal However such a discrepancy is not seen in the nonverbal which match both on the receptive and expressive aspects, with receptive being slightly better than expressive. Literature on the normal hearing children shows that parents and people attending to the child tend to use both verbal and nonverbal communication with But as the child grows older, they move from both to the verbal mode. With in the verbal mode, the child focus on generally has better comprehension than expression i.e., he learns comprehend the meaning of a word before he learns to use himself, thus the reception is better than expression. The this study contradicts this general trend. A of look the summary table indicates that these children have better expressive scores than receptive scores. This finding can be attributed to teaching strategies used for the children tested in this study. Here the stress was more on the reading and writing abilities the child, as a result of which the child developed better inner language. In contrast their ability to listen to others and comprehend what is said to them is poorer. This is apparently to inadequate generalization of speech reading abilities.

Similar observation has been made by Usha K. R. (1986) in her study on the performance of the hearing impaired on 3D LAT, where she too has observed better expressive and cognitive scores as compared to the receptive.

Another interesting finding of this study was that among the receptive and expressive skills on structured items 'A' and

unstructured items 'B' the performance was different. The structured situation elicited better responses than the natural ones. The reason could be that in the strucutred mode the cues are readly available where as in the unstructured situation the cues need to be picked up by the child from the environment. The hearing impaired child seems, unable to differentiate between the relevant and irrelevant cues in the environment and selectivity respond to the approriate ones. This aspect sheds light on the inadequacy of generalization of teaching strategies or therapentic goals to the day to day communication of the hearing impaired.

finding consistent with the literature was t.hat. the performance on the verbal scale was poorer than that of nonverbal among all the age groups. The difference between the verbal skills, however, was found to be greater for the nonverbal age group, as compared to the younger ones. This difference attributed to the difficulty in processing the verbal stimuli the hearing impaired children. Hence the gap between among verbal and nonverbal increases. A good correlation was seen in the positive direction on the nonverbal scale, on all the three dimensions of reception, expression and cognition by Usha (1986). She points out that since the nonverbal behaviour is close that in normals, this alternate mode of communocation should also be given due consideration in rehabilitation.

In comparing the normative data of the original scale with that of the Indian the following observations have been made. As in the original scale the higher age group obtained higher scores that the lower age group in all aspects. These acan be seen from the tables 2, 3, 4 and 5. Table 2 gives the percentile rank and standard scores on the receptive skills, while 3 gives that of the expressive scores. Tables 4 and 5 show the combined receptive and expressive scores respectively.

TABLE 2

RECEPTIVE LANGUAGE SKILLS

PERCENTILE RANKS (PR) AND STANDARD SCORES (SS)

Raw Score	A Sc PR	ale SS	B S PR	cale SS
5.0	100	56.2	100	93
4.5	100	54.6	100	85
4.0	100	53.1	100	77
3.5	80	51.5	100	69
3.0	70	50	80	60
2.5	40	48.5	60	52
2.0	10	46.9	30	44
1.5	0	45.4	0	36
1.0	0	43.8	0	22
0.5	0	42.2	0	17

AGE 3.0 TO 3.11 [1 B]

	ĸ			
	"A" S	CALE	"B" :	SCALE
Raw Score	PR	SS	RR	SS
5.0	100	75.6	100	68.8
4.5	90	69.0	90	63.3
4.0	90	62.5	90	57.7
3.5	8 0	55.9	70	52.2
3.0	40	49.35	40	46.7
2.5	30	42.7	30	41.2
2.0	0	36.2	20	35.6
1.5	0	29.7	0	30
1.0	0	23.1	0	24.5
0.5	0	16.5	0	8.9

AGE 4.0 TO 4.11 [1 C]

R				
	"A" S	CALE	"B" ;	SCALE
Raw Score	PR	SS	RR	SS
3.0	100	61.4	100	69.2
4.5	100	55.4	100	62.1
4.0	60	50.6	8 0	55.0
3.5	40	43.4	40	47.86
3.0	30	37.4	30	40.72
2.5	20	31.4	20	33.6
2.0	0	25.4	0	26.5
1.5	0	20	0	19.2
1.0	0	13.3	0	12.2
0.5	0	7.3	0	5.0

AGE 5.0 TO 5.11 [1 D]

" A " SCALE "B" SCALE Raw Score PR SS RR SS 5.0 100 100 62.8 61.4 4.5 67 55.7 67 53.9 4.0 67 48.6 67 52.6 3.5 41.5 42 50 40.8 3.0 8 34.3 8 34.3 2.5 0 0 27.1 27.2 2.0 0 20.0 0 21.1 14.5 1.5 0 12.9 0 1.0 5.8 7.9 0.5 0 1.4 0 0

AGE 6.0 TO 6.11 [1 E]

Raw Score	"A" SC PR	CALE SS	"B" ;	SCALE SS
5.0	100	58.3	100	60
4.5	54	48.0	5 4	50
4.0	23	37.5	31	40
3.5	8	27.1	80	30
3.0	0	16.7	0	20
2.5	0	6.3	0	10
2.0	0	0	0	0
1.5	0	0	0	0
1.0	0	0	0	0
0.5	0	0	0	0

AGE 7.0 TO 7.11 [1 B]

Raw Score	"A" SO	CALE SS	"B" RR	SCALE SS
5.0 4.5	100 91	64.3 57.5	100	63.1 :
4.0	73	50.6	73	45.7 :
3.5	46	43.9	45	36.9 :
3.0	27	37.05	16	28.1 :
2.5	9	30.2	0	19.3 :
2.0	0	23.3	0	10.6 :
1.5	0	16.5	0	1.8 :
1.0	0	9.6	0	0:
0.5	0	2.8	0	0:

AGE 8.0 TO 8.11 [1 G]

Raw Score	"A" SO	CALE SS	"B" RR	SCALE SS
5.0	100	55.7	100	56.0
4.5	60	51.3	60	51.7
4.0	40	47.0	50	47.5
3.5	30	42.6	30	43.2
3.0	0	38.25	0	38.8
2.5	0	33.8	0	34.5
2.0	0	30.0	0	30.2
1.5	0	25.0	0	25.9
1.0	0	20.7	0	21.6
0.5	0	16.3	0	17.3

TABLE 3

EXPRESSIVE LANGUAGE SKILLS

PERCENTILE RANKS AND STANDARD SCORES

AGE 2.0 TO 2.11 [2 A]

	1	1	E	
Raw Score	"A" SC PR	ALE SS	"B" RR	SCALE SS
9.0	100	92.9	100	92.9
8.5	100	88.7	100	88.7
8.0	100	84.4	100	84.4
7.5	100	80.1	100	80.1
7.0	100	75.8	100	75.8
6.5	100	71.6	100	71.6
6.0	100	67.3	100	67.3
5.5	100	63.0	100	63.0
5.0	100	58.8	100	58.8
4.5	100	54.5	100	54.5
4.0	90	50.2	90	50.2
3.5	80	49.9	80	49.9
3.0	60	48.3	60	48.3
2.5	50	47.5	5 0	47.5
2.0	30	43.2	20	43.2
1.5	20	38.9	20	38.9
1.0	10	34.7	10	34.7
0.5	0	30.4	0	30.4

AGE 3.0 TO 3.11 [2 B]

E				
Raw Score	"A" SO	CALE SS	"B" RR	SCALE SS
9.0	100	76.9	100	92.5
8.5	100	74.1	100	88.3
8.0	90	71.1	100	84.1
7.5	90	68.2	100	80.0
7.0	90	65.2	100	75.8
6.5	90	62.3	100	71.6
6.0	90	59.4	100	67.5
5.5	90	56.4	100	63.3
5.0	70	53.5	80	59.1
4.5	70	49.5	80	55.0
4.0	60	47.6	60	50.8
3.5	30	44.7	30	49.7
3.0	30	41.3	30	42.5
2.5	10	38.9	20	38.4
2.0	10	35.5	10	34.5
1.5	0	33.0	10	30.0
1.0	0	30.0	0	25.9
0.5	0	27.1	0	22.2

AGE 4.0 TO 4.11 [2 C]

Raw Score	"A" SO	CALE SS	"B" \$ RR	SCALE ss
9.0	100	87.0	100	88.3
8.5	100	82.9	100	84.1
8.0	100	78.8	100	80.0
7.5	100	74.5	100	75.8
7.0	100	70.4	100	71.6
6.5	100	66.2	100	67.5
6.0	80	62.1	100	63.3
5.5	80	57.9	80	59.1
5.0	70	53.7	70	55.0
4.5	70	50.4	70	50.8
4.0	50	45.5	40	46.7
3.5	20	41.2	20	42.5
3.0	20	37.1	20	38.4
2.5	0	32.7	20	30.0
2.0	0	24.6	0	25.9
1.5	0	20.5	0	21.7
0.5	0	16.2	0	17.5

AGE 5.0 TO 5.11 [2 D] E

	<u>E</u>			
Raw Score	"A" S PR	CALE	"B" RR	SCALE
Naw Score	FK	នន	KIK	ន្ធន
9.0	100	64.2	100	87.0
8.5	83	62.0	100	64.7
8.0	83	59.7	100	62.5
7.5	75	57.5	92	60.2
7.0	67	55.3	84	57.9
6.5	42	53.1	75	55.6
6.0	42	50.8	58	53.4
5.5	42	48.7	58	51.0
5.0	33	46.5	42	48.9
4.5	33	44.3	42	46.6
4.0	33	42.0	33	44.4
3.5	8	39.8	25	42.1
3.0	8	37.6	8	39.8
2.5	8	35.5	8	37.5
2.0	8	33.2	8	35.3
1.5	0	30.9	8	33.0
1.0	0	26.9	0	30.7
0.5	0	26.5	0	28.5

AGE 6.0 TO 6.11 [2 E]

	1		E	
Raw Score	"A" S	CALE ss	"B" RR	SCALE ss
9.0	100	62.6	100	66.4
8.5	69	60.0	92	63.4
8.0	69	57.3	92	60.5
7.5	61	54.7	77	57.6
7.0	61	52.1	69	54.7
6.5	61	50.5	69	51.7
6.0	59	46.9	54	48.9
5.5	46	44.3	54	45.9
5.0	31	41.6	31	43.0
4.5	23	39.0	23	40.0
4.0	8	36.4	15	37.1
3.5	0	33.7	0	34.2
3.0	0	31.1	0	31.2
2.5	0	28.3	0	28.3
2.0	0	22.6	0	25.3
1.5	0	22.4	0	22.4
1.0	0	19.5	0	21.5
0.5	0	16.5	0	16.5

AGE 7.0 TO 7.11 [2 F]

	T		<u>E</u>	
Raw Score	"A" S	CALE ss	"B" PR	SCALE ss
9.0	100	68.9	100	71.3
8.5	91	66.8	100	69.0
8.0	82	64.6	91	66.7
7.5	82	62.5	91	64.4
7.0	82	60.3	82	62.0
6.5	82	58.1	82	59.7
6.0	82	56.0	82	57.4
5.5	64	53.8	64	55.1
5.0	64	51.7	64	52.7
4.5	64	50.4	64	50.4
4.0	55	47.5	55	48.2
3.5	55	45.3	55	45.9
3.0	36	43.2	45	43.7
2.5	27	41.0	36	41.2
2.0	9	38.8	9	38.9
1.5	0	36.7	0	36.6
1.0	0	34.5	0	34.2
0.5	0	32.4	0	31.4

AGE 8.0 TO 8.11 [2 G]

			E	
D	"A" S0	l .		SCALE
Raw Score	PR	SS	RR	SS
9.0	100	78.4	100	78.4
8.5	100	74.6	100	74.6
8.0	100	70.8	100	70.8
7.5	90	67.0	90	67.0
7.0	90	63.2	90	63.2
6.5	90	59.4	90	59.4
6.0	80	55.6	80	55.6
5.5	60	51.8	60	51.8
5.0	60	48.2	60	48.2
4.5	40	44.4	40	44.4
4.0	30	40.6	20	40.6
3.5	10	36.8	10	36.8
3.0	0	33.0	0	33.0
2.5	0	29.2	0	29.2
2.0	0	25.4	0	25.4
1.5	0	21.6	0	21.6
1.0	0	17.9	0	17.9
0.5	0	15.3	0	15.3
		I	1	1

-3.22-TABLE-4 COMBINED RECEPTIVE LANGUAGE SKILLS - PERCENTILE RANKS

						T	
Raw Score	2.0 to 2.11	3.0 to 3.11	4.0 to 4.11	5.0 to 5.11	6.0 to 6.11	7.0 to 7.11	8.0 to 8.11
13.0	100	100	100	100	100	100	100
12.5	100	100	100	75	62	91	90
12.0	100	90	100	67	54	91	60
11.5	100	90	100	67	54	82	50
11.0	100	90	90	67	46	82	50
10.5	100	90	60	67	38	45	40
10.0	100	80	50	58	15	45	30
9.5	100	70	40	50	8	36	0
9.0	100	60	30	33	8	36	0
8.5	90	50	20	17	0	36	0
8.0	70	70	20	8	0	9	0
7.5	60	30	10	8	0	9	0
7.0	30	10	0	8	0	0	0
6.5	30	10	0	8	0	0	0
8.0	20	0	0	0	0	0	0
5.5	0	0	0	0	0	0	0
5.0	0	0	0	0	0	0	0
4.5	0	0	0	0	0	0	0
4.0	0	0	0	0	0	0	0
3.5	0	0	0	0	0	0	0
3.0	0	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0

TABLE-5

COMBINED EXPRESSIVE LANGUAGE SKILLS - PERCENTILE RANKS

Raw	2.0 to	3.0 to	4.0 to	5.0 to	6.0 to	7.0 to	8.0 to
Score	2.11	3.11	4.11	5.11	6.11	7.11	8.11
21.0	100	100	100	100	100	100	100
20.5	100	100	100	100	85		100
20.0	100	100	100	100	85	100	100
19.5	100	100	100	100	85	100	100
19.0	100	100	100	92	77	91	100
18.5	100	100	100	92	77	82	100
18.0	100	100	100	92	69	82	90
17.5	100	100	100	83	62	82	90
17.0	100	100	100	67	62	82	90
16.5	100	100	100	67	62	82	90
16.0	100	90	100	58	62	82	
15.5	100	90	100	58	62	8 2	90
			100		62	8 2 8 2	80
15.0	100	90		58			80
14.5	100	90	80	58	62	64	70
14.0	100	90	80	42	54	64	70
13.5	100	90	80	42	54	64	60
13.0	100	90	80	33	46	64	60
12.5	100	80	70	33	38	64	40
12.0	100	80	70	33	38	64	40
11.5	100	80	70	33	31	55	30
11.0	100	8 0	70	33	15	55	20
10.5	100	70	30	33	8	55	10
10.0	90	60	20	33	8	55	10
9.5	90	5 0	20	33	0	45	0
9.0	8 0	50	20	25	0	45	0
8.5	8 0	40	20	25	0	36	0
8.0	50	20	0	8	0	36	0
7.5	50	20	0	8	0	36	0
7.0	40	20	0	8	0	36	0
6.5	40	20	0	8	0	18	0
6.0	20	10	0	8	0	9	0
5.5	20	0	10	8	0	0	0
5.0	20	0	0	8	0	0	0
4.5	20	0	0	8	0	0	0
4.0	10	0	0	8	0	0	0
3.5	10	0	0	0	0	0	0
3.0	10	0	0	0	0	0	0
2.5	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0
1.5	Ö	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0
0.5	0	0	0	0	0	0	0

The children tested in this study functioned at a lower Level as compared to the westeren poputation. For e. g. a raw score of 9.0 on combined receptive skills placed the child at 97th percentile in the original scale while for the same score the child was placed in the 100th percentile in this study.

These findings give us an insight about the rehabilitation programmes used for hearing impaired in India. The major focus here is onthe instrumental benefits for the child, but what eeds to be taken into account use early identification and diagnosis, to place the child appropriately into schools and base therapy so as to attain the use of language in the natural situation. As pointed out by Wood et al (1986) the child's (hearing impaired) ability to know, think and feel should also be considered.

From the above discussion it is clear that we cannot use a test standardized on a different socioeconomic and cultural background to our population. The study justifies the need for norms on a local population. The addition of norms on the hearing impaired norms to sxisting language instruements will also facilitate greater accuracy of tanguage testing in these children.

SUMMARY

Language is frequently viewed interms of receptive and expressive abilities for the purpose of research, diagnosis and clinical educational teaching.

Indigenous language tests are scarce in India. Consequently wherever possible western tests are used, preferably with norms on Indian population. In this study an attempt has been made to obtain norms on scales of early communication skills for the hearing impaired, a language scale specifically meant for assessment of the communication abilities of hearing impaired children.

Language tests are also formulated on similar lines. A language test standardized on a particular group of children i.e., from a specific geographic area, belonging to a particular socioeconomic group and speaking one language cannot be used on children from another population.

The sample though small, is adequate enough to be used in the clinical setting and for cases in clinical use have been converted into percentile ranks. Major observations made on the normative data are :-

- (i) The expressive skills was found to be better than the receptive skills,
- (ii) The response in structured situation was better than that obtained in the natural one.
- (iii) The nonverbal scores were better than the verbal scores.

These findings shed light on the fact that the teaching programmes used in India required to be modified further. Along with the use of modifications of hearing aids, drill on speech, drill on expression and therapy directed towards daily language use are also equally important.

A limitation of this data is that the sample size is small.

It is hence necessary that normative data be obtained an larger samples.

APPENDIX-A

SCALES OF EARLY COMMUNICATION SKILLS FOR HEARING

IMPARIRED CHILDREN

NAME_	
DATE_	Child's age
	RECEPTIVE LANGUAGE SKILLS
I. DE	EMONSTRATES AWARENESS THAT THEMOUTH AND/OR VOICE CONVEY INFORMATION.
_	A. Responds to a verbal stimulus.
_	B. Watches and/or listens to the speaker spontaneously
II.DH	EMONSTRATES COMPTREHENSION OF A FEW WORDS OR EXPRESSIONS:
_	A. Identifies at least 1 word or expression from a choice of 2 or 3.
_	B. Demonstrates comprehension of atleast 1 word or
	expression in a natural situation.
III.I	DEMONSTRATES THE ABILITY TO LEARN NEW WORDS
<u>-</u>	A. Identifies 4 or more words or exppressions from a choice of 4 or more. B. Demonstrates comprehension of 4 or more words, phrases or sentences in a natural situation.
	EMONSTRATES THE ABILITY TO ACQUIRE NEW COMPREHENSION VOCABULARY IN IRASES AND SENTENCES.
	A. Identifies sentences containing new words and phrases after only a few exposure.
	B. Demonstrates comprehension of new words and phrases in sentences in a natural situation.
V.DEM	MONSTRATES COMPREHENSION OF SUCCESSIVE PHRASES AND SENTENCES.
	A. Demonstrates comprehension of the essential meaning of stories or related sentences about a particular topic.
	B. Engages in conversation about a particular topic.

EXPRESSIVE LANGUAGE SKILLS

1.DEMONSTRATES AWARENESS THAT VOCALIZATION ARE USED TO COMMUNICATE.
A. Vocalizes when expected to imitate speech.
B. Vocalizes spontaneously while looking at another
person or to get someone's attention,
II.DEMONSTRATES THE ABILITY TO USE A FEW SYLLABLES; WORDS OR EXPRESSIONS
A. Imitates at least one phoneme, syllable or word
B. Uses at leat one syllable, word or expression
consistently and meaningfully.
III.DEMONSTRATES THE ABILITY TO LEARN NEW EXPRESSIVE VOCABULARY.
A. Imitates atleast 4 different syllables, words or B. Usesestions to communicate.
IV.DEMONSTRATES THE ABILITY TO ACQUIRE NEW EXPRESSIVE VOCABULARY FAIRLY
READILY
A. Imitates a large number of words or expressions after only one or two presentations.
B. Uses a variety of one-word utterances or expressions in spontaneous speech.
V.DEMONSTRATES THE ABILITY TO JOIN 2 OR 3 WORDS TOGETHER.
A. Imitates at teat two words of a phrase or recalls atleast two words of a practiced sentence pattern.
B. Joins at least two words in spontaneous speech.
VI.DEMONSTRATES THE ABILITY TO COMBINE VERBS AND NOUSS IN PHRASES OF
SENTENCES.
A. Imitates the verb at least one noun of a phrase or recalls the verb and atleast one noun of a practiced sentences pattern.
B. Joins at least two words(a noun and verb) in

VII.DEMON	STRATES	THE	ABILITY TO USE SENTENCES CONTAINING A MODIFYING
WORD	OR PHRAS	SE.	
		A.	Imitates at least 4 words of a sentence or recalls at least 4 words of a practiced sentence pattern.
		_в.	Uses phrases of 4 or more words in spontaneous
			speech.
VIII.DEMON		THE	E ABILITY TO USE SENTENCES CONTAINING MORETHAN ONE
		A.	Imitates or recalls practiced sentences of 6 or more words.
		_В.	Usessentences of 6 or more words in
			spontaneous speech.
IX.DEMONS	TRATES T	ΓHE	ABILITY TO US SENTENCES CONTAINING MORE THAN ONE
VERB F	ORM.		
		A.	Imitates or recalls practiced sentences of 8 or more words.
		_в.	
			spontaneous speech.
			NONVERBAL RECEPTIVE SKILLS
Į.			DEMONSTRATES THE ABILITY TO RESPOND APPROPRIATELY
II	•		DEMONSTRATES GESTURES BILITY TO RESPOND TO SUBTLE OR ELABORATE GESTURES WHEN THE SITUATION DOES NOT MAKE THE MEANING OBVIOUS.
		III.	DEMONSTRATES THE ABILITY TO USE A VARIETY OF
			NONVERBAL CUES TO SUPPLEMENT THE WORDS HE KNOWS.
			NONVERBAL EXPRESSIVE SKILLS.
I.			COMMUNICATES BY USING SIMPLE GESTURES.
			COMMUNICATES BY USING ELABORATE GESTURES.
II	I.		COMMUNICATES BY USING GESTURES OR PANTOMIME TO EXPRESS MORE THAN ONE IDEA OR RELATE SEQUENTIAL

EVENTS.

SCOREING SHEET

RAW PERCENTILE STANDARD SCORES BANK SCORE

RECEPTIVE A

RECEPTIVE B

COMBINED RECEPTIVE

EXPRESSIVE A

EXPRESSIVE B

COMBINED EXPRESSIVE

APPENDIX - B

TELUGU FORMAT OF SECS

ಬಾರ್ ರ್ಯಿಂಚ್ ಕತ್ತಿ

- I. ನ್ ರು ಶೆದ್/ಮರಿಯು ಕಂಠದ್ದುನಿ ಸಮಾಬಾರಮುನು ತಾರಿಯ -ಜೆಸ್ತುನ್ನದನಿ ತಾರಿಯಪರುಮಟ.
 - A ಮಾಟಲಕು ಬಹುಲ ಇನ್ತಾಡು.
 - -B ಮಾಲ್ಲಾಪೆ ವ್ಯುತ್ತಿ ಪ್ರಪ್ತು ಪರಾಸ್ತ್ರಾಮ ತೆಥಾ ವಿಂಟಾಹು.
- II. ಕೌನ್ನಿ ಹಹಾಲನು ಗ್ರಹಿಂಚುಲ ಲೆಹ್ ಪ್ರುಕ್ತಪರ ಮು ಟ.
 - -A ಪ್ರಿಕ್ಷಪರವಿನ 2 ಶೆಠಾ 3 ಪಠಾಲಲ್ ಬಕ ಪಠಾನಿನಿ ಗುರುಪಟ್ಟುಟು.
 - B పరిస్థాలలో మాట్లాడిన కెనీసం ఒక ప్రదానిని గుట్త పెట్టుట్ట లేదా గ్రాహించుట్.
- III. కొల్లే పథాలను నేట్లకొనుటలో ఆసక్తి యాపించుట. - A నొలుగు లేదా ఎక్కువ పథాలలో కనీసం 4
 - లేదా ఎక్కువ పదాలను గుక్తించుట.
 - B పరిసరాలలో మాట్లాడినట్టుడు 4 లేదా ఎక్కువ పదాల, పదనముదాయములు, వాక్సములు గ్రాహించుటు.
- IV. క్రోత్త పదసముదాయములను, వాక్సములను నెల్సకొనుటలో ఆసక్తి తెలియపరుచుటు.

- A కొన్న సార్లు తెలియపరచిన బేరువాణే వెక్సాలకోని కొత్తే పదాలను మరియు పదసముదాయములను గుర్తించుట
- B టెకిసరాలలో సహజంగా మాట్లాడినట్టుడు పాక్యాలలో క్రొత్తే పదాలను మరియు పద -సమీదాయములను గుక్రించుట.
- ▼ ಪದಸಮುದ್ಯಾಯಮುಲನು ಮರಿಯು ವೌತ್ಸಾಲನು ಗ್ರಹಿಂದು ಟ.
 - -A ಎಕ್ಷನ ಶಿಷಯಮುಲ್ ಕಾನಿ ಶೌಥಾ ಕಥಲಲ್ಸ್ ಅಕ್ಷಮುಸು ಗ್ರಹಿಂಬುಟ.
 - -B ఎడైన ప్రత్యేకమైన విడుయము సంభాయనలా నిమగ్రమగుట

ಬಾಹ ವೃತ್ತಿ ಕೆರಿಟೆ ಕೆತ್ತ

- I కేందట్టాని ద్వారా సమాబారమును చెలియపరుచుటు.
 - A మాట్లా ఒటానికి ముంచుత్నించినముడు కెంఠట్పని ఓచయొగిస్తాడు.
 - -B ఎవీరిసైన చూసినట్టుడు లేదా వ్యక్తిని పిలుచుట్టు కేంరట్పని ఓపయొగిస్తాడు.
- II. 5° ನ್ನ ಪದಾಲಲ್ ವ್ಯಕ್ತಪಡುದುಒಲ್ ಆಸತ್ತ ಪರುಮಟ.

- A కనోసం ఒక్క అక్షరాన్ని లేదా చదాన్ని మాట్లాడుటకు త్రుయత్నించుటు.
- -B ಅಕ್ಷ ಪ್ರವಾಸ ಸಂಬಾಪನ ಮುಲ್ ಕನೆಸಂ ಬಕ್ಕು ಅಕ್ಷ ಕಾನ್ನಿ ಕೌದಾ ಪದಾನ್ನಿ ಹಿಪಮಾನಿಂಬುಟ
- <u>ు</u> కొత్త కొత్త పదాలను నేర్చకొనే మాట్లాడుటకు అసక్తి మాల్చులు.
 - -A ಕರ್ನಿಸಂ 4 ಹದಾಲನು ಹುತ್ತಹರು ಮಟಕು ಪ್ರಯಲ್ಪಿಂದುಟ
 - B కనీసం 4 వేరె పేరె పదాలను సంబాషవలా ఓపముగించుట
- IV కొత్త కొత్త పదాలను మంట్లాడుటకు నెర్చుకొనుటకు ఆసక్తి చెలియేరుచుట.
 - -A ఒకటి లేదా రెండు సార్లు తెలియేతరిచిన టేరుపాటే కొన్ని పదాలను మాట్లాడటానికి డుయెల్పించుట.
 - -B ನಾದಾರನಮುಗಾ ಮಾಟ್ಲಾಟು ಚುನ್ನಪ್ಪುಕು ಇತೆಕ ಪದಾಲನು ಹಸುಮುಗಿಂದುಟ
- 1 2 లేదా 3 పదాలను సమూపరుచి మాట్లా డుటలో ఆసక్తి 3 లవుపరుచుట.
 - A ೩ ಶೆದ್ 3 ಬಿಜ್ಜಿನಿಮುದ್ ಹುಮುಗಲ ಪಡಾಲನು ಮಾಟ್ಲಾಬುಟ
 - B సాందారనముగా మాట్లాడుటలో కనీసం రెండు పదాలను జోడించుట.

- VI పదినముదాయములలో లేదా వాక్సాలలో క్రిమా ఓదాలను, నామవాచకాలను జూఓం చేశక్తి.
 - A కనీసం ఒక క్రమాపదాన్ని లేక ఒక నామమెబక్ మొక్పములా ఓపముగించి లేదా స్ట్రిపికి తెబ్బక్స్ మాంట్లాడటానికి ప్రయత్నించుట.
 - -B లేన్నంలేట లౌనే మాట్లాడుచున్నట్టుటు కనీసం రెంటు అదాలను (ఒక నామవాచకము మరియు ఒక క్రమాపదము) జోటించుట.
- - -A కనీసం 4 పదాలు కలిసిన వాక్సాన్ని మాట్లాడుటే లేదా క్షప్తికి తెబ్బుకొనుట.
 - B లేనంలేట లానే మాట్లాడుడున్న ప్రడు 4లేదా ఎక్కువే పదాలు గల పద్గముదాయములను ఓపయొగించుట.
- viii వేరు వేరు రకాలగా దిద్ది రుదాలను లేదా పదసము దాంచుములను వాక్సాలలూ ఓపుమోంగించే శక్తి.
 - -A 6 లేక ఎక్కువ పదాల కలిగిన చౌక్సాన్ని స్పట్టికి లెబ్హేక్ నుట లేదా మాట్లాడటానికి త్రులుల్నింబుట
 - B టేనంటేట లౌనే 6 లేకి ఎక్కువ పదాలు కలిగిన వాక్వాలను ఉపమోగించుట.

- IX ఒకటి లేదా ఏక్కువీ క్రియం పదాలు కలిగిన వొక్సాలను ఓపమూంగించే శక్తి.
 - -A 8 లేదా ఎక్కువ పదాలు కలిగిన వాక్సులను మాట్లాడటానికి డ్రుయిత్నించుట లేదా కృషికి చెడ్డుకొనుట.
 - -B లేనంలేట లానే మాట్లారు చున్నప్పటు శ లేదా ఎక్కువ పదాల కలిగిన వాక్సాలను ఓపమోగించుటు.

ಮಾಟಲು ಕೆತುಂಡ ಕ್ರಯಿಂಚೆ ಕತ್ತೆ.

- I కొన్ని సాదారనమైన సైగలకు ఆరిగి జవాబు ఇచ్చే శక్తి.
- II కొన్ని కొన్ని పరిస్తితులలో అద్దము కాకున్న సైగలను అద్దము చేసుకునే శక్తి.
- III కొన్ని కొన్ని తెలిసిన పదాలకు మాట్లాడకుండా సైగలను చౌర్చు శక్తి.

ತ್ರಿಕ ಹಿಮ್ಮಾಯಾಂಭ ಪಾಂಚ್ಯಾಗ್ರಹ

- I ನಾದಾರನಮನೆ ನೆಗಲಕ್ ಸಂಬಾಮಿಂಬರುಟ.
- II ಕ್ಷಮ್ ಪರಮನೆ ಸ್ಥೆಗಲನು ಓಪಮಾಂಗಿಂಬೆ ಸಂಬಾವಿಂದುಲು.
- III ఒకటి లేదా ఎక్కువ ఆలోచనలను సైగల ద్వారా లేదా మాటలు ద్వారా కాకుండా సంబాషించుట.

ಬಾವಾ ಗ್ರಹಣ ಶಕ್ತಿ

- 1 ಬಾಂತು ಪರತ್ತು ಅಥವಾ ಥ್ವನಿಂತು ಪರ್ರಾಲಕ ಸುದ್ದೀವಿಷಂತು ತಿಳಿಂತರುತ್ತದೆ ಎಂಬ ಅರಿವನ್ನು ತ್ರೋರಿಸುಕೆರಾಳ್ಳುತ್ತಾನೆ.
 - (a) ಮಾತಿಗೆ ಪ್ರತಿಕ್ರಿಂತು ತೋಂನುತ್ತಾನೆ.
 - (ಬಿ) ಸಹಜವಾಗಿ (ಸ್ವಾಭಾವಿಕವಾಗಿ) ವರಾತನಾಡುವವರನ್ನು ಗವುನಿಸುತ್ತಾನೆ. ಪರತ್ತು:ಅಥವಾ ಅಅಸುತ್ತಾನೆ.
- 2 ಕೆಲವು ಪದಗಳನ್ನು ಅಥವ ಭಾವಗಳನ್ನು ಅರ್ಥ ಮಾಡಿಕೆ ರಾಂಡಿದ್ದೇನೆಂದು ತೆರಾರೃಡಿಸುತ್ತಾನೆ.
 - (ಎ) 2 ಅಥವ 3 ಪದ ಅಥವಾ ಭಾವಗಳಲ್ಲ ಕನಿಷ್ಠ ಒಂದನ್ನಾದರರಾ ಗುರುತಿ ಸುತ್ತಾನೆ.
 - (ಏ) ಒಂದು ಸಹಜವಾದ ಸನ್ನಿವೇಶದಲ್ಲ ಕನಿಷ್ಟ 1 ಪದ ಅಥವಾ ಭಾವ ಗುತ್ತಿದೆ
 ಂರೆಎಂದು ತೆರಾರೃಡಿಸಿಕೆರಾಳ್ಳುತ್ತಾನೆ.
- 3 ಹೆರಾಸ ಪದಗಳನ್ನು ಕರಂತರುವ ಸಾಮರ್ಥ್ಯ ಇದೆ ಎಂದು ತೆರ್ಲಾನುಕೆರಾಳ್ಳುತ್ತಾನೆ.
 - (a) 4 ಅಥವ ಅದಕ್ಕ್ಕಾ ಹೆಚ್ಚಿನ ಪದ ಅಥವಾ ಭಾವಗಳಲ್ಲ 4 ಅಥವಾ ಹೆಚ್ಚಿನ
 ಪದ ಅಥವಾ ಭಾವಗಳನ್ನು ಗುರುತಿಸುತ್ತಾನೆ.
 - (ಬಿ) ನಹಜ ಸನ್ನಿವೇಶದಲ್ಲ 4 ಅಥವಾ ಅದಷ್ಟು ಹೆಚ್ಜಿನ ಪದಗಳು, ಪದಪುಂಜ ಅಥವಾ ಪಾಕ್ಯಗಳನ್ನು ಗ್ರಹಿಸಬಲ್ಲಿನೆಂದು ತೆರ್ಲಾರಿಸಿಕೆರಾಳ್ಳುತ್ತಾನೆ.
- 4 ಪದಕುಂಜಗಳು ಮತ್ತು ವಾಕ್ಯಗಳಲ್ಲಿ ಹೆಲಾಸ ಗ್ರಹಣ ಶಬ್ಧ ಭಂಡಾರವನ್ನು ಗಳಿಸುವ ಸಾಮರ್ಥ್ಯ ಇದೆ ಎಂದು ತೆಲಾರೃಡಿಸಿಕೆಲಾಳ್ಳುತ್ತಾನೆ.
 - (a) ಸ್ಥಲ್ಪ ಅನುಭವದ ನಂತರ ಹೆಲಾಸ ಪದಗಳು, ಪದಕ**ುಂಜಗಳಿರು**ವ ವಾಕ್ಯಗಳನ್ನು ಗುರುತಿಸಬಲ್ಲ.

- (ದಿ) ಸಹಜ ಸನ್ನಿವೇಶದಲ್ಲ ಹೆರಾಸ ಪದಗಳು, ಪದಕುಂಜಗಳಿರುವ ಪಾಕ್ಕಗಳನ್ನು ಅರಿಂತುಬಲ್ಲಿನೆಂದು ತೆರ್ಗಾರಿಸಿಕೆ ರಾಳ್ಯಬಲ್ಲ.
- 5 ಅನುಗುಾಡಿ (ಬಂದರ ಹಿಂದೆರಾಂದು) ಬರುವ ಪದಕುಂಜಗಳು ಮುತ್ತು ವಾಕ್ಷಗಳನ್ನು ಗ್ರಹಣವಾಗುವವೆಂದು ಕೆರ್ನ್ಟಾಡಿಸಿಕೆರಾಳ್ಳುವುದು.
 - (a) ಕಥೆಗಳ ಅವಶ್ಯಕ ಕಿರುಗಳನ್ನು ಅಥವಾ ಒಂದು ವಿಷಂತುಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ವಾಕಕಗಳ ಅರ್ಥವನ್ನು ಅರಿಂತುವ ಸಾವರ್ಷ್ಯ ಪ್ರದರ್ಶನ
 - (๗) ಒಂದು ವಿಷಂತುಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮಾತಿನಕ್ಕ ತೆರಾಡಗಬಲ್ಲ.

ಬಾವೆಂರುನ್ನು ಉಪಂತಿರಾಗಿಸಿರುವ ಸಾವರ್ಧ್ಯ (ವಾಕ ಶಕ್ತಿ)

- · 1 ವರ್ಗಾತನಾಡಲು, ಕಂಠಸ್ಥರವನ್ನು ಉಪಂತರಾೀಗಿಸುತ್ತಾರೆ ಎಂಬ ಅರಿವು ಇರುವುದು.
 - (a) ವರ್ವಾನ್ನು ಅನುಕರಿಸಬೇಕೆಂದು ನಿರೀಕ್ಷದಾಗ, ಸ್ವರನ್ನು ಉಪಂತರಾಳಿ
 ಗಿಸುತ್ತಾನೆ.
 - (ಏ) ಬೇರೆರ್ಲಾಬ್ಬರ ಗವುನ ನೆಳೆಂತುಲು ಅಥವಾ ಬೀರೆಂತುವರನ್ನು ಮುಖವನ್ನು ನೆರ್ಲಾಡುತ್ತಿದ್ದಾಗೆ, ತಾನಾಗಿಂತ್ರೇ (ಸಹಜವಾಗಿ) ಕಂಠಸ್ವರನ್ನು ಹೆರಾರಡಿಸಿತ್ತಾನೆ.
- 2 ಕೆಲವು ಅಹರ : ಪದ : ಹೇಳಿಕೆಗಳನ್ನು ಉಪಂತಿರ್ನಾಗಿಸುವುದರ ಬಗ್ಗೆ ತಿರ್ನಾರೃಡಿಸಿ ಕೆರಾಳ್ಳುತ್ತಾನೆ.
 - (a) ಭಾಷಂತು ನಣ್ಣ ಭಾಗ : ಅಕ್ಷರ : ಪದಗಳನ್ನು ಒಬ್ಬರು ಹೇಳಿದ್ದನ್ನೆ ನೋಡಿ ಹೇಳುವುದು.
 - -# (ಚ) ಕೆಲವ : ಅಕ್ಷರ : ಪದ : ಹೇಳಿಕೆಂತುನ್ನು ಅರ್ಥಪ್ರಾರ್ಣವಾಗಿಂತುರು ಅಗಾಗ ಉಪಂತಿರ್ನಾಗಿಸಲ್ಪಡುವದು.

- 3 ಹೆರಾಸ ಶಬ್ಧ ಭಂಡಾರವನ್ನು ಮಾತನಾಡಲು ಬಳಸುವ ಸಾವುರ್ಥಕ್ಷವನ್ನು ತೆರ್ಲಾರುತ್ತಾನೆ.
 - (a) ಕನಿಷ್ಠ 4 ಬೀರೆ ಬೇರೆ ಶಬ್ಧಗಳು, ಪದಗಳು ಅಥವಾ ಭಾವಗಳನ್ನು ಅನುಕರ್ನುತ್ತಾನೆ.
 - (ಡ) ಕನಿಷ್ಟ 4 ಬೇರೆ ಬೇರೆ ಪದಗಳು ಅಥವಾ ಭಾವಗಳನ್ನು ವ್ಯಕ್ತಪಡಿಸಬಲ್ಲ.
- 4 ಹೇಳಲು (ವ್ಯಕ್ತ ಪಡಿಸಲು) ಶಬ್ಧ ಬಂಡಾರವನ್ನು ಹೊಂದುವ ಅನಾಂತುತವಾಗಿ ಸಾರ್ವರ್ಥ್ಯವನ್ನು ತೋರಬಲ್ಲ.
 - (a) 1-2 ಬಾರಿ ಜೀಳಿಕೆರಾಡುವಷ್ಟರಲ್ಲಂತೇ ಸುಮಾರು ಸಂಶ್ಯೇಂತಲ್ಲ
 ಪದಗಳನ್ನು ತ ಅಥವಾ ಭಾವಗಳನ್ನು ಅನ್ನುಕರಿಸಬಲ್ಲ.
 - (a) ಸ್ವಾಭಾವಿಕವಾಗಿ ಪರಾತನಾಡಲು ಹಲವಾರು ಬಗೆಂತು ಒಂದು ಪದಗಳನ್ನು ಭಾವಗಳನ್ನು ಉಪಂತರಾಗಿಸಬಲ್ಲ.
- 5 2 ಅಥ 3 ವರ್ಷಳನ್ನು ಕೆರಾಡಿಸುವ ಸಾವುರ್ಥ್ಯವನ್ನು ತೆರ್ಲಾರಬಲ್ಲ.
 - (a) ಕನಿಷ್ಟ 2 ಪದಗಳ ಪದಪುಂಜವನ್ನು ಅನುಕರಿಸಬಲ್ಲ ಅಥವ ಅಭ್ಯಾಸ ಮಾಡಿದ ಪಾಕ್ಯರಜನೆಂತುಕ್ಲ ಕನಿಷ್ಟ ಎರಡು ಪದಗಳನ್ನು ಜ್ಞಾಪಿಸಿಕೆ ಸಾಳ್ಳಬಲ್ಲ.
 - (a) ಸಹಜವಾಗಿ ಅಪ್ರವ ಪ್ರಾತಿನರ್ಹ ಕನಿಷ್ಟ 2 ಪದಗಳನ್ನು ಕೆರಾಡಿಸಬಲ್ಲ.
- 6 ಕ್ರಿಂರು ಪದಗಳು ಮತ್ತು ನಾಮಪದಗಳನ್ನು ಪದಕುಂಜಗಳಲ್ಲ ಅಥವಾ ವಾಕ್ಕದಲ್ಲ ಬಳಿಸುವ ಸಾಮರ್ಥ್ಯ ಇದೆ ಎಂದು ತೆರ್ಲಾಂಸಿಕೆರಾಳ್ಳುತ್ತಾನೆ.
 - (ವ) ಪದಪುಂಜದಲ್ಲ ಕ್ರಿಂತ್ರಾಪದ ಪತ್ತು ಕನಿಷ್ಠ ಒಂದು ನಾಪು ಪದಪನ್ನು ಅನುಕರಿಸುತ್ತಾನೆ; ಅಥಪಾ ಕಅತಿರುವ ವಾಕ್ಯ ರಜನೆಂತುಲ್ಲ ಕರ್ ಕ್ರಿಂತ್ರಾ ಪದ ಮತ್ತು ಕನಿಷ್ಟ ಒಂದು ನಾವು ಪದವನ್ನು ಜಾಪಿಸಿಕೆ ರಾಳ್ಳಬಲ್ಲ.
- 7 ರಲಾಪವ್ಯತ್ಯಾನ ಪದ ಅಥವ ಪದ ಪುಂಜವನ್ನುಳ್ಳ ಪಾಕ್ಕವನ್ನು ಉಪಂಲೋಗಿಸುವ ನಾಪುರ್ಥ್ಯ ತ್ರೋರಿಸುತ್ತಾರನೆ.

- (a) ವಾಕ್ಯದಲ್ಲ ಕನಿಷ್ಟ ನಾಲ್ಕು ಪದಗಳನ್ನು ಅನುಕರ್ನುತ್ತಾನೆ. ಅಥವಾ ಅಭ್ಯಾನ ಮಾಡಿರುವ ವಾಕ್ಯ ರಜನೆಯುಲ್ಲ ಕನಿಷ್ಟ 4 ಪದಗಳನ್ನು ಜ್ಞಾಹಿಸಿ ಕೆರಾಳ್ಳಬಲ್ಲ.
- (ಜಿ) ನಹಜವಾಂತು ಅದುವ ಪ್ರತಿನಲ್ಲ 4 ಅಥವಾ ಅದಕ್ಕಾ ಹೆಚ್ಚು ಪದಗಳುಳ್ಳ ಪದಪುಂಜವನ್ನು ಉಪಂತಿಗಾಗಿಸುತ್ತಾನೆ.
- 8 ಒಂದಕ್ಕಿಂತಲಾ ಹೆಚ್ಚು ುವವಕ್ಷತ್ಯಾಸಗಿರಾಂಡ ಪದ ಅಥವಾ ಪದಪುಂಜವುಳ್ಳ ವಾಕ್ಯವನ್ನು ಉಪಂತೋಗಿಸುವ ಸಾವುರ್ಥ್ಯ ಇದೆ ಎಂದು ತೆರ್ಲಾರಿಸಿಕೆರಾಳ್ಳಬಲ್ಲ.
 - (ಎ) ಅಭ್ಯಾನ ಪರಾಡಿರುವ 8 ಅಥವ ಹೆಚ್ಜಿನ ಪದಗಳುಳ್ಳ ವಾಕ್ಯಗಳನ್ನು ಅನುಕ ರಿಸಬಲ್ಲ ಅಥವ ಜ್ಞಾಪಿಸಿಕೆರಾಳ್ಳಬಲ್ಲ.
 - (a) ಸಹಜವಾಗಿ ಅಡುವ ಮಾತಿನಲ್ಲ 6 ಅಥವಾ ಅದಕ್ಕೂ ಹೆಚ್ಚು ಪದಗಳಿರುವ ವಾಕ್ಕಗಳಿರುವ ವಾಕ್ಕಗಳನ್ನು ಉಪಂತಿಗಾರಿಗುತ್ತಾನೆ.
- 9 ಒಂದಕ್ಕಿಂತ ಹೆಚ್ಚ ಹೆಚ್ಚು ಕ್ರಿಂಪಾವದವಳ್ಳ ಪಾಕ್ಯಗಳನ್ನು ಉಪಂಪೋಗಿಸುವ ಸಾಮಧ್ಯ ಇದೆ ಎಂದು ತೆನ್ನಾರಿಸಬಲ್ಲ.
 - (a) 8 ಅಥವಾ ಅದಕಲ್ಕಾ ಹೆಜ್ಜಿಗೆ ಪದಗಳುಳ್ಳ ವಾಕ್ಯಗಳನ್ನು ಅನುಕ್ ನಬಲ್ಲ ಅಥವಾ ನೆನಪಿಸಿಕೆಲಾಳ್ಳಬಲ್ಲ.
 - (ಡ) ಸಹಜವಾಗಿ ಆಡುವ ಮಾತಿನಕ್ಕ 8 ಅಥವಾ ಅದಕರಾ, ಹೆಡು ಪದಗಳುಳ್ಳ ಕ್ಲಿಷ್ಟವಾದ ವಾಕ್ಯಗಳನ್ನು ಉಪಂತಿರ್ನಾಗಿಸುತ್ತಾನೆ.

ವಾಕರಡಿತ ಗ್ರಹಣ ಶಕ್ತಿಂತು ಪರಿಣಿತ

- 1 ಸರಳ ಸಂಜ್ಞೆಗೆ ಸರಿಂತವಾದ ಪ್ರತಿಕ್ರಿಂತವಿಂತವನ್ನು ತೆವ್ವಾರಬಲ್ಲ.
- 2 ಸನ್ನಿವೇಶ ಅರ್ಥ ಮಾಡಿಕೆ ನಾಳ್ಳಲು ಸಹಾಂಯಕವಾಗಿದಿದ್ದರು ವಿವರವಾದ (ಕ್ಲಿಷ್ಟ) ಸಂಘ್ರೆಗಳಿಗೆ ಪ್ರತಿಕ್ರೀಂಯ ತೆರ್ಲಾರುವ ಸಾಮಾರ್ಥ್ಯವನ್ನು ತೆರ್ಲಾತ್ತಾನೆ.
- 3 ชยสาบ นที่งวง สาช บลัง สงานส์ (สงช์แง) ที่สลง อลก์ ที่งาง อง สนทห์ที่ นนยาทิ พสงวังายุทิส นย์ ลงนงนสงง อังายุบูลิลิซ์งางงาง อาสา

ಆವಾಕ್ಯ ಭಾವ ನೈವರಣ್ಯ

- 1 ನರಳ ಸಂಜ್ಞೆಗಳಿಂದ ತಿಳಿದು ಪಡಿಸುತ್ತಾನೆ.
- 2 ವಿಸ್ತಾರವಾದ ಸಂಜ್ಞೆಗಳೆಂದ ತಿಳಿಂತು ಪಡಿಸುತ್ತಾನೆ.
- 3 ಒಂದಕ್ಕಿಂತ ಹೆಚ್ಜಿನ ಭಾವನೆಗಳನ್ನು ಹೇಳಲು ಅಥವಾ ಬಂದರ ಹಿಂದೆರಾಂದು ಬರುವ ಘಟನೆಗಳನ್ನು ಹೇಳಲು ಸಂಪ್ಷೆಗಳನ್ನು ಅಥವ ಮರಾಕಾಜನಂತುವನ್ನು ಉಪಂತಿಗಾಗಿಸುತ್ತಾರನೆ.

BIBLIOGRAPHY

Abraham (1985), cited by Howlin .P. (1991) in - Assessing children with language tests - which tests to use ?, British journal of Disorders of Communication, Vol. 26, No. 3.

Bates (1976), cited by Kretschmer R.R. Jr. & Kretschmer L.W. (1978), in Language Development and intervention with the Hearing Impaired, University Park Press, Baltimore.

Blanton (1968), cited by Bloom and Lahey M. (1978) in Language Development and Language Disorders, Pub. John Wiley and Sons, New York.

Brannon (1968), cited by Bloom and Lahey M. (1978) in Language Development and Language Disorders, Pub. John Wiley and Sons, New York.

deVilliers and deVilliers (1972), cited by Kretschmer R.R. Jr. & Kretschmer L.W. (1978), in Language Development and Intervention with the Hearing Impaired, University Park Press, Baltimore.

Duchman (1986), cited by Ann Parker & Helen Rose in Deaf Children's phonological development, in Pamela Grunwell (1990)

Developmental Speech Disorders - clinical issues and practical implications, Pub. churchill living stone, New York.

Geetha H. (1984), cited by Usha.K.R(1986)-3D LAT and The Hard of Hearing, Unpub.Dissertation, Mysore University.

Goetzinger (1962), cited by Kretschmer R.R. Jr. & Kretschmer L.W (1978), in Language Development and Intervention with the Hearing Impaired, University Park Press, Baltimore.

Heider and Heider (1940), cited by Bloom and Lahey M. (1978) in Language Development and Language Disorders, Pub. John Wiley and Sons, New York.

Hess (1972), cited by Schlesinger. H.S in Deafness Mental Health and Language, in Frank Powell(Ed), 19S5, Education of the hearing impaired children, College Hill Press, California.

Huttenlocher(1974), cited by Kretschmer R.R. Jr. & Kretschmer L.W. (1978), in Language Development and Intervention with the Hearing Impaired, University Park Press, Baltimore.

Jean .S. .M. and Green .A. .V. (1971), cited in Darley F.L.(1978), Evaluation of appraisal techniques in speech and language pathology, Addison-Wesley Publishing Company, California.

Juenke (1971), cited by Schlesinger. H.S in Deafness Mental Health and Language, in Frank Powell (Ed), 1985, Education of the hearing impaired children, College Hill Press, California.

Katz .J. (Ed.) (1985), Hand Book of Clinical Audiology Ed. IIIrd
Pub. Williams and Wilkins, Baltimore.

Land and Rucha (1988), cited by Ann Parker & Helen Rose in Deaf Children's phonological development, in Pamela Grunwell (1990)

Developmental Speech Disorders - clinical issues and practical implications, Pub. Churchill living stone, New York.

Patrica Bender et al (1979), Research Trends in The Field of Speech and Hearing, Journal of Communication Disorders, Vol. 12.

Quigley and Kretschmer (1982), cited by Ann Parker & Helen Rose in Deaf Children's phonological development, in Pamela Grunwell (1990) - Developmental Speech Disorders - clinical issues and practical implications, Pub. Churchill living stone, New York.

Quigley et al (1976), cited by Bloom and Lahey H. (1978) in Language Development and Language Disorders, Pub. John Wiley and Sons, New York.

Simmons (1962), cited by Bloom and Lahey M. (1978) in Language Development and Language Disorders, Pub. John Wiley and Sons, New York.

Taylor (1969), cited by Bloom and Lahey M. (1978) in Language Development and Language Disorders, Pub. John Wiley and Sons, New York.

Usha K.R.(1988), 3-D LAT and The Hard Of Hearing, Unpub. Dissertation, Mysore University.

Woll and Lawson (1980), cited by Ann Parker & Helen Rose in Deaf Children's phonological development, in Pamela Grunwell (1990) - Developmental Speech Disorders - clinical issues and practical implications, Pub. Churchill living stone, New York.

Wood et al,(1990), cited by Ann Parker & Helen Rose in Deaf Children's phonological development, in Pamela Grunwell (1990)

Developmental Speech Disorders - clinical issues and practical implications, Pub. Churchill living stone, New York.

For the tests cited in the study the references can be obtained from:

Darley F.L.(1978), Evaluation of appraisal techniques in speech and language pathology, Addison-Wesley Publishing Company, California,

Lees .J. and Urwin .S. (1991), Children with Language Disorders, Whurr Publishers, London and New Jersey.