**PROJECT PROPOSAL**

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| **Part -A** |
| **1.0** | **Title of the Project** | **:** | **An Adaptation of Bankson Language Screening Test  in Hindi (BLST-H)** |
| 11.3.3 | **Area of Research :**1. Speech, Language, Hearing
2. Clinical Psychology
3. Special Education
4. ENT
5. Electronics
6. Interdisciplinary
7. Survey
8. Socio-Economic
9. Others
 | **:** | **Interdisciplinary/Speech, Language, Hearing** |
| **1.1** | **Principal Investigator** | **:** | **Dr. Brajesh Priyadarshi** |
| **1.2** | **Principal Co-Investigator(s)** | **:** | **Dr. S.P. Goswami** |
| **1.4** | **Collaborating Institution** | **:** | **Nil** |
| **1.5** | **Total Grants Required** **(in figures and in words)** |  | **Rs. 4,41,000.00 (Four lakhs forty one thousand only).** |
| **1.6** | **Duration of the Project** | **:** | **One Year** |
| **2.0** | **Project Summary**(Max. 300 words) | : | The **Bankson Language Screening Test** (BLST) was proposed by Nicholas W. Bankson in the year 1977, to provide a means by which a number of psycholinguistic as well as perceptual skills could be surveyed in children in a relatively short period of time. It is particularly useful for determining those areas which are in need of further in-depth analysis by language tests that are diagnostic in nature; and has sufficient breadth and depth to assist the clinician in the process of case selection and to provide a strong base from which to recommend additional testing. The BLST consists of a battery of 17 nine-item subtests organized into five general categories: semantic knowledge, morphological rules, syntactic rules, visual perception, and auditory perception. The test is designed to assess expressive language, and it is on this aspect of language that scoring is primarily based.The aim of the present study is to translate and adapt BLST in Hindi language. Further, it is also aimed that this adapted tool serves as a measure and to assess the sequential acquisition of Hindi linguistic and perceptual skills in children in the age range of 4 to 8 years. This test will assist better in making the clinician’s/practitioner’s assessment choices more comprehensive and meaningful. The test will also help in the assessment of linguistic and perceptual skill deficits in children with language disorders.160 typically developing Hindi speaking children from 4 to 8 years of age will be participating in the group (8 nos.) of 20 children (10 males and 10 females preferably). The development and validation of test will be done in three phases:*Phase-I:* Development of the test material and pilot study*Phase-II:* Administering the test on typically developing children. *Phase-III:* Checking reliability and validity of the test.**The test will include the following components:**Semantic knowledge test:1. Body parts
2. Nouns
3. Verbs
4. Categories
5. Functions
6. Postpositions
7. Colors/Quantity
8. Opposites

Morphological rules:1. Pronouns
2. Verb tenses
3. Plurals/Comparatives/Superlatives

Syntactic rules: 1. Subject-Verb Agreement/Negation
2. Sentence Repetition/ Judgment

Visual Perception: 1. Matching/Discrimination
2. Association/Sequencing

Auditory perception:1. Memory Sequencing/ Discrimination
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| **3.0** | **Introduction** (under the following heads) |  |  |
|  | 3.1 | Definition of the problem | : | In the multilingual country like India, it is imperative to develop and validate tests in all languages. The availability of such tools in different languages and more so in Hindi language, will help in promoting the slogan ‘Education for all’. Also, these tools can effectively serve for children whose activity and participation is restricted due to language disorder; in early stages of schooling. With the availability of variety of such tools, speech and language pathologists and other professionals can obtain the complete profile of a language disordered child, to make or confirm diagnosis so that directives for therapeutic intervention can be determined early. There is a scarcity of standard tool to asses various linguistic as well as the perceptual skills in children in Hindi. As the development of linguistic and perceptual skills are individualized processes and varies with language, dialect and instruction, an urgent need is being felt to obtain normative data on such tests in Hindi for Indian population. Most of the Hindi speaking children start to learn Hindi at home. But their sequential acquisition of linguistic and perceptual skills remains unexplored. The present study is aimed at the adaptation of BLST in Hindi language.The BLST provides a means to survey a variety of psycholinguistic and perceptual skills in a relatively short period of time. Although designed to test expressive language, provision is made for supplementary receptive testing of some items. The 17 nine-item subtests are organized into five general categories: semantic knowledge, morphological rules, syntactic rules, visual percep- tion, and auditory perception. In the semantic knowledge section the child is required to name specific items including common nouns, verbs, prepositions, and opposites. In the morphological and syntactic rules section, the child completes sentences spoken by the examiner in description of stimulus pictures [e.g., "In this picture she is climbing but in this picture she has already------- " (climbed)]. The visual perception subtests assess visual discrimination, association, and sequencing and the auditory perception subtests assess auditory memory, sequencing, and discrimination. The test requires approximately 25 minutes to administer and provides percentile rank con- version tables for children 4 years 1 month (4:1) to 8 years of age. Further assessment is recommended for children who score at or below the 30th percentile. According to Bankson (1977), enrollment in language instruction is indicated for children scoring at or below the 15th percentile, whereas a classroom enrichment approach may be most appropriate for children scoring in the 15th-30th percentiles. |
|  | 3.2 | Objectives | : | This study is proposed with the following objectives:1. To translate and adapt **Bankson Language Screening Test**(BLST) by Nicholas W. Bankson (1977) in Hindi language.
2. To assess the sequential acquisition of Hindi linguistic and perceptual skills in children in the age range of 4 to 8 years.
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|  | 3.3 | Review of status of research and development in the subject | : | There are important tests which are available in Foreign and Indian languages and are used to assess various components of language in children. Most of these tests are useful in their own ways. But these available tests assess only few components of language. Some of these tests focus upon morphological rules, some focuses upon syntactic rules and some focuses upon semantic knowledge; concentrating upon different languages. Other than these components, if a clinician has to assess the visual or auditory perceptions, s/he has to go for other tests which are exclusively meant for these purposes. As stated earlier, BLST provides a means to survey a variety of psycholinguistic and perceptual skills in a relatively short period of time. It is capable of assessing all the above mentioned parameters, which qualifies it to be termed as a comprehensive tool to assess the psycholinguistic and perceptual skills in children of 4-8 years age. However, in English language, some studies have been done using some of the components of BLST, no such study is reported in Indian languages; moreover, in Hindi language. |
|  | 3.4 | International and national status | : | The BLST has been utilized in various foreign languages but no such adaptations have been made in any Indian languages; preventing the use of this widely accepted test on Indian individuals with language disorders. |
|  | 3.5 | Importance of the proposed project in the context of current status | : |  There are limited standard tools available to asses various linguistic as well as the perceptual skills in children in Hindi. As the development of linguistic and perceptual skills are individualized processes and varies with language, dialect and instruction, an urgent need is being felt to obtain normative data on such tests in Hindi for Indian population. Most of the Hindi speaking children start to learn Hindi at home. But their sequential acquisition of linguistic and perceptual skills remains unexplored. Therefore, the present study is aimed at the adaptation ofBLST in Hindi language. |
| **4.0** | **Work Plan** |  |  |
|  | **4.1** | **Method** |  |  |
|  |  | Subjects / Participants | : | 160 typically developing Hindi speaking children from 4 to 8 years of age will be participating in the group (8 nos.) of 20 children (10 males and 10 females preferably). |
|  |  | Material | : | The test items used in **Bankson Language Screening Test** (BLST) by Nicholas W. Bankson in the year 1977 will be taken as the base. The test material will also be comprised of appropriate pictures and toys wherever applicable. The pictures required for the test items will be drawn by an artist. The required toys will be collected and the final kit will be prepared. |
|  |  | Procedure | : | The adaptation and validation of test will be done in three phases:**Phase-I:** Development/adaptation of the test material and pilot study* The test items of **Bankson Language Screening Test** (BLST) by Nicholas W. Bankson (1977) will be translated into Hindi.
* A review of the available literature on sequential acquisition of linguistic and perceptual skills will also be made by referring to books, journals and web-based sources and existing tools in India.
* The common categories of items will be maintained and any additional items specific to Hindi language will be added; and the final test material will be compiled.

*Pilot study:*A pilot study will be carried out as a preliminary try-out and for familiarization of administration. It will be tested on a total of 16 children (two in each of the eight groups). According to the performance of the children the final test material will be designed incorporating the necessary modification to suit to the needs of the children. **Phase-II:** Administering the test on typically developing children. For validation of the test, the test material will be administered on 160 typically developing children.**Phase-III:** Checking reliability and validity of the test.**Reliability** The inter-judge reliability will be carried out. The data will be audio-video recorded, out of which 10 percent of the data will be retested by a competent Hindi speaker.**Validity** To assess the validity of the developed test, it will be administered on “N” number of children with language disorder.**Procedure for data collection:**1. The aim of the study, procedure, and duration of testing will be explained to the participant/caregiver.
2. Prior written consent will be taken from the participant/caregiver for the participation in the study.
3. All the participants will be tested in a quiet, noise free environment at home, school or clinical setting.
4. The audio-video recordings of the session will be carried out while administering the test.
5. The stimuli will be presented in auditory, visual, orthographic and gestural mode separately (as required).
6. Separate scoring will be carried out for each mode.

**Scoring**A common scoring system will be used for the subtests. A score of 1 will be given for each item answered correctly. Therefore, the maximum score for each subtest will vary according to the number of items in it. The performance of the participant on each item in the test will be scored on a three point rating scale as given below:*1 point:* If a participant performs a given test item without any assistance.*Half point:* If a participant performs a given test item with an assistance or verbal prompt.*0 point:* If a participant cannot perform a given test item even with verbal prompt. |
|  |  | Analyses | : | Obtained scores will be tabulated and appropriate statistical analyses will be carried out. |
| **6.0** | **Implications of the results of the study** (Illustrative) |  |  |
|  |  | 1. Presentation of scientific papers in professional seminars / publication of articles
 | : | The findings of the study will be presented in the national and international forums. The outcomes of the study will be published in national/ international journals. |
|  |  | 1. Discussion with professionals
 | : | The project will be of great help for the practicing clinicians/professionals as it will provide a means by which a number of psycholinguistic as well as perceptual skills could be surveyed in children in a relatively shorter period of time. It is particularly useful for determining those areas which are in need of further in-depth analysis by language tests that are diagnostic in nature; and has sufficient breadth and depth to assist the clinician in the process of case selection and to provide a strong base from which to recommend additional testing. |
|  |  | 1. To utilize the results in the development of remediation
 | : | It is proposed that the project will produce field tested validated test material in Hindi language which can be used by the clinicians/professionals for identification of linguistic and perceptual skill deficits in children ranging from 4 to 8 years of age; and also in planning appropriate management strategies for children with language disorder. |
| **7.0** | **Utilization of results of the study** |  | The test adapted and validated in this study can be utilized as a reference manual in speech and language clinics for assessment of linguistic and perceptual skill deficits in children ranging from 4 to 8 years of age.  |