Research Article – Phonology

Tense markers among Hindi speaking typically developing children

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Abstract

In grammar, tense is a category that expresses time reference with reference to the moment of speaking. Tenses are usually manifested by the use of specific forms of verbs, particularly in their conjugation patterns. Most of the previous research reveals that tenses develop with age and thus older children had more accurate speech and fewer error patterns in their speech. However, in Indian contexts, limited studies are noted in the area of language development in children with intellectual disability Hindi-speaking children. Thus, the present study aims to explore tense markers in Hindi speaking intellectually disabled children and its comparison across mental age (MA) matched typically developing children. The results revealed that syntax develops significantly with the age. Comparison across the two groups showed higher occurrences of tense forms among TD children when compared to the children with ID. Related studies are discussed clearly in the paper which reveals a number of studies supporting the finding. The present study has significant implications for the assessment of developmental speech disorders among Hindi-speaking group of Indian population.

Key words: Plural markers, syntactic development, children with intellectual disability, Hindi

Introduction

Language is a complex and dynamic system of conventional symbols that is used in various modes for thought and communication (ASHA, 1982). It is an organized system of arbitrary signals and rule governed structures that are used as a means for communication (Bloom and Lahey, 1978). There are four main stages of normal language acquisition: The babbling stage, the Holophrastic or one-word stage, the two-word stage and the Telegraphic stage. These stages can be broken down even more into these smaller stages: pre-production, early production, speech emergent, beginning fluency intermediate fluency and advanced fluency. Within a few weeks of being born the baby begins to recognize the mothers’ voice. There are two sub-stages within this period. The first occurs between birth – 8 months. Most of this stage involves the baby relating to its surroundings and only during 5/6 – 8 month period does the baby begin using it’s vocals. The babies attempts at creating and experimenting with sounds is what we call babbling. When the baby has been babbling for a few months it begins to relate the words or sounds it is making to objects or things. This is the second sub-stage. From 8 months to 12 months the baby gains more and more control over not only it’s vocal communication but physical communication as well, for example body language and gesturing. Eventually when the baby uses both verbal and non-verbal means to communicate, only then does it move on to the next stage of language acquisition. The second stage of language acquisition is the holophrastic or one word stage. This stage is characterized by one word sentences. In this stage nouns make up around 50% of the infants vocabulary while verbs and modifiers make up around 30% and questions and negatives make up the rest. This one-word stage contains single word utterances such as “play” for “I want to play now”. Infants use these sentence primarily to obtain things they want or
need, but sometimes they aren’t that obvious. The two word stage (as you may have guessed) is made of up primarily two word sentences. These sentences contain 1 word for the predicate and 1 word for the subject. The final stage of language acquisition is the telegraphic stage. This stage is named as it is because it is similar to what is seen in a telegram; containing just enough information for the sentence to make sense. This stage contains many three and four word sentences. Sometimes during this stage the child begins to see the links between words and objects and therefore overgeneralization comes in. During this stage a child’s vocabulary expands from 50 words to up to 13,000 words. At the end of this stage the child starts to incorporate plurals, joining words and attempts to get a grip on tenses.

Development of syntax

Although babies learn how to speak at different rates, almost all little ones learn how to form words and sentences in a similar order, beginning with single syllables and graduating to more complex ideas like tense. In just a few short years, a child goes from no language at all to forming cohesive sentences following grammatical rules. This process is called syntactic development.

Syntax refers to the rules of word order and word combinations in order to form phrases and sentences. Solid syntactic skills require an understanding and use of correct word order and organization in phrases and sentences and also the ability to use increasingly complex sentences as language develops. Syntax refers to the rules used to combine words to make sentences; syntactic development is the way children learn these rules. Syntactic development is measured using MLU, or mean length of utterance, which is basically the average length of a child’s sentence; this increases as a child gets older. According to Jean Berko Gleason’s book, “The Development of Language”, kids go through five stages of syntactic development which were identified by Roger Brown in 1973. Children automatically develop syntactic rules without explicit instruction; they learn it simply by listening to others speak around them. Between the ages of 12 and 18 months, babies usually begin to use words to communicate, beginning with one-word utterances, such as “more,” “go” or “dog.” Within a few months of uttering their first words, they move into Stage I of syntactic development, two word combinations. According to Gleason, these primitive sentences mostly consist of nouns, verbs and adjectives with a lack of important grammatical elements. Usually between 28 and 36 months the child begins with the present progressive -ing, then the prepositions in and on. 36 to 42 months acquisition of irregular past tense words, such as “fell,” followed by adding "s" to possessives, then proper use of “to be” verbs, such as “are” vs. “is.” 40 and 46 months, includes understanding of articles, the regular past tense (adding -ed), and third person regular present tense, such as “He laughs.” From 42 months on, children reach Stage V, which includes using contractions, such as “I’m” and “you’re.” They use third person irregular present tense, such as “she has,” and more complicated uses of “to be” verbs, such as combining them with other verbs and forming contractions with them. According to Bowen, kids have usually mastered all of these stages by 52 months and should be able to form four to five word sentences around age 4 (Bowen).

Tense Markers

In grammar, tense is a category that expresses time reference with reference to the moment of speaking. Tenses are usually manifested by the use of specific forms of verbs, particularly in their conjugation patterns.

Basic tenses found in many languages include the past, present, and future. Some languages have only two distinct tenses, such as past and non-past, or future and non-future. There are also tense-less languages, like Chinese, though it can possess a future and non-future system, which is typical of Sino-Tibetan languages. On the other hand, some languages make finer tense distinctions, such as remote vs. recent past, or near vs. remote future.

Tenses generally express time relative to the moment of speaking. In some contexts, however, their meaning may be relativized to a point in the past or future which is established in the discourse (the moment being spoken about). This is called relative (as opposed to absolute) tense. Some languages have different verb forms or constructions which manifest relative tense,
Tense markers among Hindi speaking children

such as pluperfect ("past-in-the-past") and "future-in-the-past".

Present Tense

Simple Present Tense

A sentence is presented in simple present tense when it is used to describe an action that's happening at present and does not indicate when the action is expected to end. Simple present tense is used when: The action that is taking place, in general. The action is not only occurring now; it repeats after regular intervals of time. To indicate facts those are generally true. The action for relating habits and routines that happen all the time, be it in the future, past or present.

Structure

Verb "+s/es" form is used;
If subject is 3rd person singular. The verb is used in its original form;
If subject is 1st and/or 2nd person singular.
If subject is 1st and/or 2nd person plural.
If subject is 3rd person plural.

Present Progressive or Present Continuous

Though the simple present and present continuous tenses are used interchangeably, present continuous usually defines an act that is going on at the time of speaking. The sentences with present progressive tense are used when: Something is taking place now, while speaking and has a definite end as well. When something is already decided and arranged as well to perform it. This tense is used in order to indicate an undesirable habit.

Structure

Use first form of the verb “+ing”

Simple Past Tense

A sentence is presented in simple past tense when it is used to describe an action that's happening at present and does not indicate when the action is expected to end. Simple present tense is used when: The action that is taking place, in general. The action is not only occurring now; it repeats after regular intervals of time. To indicate facts those are generally true. The action for relating habits and routines that happen all the time, be it in the future, past or present.

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If subject is 3rd person singular. The verb is used in its original form;
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If subject is 1st and/or 2nd person plural.
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Past Tense

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Structure

Use first form of the verb “+ing”
Past Perfect Continuous Tense

A continuous action that was completed sometime in the past falls under Past Perfect Continuous tense. Such sentences are framed by using the modal, 'had' + 'been' + the present participle of the verb (-ing).

Structure

Subject + had + been + Verb (ing) + object

Future Tense

Simple Future Tense

This tense is used for those sentences which refer to the actions which will occur later, in future. This requires a future tense auxiliary verb even though the verb would be unmarked.

Future Continuous Tense

This tense defines those acts which will be continued at a future point of time. In order to form a future continuous tense sentence, a future auxiliary verb is required followed by a main verb that ends with -ing.

Structure

'will' + 'be' + present participle of the verb (ing).

Construction

Use first form of the verb (+ing)
1st and 2nd person — ‘Shall be’
3rd person — ‘Will be’

However, nowadays this distinction of 'will' and 'shall' is not followed. Instead, 'will' is used wherever absolute conviction is required to be expressed while the usage of 'shall' depends on individual writing style.

Future Perfect Tense

This tense is used to express an act that is predicted to be finished within a certain span of time in the future. Such sentences are formed by 'will' + 'have' + 'past participle of the verb'.

Future Perfect Continuous Tense

This tense form indicates an action that is continuous and, at some point in the future, it will be completed. It is formed using the modal 'will/shall' + 'have' + 'been' + 'the past participle of the verb (-ing)'.

Tenses are critical to sensible and flawless language. They help you convey your ideas clearly by way of words. They help indicate the time of the statement and provide the reader with a crystal-clear picture of incidents.

Hindi Language

Hindi, or more precisely Modern Standard Hindi, is standardized and Sanskritized register of the Hindustani language (Hindi-Urdu). Hindustani is the native language of people living in Delhi, Haryana, Western Uttar Pradesh, Bihar, north-eastern Madhya Pradesh, and parts of eastern Rajasthan, and Hindi is one of the official languages of India. Hindi is the fourth largest language in the world by native speakers. People who identify as native speakers of Hindi include not only speakers of Standard Hindi, but also many speakers of Hindi languages family, who consider their speech to be a dialect of Hindi. In the 2001 Indian census, 258 million people in India reported Hindi to be their native language; as of 2009, the best figure Ethnologue could find for speakers of actual Hindustani Hindi (effectively Khariboli dialect less Urdu) was a 1991 figure of 180 million. The Constitution of India has effectively instituted the usage of Hindi and English as the two languages of communication for the Union Government. Most government documentation is prepared in three languages: English, Hindi, and the primary official language of the local state, if it is not Hindi or English.

As evident from above information, among the above studies no language data on children with intellectual disability is available in Hindi language. Hence, it is difficult to visualise and describe plural markers developed during language acquisition among the Hindi-speaking intellectually disabled children. It is essential that systematic, observational and experimental study of language acquisition in children in these Hindi-speaking children needs to be conducted for developing both assessments and intervention programmes.
Tense markers among Hindi speaking children

Thereby, the present study keeps in mind the above limitations and thus tries to improvise the description of tense markers in language data among Hindi-speaking typically developing children.

**Aim of the Study**

The study aims to explore tense markers in Hindi speaking typically developing children with the objective of analysing the data of among these children across various age levels.

**Methodology**

**Participants**

The study included twenty typically developing children. These children were selected from districts of Haryana and Delhi. All these children were native speakers of Hindi language.

**Selection Criteria**

Typically Developing Children

Typically developing school going children were recruited from Hindi-medium schools within the age range of four to six years. The children within four to six years were preferred for the study because by four years a reasonable amount of language development occurs in a child that can be compared to adult language patterns. Thus, the mental age range of four to six years needs largest attention for remediation of children with language disorders.

Prior to conduction of the research, school authorities were explained about the purpose of the research and a written permission was obtained from them.

**Inclusion criteria**

- Children between four to six years of age
- Children who speak Hindi as their native language
- Children, selected by teachers, who best suited the criteria for recording of language samples

**Exclusion criteria**

- Children with a history/complaint of any speech and/or language deficits
- Children with a history/complaint of any reading and/or writing problems
- Children who had any history/complaint of acquired hearing loss
- Children with complaints of cognitive deficits such as poor memory, attention deficit, organizational and/or sequencing issues
- Children with a history of any transfer from more than one school
- Children with a history of any shift in the medium of instruction
- Children with a history of any academic failures.

Post-selection, these children were divided into four subgroups, *Group 1 (4-4.5 years)*, *Group 2 (4.6-5 years)*, *Group 3 (5-5.5 years)*, and *Group 4 (5.6-6 years)*.

**Table 3.1. Age/sex distribution of 4-6 year old typically developing children**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Age Group</th>
<th>Child</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I.</td>
<td>AK</td>
<td>4.2</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I.</td>
<td>FM</td>
<td>4.3</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>(4-4.5)</td>
<td>DS</td>
<td>4.1</td>
<td>M</td>
<td>4.2</td>
</tr>
<tr>
<td>4.</td>
<td>years</td>
<td>GB</td>
<td>4.0</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>PK</td>
<td>4.4</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td>MN</td>
<td>4.7</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td>YS</td>
<td>4.6</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>II.</td>
<td>PT</td>
<td>4.5</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>(4.5-5)</td>
<td>HM</td>
<td>4.9</td>
<td>M</td>
<td>4.7</td>
</tr>
<tr>
<td>10.</td>
<td>years</td>
<td>HK</td>
<td>4.8</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td>RD</td>
<td>5.4</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>III.</td>
<td>MA</td>
<td>5.2</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>(5-5.5)</td>
<td>AP</td>
<td>5.3</td>
<td>F</td>
<td>5.32</td>
</tr>
<tr>
<td>14.</td>
<td>years</td>
<td>SK</td>
<td>5.5</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td>OM</td>
<td>5.2</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td></td>
<td>RH</td>
<td>5.6</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>IV.</td>
<td>IP</td>
<td>5.8</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>(5.5-6)</td>
<td>JK</td>
<td>5.9</td>
<td>M</td>
<td>5.8</td>
</tr>
<tr>
<td>19.</td>
<td>years</td>
<td>DJ</td>
<td>5.7</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td></td>
<td>KM</td>
<td>6.0</td>
<td>M</td>
<td></td>
</tr>
</tbody>
</table>

**Language data collection**

Natural conversational samples were video recorded, during clinician-child and parent-child interactions at the time of play. Each sample was recorded in a quiet corner room within the school premises, with limited auditory and visual distraction. The recordings were a minimum of 25 to 30 minutes targeting one child at a time. During the recording therapist/parent gave minimal instructions and focussed on eliciting maximum natural responses from the child based on the stimuli (toys/pictures) presented.

Various materials including toys, books and pictures were used to elicit language responses from
children. A list of materials is provided in Table 3.3. All the subjects interacted using the same stimuli material. Additional notes regarding the recording situations and activities were taken by a second researcher at the time of recording itself.

Table 3.3. Toys and materials used for Language Data Collection

<table>
<thead>
<tr>
<th>Category</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toys and Play Materials</td>
<td>Doll House</td>
</tr>
<tr>
<td></td>
<td>Building blocks</td>
</tr>
<tr>
<td></td>
<td>Toy Cars and Toy Train</td>
</tr>
<tr>
<td></td>
<td>Kitchen Set</td>
</tr>
<tr>
<td></td>
<td>Paper-pencil</td>
</tr>
<tr>
<td></td>
<td>Road Traffic</td>
</tr>
<tr>
<td>List of Pictures</td>
<td>Village Scene</td>
</tr>
<tr>
<td></td>
<td>Birthday Party</td>
</tr>
<tr>
<td></td>
<td>City Scene</td>
</tr>
<tr>
<td></td>
<td>Family</td>
</tr>
<tr>
<td>Topics for elicited Responses</td>
<td>School Life</td>
</tr>
<tr>
<td></td>
<td>Television Programmes and</td>
</tr>
<tr>
<td></td>
<td>Cartoon Scenes</td>
</tr>
<tr>
<td></td>
<td>Favourite clothes/music</td>
</tr>
</tbody>
</table>

Language analysis

The recorded language samples were transcribed verbatim. Each of the utterance produced by Therapist (T) and Pupil/subject (P) was transcribed within few hours of recording on the same day. The utterances were written down on a separate line and marked as either T’s or P’s utterance appropriately. Any interaction or clues provided during the recording session were also written down during transcription. Thus, overall guidelines provided by LARSP were followed.

Language Assessment, Remediation and Screening Procedure [LARSP]

LARSP is a guide for analysis of the grammar and morphology of children’s spontaneous language samples. It has been described by Crystal, Fletcher and Garman (1976) and Crystal (1979). It is a linguistic profile, used by researchers and clinicians to carry out a comprehensive and consistent linguistic analysis (Ball, 1999). It was developed as a single procedure, integrating the clinical operations of screening, assessment and remediation in the area of grammar. It includes identification of sentences and analysing them at clause, phrase and word levels. The LARSP procedure involves seven stages of transcription, grammatical analysis, structure count, pattern evaluation, statement of remedial goals, and statement of remedial procedures.

The presence of a unit was denoted as ‘+’ and absence as ‘-’ for ease of understanding. Thus, marked data was transferred on to a smaller profile for analysis purposes. The structures for plural markers were selected from various explanations of Hindi syntax by Koul (2008) and also Bhartiya Saahitya Sangrah (2005).

The following scans were made on each of the transcripts.

Scan 1: Discriminating Analysable and Non-analysable Utterances

This scan focused at separating various utterances as analysable and non - analysable. The non-analysable utterances included three categories:-
(a) Partially/wholly unintelligible utterances
(b) Presence of unwanted noise like vehicle noises and/or vegetative sounds
(c) Deviant, incomplete, unfinished and ambiguous utterances

Scan 2: Type of Response

This Scan analysed various sentences, as being spontaneous ones or response to therapist’s utterances. Spontaneous sentences were distinguished from responses. Any extra sentence other than the response sentence produced immediately following a stimulus was considered as a spontaneous sentence.

The response utterances were the ones that occurred in relation to therapist’s utterances. The response patterns were classified under ‘normal response type’ and ‘abnormal’. Normal responses were of 3 types:

i. Full major sentence
ii. Elliptical major sentence: When exact number of words omitted can be recalled by referring to previous sentence. Eg: If one word of the sentence is remaining it is elliptical 1
iii. Minor sentence: usually /uhm, nahi/ (no), /mhm, haan/ (yes).

A broad category of repetitions was also classified. This included responses similar to echolalia and also elicited imitations. In case of any confusion or uncertainty, the sentences were placed under ‘problem’ category.
Tense markers among Hindi speaking children

**Scan 3: Tense**

The tenses in Hindi are:

1. **Present Tense**
2. **Past Tense**
3. **Future Tense**

These tenses are further classified as:

1. **Present Tense:**
   a) **Present Indefinite Tense**
      This makes use of word |h æ|
      **Example:** |ladka: rota: h æ|, |ladka: a:ta: h æ|
      “Boy cries” “Boy comes”
   b) **Present Continuous Tense**
      This makes use of word |raha: h æ|
      **Example:** |ladka: roraha: h æ|, |ladka: a:raha: h æ|
      “Boy is Crying” “Boy is Coming”
   c) **Present Perfect Tense**
      This makes use of word |ta: h æ|
      **Example:** |ladka: rozkhata: h æ|
   d) **Present Perfect Continuous Tense**
      This makes use of word |ta:jaaraha h æ|
      **Example:** |ladka: use maartaa:jaaraha h æ|

2. **Past Tense:**
   Words can be used in six types in a past tense.
   a) **Past Indefinite**
      This includes addition of |ya: | to existing verb.
      **Example:** |gaya:| |a:ya: | “Gone” “Came”
   b) **Past Continuous**
      This includes use of word | h æ | in addition to |ya: | to existing verb.
      **Example:** |gaya: h æ | |a:ya: h æ | “Has gone” “Has come”
   c) **Past Perfect**
      This includes use of word | hoga: | with existing form of verb
      **Example:** |a:a:ta: h æ| “Is going” “Is coming”
   d) **Past Perfect**
      This includes use of word |tha: | with |ya: | in addition to the existing form of verb
      **Example:** |gaya: | |a:ya: | “had gone” “had come”
   e) **Past Perfect**
      This includes use of word | hoga: | with |a: | in addition to the existing form of verb
      **Example:** |gaya: | |a:ya: | “might have gone” “might have come”

3. **Future Tense**
   a) **Future Indefinite**
      Addition of word |ega: | to existing verb form.
      **Example:** |likʰega: | |dża:ya: | “will write” “will go”
   b) **Future Continuous**
      Use of words like |fa:ya: | and |sambʰav h æ|
      **Example:** |ja:ya:veh a:ʤ a:yega: | “perhaps I will come today”
      |sambʰav h æ veh der se a:yega: | “possibly he will come late”
   c) **Future Perfect**
      Addition of word |hoga: | to existing verb form.
      **Example:** |vehaayoga: |
   d) **Future Perfect Continuous Tense**
      Addition of word |rahahoga: | to existing verb form.
      **Example:** |vehaarahahoga: |

**Statistical Analysis**

After Transcription and analyzing the recorded data, the record sheets were further subjected to statistical analysis. For this the Fisher’s Exact Test was used in order to compare results within each group during tense analyses.

The results are expected to strengthen linguistic profiling of Hindi speaking children between 4-6years. Such profiling is expected to increase our understanding of disordered language in this group and also help in planning remediation.
The detailed interpretation of data analysed is described in the section that follows.

Results

The tense forms in Hindi are Present, Past and Future. Out of these present has various sub categories, namely Present Indefinite (use of word “hae”), Present Continuous (use of word “rahahae”), Present Progressive (use of word “ta hae”), Present Progressive Continuous (use of word “ta jaarahahae”). The past tense includes tense forms like Past Indefinite (use of word “gaya” or “gayatha”), Past Continuous (use of word “jarahatha”), Past Progressive (use of word “gayathra”), Past Progressive Continuous (use of word “gayahoga”). The future tense includes Future Indefinite (use of suffix “ega”), Future Continuous (use of word “shayad”), Future Progressive (use of word “hoga”) and Future Progressive Continuous (use of word “rhahoga”).

As indicated in Table 5.1, by 6 years of age, it was seen that children frequently used present and past tenses. From 4 years onwards, TD children start using tense markers in their sentences but these are only present tense markers. Among this the highest used tenses are Present Indefinite & Present Continuous, followed by Present Progressive and Present Progressive Continuous. Apart from this, few occurrences of past tense are also noted. This includes prominent occurrence of Past Indefinite and very limited episodes of Past Progressive. In addition, a few occurrences of Future Indefinite are also noted.

It is seen that Present Indefinite & Present Continuous complete their development by 4 years itself and then continue to be used even after that with good consistency. The other present tense markers Present Progressive and Present Progressive Continuous appear in 4 years but are limited in frequency. As the age increases the frequency of these tenses also increases. By 6 years, the development of Present Progressive completes. However, Present Progressive Continuous remains under developed even by 6 years of age.

Among the past tense markers, the occurrence of Past Progressive Continuous is negligible even at 6 years of age. The other past tense markers Past Indefinite, Past Progressive start developing by 4 years of age. The percentage of Past Indefinite is greater than Past Progressive start developing by 4 years of age. The percentage of Past Indefinite is greater than Past Progressive till 6 years, but both the tense markers continue to develop even beyond 6 years. The past tense marker Past Continuous remains minimal in occurrence at 4 years and increases with age. Past Continuous also remains under developed till 6 years.

Future tense markers occur minimally till 6 years. Among these, the only prominent future tense is Future Indefinite which appears by 4 years. As age increases, the frequency of Future Indefinite also increase but remains under developed till 6 years. The other future tenses, Future Progressive, Future Continuous, Future Progressive Continuous remain negligible and show very limited variation with age. This is illustrated in Figure 5.1.

Table 5.1. Development of Tense forms across 4-6year old typically developing children

<table>
<thead>
<tr>
<th>TENSE FORMS</th>
<th>4-4.5 Years</th>
<th>4.5-5 years</th>
<th>5-5.5 years</th>
<th>5.5-6 years</th>
<th>Fisher’s Exact Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td>Present Indefinite</td>
<td>5</td>
<td>100</td>
<td>5</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Present Continuous</td>
<td>5</td>
<td>100</td>
<td>5</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Present Perfect</td>
<td>2</td>
<td>40</td>
<td>3</td>
<td>60</td>
<td>5</td>
</tr>
<tr>
<td>Present Perfect Continuous</td>
<td>1</td>
<td>20</td>
<td>1</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Past Indefinite</td>
<td>3</td>
<td>60</td>
<td>3</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>Past Continuous</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Past Perfect</td>
<td>1</td>
<td>20</td>
<td>2</td>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>Past Perfect Continuous</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Future Indefinite</td>
<td>3</td>
<td>60</td>
<td>2</td>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td>Future Continuous</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Future Perfect</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Future Perfect Continuous</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Tense markers among Hindi speaking children

Results on tense markers analyses presented a predictable picture of increasing performance of typically developing children as age increases from 4years to 6years. This performance, however, is not uniform across all the categories.

![Graph showing development of tense forms across typically developing children](image)

**Fig. 5.1.** Development of Tense forms across typically developing children

**Discussion**

Language developmental data in Indian languages has enhanced our knowledge about child language disorders. When speech language pathologists in India face a variety of languages spoken by children with language disorders a challenge of selection of appropriate goals for therapy starts. Traditionally, translating language development data from English data sets of non-Indian subjects has been the norms. But this inherits obvious disadvantages in diagnosis and therapeutic planning. This approximate data suggested in Indian language studies of children, both normal and delayed in language development (like Karanth, 1985; Subbarao, 1995; Jayaram, 1993; Sreedevi, 1976; Bhatt, 2002; Karthikeyan, 2003; Rupella&Manjula, 2007) have influenced therapy and assessment process.

The syntactic development in children has been studied extensively in western as well as Indian literature. Application of language data from English-speaking children (like Brown 1973) to children speaking Indian languages is not appropriate. While discussing the developmental data from LARSP (Crystal et al., 1976, 1989) outline approximately seven stages of syntactic development in children between 9months to 4.6years and above. They have stressed that learning of grammar in a language has been completed by the time the child goes to school. The present study supports this view.

**Language of normal subjects**

The development in syntax for these children followed variable pattern of development for different syntactic features. Some features developed completely by 6years whereas other remained completely absent by this age. Among the other structures, as the age increased these markers also improved in their occurrence. Among the tense forms, the present tenses were used the most. This included present indefinite, present continuous and present progressive tense. The past tenses were limited in use but appeared more than future tense.

The result of present study agreed with few studies done in other languages like Kannada,
Malayalam etc. (Tasneem, 1972; Sridevi, 1976; Subramaniam, 1978; Uma, 1993; Suchitra & Karanth, 1990; Subbarao, 1995; Kaur, 2015; Verma, 1980; Krupa, 2009). On syntactic markers, the present study found use of regular plurals most often, with very minimal incidents of irregular plural forms. This was observed in various other studies done in Indian languages (Subbarao, 1995; Kaur & Shiny, 2017). Among the tense markers also, the present study was in agreement with other studies, as most of the studies showed present tense to be more prominent in speech of typically developing children (Subbarao, 1995).

Language in Intellectually Disabled Children

Children with intellectual disability demonstrated that as age increases, the performance also increases. The qualitative analyses among children with intellectual disability showed an increase in number of sentences with age. Thus, there was a significant difference between the age groups within children with intellectual disability. This difference also existed for the number of sentences per turn but not for mean sentence length. On comparison with normal subjects children with intellectual disability showed lower scores for total number of sentences produced, mean sentence length and sentences produced per turn. This finding supported the viewpoint shared by Subbarao (1995) who suggested that this feature of language cannot alone predict the language performance in general, as the differences are not uniform and subjects lagged behind typically developing children. In addition to this, it was evidently noted that children with intellectual disability produced sentences only in response to a stimuli given. The sentences were not spontaneously produced by these children, perhaps due to limited cognitive abilities. This was also observed in other studies done in similar areas (Subbarao, 1995). Various other studies done in similar areas (Subbarao, 1995) also showed difficulties in accessing or recalling information without help of stimuli (Subbarao, 1995; Kierman, 1985; Winters & Brzoska, 1976).

The tense markers showed a variable pattern of development. The present tense seemed to develop similarly among children with intellectual disability and typically developing children though significantly lower development was noted by past and future tense markers for children with intellectual disability relative to typically developing children. This supported the study by Abbedutto & Chapman (2007) who proposed that children with intellectual disability do not develop rule oriented language behavior. Rather, they string their words together as per their requirements. This could be the reason for less use of past and future tense as children with intellectual disability generally talk about events present before them and can rarely recollect past events or talk of their future plans.

Limitations and Future Directions

The selection of intellectually disabled participants for the present study was based on the school records. A re-assessment of their mental age was not done due to lack of resources. Instead, assessment of their language age was performed to confirm that their language level is similar to that of the controls. This is a limitation for the present study and it should be considered important parameter in future.

Future studies can also focus on a detailed comparison across natural conversational samples and other narratives used in the study. Moreover, comparisons across language samples collected during parent-child and clinician-child interactions are also important in future.

Hindi is a diverse language with various dialects spoken in different parts of Northern India. The present study focused only on children speaking Hindi in Delhi and Haryana. Further studies are needed to confirm the development of language among other Hindi-speaking children.

References

Tense markers among Hindi speaking children


