Evaluation of Pragmatic Skills in 2-5 Year Old Kannada Speaking Children

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Abstract

Effective communication requires not only linguistic knowledge but social knowledge as well. The rule governing the use of language in context is termed as pragmatics (Bates, 1976a). This study evaluated the performance of 2-5 year old typically developing Kannada speaking children on five pragmatic skills. 36 children participated in this study. One hour audio-video sample of mother-child interaction was recorded. The findings of this study are discussed in terms of frequency of pragmatic skills initiated and responded by each child during the course of interaction with his/her communicative partner (i.e., mother).

Key words: Pragmatic skills, Typically developing children (2-5 year), Kannada Speakers.

Introduction

Early social interactions provide the vehicle through which the child acquires the linguistic structures. Since the middle of 1970’s and 1980’s emphasis began to shift from defining language in terms of syntax and semantics to defining language in terms of its use (i.e. pragmatics). A useful framework for understanding early pragmatics development derives from the theory of speech acts (Austin 1962, Searle, 1969). In Austin’s view, sentences have three components: their intended function, “illocutionary force”; their form, “locution”; and their effect on the listener, or “perlocution.” Berko-Gleason (2005) defined pragmatics as the linguistic domain concerned with the appropriate use of language across a variety of social contexts that provides for a listener's accurate interpretation of the speaker's intentions and references.

With increase in age, children learn to utilize and connect various specific contextual factors for communication. James & Seebach (1982) investigated questioning skills of
typically developing children between the ages from 2 to 5 years. Results indicated that the number of questions produced increased with age. Klecan-Aker & Swank (1988) evaluated pragmatic functions of preschool children in the age range of 2 to 5 years. Pragmatic skills assessed were description, personal, affirmation/negation, greeting, labeling, revision, turn taking, and requesting. The findings of the study indicated a general increase in correct responses with an increase in age. They also reported that, girls generally showed a superior performance compared to boys.

Nishi (2004) reported that by 2.6 years children acquire requesting and negation. Nitta (2006) reported developmental change in emergence of pragmatic skills in typically developing children in the age range of 1 to 3 years. Dheepa and Shyamala (2008) studied pragmatic skills in children between the ages of 1 to 8 years. Reporting that, children by 1 to 2 years master joint attention and requesting skills. The pragmatic development reached plateau after 2 years of age. By the age of 2 years questioning and answering skills were acquired. The author reports that there was no gender difference within and across the age group in the acquisition of pragmatic skills.

The review of studies on emergence of pragmatic skills in typically developing children presents the view that, pragmatic skills follow a developmental continuum. The assessment of pragmatic development is necessary in understanding a child’s competence in language use. Hence, the present cross sectional study was undertaken with the following objectives:

Objectives

1. To study the pragmatic skills in 2-5 year old typically developing Kannada speaking children in the context of mother-child interactions.

2. To find gender differences if any.

Method

The present study evaluated the performance of typically developing children between the ages from 2-5 years on five pragmatic skills.
1. **Questioning:** Utterances that indicate ‘Wh’ questions.

2. **Answering questions:** Gestures and/or utterances that acknowledge the speaker’s statements or questions.

3. **Request for object and / or action:** Gestures and / or utterances that direct the listener to provide an object and / or to perform an action.

4. **Response for negation:** Gestures and / or utterances that indicate absences of object / item.

5. **Response for Joint attention:** Listener’s use of attention-following behaviours, such as head turn and eye gaze to follow the visual focus of a communicative partner.

**Participants:** A random sample of 36 typically developing children from 2-5 years of age (mean age of 3.8 years) in interaction with their mothers participated in this study. The entire group was divided into three subgroups with one year of age interval. The subgroups included, 2 – 3 years (mean age: 2.7 years); 3.1 – 4 years (mean age: 3.5 years); 4.1 – 5 years (mean age: 4.9 years). Each subgroup consisted of 12 participants (6 male each and 6 female each). All participants were from native Kannada speaking families. Participants were screened for normal Speech and Language skills, Cognitive skills, Motor development and Hearing ability.

**Materials:** Toys and activities suitable for children in the selected age range were included based on guidelines from ‘Toy kit for children with developmental disabilities’ (Venkatesan, 2003). The toys included were flash cards, story and picture books, puzzles, building blocks, toy vehicles, ball, doll, kitchen set.

**Procedure:** An informed consent in writing was obtained from all the mothers of children who participated in this study. The procedure taken up in this study was audio-video recording of mother-child interaction. Sessions of semi instructed mother-child interactions served as the media through which the pragmatic skills were assessed. Mothers and children were instructed to play and interact with each other as they would normally do at home using as many of the toys and materials provided to them. An hour’s audio-video recording of mother-child interaction was collected in 3 – 4 sittings for 20-15 minute duration within a
week. Recording was carried out at their homes. At the end of each session, children were provided with tangible reinforcement.

**Coding Procedure:** The recoded video samples of mothers-child interaction were subjected to frequency calculation. Frequency referred to the number of instances of initiation from mother and responses given by each child and self-initiation by each child for each pragmatic skill. The responses obtained from each child to mother’s initiation of pragmatic skills was grouped into two categories namely, response and no response.

- **Response:** Contextually appropriate response (gestures and / or utterances) from the child that occurred to mother’s initiation of pragmatic skills
- **No response:** Ignoring the question without answering. Responses out of topic were also grouped in “no response” category.

**Judges:** Three Speech-Language Pathologists (postgraduates) served as judges for this study. Recorded audio-video samples were shown to the judges along with the operational definitions / explanatory note and score sheets for analyzing frequency of response. The samples were judged independently by these three judges.

**Inter-judge Reliability:** For each pragmatic skill, inter-judge reliability was calculated among the three judges. Reliability co-efficient alpha was calculated and it was found to be 0.7 to 0.8 indicating high reliability between the judges.

**Results and Discussion**

In order to check for the presence of gender effect on pragmatic skills, Mann-Whitney U test was carried out. These analyses revealed that no significant differences at .05 level of significance were present between male and female participants of the study. Hence, in the final analysis, data was combined.

**Table-1: Mean percentage & SD values for pragmatic skills of typically developing Children**

<table>
<thead>
<tr>
<th>Pragmatic skills</th>
<th>2.1-3 years</th>
<th>3.1-4 years</th>
<th>4.1-5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qn</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>32.25</td>
<td>6.86</td>
<td>26.25</td>
</tr>
</tbody>
</table>
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Table-1 and fig-1: shows mean percentage and SD values for pragmatic skills. As indicated in table-1, pragmatic skills; answering questions, request of object and/or action, response for negation, and response for joint attention used by typically developing children increased with age. Pragmatic skill like questioning was high at the age of 2.1-3 years and decreased with age, indicates the interest/curiosity of young children in understanding new concepts compared to the higher age groups.

Duncan’s Post Hoc test was carried out to check pair wise differences between the age groups on pragmatic skills studied:

Table-2: Duncan’s test at 0.05 level of significance for pragmatic skills

<table>
<thead>
<tr>
<th>Age (in years)</th>
<th>Pragmatic skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Qn</td>
</tr>
<tr>
<td>2.1-3 &amp; 3.1-4</td>
<td>S</td>
</tr>
<tr>
<td>2.1-3 &amp; 4.1-5</td>
<td>S</td>
</tr>
</tbody>
</table>

Qn: Questioning, AQ: answering questions, Rq: request for object and/or action, R_Ng: response for negation, R_JA: response for joint attention
Table-2: shows results of Duncan’s test at 0.05 level of significance (pair wise comparison). The results indicated that, for questioning and requesting skills there was statistically significant differences at .05 level of significance for pairs, 2.1-3 years & 3.1-4 years; 2.1-3 years & 4.1-5 years; 3.1-4 years & 4.1-5 years. For answering questions there was statistically significant differences at .05 level of significance for pairs, 2.1-3 years & 3.1-4 years; 2.1-3 years & 4.1-5 years. For pragmatic skills; response for negation, response for joint attention, statistically significant differences were not seen for pairs; 2.1-3 years & 3.1-4 years; 2.1-3 years & 4.1-5 years; 3.1-4 years & 4.1-5 years and answering questions for pair 3.1-4 years & 4.1-5 years.

Results of this study indicated that, the pragmatic skills that emerged in typically developing children increased with age. The results of this study are in support with earlier studies that focused on development of pragmatic skills in typically developing children for different age groups. James & Seebach (1982) for children in the age range from 2 to 5 years; Klecan-Aker & Swank (1988) for 2 to 5 years; Nishi (2004) for children in the age range from 2.6 to 3.6 years; Nitta (2006) for 1.1 to 3 year old typically developing children and Dheepa & Shyamala (2008) for typically developing children from birth to 8 years of age.

Conclusion

The focus of study on the pragmatic domain has broadened the view of communication towards the social dimension. The present study adds new information to the existing literature on development of pragmatic skills in typically developing children. Further the normal pattern of pragmatic skills to be evaluated under different social contexts. Such a study would serve as basis for understanding the changes of pragmatic skills in clinical population.
References


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