

Pragmatic Skills in Typically Developing Infants

¹Shilpashri H.N. & ²Shyamala K. Chengappa

Abstract

Communication refers to exchange of information between the speaker and listener. Among the various modes, language forms the primary means of human communication. The knowledge of language is viewed as an integration of content, form and its use. The use of language in social contexts refers to as pragmatics. Pragmatics forms a critical intersection for children's developing language competence and social interactions. As speech and motor milestones develop, pragmatic skills also develop during infancy. The present study was an attempt to understand the type of pragmatic skills acquired at the age of 6 months to 12 months of infancy with Kannada as their mother tongue. Eight typically developing infants (4 male and 4 female) were considered for the present study. One hour audio - video sample of mother-child interaction was recorded and analyzed for eight different pragmatic skills. The results of the present study are discussed in terms of acquisition of pragmatic skills during infancy.

Key words: Infants, Kannada speakers, Pragmatic skills.

The ongoing exchange of message is the act of communication. Communication is a key element in defining humans as social beings. Language is primary means by which human beings maintain interpersonal contact, socialize with others and regulate interactions. Effective communication requires not only linguistic knowledge but social knowledge as well. Efficiency in both linguistic and social abilities is therefore necessary for contextually appropriate, meaningful and effective interpersonal communication (Adams, 2005). Just as learning phonological, semantic (content) and syntactic (structural form) rules of language, a child must also master the rules that underlie how language is used for the purpose of communication (Hymes, 1971). The use of language for social communication is termed as pragmatics.

One of the keywords of interest in past decades for speech-language pathologist has been the study of pragmatics. Focus on pragmatics has broadened our view of communication towards the social dimension. The term pragmatics has been introduced into the field of speech – language pathology by Elizabeth Bates. Bates (1976) defined pragmatics as “rules governing the use of

language in context”.

Children’s pragmatic language development can be observed at the infancy stage and is seen to rapidly increase and be more sophisticated during the preschool years. From the earliest stage of language development itself, children’s utterances reflect social acts more than linguistic achievements.

Woolfolk and Lynch (1982) have reported that infants between the age of 2 and 10 months use eye contact and gaze exchange to regulate joint attention on an activity. Presence of eye contact, smiling and attention indicates that the child takes notice of someone or something. Pointing plus vocalization suggests demand for someone or something. Longitudinal studies that have concentrated on children’s earliest gestural and verbal communicative intents have demonstrated that children begin as early as 9 to 10 months of age to use their gestures and vocalizations for pragmatic functions as requesting, labeling, answering, greeting and protesting (Bates, Camaioni & Volterra, 1975; Dale, 1980). By 12 months typical infants routinely engage in coordinated joint attention with their caregivers (Bakeman & Adamson, 1984; Carpenter, Nagell

¹Junior Research Fellow, Dept. of Speech Language Pathology, All India Institute of Speech and Hearing, Mysore-570006, email:shri_shilpa_15@yahoo.co.in, ²Professor, Dept. of Speech-Language Pathology, All India Institute of Speech and Hearing, Mysore-570006, email:shyamalakc@yahoo.com

& Tomasello, 1998). Mathew (2004) has reported in her study that children acquire verbal indication of negation by 1 ½ - 2 years of age.

Studies have also focused on how caregivers regulate interaction with the baby by selectively responding to the baby’s gestures. These early interactions have been referred as proto-conversations (Bateson, 1975). Snow (1977) has examined such conversations over several stages between mothers and infants aged from 0 to 18 months.

Individuals who fail in using language appropriately to the context are usually put under the diagnosis of pragmatic disorder. In order to identify these deficits, it is important to understand the normative aspects. Hence, the present study aimed to identify type of pragmatic skills acquired by 6 months to 12 months aged typically developing infants.

Method

The present study aimed at investigating the type of pragmatic skills acquired by typically developing infants between the age ranges of 6 months to 12 months. The eight pragmatic skills studied were as follows.

1. Smiling.
2. Attention.
3. Eye contact.
4. Vocalization.
5. Play behaviors.
6. Non verbal turn taking.
7. Giving on request.
8. Non verbal indication of negation.

Subjects: 8 infants (4 male and 4 female) in the age range of 6 months to 12 months with Kannada as their mother tongue and their mothers (as mother spends most of the time with the child) were considered for the present study. These infants were screened for speech, language, motor development and hearing, to rule out any associated disorder.

Sl.No.	Age in months	sex	Sl. No.	Age in months	sex
1	06	F	5	07	M
2	09	F	6	08	M
3	09	F	7	08	M
4	11	F	8	09	M

Table 1: Demographic data.

Materials: The test materials included sound makers, toys and picture books.

Procedure: An informed consent was obtained in writing from the mothers of all the children, prior to the study. An interview was conducted with the mothers to rule out history of speech, language and motor developmental delay and hearing problem if any. The procedure undertaken in the present study was audio - video recording of mother-child interaction, at home. Prior to video recording, mothers of all the infants were instructed to interact naturally and to play with the child using toys/materials given. They were also instructed to feel free and to focus on play activity and not to the camera. Semi-instructed method was used where mothers were demonstrated the method of using toys / materials given to elicit the target behavior to be studied. One hour audio-video sample of mother-child interaction was collected in 2 – 3 sittings for 20 – 30 minute duration each. Recording for all the infants were done with in a week at their homes.

Scoring and analysis: Two point rating scale (**0 and 1**) was used for scoring of pragmatic skills. **0** – indicating absence of the pragmatic skill and **1** – indicating presence of the pragmatic skill.

Three speech-language pathologists (undergraduates, currently working for their internship program) served as judges for the present study. All the three judges were trained for the use of terminologies and analyzing the pragmatic skills from the video clipping. After the training, judges were instructed to rate the pragmatic behavior using two point rating scale only if the child exhibit the behavior for minimum of three times in the whole recording.

Results and Discussion

The present study investigated the pragmatic skills in eight typically developing infants between the age ranges of 6 months – 12 months. The infants were assessed for 8 pragmatic skills namely; smiling, attention, eye contact, vocalization, play behaviors, non verbal turn taking, giving on request, and non verbal indication of negation. The responses were scored by 3 judges according to the rating scale as mentioned above.

All the 3 judges had similar ratings for all the behaviors analyzed. Table-2 and 3 gives the summary of pragmatic skills seen in all the infants.

Pragmatic skills	Females (age in months)			
	F 106	F 209	F 309	F 4 11
Smiling	1	1	1	1
Attention	1	1	1	1
Eye contact	1	1	1	1
Vocaliza -tion	1	1	1	1
Play behaviors	1	1	1	1
Non verbal turn taking	1	1	1	1
Giving on request	0	0	0	1
Non verbal indication of negation	0	0	0	1

0-Absent, 1-Present.

Table-2: Pragmatic skills of 4 typically developing infants (females).

Pragmatic skills	Males (age in months)			
	M 107	M 208	M 308	M 409
Smiling	1	1	1	1
Attention	1	1	1	1
Eye contact	1	1	1	1
Vocaliza -tion	1	1	1	1
Play behaviors	1	1	1	1
Non verbal turn taking	1	1	1	1
Giving on request	0	0	0	0
Non verbal indication of negation	0	0	0	0

0 – Absent, 1 – Present

Table 3: Pragmatic skills of 4 typically developing infants (males).

As shown in the above table – 2 & 3, pragmatic skills namely, smiling, attention, eye contact, vocalization, play behaviors, non verbal turn taking, were seen in all the participants belonging to both the gender groups. Hence, in the present study gender differences were not seen for acquisition of pragmatic skills.

The above results obtained are in agreement with study conducted by Woolflok & Lynch (1982) wherein the pragmatic skills namely – attention, eye contact, smiling, vocalization stabilizes by 2 – 10 months of age. Owens (1984) reports nonverbal turn taking begins by first 6 month of life. Dheepa (2005) studied pragmatic skill development in typically developing Tamil speaking children and she has reported that children acquire skills namely, smiling, attention and eye contact by one year of age. As 6 months is the lowest age considered in the present study, few of the pragmatic skills listed may also have been acquired before 6 months of age.

Pragmatic skills namely, non verbal indication of negation, giving on request was seen only in one female participant aged 11 months. Woolflok & Lynch (1982) and Dheepa (2005) reported that giving on request is acquired by 1 – 2 years of age. Children acquire negation generally by 1 – 2 years (Dheepa, 2005) and more specifically by 1 ½ – 2 years (Mathew, 2004). In the present study, as there was only one child in the higher age (11 months) with in the group who confirmed, it cannot be definitely concluded whether giving on request and non verbal indication of negation are acquired (or not) by one year of age.

In the present study an attempt was made to highlight the performance of infants on few pragmatic skills. However, further research on large population and on various pragmatic skills is necessary to arrive at the normative values or for further generalization of the results.

Conclusions

Development of pragmatic skills starts during infancy. Understanding the normal aspects of pragmatic skills helps in identifying and planning therapeutic intervention for children with pragmatic disorder at an early age. The present study aimed at identifying the type of pragmatic skills acquired by eight 6 – 12 months aged typically developing infants. Only eight pragmatic skills were included in the present study. The findings of the study revealed no gender differences on any of the eight skills studied. The Pragmatic skills namely, smiling, attention, eye contact, vocalization, play behaviors, non verbal turn taking were found acquired by all the eight infants while giving on request and non verbal indication of negation were seen only in one participant of 11 months age (participant of highest age of the group studied). However, normative data needs to be developed on a larger sample in this regard.

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