Pragmatic Skills in Gujarati Speaking Autistic Children

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Introduction

Language development arises from the necessity to communicate with other people. Language is generally the child`s first socialization experience, enabled by the parents during every-day activities. A pragmatic disorder may be observed when a child`s language is not adequate and affects social adaptation. Pragmatic skills disorder may result in different communication indicators. In children with autism, inadequate communication goes beyond social communication and marks the capabilities to maintain relations and to show interest in various topics. A child should be evaluated to see whether they have a developmental language disorder if they exhibit significant difficulties with spoken receptive and expressive language but no intellectual deficiency.

Speech and language disorders that cause issues with communication and related domains might be classified as communication disorders. From basic sound replacement to the incapacity to comprehend or utilize one's innate language, the delays might take many forms. The consistent deficit in interaction in social communication, including social mutuality and verbal communication behavior used in social interactions, tends toward inabilities to develop and maintain social relations.

A key example of a childhood communication disorder is autism in children. The

term autism typically raises up images of children who engage in a wide range of abnormal and socially unacceptable behavior, or children whose language is severely inadequate (Hulit and Howard, 2006). According to DSM-5, an autism diagnosis requires the demonstration of restricted and repetitive behavioral patterns. Verbal and non-verbal social communication features vary depending on age, cognitive and linguistic developmental level. Several symptoms can be noticed, from total absence of speech, to a mild language delay; as well as deficits in receptive language and echolalia. Even when formal language abilities are intact, the use of language in social mutual communication is often inadequate in children with autism.

Literature Review

Deficits in non-verbal communication skills protuberant in autism include absence of eye contact and those in conversational skills like forms, initiation, frequent empty turns, inability to follow topic or control of conversation and associated non contextual or socially inappropriate comments. These traits provide evidence for the presence of pragmatic language disorder associated with autism (Bishop and Norbury, 2002).

Pragmatic skills are essential in identifying children who need extra intercession in the area of pragmatics. It is a socially motivated behavior and involves assessing a child in interaction with a peer or an adult and these observations are difficult to make in a clinical setting (Toe et al., 2020). Children with inadequate pragmatics perform better in a designed environment, like a formal test as compared to a naturalistic situation (Bishop & Adams, 1989).

Senju, Yaguchi, Tojo, and Hasegawa (2003) investigated gaze behavior in a study involving 13 Japanese children with high-functioning autism and 15 typically developing peers, finding that while the typically developing children better understood direct gaze, both groups performed similarly in identifying averted gaze. So, it was noted that children with autism have a problem with processing direct gaze which in turn connects to the failure in establishing normal course of eye contact, which may restrict subsequent development of social and communicative skills.

Dawson et al., (2004) studied social attention impairments in autism and their relations to language ability. The outcomes showed that there was a significant

impairment in the domains of social orienting, joint attention, and attention to distress in preschool-age children with autism in connection to mental-age-matched children with developmental delay (DD) and typical development children (TD). The study was carried out with reference to the nonverbal communication abilities in young children with autism. The nonverbal communicative skills, socio-cognitive abilities, MA and IQ of the children were measured. The early social communication scale (ESCS) (Munday, Hogan, and Doehring, 1996) was used to measure the nonverbal communicative skills. Findings showed that the duration of the ESCS testing did not differ across the four groups. There was a significant difference in the average number of nonverbal communicative acts in four groups and children with autism had pointedly fewer nonverbal communications than the children in the other three groups. The results of the study highlight the need for both early diagnosis and early intervention (Chiang, Soong, Lin, and Rogers (2008).

Chakravarthy (2002) made a diagnostic scale that could help us qualify the nature of ASD and to make an allowance for the profiling of symptoms. Neurodevelopmental disorders may result in pragmatic deficits, but autism spectrum disorder (ASD) and Developmental Language Disorder (DLD) are significant illustrations of communication disorders that affect social communicative and pragmatic language. It is important to consider these different characteristics of children with one of these diagnoses, as there is evidence of a number of children that receive the DLD diagnosis but later develop ASD symptoms during their young years.

Biji (2003) stated that pragmatic skills in children with pervasive developmental disorders (PDD's) include challenges with greeting, labelling, requesting, negation, affirmation, repair, stylistic variation, referential communication, turn taking, closing conversation, eye gaze and proximity. The post-study results showed that children with PDD that struggled with the pragmatic skills and the performances on pragmatic skills including greeting, eye gaze, affirmation, negation, proximity, closing conversation, labelling improved when compared to other skills due to the intervention program during which these aspects established more attention.

Shilpashri (2010) studied pragmatic skills in children with ASD. The study result showed that among the 14 pragmatic skills that were initiated by the caregiver, the

response for tagging was mastered only in few children with ASD. The result showed that percentage of response from the children with ASD to a caregiver's initiation of pragmatic skills and on self-initiation was not linear for all pragmatic skills with respect to age, as compared to typically developing performance.

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Need For the Study

Pragmatics is the study of the relationship between languages which affects the whole communication. Children with language disorders deviate in pragmatic skills when compared to typical developing children. There is very limited research on pragmatics of the Gujarati language in children with autism.

Aims of This Study

The aim of the present study was to assess the pragmatic skills in Gujarati speaking children with verbal autism by comparing with MA matched TD children in the age range of 4-5 years. We will describe the pragmatic skills provided by 4-5-year-old typically developing children based on caregiver –child interaction, the performance on pragmatic skills by 4-5-year-old mental age children with Autism along with the comparison of the performance of the above two groups

Inclusion Criteria

1. Gujarati as a mother tongue
2. Children who were attending special school for at least 1-2 years and with a MA 4-5 years.
3. No history of any delay in speech, language, cognition and neurological abnormality in normal population.

Methodology

The data was collected by using interaction with toys, pictures, picture description

and general conversation. Sample collection was done with reference to the study done by Shilpasree, 2010. In the present study all the subjects were engaged in play/ interactive sessions. The 20-30 minutes of interaction was recorded and later transcribed. Transcribed sample was subjected to analysis for pragmatics in different areas.

Participants

The participant group included 30 children with verbal autism, who express their needs minimally and occasionally with phrases and simple sentences. 10 neurotypical subjects for the reference group with age group range of 4-5 years were also part of this study. The subjects were attending Gujarati medium schools in and around Ahmedabad. The latter group included 5 males and 5 female subjects with a mean age of 4.5 years.

Parameters of pragmatics skills namely response for eye contact, smiling, response for gaze exchange, response for joint attention, response for request of object and/or action, response for labelling, answering questions, response for negation, response for turn -taking response for conversational repair, response for topic initiation, response for topic maintenance, response for comment/ feedback, response for adding information were assessed with reference to Shilpasree, 2010.

Results and Discussion

Table A shows the presence of 14 pragmatic skills recommended in a recent study on autistic subjects (Shilpashri, 2010). The neurotypical reference group provided a healthy presence of a majority of pragmatic skills. For example, all the subjects responded to eye contact, contributed in gaze exchange, used smiling, responded to requests, labelling and demonstrating attentiveness in the conversation process. The typically expected joint attention skills, turn taking skills were also shown by all the neurotypical participants. In this study fifty percent (50%) or less responses were detected for repairs in conversation and topic initiation and topic maintenance. The pragmatic skills like commenting on feedback and adding information were absent. These results are on track with data reported by Shilpashri (2010) regarding the development of pragmatic skills in Kannada speaking neurotypical children.

The subjects with verbal autism showed a different pattern compared to the neurotypical reference group. For instance, responses to labelling and requests for objects

were merely 83% present and were comparable to the reference group. Though, less than 50% of the subjects participated in skills requiring responses to adult stimulus utterances. The score of smiling, gaze exchange and eye contact were also low.

Pragmatic particulars	**Group-I (4-5 yrs)**	**N=10 % age**	**Group-I (MA 4-5 yrs)**	**N=30 % age**
Eye Contact	9	90	13	43
Smiling	10	100	08	26
Gaze exchange	10	100	15	50
Joint attention	10	100	18	60
Request	10	100	20	66
Labelling	10	100	25	83
Answering Questions	10	100	16	53
Negation	10	100	18	60
Turn taking	10	100	22	73
Conversational repair	06	60	12	40
Topic Initiation	05	50	10	33
Topic maintenance	06	60	12	40
Comment /Feedback	00	00	00	00
Adding Information	00	00	00	00

Table A: Showing percentage score of comparing of pragmatic skills between TD children and autistic children.

In this study subjects with autism showed 83% responses for labelling and 60% responses for joint attention. This is slightly higher than the data presented by Shilpashri 2010. The reason could be due to the nature of the training provided in schools where each of the pragmatic skills were repeatedly focused. Therefore, the nature of training in speech and language therapy and special education sessions may influence the development of pragmatic skills along with parent's behavior and their support towards child development in all areas.

Summary and Conclusion

Language is a pillar to means of communication and communication almost always takes place within some sort of social framework. Pragmatics is a branch of linguistics that explores the ways language is tied to the context in which it is used. Children with language disorders having deviations in pragmatic skills compared to TD children. It is also probable that the pragmatic skill variations will affect the development of other components of language also. The current study indicates that focus should be given to improve pragmatic skills in children with autism during therapeutic management.

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