

# Communicative Intents in Korean-speaking Typical and Autistic Children

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## Purpose

It has frequently been reported in the literature that children with autism spectrum disorder (ASD) have difficulties having an interaction with others in communication. Tager-Flusberg & Anderson (1991), for example, found that children with ASD failed to add new information properly, hence unable to maintain and shift the discourse topic, as a consequence. More recently, Tager-Flusberg (2000), Hale & Tager-Flusberg (2005, p. 523) found that the communication impairment, but not social interaction, was significantly related to non-contingent discourse. In particular, children with autism experience difficulty initiating and maintaining a conversation by answering to a question and turn-taking effectively. Moreover, they rarely respond to requests for clarification or repair their messages by providing new information.

Our study examines communicative intents expressed by normally-developing (NDC) and autistic Korean-speaking children (ASD) with a focus on two discourse-pragmatic categories such as topic continuity (shared attention) and topic maintenance. It is hoped that we examine the way in which typical and atypical children develop communicating by attending to the main focus of discourse topic as well as by adding new information as desired in an attempt to maintain the ongoing topic.

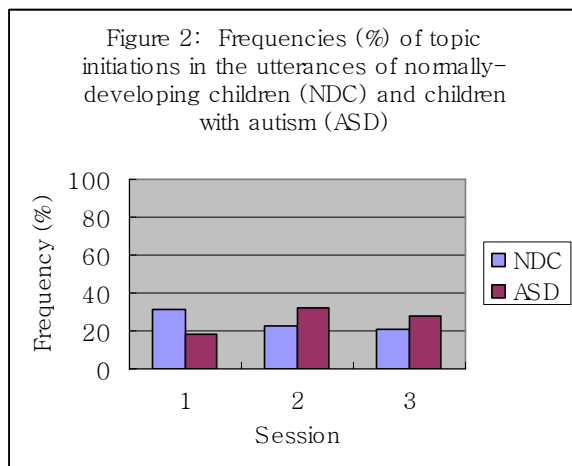
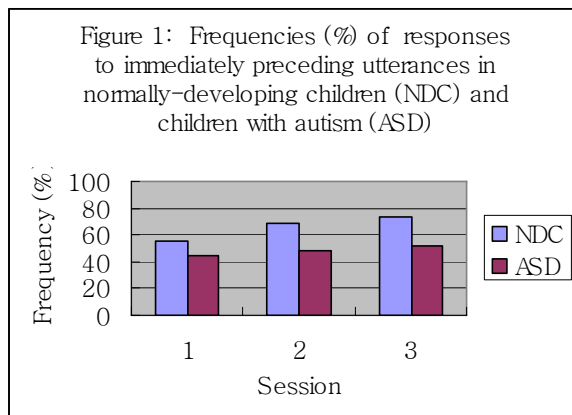
## Methods

The subjects included in this study were sixteen, a group of eight normally-developing control children (three females and five males) (1;1-2;0) and a group of eight children with autism (one female and seven males). The candidates for the autism group were screened by Receptive-Expressive Emergent Language scale (REEL), MacArthur Communicative Development Inventory - Korean (MCDI-K), Peabody Picture Vocabulary Test- Revised (PPVT-R), Denver Developmental Screening Test -Korean (DDST-K), and Child Autism Rating Scale (CARS). The control group were also recruited by three of the diagnostic instruments above, REEL, MCDI-K, and DDST-K, whose results were taken into consideration in matching them with the typical group.

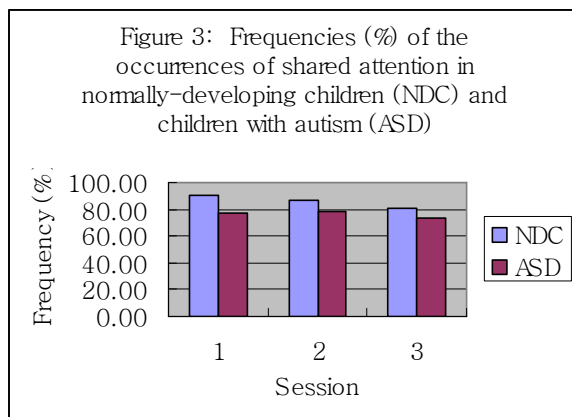
The data examined for this study include spontaneous language collected during a variety of dyadic activities. Children were each invited to interact with the principal investigator (PI) in two 15-minute-long sessions, a structured play and a semi-structured free play. During the structured play session, each child was instructed to be engaged in nine tasks using a balloon, a clockwork toy car, soap bubbles, picture books, a toy kitchenware, and blocks. During the remaining semi-structured free play, the child was asked to play with the PI using his and her favorite toys. The activities conducted here were all verified by language pathologists and developmental psychologists in order to determine the degree to which they were adequate for the level of the children under investigation, and inter-rater reliability estimates ranged from 85 to 95%. These two sessions were preceded by a pretest and the whole procedure of these sessions was conducted three times, once a week, for each subject. The on-task PI-child interactions were assessed in terms of discourse-pragmatic skills. The Inventory of Communicative Acts-Abridged (INCA-A) (Ninio, Snow, Pan & Rollins, 1994) was adopted to code children's communicative intentions. An additional rater coded twenty percent of the total corpus and it was found that the raw percentage of agreement between the two coders ranged from 89 to 92%.

## Results

Results show that, as seen in Figure 1 and Figure 2 below, both NDC and ASD group responded to their interlocutors more frequently than initiated the discourse topic (45%-75% vs. 18%-32%). No significant difference was detected between the NDC and ASD groups in their utterances initiating the discourse topic.



An analysis of the children’s responses in terms of topicality (shared attention vs. off-topic utterances) revealed that the utterances for shared attention were significantly much less frequent in autistic children than in normally developing children ( $F=4.50, p<.05$ ), as illustrated in Figure 3 below.



With respect to topic maintenance, both groups produced old information more frequently than new information, there being no significant difference between the two in terms of producing new information ( $F=2.729, p=.086$ ). It was

observed in our study that our subjects with ASD would say, “Yes,” in response to their interlocutors’ utterances that require new information, or would simply use echolalia. Topic maintenance strategies involving expansion, turn-taking, and explication, on the other hand, were observed to increase in the typically developing children with time, but not in the children with ASD.

## Conclusion

The striking contrast found in this study is comparable to the major findings in previous studies of English-speaking children with autism. As reported in Rollins & Snow (1998) and Tager-Flusberg (2000), English-speaking autistic children, as contrasted with normally-developing children, are also observed to have discourse-pragmatic deficits in children with autism, which would lead to lack of attention to socio-pragmatic cues and difficulty of maintaining attention to mutual social stimuli.

It is speculated, in line with Tager-Flusberg (1999), for example, that children with ASD are probably not aware that they can obtain new information from their interlocutors and/or that other people also need to be provided with new information in order to both keep and shift shared attention as required in the discourse. This lack of sensitivity is possibly due to their inability to understand that others also have minds with separate beliefs, desires, and hopes, among others, their theory of mind still needing to mature.

## References

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