Applying the principle of conversational analysis to the intervention in children with high-functioning autism spectrum disorders

Background
Conversation Analysis (CA) is a data-driven methodology used to unravel complex systems, such as natural interactions among conversationalists. CA may be useful for the assessment of and intervention in communication disorders seen in autism. Interventions for individuals with autism using CA are not common, although some studies have attempted this approach (Stribling et al., 2009; Muskett et al., 2010). Wilcox & Mogford-Bevan (2000) applied the principles of CA to the assessment and treatment of a child with Pragmatic Language Impairment and were able to detect inappropriateness of attention getting, initiation, directives, responses, cohesion, and repair. Afterwards, a behavioral approach was adopted to improve the child's use of a polar interrogative rather than declarative statement when making a request. Additionally, a meta-linguistic approach was adopted to improve the child's failure to respond to another's initiation. CA is likely to provide ideas for compensatory actions on the part of adults when communicating with an autistic child.

Objectives
We studied whether CA could provide adults with conversational strategies to compensate for communication problems with autistic children. We also investigated whether use of compensatory strategies improved communication in autistic children.

Methods
Five boys with high-functioning autism spectrum disorders (HFASDs) participated. As their conversational partner, 5 adults who are unfamiliar to the boys also participated. Research was designed to include 5 baseline sessions, 5 treatment sessions, and 5 withdrawal sessions. CA was conducted by the author after baseline sessions were completed to figure out compensatory strategies for the adults. During the treatment sessions, use of provided compensatory strategies was encouraged in addition to CA. No CA was conducted in withdrawal sessions.

Results
Communication breakdowns identified included children ignoring adults addressing them and the children's failure to clarify who the adult was speaking to. Compensatory strategies provided for adults included using longer sentences with fewer abbreviations,

avoiding a final particle in a sentence, avoiding Wh-questions, asking the child directly what the child is expected to tell, using direct expressions instead of asking indirect questions, and asking the child who the hearer is.

All adults succeeded in applying recommended compensatory strategies in treatment sessions. Communication problems seen in children in baseline sessions were improved in the treatment sessions, and the improvements were maintained in withdrawal sessions.

Conclusions

The process of CA provided adults who were conversational partners with a child with HFASDs with a framework within which it was possible to identify specific and recurring problems in the child's interactions in a range of communicative contexts. It was also possible for the adult to compensate for targeted communication problems seen with the child. The adoption of CA in the assessment and treatment of children with HFASDs seems effective.