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A SUITABLE PRACTICE TO PROMOTE CONVERSATIONAL SKILLS IN YOUNG PEOPLE WITH AUTISM SPECTRUM DISORDER

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ABSTRACT

People with Autism Spectrum Disorder (ASD) often lack the appropriate communication skills necessary for school learning and social achievement. The article provides a detailed technical characterization of a promising technique to improve communication skills in high-functioning young people with ASD. The technique used is Comic Strip Conversations (CSC), in which visual representations (drawings, images, written words, etc.) provide a framework for conversation. In this article, casework is discussed, and preliminary data suggest that the technique is appropriate for promoting conversation skills in young people with ASD.

KEYWORDS: Autism spectrum disorder, Conversational skills, Comic strip conversation

INTRODUCTION

Autism Spectrum Disorder (ASD) is a developmental disorder characterised by impaired social interaction (often appearing indifferent to other people), reduced communication (failing to understand common gestures, facial expressions, and affective responses), and poor imagination (difficulty in developing interpersonal play and telling stories), as well as repetitive behavior and restricted interests (see Guazzo, 2004, for a review).

The lack of social attachment is evident on many occasions from early childhood: infants with ASD do not seek adult attention, show no interest in their mother's voice or human face, and do not make any anticipatory movements when they are to be picked up. Their crying appears devoid of communicative connotations and is often inconsolable. Contrary to what children with typical development do, those with autism do not seek the comfort of their parents when they are sad or hurt: their 'paradoxical' sensitivity sometimes leads them not to feel pain, and if they do, they do not know how to find relief in the consolation of adults. They also reject or passively endure physical contact: they often adopt escape behavior when breastfed and desperately break away from hugs, reassured only if they are left in peace and alone. This preference for solitude and solitary games remains an obstacle to their social development, which is almost always extremely lacking throughout life, even in the least serious cases and without associated intellectual

disabilities. These people are not usually interested in friendships, and their behavior may appear rude and offensive because they are unaware of the communicative codes of social interactions.

Children with ASD, given their very poor symbolic abilities, usually show no interest in imaginative play and are thus excluded from peer groups, in which, moreover, they show no interest or spontaneous affection. If they are in the same playing area as their peers, they make no effort to interact and do not respond to their initiatives. Many times, for example, problems of behavior such as self and direct hetero aggression arise, which can, at least in part, be traced back to their communication difficulties (Bamberg & Damrad-Frye, 1991; Bartak, Rutter & Cox, 1975; Cox, Rutter, Newman & Bartak, 1975).

About half of people with autism do not develop any functional language. The language deficit is very severe and pervasive in all of them: that is, even those who possess the language code are generally unable to use it properly and for communicative purposes (Rutter, 1978; Hart, 1980; Jogis, 1975;). However, the level of functioning varies greatly from one person with ASD to another. Some even lack functional language, while others may be able to express more than they can understand. A language deficit, therefore, must be understood as a profound difficulty in relating to others, which manifests in serious problems in acquiring verbal and non-verbal codes and in their use (to express oneself, but also to understand others). Generally, the language of verbal subjects is characterized by syntactic (especially pronominal inversion), semantic (use of courtly terms, neologisms, frequent onomatopoeia, etc.) and pragmatic (excessive or absent facial gestures and mimicry, dysprosody, lack of eye contact, etc.) (Lord & Paul, 1997; Lord & Pickles, 1996).

Social and emotional behavior is one of the most important nodes in the autistic syndrome, destined to influence the development and growth of the person in all its manifestations. Perhaps the most evident and relevant feature among the anomalies in social and affective behavior is the fact that these subjects do not look their interlocutor in the eye, either avoiding and refusing eye contact or simply neglecting to pay attention to the upper part of the face, which is instead the richest in information (Klin, 1991; Klin, Jones, Schultz, Volkmar, Cohen, 2002; Volkmar, Carter, Grossman & Klin, 1997). These anomalous behaviors are serious symptoms and constitute a further obstacle in the learning process. Thus, even when the desire to be with others appears, as often happens with growth, relational inadequacy remains very serious and determines a deficit in pragmatic communication (i.e., the use of language for social purposes) that merges social, emotional, cognitive, and linguistic factors, both in the emission and reception of messages. It includes three fundamental areas: 1) the ability to use statements to express intentionality to achieve a certain purpose, 2) the ability to make judgments about the needs and abilities of the interlocutor, to regulate the style or content of speech according to needs, 3) the ability to apply the rules of speech to participate in conversational exchanges (Mundy, Sigman & Kasari, 1990, 1993, 1994; Prizant, 1983).

Establishing interpersonal contact through communication, verbal and non-verbal is the foundation of any social activity that, in subjects with autism, is undermined at the root by the enormous difficulty with which they respond to external stimuli.

The person with autism cannot find his way in the jungle of signals in which every communicative exchange, even the simplest, consists. The interlocutors, in general, are unaware of the many communication codes at stake during the interaction. Still, the lack or lack of those spontaneous behaviors, such as a certain timing in the eyes, is immediately perceived and makes it very difficult to communicate with them, even if they have adequate linguistic competence.

The difficulties with communication and reciprocal social interaction seen in autism and related disorders have been interpreted by some scholars as reflecting an underlying deficit in theory of mind (Baron-Cohen, 1988; Loveland & Tunali, 1993). Theory of mind refers to the ability to understand that others have beliefs, desires, and intentions that may be alike or differ from one's own. It has been repeatedly observed that persons with ASD typically demonstrate deficits in this kind of social-cognitive understanding (Tager-Flusberg, 1992, 1996, 1997).

Our focus in this work was on finding concrete ways to reduce the usual deficits of persons with ASD in conversational skills using the technique of Comic Strip Conversations (CSC), as proposed by Gray (1994), which the reader may consult for additional information. (Gray, 1998). It could be hypothesized that simple drawings used in conversational contexts would help promoting turn-taking and assuming conversational roles, considering the possible beliefs of the interlocutor, maintaining topics, and hopefully expressing original narrative contents (Ahmed-Husain & Dunsmuir, 2014).

1. METHOD

Subjects with autism often fail to communicate because they lack the necessary motivation to start an interaction. At the same time, if we make them choose the stimuli on which to set up a conversation, the probability of producing a verbal response increase. So, if every communicative attempt, no matter how far from the verbal production of a typical developing peer, is immediately reinforced, the result is an increase in the number of responses and attempts made to achieve the goal (e.g., the request for an object). Thus, the use of language leads to direct results that can be explicitly stimulated, thus increasing the motivation to communicate.

In our intervention many opportunities for verbal interaction have been taken into consideration, all of them naturally reinforced, characterized by the following points:

- *Natural reinforcement of each verbal attempt*: All verbal attempts are naturally reinforced, allowing the subject to receive the object or perform the required activity.
- *Exchange of verbal initiative*: Initially, the operator chooses the item to be proposed to the subject by modelling a verbal expression; after an adequate communicative attempt and the delivery of the

item (for about 10 sec.), the subject can choose a new item on which the operator models the task (turn-taking);

- *Variation of the task*: The same action must be referred to and extended to different contexts and situations (take the pen and take the medicine), and the same referent can be coupled to different labels (buy the pasta and cook the pasta).

- *Shared control*: Alternating control of the stimulus between operator and pupil according to the turn-taking; if the subject requests, verbally or gesturally, a toy, the operator allows him/her to take it, imitating his/her verbal behavior.

We have used this procedure as a philosophy to set up an innovative speech in motivating subjects with high-functioning autism to the conversation and socio-communicative skills since these are the most deficient skills in all these people (Baltaxe, 1977; Boucher, 1988; Carr & Durand, 1985; Rinn & Markle, 1981).

1.1 Participants

Three young people with autism (Paolo, Matteo and Luca; Non-real names), aged between 15 and 17 years old, served as subjects. They had been diagnosed as having ASD level 1 ($IQ \geq 70$ to WISC-IV), according to the criteria of the National Society for Autistic Children (Ritvo & Freeman, 1978) and the DSM-V (American Psychiatric Association, 2013).

From a functional point of view, the three subjects had the following characteristics, although there were individual differences in the frequency, duration, and intensity of the behavioral manifestations:

- Qualitative impairment in social interaction
- Behaviour, narrow and repetitive interests, and activities
- Disorders at the level of social integration and interpersonal relationships
- Absent or very poor relational mimicry
- No interest in social gaming activities
- Frozen Emotivity
- Polarized interest in objects and manipulation activities
- Motor stereotypes, rituals
- Motor coordination problems
- Compromised speech.

In summary, the three boys had functional language and could answer simple questions mostly relying on phrases with three or four terms (subject, verbal predicate, and complement). They were considered to be high functioning ASD persons given their mental ages, presence of language, and evidence of at least some social skills. However, they had experienced recurrent failure in generalizing newly acquired language skills to new social contexts and activities despite systematic efforts from teachers, speech therapists, and behavioural psychologists to promote such generalizations.

The intervention is aimed at developing:

- a functional language (even if formally non-corrected) which allows the person to interact with others in order to understand and make himself understood in the most important situations of his life.
- the ability to converse, as a cooperative event in which participants collaborate to regulate, through four norms, the bidirectional flow of information (Grice, 1975): 1) quantity (being informative without being protracted), 2) quality: (to be truthful), 3) relation (to be inherent to the topic and the situation), 4) manner (to be clear and understandable to the interlocutor).

1.2 Materials

Conversations. Each conversation consisted in a conversation between two or more people which incorporates the use of simple drawing. These drawing are used to illustrate ongoing communication by providing additional support to individuals who struggle to understand the quick exchange of information that occurs in a conversation. Individuals with Autistic Disorder are often visual learners who require more processing time than their peers. Comic Strip Conversations turn an abstract conversation into a concrete representation that allows for reflection and understanding (Gray, 1994). The conversations are personalized for each child, often motivating and serve as a visual cue that targets behaviour for improvement. Specific topics of conversation varied across children because of individual preferences for activities and/or games.

Setting. Baseline e-generalization probes were presented in the training setting and the “ecological” generalization setting. The training setting consisted of a workroom at the adult’s after-rehabilitation program. The room contained four child-sized chairs, a table, and an activity cabinet. The “ecological” generalization settings consisted of a real environment where the conversation takes place.

Design. An ABAB research design, or a reversal-replication research design, was used. The ABAB experimental design allows the highlighting of a functional relationship between the modification made to the behavior under study and the intervention implemented by the experimenter. It examines the effects of an intervention alternating the basic condition (phase A), in which no intervention is in place, with the intervention condition (phase B), in which the treatment is implemented. The main feature of this design is that it is structured in four phases (Barlow & Hersen, 1973; Kazdin, 1982):

1. *Phase A, or basal measurement, involves observing and measuring the behavior under analysis before the modification intervention begins. This phase aims to arrive at a vision of the problem as it occurs naturally and to obtain data that can be compared with those obtained during the treatment and at its conclusion.*
2. *Phase B, or treatment, consists of constantly observing and measuring the effect produced by the strategy on the behavior to be modified; this is the same behavior as that examined during the first phase.*
3. *Phase A, or reversal, restores the situation before the treatment took place. In other words, the experimenter, after having carried out the first basic measurement and the intervention, will limit*

himself in the third phase to observe and measure the subject's behavior and object of analysis without intervening.

4. *Second phase B*, consists in restoring the situation present during the second phase or phase B. In other words, this drawing examines the effects of an intervention by alternating the basic measurement (A), when no intervention is in place, with the intervention condition (B) until the four phases are completed (A-B-A-B). The effects of treatment are reliable if the behavior changes, depending on expectations, during the first phase of B, reverses or approaches the basic level when treatment is discontinued, or improves when treatment is reintegrated in the second phase of B.

The use of this experimental design allows an adequate scientific controllability of the treatment by the educator who, many times, is content to have caused a certain change without worrying about establishing the existence of a cause-effect connection that should exist between his intervention and the modification produced in the behavior of the pupil. This control is indispensable in a context, such as the Italian one, where there are no special schools for autism, to establish whether it is the educational treatment that produces changes or the many environmental variables present in a class with about 20 subjects with typical development or other problems (Learning disorders, Psychopathological disorders, social maladjustment, etc.).

When implementing an *ABAB* design, the first step involves measuring the dependent variable (the people's correct responses) during the baseline phase (A₁) when no treatment is applied (see Figure 3). Once the stability of the behavior has been achieved, the treatment or independent variable (B₁) is applied, and its effect on behavior is observed. Lastly, these two phases are repeated or replicated (A₂ and B₂). A convincing demonstration of the effect of the independent variable on the dependent variable is provided if the behavior changes only when treatment is present and not when it is absent. In other variations of this design, different treatment conditions can be compared instead of including a baseline comparison.

1.3 Procedure

Baseline. Conversational speech was assessed by attempting to engage the adult in the specific conversations. The child and therapist/conversant held a specific Comic Strip related to the topic of conversation, and the therapist presented the first Comic Strip and a question. The therapist waited 20s for the child to answer the question and then asked a contextually appropriate question. It was anticipated that this 20s-time delay would help occasion the response (Charlop & Milstein, 1989). The conversant continued by saying the next Comic Strip of the conversation. A response was considered correct if the child said the line of the predetermined conversation or any other contextually appropriate statement consisting of an answer and a question. If the person provided a novel response, the conversant answered appropriately and encouraged any appropriate conversational speech by continuing with the topic proposed by the person. In the training setting only, the subject was given a

small food reinforcer is he had completed a conversation.

Topics of conversation. Specific topics of conversation varied across people because of individual preferences for activity and/or games. The preference for activities/games was determined by the adult's verbal requests during his after-rehabilitation program. For example, all three people were very interested in gaming to Bowling.

Intervention

a) Intervention of functional communication.

They have taught routines of social communication: to give information on your own identity, to supply basic linguistic expressions necessary in several contexts communicated to you (school, job, etc.). Role games turn taking, and to put questions have taught. They have taught to use strategies that increase understanding and that they favor the production of various communicative intonations.

b) Intervention to develop conversational abilities (Guazzo & Acampora, 2005).

The preference that these subjects have for the visual channel has determined the resource to uses it of visual strategies:

- An organization to the learning gives and to the daily experiences.
- Their ability to pick and to comprise the information exchanged in one conversation.
- They render a situation expectable that they give the point of view of the autistic person is difficult to understand.

First phase

1. Location of a fan of arguments and activities favourite from the boy who shall make intrinsic reinforcements and conversational dulls. Some studies have demonstrated that people who already have some oral skills, they have improved social behavior when they can determine the content of the argument of the chosen conversation of one of, they from part of the subjects;

2. Collection of the information that will regard the elements acclimatizes them, the involved persons and the role of the subjects in that situation.

Second phase

1. *Reorganisation of one temporal sequence of the chosen activity:* to the boys, they have introduced in scattered order the several actions that constituted an activity and demanded to put them in the just sequence. All three boys about this demand have not introduced large difficulties, demonstrating their ability to control that activity.

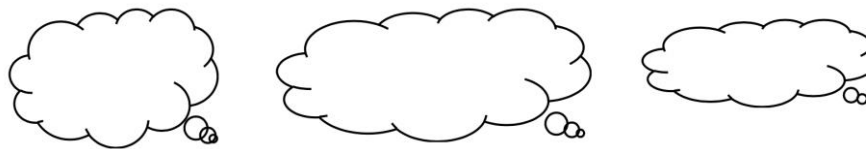
2. *Description of images of the topics from chosen they:* the boys must describe and comment on the images from observed they. The greater part of the subjects regarding this demand has produced phrases lacking in functors and characterised from the exclusive use of predicate and complement (Figure 1).

Third phase: introduction of the comic strips

1. The subject came invited to insert in Figure 2 the balloon exacts between three alternatives in answer to HELLO! ‘Hi Luca!’, ‘Good Morning’ or ‘Goodbye’. ‘Hi’ is the most correct answer because it is a family greeting mode that is used a lot between friends, ‘Good morning’ is always a correct answer but less formal than ‘Hi’ between friends, ‘Goodbye’ is the wrong answer because it is used when someone leaves (See the following comics).



2. The subject was asked to start a conversation by inserting the following text in the empty cartoons (Fig. 2): ‘Here’s Matteo’, ‘Hi Luca. Shall we play?’, ‘Yes, of course!’.



3. To the subject it comes demanded to fill up the balloon to maintain one conversation (Figure 2);



Fourth phase

1. Generalisation before between the chosen topics from the boys and then on chosen topics from the operator, this to avoid also obsessive behaviour.

2. Instruction of the ability to change the conversation argument.

3. To increase the communicative and social repertory in an “ecological” environment (home, school, bowling alley, park, bar, restaurants, supermarket, etc).

2. Results and conclusions

With such intervention, it has attempted to upgrade conversational abilities by strengthening intrinsic motivation. Through this strategy, it has attempted to hold account of the peculiar cognitive characteristics of these persons. It has given them it to experience a positive communicative loop, increasing the relational life (Fig. 1).

It turns out that you acquired from the subjects implies you, in the present study, have confirmed that

the visual representation (use of images and comic strips) of the events can supply the support necessary to make yes that the individuals can acquire ability and strategies of conversation (Wetherby & Prutting, 1984; Wilkinson, 1998). In particular, to the end of the participation, all the subjects introduced improvement in the following abilities (Guazzo & Acampora, 2005):

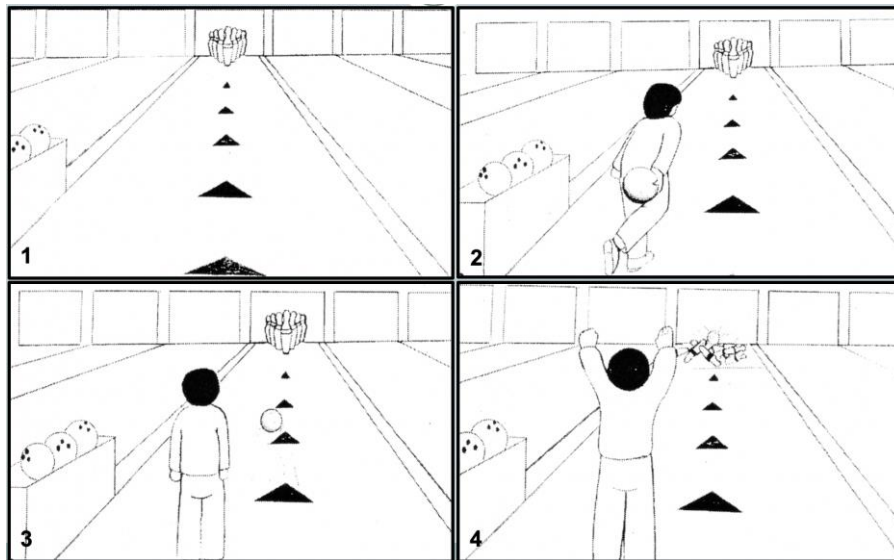


Fig. 1 - Description of images from observed they: 1. “Bowling... to play”; 2. “To put shoes... to play bowling”; 3. “Launch ball... to hit skittles” and/or “Ball... rolls track... skittles”; 4. “Ball hit skittles... made STRIKE”).

- Use of the gestures and the look.
- structuring of a phrase more articulated (use than functors).
- Starter of one conversation (to attract attention, use comments, ask for information).
- Maintenance of one conversation (to recognize comments, make questions, and answer).

In conclusion, only through the repetition of interactive experiences (initially “simulated” with “scripts of routine social experiences”, and then with natural social experiences), the people with autism will have the possibility to learn these abilities (Loveland, Landry, Hughes, Hall & McEvoy, 1988).

REFERENCES

Ahmed-Husain, S. & Dunsmuir, S. (2014). An evaluation of the effectiveness of Comic Strip Conversations in promoting the inclusion of young people with autism spectrum disorder in secondary schools. *International Journal of Developmental Disabilities*, 60, 89-108. DOI: [10.1179/2047387713Y.0000000025](https://doi.org/10.1179/2047387713Y.0000000025)

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5rd. ed. rev.). Washington, DC: Author.

Baltaxe, C.A.M. (1977). Pragmatic deficits in the language of autistic adolescents. *Journal of Pediatric Psychology*, 2, 176-180. DOI: [10.1093/jpepsy/2.4.176](https://doi.org/10.1093/jpepsy/2.4.176)

Bamberg, M. & Damrad-Frye, R. (1991). On the ability to provide evaluative comments: further explorations of children's narrative competencies. *Journal of Child Language*, 18, 689-710. DOI: [10.1017/s0305000900011314](https://doi.org/10.1017/s0305000900011314)

Barlow, D.H. & Hersen, M. (1984). *Single case experimental designs*. New York: Pergamon Press.

Baron-Cohen, S. (1988). Social and pragmatic deficits in autism: cognitive or affective? *Journal of Autism and Developmental Disorders*, 18, 379-402. DOI: [10.1007/BF02212194](https://doi.org/10.1007/BF02212194)

Bartak, L., Rutter, M. & Cox, A. (1975). A comparative study of infantile autism and specific developmental receptive language disorder. I. The children. *British Journal of Psychiatry*, 126, 127-145. DOI: [10.1192/bjp.126.2.127](https://doi.org/10.1192/bjp.126.2.127)

Boucher, J. (1988). Word fluency in high functioning autistic children. *Journal of Autism and Developmental Disorders*, 18, 637-645. DOI: [10.1007/BF02211881](https://doi.org/10.1007/BF02211881)

Carr, E.G. & Durand, V.M. (1985). The social-communicative basis of severe behavior problems in children, in Reiss, S. & Boozin, R.R., (Eds.), *Theoretical issues in behavior therapy*. New York: Academic Press.

Charlop, M. H. & Milstein, J. P. (1989). Teaching autistic children conversational speech using video modeling. *Journal of Applied Behaviour Analysis*, 22, 275-285. DOI: [10.1901/jaba.1989.22-275](https://doi.org/10.1901/jaba.1989.22-275)

Cox, A., Rutter, M., Newman, S. & Bartak, L. (1975). A comparative study of infantile autism and specific developmental language disorders: II. Parental characteristic. *British Journal of Psychiatry*, 126, 146-154. DOI: [10.1192/bjp.126.2.146](https://doi.org/10.1192/bjp.126.2.146)

Gray, C. (1994). *Comic strip conversations*. Arlington, TX: Future Horizons.

Gray, C. (1998). Social stories and comic strip conversations with students with Asperger syndrome and high-functioning autism. In Schopler, E., Mesibov, G.B. & Kunge, L.J. (Eds.). *Asperger syndrome or high-functioning autism?* (pp. 167-198). New York: Plenum Press.

Grice, P. (1975). Logic and conversation. In Cole, J. & Morgan, P. (Eds.), *Syntax and Semantics: Speech acts*. New York: Academic Press, 41-59.

Guazzo, G. M. (2004). *Autismo. Dal caos all'ordine*. Nola, NA: IRFID.

Guazzo, G. M. & Acampora, V. (2005). Il potenziamento della motivazione in un gruppo di soggetti autistici high-functioning: l'uso del rinforzo naturale. *Disabilità Evolutive*, 21, 5-46.

Hart, B. (1980). Pragmatics and language development. In B. B. Lahey & A. E. Kazdin (Eds.), *Advances in clinical-child psychology* (pp. 383-427). New York: Plenum Press.

Jogis, J.L. (1975). "To be spoken sadly". In Buscaglia, L. (Ed.). *The disabled and their parents: a counselling challenge*. Thorofare, NJ: Slack Inc.

Kazdin, A.E. (1982). *Single case designs*. London: OUP.

Klin, A. (1991). Young autistic children's listening preferences in regard to speech: A possible characterization of the symptom of social withdrawal. *Journal of Autism and Developmental Disorders*, 21, 29-42. DOI: [10.1007/BF02206995](https://doi.org/10.1007/BF02206995)

Klin, A., Jones, B.A., Schultz, R., Volkmar, F. & Cohen, D. (2002). Visual fixation pattern during viewing of naturalistic social situations as predictors of social competence in individuals with autism. *Arch.Gen. Psychiatry*, 59, 809-816. DOI: [10.1001/archpsyc.59.9.809](https://doi.org/10.1001/archpsyc.59.9.809)

Lord, C. & Paul, R. (1997). Language and communication in autism. In Cohen, D.J. & Volkmar, F.R. (Eds.), *Handbook of autism and pervasive developmental disorders*. New York: John Wiley & Sons, 195-225.

Lord, C. & Pickles, A. (1996). Language level and nonverbal social communicative behaviors in autistic and language-delayed children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 1542-1550. DOI: [10.1097/00004583-199611000-00024](https://doi.org/10.1097/00004583-199611000-00024)

Loveland, K., Landry, S., Hughes, S., Hall, S. & McEvoy, R. (1988). Speech acts and the pragmatic deficits of autism. *Journal of Speech and Hearing Research*, 31, 593-604. DOI: [10.1044/jshr.3104.593](https://doi.org/10.1044/jshr.3104.593)

Loveland, K. & Tunali, B. (1993). Narrative language in autism and the theory of mind hypothesis: a wider perspective. In Baron-Cohen, S., Tager-Flusberg, H. & Cohen, D.J. (Eds.). *Understanding other minds: perspectives from autism*. Oxford: Oxford University Press.

Mundy, P., Sigman, M. & Kasari, C. (1990). A longitudinal study of joint attention and language development in autistic children. *Journal of Autism and Developmental Disorders*, 20, 115-123. DOI: [10.1007/BF02206861](https://doi.org/10.1007/BF02206861)

Mundy, P., Sigman, M. & Kasari, C. (1993). The theory of mind and joint attention deficits in autism. In Baron-Cohen S., Tager-Flusberg H. & Cohen D.J. (Eds.). *Understanding other minds: Perspectives from autism*. Oxford: Oxford University Press, 181-203.

Mundy, P., Sigman, M. & Kasari, C. (1994). Joint attention, developmental level and symptom presentation in autism. *Development and Psychopathology*, 6, 389-401. DOI: [10.1017/S0954579400006003](https://doi.org/10.1017/S0954579400006003)

Prizant, B. (1983). Language acquisition and communication behavior in autism: Toward an understanding of the 'whole' of It. *Journal of Speech and Hearing Disorders*, 48, 296-307. DOI: [10.1044/jshd.4803.296](https://doi.org/10.1044/jshd.4803.296)

Rinn, R.C. & Markle, A. (1981). Modification of social skill deficits in children. In Bellack A.S. (Ed.). *Research and practice in social skills training*. New York: Plenum Press.

Ritvo, E. R. & Freeman, B. J. (1978). National Society for Autistic Children definition of the syndrome of autism. *Journal of Autism and Childhood Schizophrenia*, **8**, 139-161. DOI: [10.1007/BF01537864](https://doi.org/10.1007/BF01537864)

Rutter M. (1987). The 'what' and 'how' of language development: a note on some outstanding issues and questions. In Yule W., Rutter M. (Eds.), *Language development and disorders*. London: MacKeith Press, 159-170.

Tager-Flusberg, H. (1981). On the nature of linguistic functioning in early infantile autism. *Journal of Autism and Developmental Disorders*, **11**, 45-56. DOI: [10.1007/BF01531340](https://doi.org/10.1007/BF01531340)

Tager-Flusberg, H. (1992). Autistic children talk about psychological states: Deficits in the early acquisition of a theory of mind. *Child Development*, **63**, 161-172. DOI: [10.2307/1130910](https://doi.org/10.2307/1130910)

Tager-Flusberg, H. (1996). Brief Report: Current theory and research on language and communication in autism. *Journal of Autism and Developmental Disorders*, **26**, 169-172. DOI: [10.1007/BF02172006](https://doi.org/10.1007/BF02172006)

Tager-Flusberg, H. (1997). Language acquisition and theory of mind: Contributions from the study of autism. In Adamson L.B. & Ronski M.A. (Eds.). *Research on communication and language disorders: Contributions to theories of language development*. Baltimore, MD: Paul Brookes Publishing.

Volkmar, F.R., Carter, A., Grossman, J. & Klin, A. (1997). Social development in autism. In Cohen D.J., Volkmar F.R. (Eds.). *Handbook of autism and pervasive developmental disorders*. New York: John Wiley & Sons, 173-194.

Wetherby, A. & Prutting, C. (1984). Profiles of communicative and cognitive social abilities in autistic children. *Journal of Speech and Hearing Research*, **27**, 364-377. DOI: [10.1044/jshr.2703.364](https://doi.org/10.1044/jshr.2703.364)

Wilkinson, K.M. (1998). Profiles of language and communication skills in autism. *Mental Retardation and Developmental Disabilities Research Reviews*, **4**, 73-79. DOI: [10.1002/\(SICI\)1098-2779\(1998\)4:2<73::AID-MRDD3>3.0.CO;2-Y](https://doi.org/10.1002/(SICI)1098-2779(1998)4:2<73::AID-MRDD3>3.0.CO;2-Y)