

Peer Support Amongst Autistic Children: An Examination of the Communication Structure in Small Group Discussions

Senja Mankinen, Juliene Madureira Ferreira¹, Arttu Mykkänen²

¹Associate Professor, Faculty of Education and Culture, Tampere University – Finland

²Lecture, Faculty of Education and Culture, Tampere University - Finland

Abstract

Purpose

Over the last decade, many studies have investigated peer support between neurotypical and neurodivergent children. Less is known about how autistic children support each other in educational contexts, especially in basic education, where child-adult interactions are still predominant. This study investigated whether and how autistic children supported each other in small group discussions in the first years of basic education. We focused on unraveling the communication structures of these supportive events, aiming to understand further how autistic children make sense of social interactions and intersubjective processes that require peer support.

Design/methodology/approach

Building on Conversation Analysis methods, we analyzed the transcripts of the small group discussions, identifying and analyzing the construction of support in children's dialogues. Nine Finnish children (7–10 years old) attending mainstream school in Finland under intensified support in part-time special classrooms participated in this study. The study adopted a specific method called Idea Diary to frame the small group discussions. The teacher guided the conversations, providing a dynamic structure for children's interactions, but students were encouraged to interact among themselves. We recorded eleven sessions within the six-month implementation of the Idea Diary, totaling 240 minutes of data.

Findings

Results show that the children recognized situations where other children needed support in interactions and intervened in ways that promoted the continuation of the conversation and the clarification of ideas. Autistic children were sensitive to peers' unspoken needs, capable of identifying subtle nuances of conversation dynamics, and able to express support through comments and questions during the small group discussions.

Originality/value

This study provides insights into the understudied phenomenon of peer support among autistic children in small-group discussions. It contributes to the growing corpus of research dedicated to exploring and revealing social competencies among autistic people. It discusses implications for developing educational practices that foster social interactions respecting the quality of autistic interactions and the interests of autistic students.

Keywords: autism, peer support, autistic social interactions, co-regulation, participation, social competences

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Introduction

Learning support is essential for promoting the effective participation of autistic students in inclusive education. It can be offered in different ways, including special professional educational support through child-adult interactions or peer support fostered by class teachers during specific activities (McCurdy & Cole, 2014). Education professionals provide learning support to enhance children's learning and socialization in school. A substantial body of research has pointed out the benefits of adult-child special support for autistic children, including well-being benefits (Bailey *et al.*, 2020; Danker *et al.*, 2016), enhancement of social networks (Able *et al.*, 2015; Hochman *et al.*, 2015), and improving learning outcomes (Bolic Baric *et al.*, 2016; Roberts & Webster, 2022; Parsons *et al.*, 2011). It is also well-known that without adequate support, autistic children may get fewer interactional opportunities with their peers, which can lead to social isolation and exclusion (Fasano *et al.*, 2021). While learning support is mostly performed by adults, peers can also provide socio-emotional and academic support for autistic children. Different studies show the benefits of peer support for autistic children. For example, the systematic literature review conducted by Ezzamel (2016) shows how different types of peer-mediated interventions can increase autistic children's participation in the school context. In the same direction, studies also found that peer networks effectively increase social interactions among autistic secondary students (Sreckovic, Hume & Able, 2017). Such networks can be used to reduce rates of bullying victimization in schools. Therefore, promoting socialization between autistic and non-autistic children can increase social interactions, impacting the autistic child's overall social support (Carter *et al.*, 2017).

While adult support and peer interactions with non-autistic peers are very well-established strategies for promoting inclusion, less is known about the capabilities and potentials of peer support among autistic children. Previous research on peer support has prioritized exploring interactions between autistic and non-autistic people (Brock & Huber, 2017), leaving the potential for support among autistic children understudied. Establishing such social relations may be challenging despite the evidence showing that autistic children desire friendship and connection in school (Cresswell *et al.*, 2019) and that peer support from other autistic people can increase the sense of belonging in group and communities (Crompton *et al.*, 2022). Particularly in the school context, there is a predominant belief that autistic children have severe limitations in understanding social dynamics, which prevents them from supporting others in the group despite the mounting evidence pointing out autistic social competencies (Fantasia *et al.*, 2014; Ferreira & Bottema-Beutel, 2023; Ferreira & Muniz, 2024). Such beliefs hinder autistic students' participation, impacting their overall inclusion in school activities (academic and social realms). To overcome this challenge, we

must better understand autistic intersubjectivity. Thus, more studies focusing on understanding the social dynamics of autistic interactions are demanded. The present study addressed such a gap by examining how autistic students in basic education (first to third graders) interact and participate in small group discussions. Our study builds on Conversation Analysis methods, focusing on unraveling the communication structures of autistic discussions, with specific attention to ways autistic children support each other. We aimed to understand better students' social capabilities and the potential of autistic interactions in the context of special education groups. Understanding how autistic people interact is the best way to make social contexts more flexible so that all children can participate equally (Bottema-Beutel, 2017; De Jaegher, 2013; De Jaegher, 2021). We identified and analyzed such situations, informing educators and other practitioners about how support may be constructed in such social interactions, and how promoting small group work in educational contexts may facilitate social encounters amongst autistic children.

Participation in small-group discussions among autistic children

Participation is one of the key elements in inclusive education. Participation can happen at many levels of education, requiring effort from all the people involved in the schooling process (Aiscow *et al.*, 2013). Beyond physical presence in the classroom, participation includes establishing interactions with others and engaging in learning situations. It can be identified by various behaviors within social interactions, including acts of help and support in child-child social dynamics (Ferreira, 2017; Ferreira & Bottema-Beutel, 2023). Studies focusing on the microanalysis of peer support in special education identify that peer support often happens when children are not actively trying to help one another (e.g., directing or correcting their behavior and actions), but when they desire to just participate in each other's activities (Ferreira, 2023). Previous studies also found that talking in groups may increase text comprehension, critical thinking, and enhance learning (Maine & Hofmann, 2016; Murphy *et al.*, 2009). Small group discussions also allow participants to learn and practice their social skills when the dialogue in the classroom is productive (van der Veen *et al.*, 2015). Therefore, understanding how peer interactions are constructed is important for educators, particularly those invested in fostering children's learning and development (Ferreira, 2017).

The problem is, nevertheless, that practices involving autistic children often privilege one-to-one discussions or child-adult interactions. Thus, while we know extensively how neurotypical children structure play, communicate, and build joint narratives (Carvalho *et al.*, 2002; Império-Hamburger *et al.*, 2009), less is known about how autistic children influence and participate in joint activities and in the construction of group discussion. At the same time, we recognize that in small group discussions in school settings, the teacher has a crucial role in scaffolding the interaction,

helping autistic children to understand, for example, the sequentially organized structure of conversations and to participate in the conversation (Bottema-Beutel *et al.*, 2021). In such situations, the structure of the conversation can be more easily switched from a typical Teacher–Student–Teacher–Student to T–S–S–S order, where students can build their knowledge together. Teachers can use pass-on turns to demonstrate the idea of T–S–S–S structure in the conversation by taking the response slot and giving it to other students. The fewer pass-on turns, the more room the students have to participate in the conversation (Willemsen *et al.*, 2019). However, while these pass-on turns may be a helpful tool for teachers when scaffolding the interactions among autistic children, teachers need to comprehend how the dynamics of autistic interactions happen fully, the different communication structures that may be applied, and the timing of the conversation. Hence, by investigating the conversation structures of autistic children in groups, we can better understand how interactions unfold to establish participation, learning how to support autistic children’s participation for promoting inclusion and equity.

Communication structures and peer support in small group discussions

Autistic people often interact differently with others than neurotypical people (Fletcher-Watson & Bird, 2019). Previous research has shown that wh-questions, such as what, when, how, etc. can be difficult for autistic people (Vicker, 2017). They may also have difficulties knowing what information the communication partner needs on the topic to understand the message (Vicker, 2017). Therefore, the communication can be hard to understand for the communication partners and when clarifications are required and asked for, autistic people may have difficulties answering those wh-questions. Another example is the different conversation patterns in dialogues with autistic people. The conversation topics may change unexpectedly, and the interactions may not follow the norms made by neurotypical people – sequential turns at talk. To support the interaction between autistic children and neurotypical people, we need to change the norms of the conversations and make them more flexible. When autistic children are given space to be who they are and participate in their preferred ways, including retreating, taking breaks, or remaining unseen, the interactions work better for both autistic and non-autistic participants (De Jaegher, 2021).

One of the basics of conversation analysis is that conversations are sequentially organized. The utterances we make in a conversation are connected to each other, and often, the second utterance follows the previous one made by another speaker (Stivers, 2012). Adjacency pairs describe how different utterances often come in pairs. The adjacency pairs consist of first- and second-pair parts, for example, question-answer, invitation-turn of acceptance or rejection, greeting-greeting, and so on (Stivers, 2012). Sometimes, the second pair-part might be nonverbal;

for example, a yes or no question may get a response by nodding or shaking one's head. For adjacency pairs to be complete, the recipients need to understand the expectations for the second-pair part (Sterponi *et al.*, 2015). The planning for the second turn starts when the first speaker is talking. Therefore, a fluent conversation requires that the participants understand and process the previous speaker's speech while the speaker is still speaking (Levinson, 2012). When there are more than two participants in the conversation, the speaker may either select the next speaker and indicate it verbally or nonverbally (e.g., gaze is often used to indicate sequence in conversations), or the next speaker will select themselves and proclaim the turn. Sometimes, there may be situations where two or more participants speak simultaneously. Then usually, some of the speakers stop talking and let the other speaker finish and possibly reframe their turn. Alternatively, someone may change the topic or not reply as the first speaker has thought they should. Then, the first speaker may take a repair-turn and reframe their utterance; for example, ask again and reframe the question to get an answer from the second speaker (Sacks, *et al.*, 1974). Understanding the unfolding of such interactions provides insights into how relationships are established or how communication culture is explored.

Autistic people regulate and are regulated. Co-regulation may occur as well, but usually, autistic people tend to either over- or undershoot, which may break down the interaction (Di Paolo *et al.*, 2018). To prevent the interaction from breaking down, all the participants face the challenge of taking other participants into account. Other participants may try to co-regulate by, for example, signaling with their non-verbal behavior (looking distracted, changing their posture, etc.) that the strongly regulating participant could give others room to participate. If co-regulation attempts are not noticed or considered, the interaction may break down (Di Paolo *et al.*, 2018). When the interaction is in a school setting, the teacher has an important role in both giving the children opportunities to practice social interactions and supporting the interactions when needed. Previous research has focused on the co-regulation of emotions between autistic children and their parents and co-regulation strategies that parents, caregivers, or educators use (e.g., Gulsrud *et al.*, 2009; Guo *et al.*, 2017; Rämä & Kontu, 2012; Ting & Weiss, 2017). Exploring the co-regulation between autistic children may bring more knowledge to the field.

The present study

The aim of the study was to examine the communication structure of small group discussions amongst autistic children, analyzing specifically the construction of children's interaction, understanding how they position themselves in the group with or without the teacher's support, and how they support each other in the interaction. To do so, we adopted a conversation analysis (CA)

approach, focusing on unraveling the structure of turns at talk and how they build supportive conversations (Silverman, 1998). CA helps us to investigate the interaction thoroughly and enables us to see the competence that autistic children have in group discussions and in supporting each other in the conversation. The following research questions guided this study: Do autistic children support each other in small group discussions? What communicational structures do autistic children use to support each other in small group discussions?

Method

Participants

In this study, participants were 9 children aged 7–10 who attended school under a part-time special support service in the Pirkanmaa area in Finland. Students of this special class either had been or were under investigation to conclude a diagnosis of autism spectrum disorder (ASD) based on the criteria of the ICD-10 (World Health Organization [WHO], 1992) or DSM-V (American Psychiatric Association [APA], 2013). Participants were usually able to communicate utilizing verbalization. Still, they often refused to or presented difficulties participating in school activities that involved writing or verbal discussion, demanding special education support in the Finnish Inclusive Education System.

In Finland, the special education services are divided into three levels of intervention. The first tier, general support, is usually provided by class teachers once difficulties in learning and schooling are identified. The second tier, intensified support, results from work between class teachers and special education teachers and may include, for example, one-to-one sessions with the special education teacher, occasional group lessons also with the special education teacher, and material adaptation when needed (see EDUFI, 2016; Eklund *et al.*, 2020). The third and final tier, special support, requires an assessment and a formal decision made by the administrative school leader. Depending on the child's needs, it can include different actions such as part-time small group lessons, flexible curriculum, material adjustments, and special class teaching, although the latter is rare and recommended in specific cases (Eklund *et al.*, 2020; OSF, 2022). For the participants of this study, special support was carried out in a special classroom where most of the lessons were delivered in small groups (from 5 to 12 children per class). In special cases, students would have the opportunity to attend lessons (e.g., second language learning) in larger groups, which included neurotypical children with no need for special support, usually accompanied by class aids or special education teachers.

The context of small group discussions in the special class: Implementing the Idea Diary

To frame this investigation, the study analyzed data from the six-month implementation of a specific pedagogical approach named *Idea Diary* (Muniz, 2015; 2020). The practice involves using learning diaries constructed by the students in other social contexts than school. Children are invited to take the diaries home and note their learning experiences outside the school context. The entries in the diaries can be made through writing, drawing, collage, and adding pictures or stickers of the things they are interested in. The aim is to access children's interests, thoughts, and experiences and learn more about what and how they learn outside school. Once students bring their diaries back to class, they converse about their notes in small-group discussions called "sharing circles." The sharing circles were small-group discussions organized and structured by the teacher but led by the children. Students are prompted to participate in each other's conversation, for example, by asking questions from them or asking others to help them explain something more precisely. However, one important feature of this small group discussion is that the epistemic knowledge of what is being discussed remains with the children. The teacher guides and supports the conversation, but children are the ones who know about the content of what is being discussed. This changes the positionality of the speakers, placing children in the center of the dynamic (Ferreira & Bottema-Beutel, 2023). Unlike in many classroom conversations where the questions and answers are already known by the teacher, the Idea Diary method gives the students epistemic authority (Heritage, 2012). The sharing circle happens once or twice a week during regular school hours. Based on the group discussions, the students chose one topic to be further explored during the rest of the week. The teacher takes this topic and incorporates it throughout the classes. The Finnish curriculum allows teachers to be creative in teaching methods, so it was possible to incorporate children's ideas and interests into the classroom's curriculum.

This method has been widely used not only for special education support but for regular classroom activities and has been proven to enhance children's engagement and interest in school activities (see Ferreira & Muniz, 2024; Muniz *et al.*, 2022 – for more details on the methodology, see <http://www.lucianamuniz.com.br/metodologia/>). The Idea Diary allows the teacher to get to know the children and their interests better. It also enables the children to get better involved in the classroom curriculum and, consequently, their learning process when the topics are familiar and include their interests. Previous studies with autistic people have shown that teaching norms of social interactions to autistic people may make it more difficult for them to join in interactions. Instead, the path is to promote an environment that allows them to be themselves and express their abilities (De Jaegher, 2021). The Idea Diary method is aligned with this perspective and aims to aid

adults and children in the classroom to find a common ground from which it may be easier to carry on in other areas of teaching.

The data and ethical procedures

The data derived from the project's dataset 'masked for review' under the responsibility of the second author. The data was collected during the Spring semester of the 2021 academic year by the second author herself and stored under the double authentication protection of 'masked for review' University cloud services. Data collection was authorized by the municipality of 'masked for review' and reviewed by the ethical committee of 'masked for review' University. Following European Union regulations and the guidelines on the ethical principles of research with human participants in Finland issued by the Finnish National Board on Research Integrity, consent was collected from all children and their legal guardians before the beginning of the project and a period of adaptation in the classroom environment ensured that all children involved in the study were comfortable with the camera equipment.

The dataset included eleven video-recorded sessions of sharing circles of the Idea Diary sessions in this classroom and six recordings of class lessons. However, in this article, we focus exclusively on the analysis of videos showing the discussions over the idea diaries. The sharing circle sessions were recorded once a week, with the average duration of each sharing circle being 25 minutes (a total of 240 minutes of video data). In the sharing circle sessions, the students and their teacher discussed what the children had experienced outside the school and written down in their diaries (i.e., diary entries).

Analysis

The first step for data analysis was the verbatim transcription of all the videos and data anonymization. Pseudonyms were created for each participant, and all sections that included children who did not authorize participation were excluded from the videos. Subsequently, all the videos were screened to identify significant moments where supportive interactions occurred. This analysis consisted of a qualitative assessment of the content of the videos (verbal and non-verbal exchanges) and resulted in 15 episodes where children acted in a supportive manner. The dynamics of these interactions were often structured as two or three speaker turns – the child presenting the diary and two peers (or one peer and the teacher) supporting the conversation about the idea diary.

The second step of the analysis consisted of applying CA conventions to analyze all 15 selected episodes further. For this step, we used a modified version of Jefferson's (1986; 2004) conventions for CA analysis (see Appendix A). This process was carried out in the original language of the data,

Finnish, and only at the end of the process was it transferred with necessary adjustments to the English gloss. CA is a method of in-depth analysis of dialogues that, by identifying interlocutors' turns at talk, can describe the sequential structure of the conversation (Sidnell, 2013; Stivers, 2012). With CA we can detect detailed information on both the structure and rhythm of conversations and how the interaction between the participants is built, allowing a better understanding of how people perform actions, express emotionality, and create meaning within dialogues. CA concentrates not only on what is said and what people achieve with their utterances (Sacks & Jefferson, 1989; Silverman, 1998) but also on how non-verbal actions play a role in the dialogue (Mondada, 2018).

In CA, the units of analysis are defined as turns at talk and are usually identified and organized in adjacency pairs. Adjacency pairs are a two-part exchange in which the second utterance is functionally dependent on the first (Sacks & Jefferson, 1989). The pair is usually identified by the connection between utterances from the first and second speakers; see the example below.

Speaker 1 (turn 1): Mary, would you like to get some coffee after work?

Speaker 2 (turn 2): I would love to, but I am afraid I have to get going home; my oldest is coming home from summer camp today, and I have to pick him up. Perhaps some other time.

Speaker 1 (turn 3): Sure. No problem.

The example illustrates how the communication is organized (in turns) and we see how the speaker at the second turn responds (negatively) to speaker 1's invitation in the first turn, revealing a clear communication between interlocutors and forming an adjacency pair known as 'question and response'. Additionally to the negative response, speaker 2 also explains why the invitation cannot be accepted, fulfilling the void of speaker 1's possible expectation for a positive. In this study, we mapped out the adjacency pairs within the selected episodes, aiming to identify the different types of communication structures that can create supportive interactions. Such adjacency pairs allowed us to examine how autistic students understand the social requirements within such conversations and how they build support in the discussion. Hence, this process entailed categorizing the different types of turns in children's dialogues and analyze: a) if the children were bringing more information about the topic into the conversation (i.e., commenting the topic) or if they were asking for clarification of the topic (e.g., question-answer dynamic); b) how children built the turn (i.e., content and timing of response); c) what was the role of support in the interaction.

Previous studies using similar CA methods to analyze autistic interactions in small groups have shown how autistic students are competent in providing accounts of theirs and others' behaviors (Ferreira & Bottema-Beutel, 2023), show emotionality (Sterponi & Chen, 2019), and demonstrated how autistic children are agentic in their participation in groups (Ferreira & Muniz, 2024). In this

study, we focus on support – an important social competence for group learning throughout schooling and other educational processes.

Findings

The majority of the supportive interactions occurred once children were well-known to the methods, from the third session forward. This potentially indicates that the structure of the Idea Diary (organization of the sessions and routine repetitions) enhanced children’s engagement by allowing them to present their ideas in an organized manner. Children learn how to present the diary entries and gradually feel more comfortable to expand their participation and interaction with what others have produced. The result is that children present their drawings and ideas, and peers open the discussion by introducing new thoughts, questioning the drawings, or posing questions to clarify information related to the drawing. Within this process, supportive interactions emerge.

Throughout our analysis, we identified 15 episodes of supportive interactions during the implementation of the Idea Diary. These supportive interactions were expressed through different adjacency pairs, forming diverse communication structures (see Table 1). In this article, we will focus on presenting and discussing only two modalities of communication structure as they were the most prevalent: Participation through comments and participation through questions. Most of the supportive interactions started with comments on the diary entries presented by children. In this section we will explain how peer support is constructed in each of these communication structures (adjacency pairs), informing how autistic children support each other in small group discussions.

INSERT HERE: Table 1: Mapping the communicational structures in the conversations

Support for participation through comments

A total of 11 episodes of supportive interactions were identified in communication structures involving comments building on ideas or expressing individual perceptions in small group discussions. In these situations, the conversation structure often included one turn where speaker 1 presented his/her diary entry and subsequent turns where peers (speakers 2 and potentially 3) made remarks. To illustrate, we bring episodes A and B.

In episode A, we see an interaction where Daniel (the peer) supports Elias (the child presenting his diary) in answering the teacher’s questions about his drawing. Elias’ drawings follow very strict structures; they are always black and white and accompanied by a sticker and a non-related word that starts with the letter P (see Figure 1). Elias is also a child who, although he can express himself verbally, limits his communication with others; thus, the teacher tends to ask him more questions, attempting to give him more opportunities to explain his ideas.

INSERT HERE: Figure 1: Example of Elias' diary entries.

In this episode, the teacher is particularly curious to understand why the facial expressions of the clown have changed from previous drawings (see Figure 2).

INSERT HERE: Figure 2: Description of Episode A "How has it changed?"

The interaction begins with the teacher posing a series of questions to Elias, one of them being "How has it changed?", referring to the difference made in Elias's clown drawing (line 1). Elias has not answered many of the teacher's previous questions, but he attempts to do so in this one. He starts by pointing to the mouth of the clown (line 2) and then comments on the literal drawing (lips are turned downwards). The dialogue pauses for a few instances. Daniel (the peer sitting in front of Elias) makes a comment (line 10), suggesting what can be the feeling that makes the picture different – being sad. Daniel interprets the teacher's series of questions to focus on what is happening to the clown (the character of the drawings) instead of the drawing itself (the lines of mouth). We interpret Daniel's intervention as a supportive act, helping the peer to provide the type of answer the teacher may be interested in. Daniel also provides other inputs on the drawing modifications (line 14), suggesting that spots across the clown's face are also new. Daniel's second interpolations support Elias as it gives more elements to which he can use to respond to the teacher's questions. The teacher approves Daniel's suggestion and re-organizes the question for Elias to make sure of the peer's interpretation and to bring Elias back to the conversation.

Although support was not requested (by Elias or the teacher), they are accepted, or at least not refuted by other speakers. Daniel wishes to participate in the conversation but can also identify the elements at risk for the continuation of the discussion. Providing aid in conversations is a delicate process that demands a careful understanding of the social dynamic, something that has been widely accepted as challenging for autistic people (Vicker, 2017) and, thus, scarcely explored in autistic dialogues.

In another similar situation, in episode B (see Figure 3), Elias shows a drawing from his notebook and has difficulty explaining what is happening in the picture. In this episode, we see how a question can also provide ideas for interpreting the situation and suggest answers to the teacher's questions.

INSERT HERE: Figure 3: Episode B "Is it like that Elias?"

The interaction starts with the teacher inquiring Elias about what is 'exploding' in the picture. Although Elias has signaled the event of an 'explosion' in his previous comments, he refutes the idea (lines 2 and 16), leaving the teacher and peers confused about the explanation. It seems like Elias is not quite sure of his intentions with the drawing and may have forgotten the scene or the context of the drawing. After a series of questions from the teacher, Daniel raises his hand (line 24). When the

teacher gives him permission to ask his question (line 21), he provides an interpretation of the drawing and a possible explanation for what the teacher was initially questioning Elias about (line 28). When the teacher asks Elias if it is that sound, Elias nods (lines 32 & 34), accepting the interpretation suggested by the peer.

Regardless of whether Elias's intentions were indeed to portray such sound, we see a different communication structure for peer support in small group discussions in this interaction. Again, Daniel recognizes that there is a need for clarification that Elias probably is not going to present. He requests the turn to speak, and instead of guessing what it is or taking ownership of the idea, he uses the structure of a question, which allows Elias to claim the interpretation as his intention. This specific and refined way of contributing to a conversation creates an environment of trust and openness through which collaborations can be developed.

Peer support is widely used in situations to support autistic children. However, studies have often focused on interactions involving neurotypical children as those in the supportive role (Bambara *et al.*, 2021). In such situations, conversations are structured in a more directive or guiding way, with the peer showing support by assisting autistic children in fulfilling expected conversation patterns (Bambara *et al.*, 2018; 2021), providing social hints, or facilitating interpretations in different social settings. Our study, however, shows that autistic children build such support differently: less guiding and more participatory (providing ideas instead of answers or guides). Both episodes presented in this article show how children are interested in participating when others tell about their idea diaries. The support is not for achieving a certain task or fulfilling a predefined expectation for conversation but for understanding what is being presented and what ideas are being shown to the group.

Support for participation through questions

Another interesting way autistic children build peer support was through questions for clarification during conversation. This type of communication structure appeared 3 times across our dataset. Unlike the comments, which directly supported peers in explaining their ideas, questions contextualized the interpretation of the diary entries and opened space for further dialogue. They show a specific communication capability that the teacher could foster further when guiding small group discussions in the classroom. To illustrate, we bring episode C (see Figure 4).

INSERT HERE: Figure 4: Episode C "Didn't you Frans yesterday build those with the building blocks?"

The interaction starts in episode C, in which Frans shows a drawing from his notebook. He has difficulties in telling what it is, and Laura comes to help by asking, "didn't you, Frans, yesterday build those with the building blocks" (line 16). Frans does not reply to her but turns his gaze at her, and

the teacher seems to remember the occasion from yesterday as she continues, “yes Frans, is that some specific dinosaur?” (line 23), after which Frans confirms that it is (line 26).

In this episode, Laura's help comes in the form of a memory that places Frans back to the time and place where the drawing started. Although the diary itself is recognized to function as a hook to the memory of specific experiences, including possibilities to evoke emotionality (Ferreira & Muniz, 2024), while sharing the contents in the diary's entries, it is common and expected that children forget certain details of their experiences (see Muniz, 2015). Laura helps Frans remember what he is doing, offering the teacher some context in which the drawing was constructed. She doesn't know what the drawing means, or what kind of information Frans wants to share with that drawing, but she is connected to her peer, showing to be attentive to what happens around her and being willing to be supportive. She brought that memory closer to the group. Laura's comment is also accepted by other participants in the discussion. The pause after the teacher's turn on line 12 may indicate to Laura that Frans needs help in explaining his drawing. She gives Frans and others a chance to make a connection to a situation from the previous day, which could help Frans to answer the teacher's question (line 12). The interaction then continues with Frans being able to respond to the teacher's questions. Here, we see children using questions to elucidate a situation pragmatically, something that has been debated as challenging for autistic children (Bauminger-Zviely *et al.*, 2014). The statement follows a unique grammatical structure and comes entangled in a memory that is unclear. For example, Laura's statement doesn't inform us that it is a memory, nor does she recollect the scene from what point of view. It is as if part of the information is shared, almost as she expects others in the group to know what she is talking about. This produces a quite fragmented interpolation in the dialogue and demands attentiveness to be identified. Nevertheless, even with its singularities, the support is understood by this group of speakers and listeners. This finding points out the importance of a careful analysis of the time and structure of autistic dialogues, something that has been emphasized as being the key to understanding autistic intersubjectivity in theory (Di Paolo *et al.*, 2018).

Similarly to the situations of help through comments, the child presenting the diary or the teacher did not directly request aid. Support was offered through the children's ability to read into the conversation dynamic and was guided by their wish to participate in the construction of the small group discussion. In other studies that have used the method of the Idea Diary, researchers reported identifying a gradual engagement in their peers' diaries; children started participating in others' stories, bringing elements inspired by peers' experiences and narratives (Muniz, 2020; Oliveira & Muniz, 2022). In this study, engagement in others' stories and interests also seems to be the driving force of the interactions. Looking at all the episodes, we can see that only some of the

children recognized the situations where help was needed and came to help, but all of them were interested in sharing their ideas and listening to others' experiences and thoughts. Support was always recognized and accepted by either the child presenting the diary or by the teacher, who built on children's interventions to shape the group's dynamic. Either by stating comments or by asking questions, peer support afforded the continuation of the discussion and fostered a climate of safety for all children to participate.

Conclusion

The present study focused on unraveling the communication structure of supportive interactions in conversations amongst autistic children in small group discussions. Despite the importance of peer support in small group activities and the well-documented pragmatic deficit in autistic interactions, peer support is an overlooked study domain. We examined two main research questions: Do autistic children support each other in small group discussions? What kind of communicational structures do autistic children use to express peer support? The communication structures identified in our study were categorized into comments, questions, responses to invitations. Due to word count limitations, we concentrated on reporting the most prevalent cases, including comments and questions only.

Regarding the identification of supportive acts or supportive interactions, our study shows that amongst autistic children, support is constructed in various ways, indicating children's competencies beyond what is usually expected. Regardless of potential difficulties in understanding the dynamic flow of conversations (Paul *et al.*, 2009) or intuitive reading of social situations (Jones & Schwartz, 2009), children in our study showed great capacity to not only perceive the difficulty of the peer but also act opening the conversation with alternative answers. Two elements may have played a role in this situation: first, the group's composition. The configuration of the special classroom, with fewer students and less overwhelming stimuli, affords students to spend a great deal of time together, learning about each other and possibly observing each other even if there are few joint academic activities in their schooling routine. We do not assume that familiarity is important in autistic interactions. Still, we recognize that time spent together may influence how children adapt to interact with each other, which is indeed relevant in autistic relationships (Meirsschaut, 2010). The second element was the structure of the idea diary. This method offers a specific routine and a defined structure that supports autistic children in social interactions that embed the sharing circle (Ferreira & Muniz, 2024). This context may have created a safer environment for autistic children to participate and to use their observations of others to construct this participation. In other words, it is possible that with a more adequate environment for social interactions, autistic children may be more socially active. The structure of the sharing circles – each

child having specific turns to talk about their diary and open dialogue about children's experiences – gave children epistemic authority (Heritage, 2012) over the content of the conversation. Also, conversations were not solely framed by Teacher–Student–Teacher–Student as classroom discussions often are. Instead, Teacher–Student–Student–Students, often present in our data, allowed flexibility, and helped children to participate (Willemsen *et al.*, 2019). The T-S-S structure also avoids *wh*-questions that are known to be difficult for autistic children (Vicker, 2017). Thus, we argue that the Idea Diary method seems to give children a safe and flexible environment to practice important social skills that could be useful for teachers with autistic students. Additionally, as a practical implication, teachers can learn from this work how to create setups for inquiry-based interactions with autistic students, rethinking their practices to use more inclusive and inviting inquisitive language.

Our study's results also suggest that amongst these autistic children, support emerged from children's wish to participate in each other's stories. Instead of guiding behaviors, correcting statements or actions, or providing a correct answer to teacher's questions, peer support constructed in our study shows children's willingness to collaborate and contribute to an ongoing story. The use of proposals in the form of questions (as in Example C) is a common structure for eliciting a positive or confirming answer from the opponent speaker (Ilie, 1999). This structure, although not conventional, gives an alternative response in the formulation of the question and aids the respondent in elaborating an answer. In our case, it supported the child presenting the diary to provide an alternative answer within the dialogue.

We suggest that teachers with autistic students could benefit from using methods like Idea Diary to facilitate peer support amongst autistic children. The Idea diary as a material instrument prompts and facilitates peer group interaction and gives an important insight for the teacher about students' strengths and challenges for social encounters. It provides an opportunity for teachers to mediate the interactions and to support peer participation. Another important aspect that should be considered is the fact that the Idea diary gives the epistemic authority (Heritage, 2012) to the students. This has two important consequences for the learning process. First, it can expand teachers understanding about students interests and knowledge. By learning to know their students and what kind of challenges they have in interactions, the teachers can scaffold the interactions better and help the autistic students when and if necessary. Second, because children keep the epistemic authority over the content of the discussion, they may experience a sense of achievement and ownership, which is frequently denied to autistic students. Therefore, our study also provides insights for teachers on how to organize activities in the classroom. Even if teachers don't implement

the idea diary as a whole method, they can learn about which principles in this pedagogical framework benefit autistic interactions in group discussion.

Finding ways in which we can support autistic children in creating shared knowledge can enhance the possibility of them forming friendships and engaging in school activities. Pedagogical methods such as the Idea Diary provide room for children to express themselves and enable them to practice important social skills important in diverse social contexts. When the balance between structured interaction (e.g. in the sharing circles everyone had their own turn of presenting their diary) and flexible interaction (e.g. T-S-S structure in group discussions) is good for the students, the interactions can aid peer support. Overall, our study contributes to ongoing debates on the social competencies of autistic children in an educational context and the need for more pedagogical approaches that can provide time, space, and structure that facilitate autistic children to interact with peers on their own terms. Additionally, our study also corroborates with other studies in autism research that suggest the use of CA as a method not only to study autistic interactions but also as a tool for assessing it in various social contexts (Yu & Sterponi, 2023).

As final considerations, we also recognize that our study has two limitations. First, the lack of standardized assessment of children's educational needs, thus lacking a comprehensive understanding of the clinical demands of each child. Second, the selectiveness and size of the sample, comprising of a small mixed-grade classroom with children in different school years and developmental phases, thus perhaps limiting generalization to other subgroups of schoolers. We, thus, call for replications on larger groups of children. Within this perspective, future studies should include the examination of positive interactions and supportive acts in larger groups and with older students. Furthermore, we also believe that future research should focus on empirical observations of the Idea Diary implementation in inclusive groups, where autistic children are closely collaborating with typically developing children. This would allow for more insights into the challenges and conditions of mediating significantly different communication dynamics, potentially leading to better inclusive practices.

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Appendix A

Adaptation of Jefferson's conventions used to guide the application of CA in this study

[]	Overlapping talk/nonverbal actions are in brackets
(0.0)	Elapsed time by seconds
↑↓	Shifts into higher or lower pitch
:	Sound or nonverbal act before colon is stretched
<u>word</u>	Stress/emphasis on the word
WORD	Loud volume
°word°	Quiet voice
-	A cut-off
=	No break or gap between or within turns.
(())	Descriptions of nonverbal actions are in double brackets
(.)	A stopping fall in tone, might not be the end of a sentence
→	Calls attention to a specific line