FEATURE ARTICLE

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Tailored interviewing to uncover the perspectives of children with multiple disabilities on daily activities: A qualitative analyses of interview methods and interviewer skills

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Abstract

Introduction: Uncovering the perspective of children with multiple disabilities is important in health care to enable person-centred health care. For occupational therapists, uncovering the child perspective on meaningful activities is necessary to set appropriate goals for treatment. It is not always evident that children with multiple disabilities can express themselves in an interview. The interviewer should adapt his communication to the child. In literature, alternative communication is widely studied, but a clear algorithm for deciding what to use to successfully gain insight into the child perspective is missing. This study aims to identify helpful interview techniques and interviewer skills and how they can be used to effectively uncover the perspective of children.

Methods: Videos of nine interviews with children with a mitochondrial disorder, conducted by an occupational therapist, were analysed by five researchers. The interviews were analysed to see how well the interviewee had obtained the child's perspectives followed by observation of communicative abilities of the child and the types of questions the interviewer asked. A qualitative directed content analysis of the semi-structured interviews followed.

In memoriam: Esther Steultjens contributed extensively during this study, but was no longer with us in finalising the report. Her input during the research was extremely valuable.

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Findings: An interview pattern was observed in the children's communication leading to six successful interviews. Children communicated verbally on four different levels and also used non-verbal communication. The interviewer used five types of questions, which varied between and within the children. The content analysis resulted in two themes: parental influences and interviewer skills.

Conclusion: Results show the importance of matching the type of questions to the verbal communication level of the child and revealed several interviewer skills and techniques. An overview to guide tailor-made interviewing is presented. The interviewer has a major role in successful interviewing and thus in enabling the inclusion of the child perspective in research and care.

KEYWORDS
child advocacy, child language, communication, interview, patient-centred care

1 | INTRODUCTION

With the increasing focus of health-care providers on person-centred care, it is important to capture the views and experiences, wants, and needs of care receivers, for example, children. Uncovering the child's perspectives about what is meaningful activity is particularly important to occupational therapy. It is important that children can express their own experiences because parents cannot always reliably represent the child's perspective (Brook & Boaz, 2005; Hart & Chesson, 1998; Runeson et al., 2001). As Morris (2003), advocate children and young people, including children with cognitive and communication disabilities, have something to communicate. Understanding the child and their capacities to communicate is essential if we want them to share their perspectives. The interviewer needs to find ways of understanding their views and experiences.

Children can have a large range of symptoms and impairments. Therefore, communication needs to be adapted to the individual child. For example, children with mitochondrial disorder have been found to have three functional profiles in which their level of motor and cognitive functioning varies, as well as their levels of communication (Lindenschot et al., 2018). The communication level within these three profiles varies from non-functional (non-)verbal communication to sufficient abilities to make themselves understandable. The large variety in cognitive and communication capacities presents challenges for the interviewer.

In general, interviewing children is a two-way process that can be conceptualised in terms of moment-to-moment transactions (Gilstrap & Ceci, 2005). Children and interviewers can co-regulate each other's affects, thoughts, behaviours, goals, and words. Following this

> **Key Points for Occupational Therapy**
> - Interviewer skills and techniques should be customised to the child.
> - The type of questions should be based on the communication level of the child.
> - The occupational therapist has power and responsibility to uncover the child perspective.

conception, Saywitz et al. (2017) suggest that a 'one-protocol-fits-all' approach may be too restrictive, for example, young children versus teenagers. Even 3-year-old children can describe situations vividly and can recall experiences of adverse events, such as illness and hospitalisation (Docherty & Sandelowski, 1999). Children develop 'scripts' of familiar situations and experiences from an early age. These scripts are used as the primary means to anticipate, comprehend, and re-create real-life experiences (Nelson, 1986). Children have to think in logical concepts, connecting obtained information and experiences. Age and developmental level affect a child's ability to mentally distinguish between information, to think independently about elements, to analyse abstract elements separately from perceived meaning (Toomela et al., 2020), and to communicate their experiences (Docherty & Sandelowski, 1999). Interaction with the socio-cultural environment and education enables the development of logical conceptual thinking (Murnikov & Kask, 2021; Toomela, 2016). As the understanding of words and their meaning improves, the ability to reflect

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and reason progresses, enabling them to understand and apply words in more complex situations (Blank, 2001). This influences the information obtained during an interview.

The level of (non-)verbal communication children can use in a more or less complex situation and the interview style of the professional can both be classified in 'stages'. The communication level of the child is classified by Oskam and Scheres (2016) into three levels with two stages each (situation, signal, or symbol level). Blank (2001) developed a model with four types of abstraction in interview style with different sorts of questions (Figure 1). Whether children communicate at a given time or under given circumstances at a situation, signal, or symbol level depends on their cognitive ability (ability to reason and act independently) and the socio-emotional level (extent to which a child can oversee and handle situations). An interviewer can influence the ability of the child to communicate by formulating a question in a certain manner or using materials such as pictures, which aids the child to give information. For instance, 'what happens usually when' types of questions are asked to gain children's information or their script knowledge (Docherty & Sandelowski, 1999). An interviewer should match the interviewing style and question form to the communication abilities of the child.

For children with a disability in health care, many different interview techniques and supportive tools are available to yield the experiences of their daily occupations, for example, the use of signing, assistive communication devices, prompts, or augmentative and alternative communication (AAC), such as Talking Mats® (Lindenschot et al., 2021; Murphy & Cameron, 2006), the use of stimulus material (Punch, 2002), or the auto-driven photo-elicitation interview (Croghan et al., 2008; Phelan & Kinsella, 2011). Several of these have been used in a study of Lindenschot et al. (2020) in children with mitochondrial disorder aged between 6 and 18 years, who had variable communicative, cognitive, and physical disabilities. To gain insight in the experiences of activities, children were asked 'what they do', 'how they perform and experience these activities', and 'what their wants and needs are'. Each child was interviewed with a different method, adapted to their capacities, justified by Kelly (2007) who argues that the flexible nature of qualitative research allows room for creative and responsive methodological approaches for consulting children. The aim of this study is to get insight into which techniques and interviewer skills are helpful and in what way they can be used to effectively uncover the perspectives of children with a developmental disorder.

2 | METHODS

To answer the question which interview techniques and skills were used and helpful, two research designs were

Classification levels (Oskam&Scheres, 2016)
Situation Level I
Child communicates but is unaware of it. Current situation determines content of information.
Situation Level II
Child is aware of communication and question-answer setting. Talks about recognizable situations.
Signal Level I
Child is able to establish relationships between a concept and a fixed associated situation. Communicates on reality.
Signal Level II
Child links the form of communication to several situations. Communicates about clear and regularly recurring situations
Symbol Level I
Child has a more comprehensive model of the world. Communicates outside of immediate reality. Talks about concepts that they experienced and varies fixed sets of familiar associations.
Symbol Level II
Child uses different forms of communication to communicate about various concepts that are not yet conscious experienced and handles them creatively

Classification of questions (Blank, 2001)
Matching perception
Closed questions, Ask question like; 'Show me what you like', 'what did you like?', 'can you find one you like'
Selective analysis of perception
Short sentences, repeating questions, give additional information to help child understand question. Ask questions like; 'What do you like?', 'How are these two different?', 'Where? Who?' 'What is happening?'
Reordering perception
What and where. Give additional description to the question. Ask questions like: 'What will happen next?', 'How do you feel?', "Can you tell me what happened?'
Reasoning about perception
Complex questions; why, what, where, how, etc, like: 'What would you do?', 'Why do you like….?', 'What will happen if you…?'
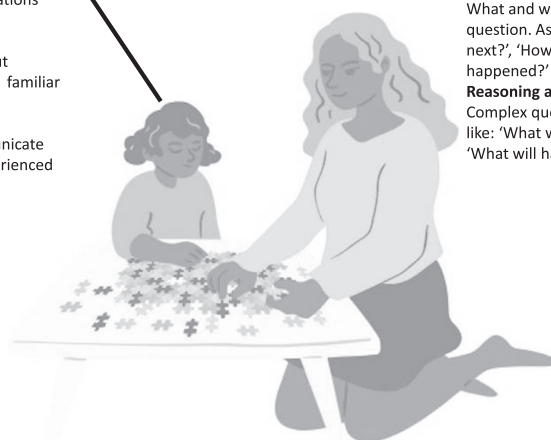
FIGURE 1 Overview of communication level of children and interview styles of professionals

carried out on the videotapes of the semi-structured interviews of nine cases included in the study of Lindenschot et al. (2020). First, we analysed how successfully the interviews uncovered the child perspective on the level of content and enriched this with observing (in)adequate responses of the child to the interviewer's questions. Next, the communicative ability of the children was observed with the communication classification of Oskam and Scheres (2016), and the types of questions the interviewer used were observed with the classification of Blank (2001). Lastly, a qualitative directed content analysis (Hsieh & Shannon, 2005) was performed.

All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee, the 1964 Declaration of Helsinki and its later amendments, or comparable ethical standards (General Assembly of the World Medical Association, 2014). The ethical board of the regional research committee provided their consent (Number 2016-2968). All parents and professionals signed informed consent. Where indicated, the children also signed the informed consent to recognise their volition/agency (Stafford et al., 2003).

2.1 | Data collection

The study used the 12 hours of video-recorded interviews of nine children with a genetically confirmed mitochondrial disorder aged 6 to 18 years with different functioning profiles varying in age and gender; these children were included in the study of Lindenschot et al. (2020). Five children had an extremely low cognitive ability (−2 SD on a norm-referenced test), one child a low cognitive ability (−1 SD), and three children an average cognitive ability. The children also varied in their ability to communicate verbally; one child was not able to verbally communicate, three children were only able to communicate with a known person or with very frequent repetitions as their speech ability was to limited, two children were able to verbally communicate despite small speech problems, and one child did not experience any difficulty verbally communicating. None of the children used assistive devices for communication. More information on demographics can be found in Lindenschot et al. (2020).

All interviews were performed by the same researcher (M. L.), who is a certified paediatric occupational therapist with experience in conducting interviews with children with different communication/cognitive levels. M. L. has a strong focus on occupation, and due to her experience with children with various abilities, she adapted to different levels of functioning. The interview

was scheduled at a location chosen by the child and his/her parents: at home or at the hospital.

2.2 | Data extraction and analysis

The videos showed semi-structured interviews focussed on getting insight in the perspective of children on their everyday activities. All interviews were conducted with the same topic list, and interview guide and interview techniques were adapted to the child's abilities and his/her communication preferences based on professional knowledge. The audio of the videotapes was transcribed. Non-verbal responses, based on the video footage, were added in the transcriptions. Three analyses were conducted. The first analysis, conducted by four researchers (S. D., E. S., M. L., and J. Z.), focussed on how successful the interviews were in obtaining the information. Interviews were classified as successful when all researchers agreed that the child perspective on everyday activities was uncovered. Also, pre-set codes were used to code verbally/non-verbally (in)adequate responses of the child and detect a possible interview pattern.

The second analysis was completed by one researcher (S. D.) with the classification of communication level (Oskam & Scheres, 2016) (see Figure 1) and the type of questions (Blank, 2001). S. D. is a certified speech-language pathologist and a paediatric psychologist. Reactions of the children were observed, and notes were taken on communication abilities of each child. Analysis resulted in a description of the child's and interviewers' communication and a conclusion on the level of communication of the child. The results were checked by another certified speech-language pathologist (P. W.) who is specialist in children with developmental disorders and discussed with S. D.

The third analysis involved a qualitative directed content analysis (Hsieh & Shannon, 2005) in which both the videotape and the audio transcription were viewed, read, and re-read by two researchers (J. Z. and E. S.) to direct pre-set codes of verbal and non-verbal communication behaviours and interactions between interviewer, interviewee, and participating parents. The pre-set codes were piloted in one case by two researchers (J. Z. and E. S.) independently to standardise the coding process, which resulted in the final set of codes. Each researcher (J. Z. and E. S.) then used the final version of the pre-set codes to analyse four cases each. Both researchers made case notes reflecting their experiences during the coding process. J. Z. and E. S. discussed the codes given in each video and categorised codes into subthemes. These subthemes, explained with interview examples, were

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presented to the interviewer for member checking and then discussed with the research group to finalise the categorisation process into themes.

3 | FINDINGS

The success of the interviews in obtaining the child's perspective is discussed first. Secondly, the outcome of the description of the communication levels of the children and, thirdly, the themes as result of the directed content analysis are described: parental influence and interviewer skills.

3.1 | Disclosure of child's perspective

Each interview started with a unique setting and explanation of the interview procedures to be used with that specific child, based on the clinical decision algorithm. After setting the stage of the interview, for example, getting the needed material in place and explaining the procedure to the child, the prepared interview technique was trialled to align to the child's capacities and expectations.

Based on the content, six interviews were classified as successful in uncovering the child perspective, and in three interviews, it was unsure whether the interviewer was successful. For Case 3, the child could only answer yes or no by blinking with his eyes; the mother served as an interpreter of the non-verbal reactions to the closed questions. The interviewer could not validate the non-verbal reaction of the child without information from the mother. Another child (Case 6) answered yes to most of the questions when at the same time the non-verbal communication of the parent showed the inadequacy of that answer. One interview (Case 5, German-speaking child) was only partly successful. Although adequate responses occurred, the translation of the interview questions from Dutch into German by the parent and answers vice versa interfered with the interaction between the interviewer and the child.

Next to the content analysis on the response level of the children showed more adequate responses (356 times; 272 verbal and 84 non-verbal) than inadequate responses (52 times; 42 verbal and 10 non-verbal). The codes 'non-verbally adequate' and 'verbally adequate' were observed in all cases, whereas the code 'verbally inadequate' was only observed in Cases 1, 2, 4, 8, and 9, and the code 'non-verbally inadequate' was only observed in Cases 2, 4, and 9. Cases 3 and 6 were not analysed as the coding would need information from the parent(s). Therefore, almost every child (except Cases 5 and 7) gave in some manner inadequate

responses. In the successful interviews, the interviewer was able to detect the inadequate response and counter with a different type of question or technique to uncover the child's perspective.

Therefore, the six successful interviews were characterised by an occurring verbal communication pattern with adequate responses of the child on either open-ended questions, choosing between two-option questions, or closed-ended questions. The interviewer repeated her communication pattern to disclose as much as possible about the child's perspective. Interview techniques such as asking elaborating questions, resuming answers, and summarising content were repeatedly used to align with the child's story and perspective. The interviewer ended the interview when all the interview topics were communicated.

In the interviews classified as successful, the interviewer set a collaborative and interested atmosphere by using both verbal and non-verbal communication options. Verbally, making a joke, telling a personal story, and expressions to show comprehension of the child's views added to the success of the interviews. Non-verbally, tone of voice, eye contact, facial expressions, providing physical support, and doing things together assisted the disclosure of the child's perspective. In addition, the interviewer used AAC to support communication with some children (see Table 1).

3.2 | Communication level of the children and types of questions of the interviewer

Based on the reaction of the children on the questions/stimuli of the interviewer, the children were placed at one of the communication levels (Oskam & Scheres, 2016). The types of questions of the interviewer were observed with the model of Blank (2001). Table 1 gives an overview of the observation of the communication level of the children and the type of questions used by the interviewer. Overall, three children communicated on Signal Level I (Cases 1, 3, and 6), two children on Signal Level II (Cases 2 and 7), two children on Symbol Level I (Cases 4 and 8), and two children on Symbol Level II (Cases 5 and 9).

The interviewer used 'matching perception' in two cases (Cases 3 and 6). She used 'matching perception' in Case 1 as well, but later in the interview, she switched to 'selective analysis of perception'. In one case, she used 'selective perception' (Case 2). 'Reordering perception' was used in one case (Case 7) and also in another case (Case 8), but during this interview, the interviewer occasionally used a question type of 'reasoning about

TABLE 1 Observation of the children and interviewer, organised by communication level

Case Signal Level I	Interview setting	Communication observation	Used techniques by the interviewer	Types of questions
1	At home, mother and father present, limited involvement in the conversation	The child provides information and asks questions to the interviewer. She is often in her own fantasy world and communicates with and through her doll about the questions asked. She mainly discusses daily activities, e.g., eating a sandwich and sleeping. When she talks about what she does in the morning, she jumps from one subject to another. She very occasionally answers a question adequately. She has difficulty in answering questions with a time signature. The help that mother offers to give an answer does not always help to come to a correct answer (giving a complementary sentence or giving the first sound of a word).	The interviewer tries to use the Talking Mats®, but the child cannot see the pictures. Then the interviewer tries to explain the two options: I like and I do not like, multiple times, but the child pays no attention to what the interviewer says. Then the interviewer tries to have a conversation with the child and asks her question about daily life. She uses questions with what, where, and when. Questions are integrated into play or proposed with the use of a hand puppet.	Start of the interview: matching perception End of the interview: selective analysis of perception
3#	At home, mother present and involved in interpreting communication (only non-verbal)	The child reacts either by winking his eyes, which means yes, or by moving his eyes up, which means no. He does not respond quickly, and his movements are very subtle sometimes. When the interviewer asks question in general about a topic, he does not respond, or his answers are are not always correct according to his mother. She will then rephrase the question and give more information about the topic. She will give information about a certain situation in the life of the child. For example: /Do you like it when grand mom reads to you from the Harry Potter book?/.	The interviewer asks closed questions: /swimming, is that fun to do?/. The questions only needs a yes or no answer and are prepared by interviewing the mother.	Matching perception

(Continues)

TABLE 1 (Continued)

Case	Interview setting	Communication observation	Used techniques by the interviewer	Types of questions
Signal Level I				
6#	At home, mother and father present, limited involvement in the conversation	The child imitates gestures and words of the interviewer or parents. He asks question about what the interviewer is doing and if the interviewer went with a car to his house. The sentences are not grammatically correct, and most are short (two or three words); most questions are answered with yes. He does not use the word 'I'; he refers to himself with his name. The child does not understand all the pictures and needs further explanation. He gives additional information on one occasion. In most cases, he answers a question with yes, which is not always appropriate. On two occasions, the child does not directly answer the question, but what he says fits the context of the question. His mother helps him by giving a complementary phrase, or she gives the first sound of the word. This does not aid the child.	She introduces the Talking Mats® with two options (like or does not like). The interviewer has to repeat the instruction of the Talking Mats® . She gives an additional example before starting the whole process. The interviewer points in the room to clarify a picture (Talking Mats®) or a question. The interviewer uses gestures. The interviewer mostly uses question in the form, such as: /Do you like swimming?/. If she thinks the child does not give a correct answer or does not understand it, she repeats or rephrases the questions. For example: The child says yes when he is asked if he likes to eat.	Matching perception
Signal Level II				
2	At home, mother present and involved in making communication easier	The child can answer questions about what and where. He needs guidance to answer these questions in the form of repeating the question, using picto's, pointing to an object in the room, giving the first sound of the word, or pointing him to the Talking Mats. The instruction of using the Talking Mats must be repeated several times. The child understands the picto's, and he can link them to his own situation. Sometimes, he needs some help choosing between the two options. For example, eating, he says he does not like that; however, his mother asks him about pancakes, and then he can give some other examples of food that he likes. He also speaks about his grandmothers' pancakes. He uses non-grammatical, short sentences with two to five words. He uses the infinitive verb.	The interviewer uses short sentences. She introduces the Talking Mats® with two options (like or does not like). The interviewer also asks question like 'What do you like?' or 'Where?'. She gives to the instruction more than once during the interview. She repeats questions and provides additional information to help the child understand the question.	Selective analysis of perception

(Continues)

TABLE 1 (Continued)

Signal Level II

#	Context	Interviewer	Child	Codes
7	At the hospital, mother and father present and involved in the conversation	The interviewer asks different sort of questions, what, where, and how. A question with the word why is only used occasionally. The interviewer gives an additional description to the question on several occasions. Or she repeats the question. She will also ask the parents to help the child with answering the questions. The interviewer uses AAC and auto-driven photo-elicitation. The Talking Mats with three options (like, I do not know, or does not like) are visible on the table but are used rarely during the conversation with the picture of the child's life. The Talking Mats® is used for the activities that are not in the pictures of the child.	The child sometimes reacts of its own accord to the picture shown. She answers the questions of the interviewer about the pictures. The child answers most questions herself, and almost all the answers match the question. One example when she does not answer the question correctly: a picture of crafting, and the child answers with 'your feet will get tired'. On some occasions, parents provide additional information. Not all questions that deal with explaining a situation, for example, /How is the story of the play?/, are answered. The child then only mentions objects that are visible in the picture but does not give an explanation. On one occasion with the Talking Mats®, she gives an explanation about why the activity is not pleasant. In one or two moments, the child gives additional information, for example, /I played there with another girl/. Or she mentioned something in the room and points at it. The child can answer the questions about what she does or does not like without the use of the Talking Mats. She uses short sentences with sometimes a conjunction: /but/, /and/, and /because/; sometimes, she uses ungrammatical sentences.	Reordering perception In some occasions: reasoning about perception

Symbol Level I

#	Context	Interviewer	Child	Codes
4	At home, mother present but not involved	The interviewer asks different sort of questions, what, where, how, and why. Sometimes, the interviewer gives an additional description to the question. Or she repeats the question. She will also ask the parent to help the child with answering the questions. The interviewer does not use any AAC.	The child answers most of the questions without any help. She will give new information concerning the topic. She will not add new topics to the conversation outside of the conversation topic. Questions in which the child is asked to give an opinion are often answered with: /I do not know/. Her mother sometimes helps answering or the interviewer asks a supplementary question. The child uses short sentences with sometimes a conjunction: /but/, /and/, /therefore/, and /because/.	Reasoning about perception
8	At home, mother present and involved in the communication	The interviewer uses the Talking Mats® in the conversation. She lets the child name the pictures. The interviewer asks different sort of questions, what, where, and how. A question with the word why is only used occasionally. The words how and why are only used occasionally. She sometimes elaborates if the child does not understand or does not answer the question.	The child can name the pictures (Talking Mats®) by itself. The child can answer questions about what and where. He has difficulties with answering questions beginning with why. He then answers: /Because I do not like that/. However, he does not elaborate why he does not like that situation. He only gives examples of things he does in real life or a relation with real life, for example: going to the swimming pool or taking a bath. He uses short sentences with sometimes a conjunction: /but/, /and/, and /because/. He can answer most questions. His mother helps him sometimes and completes what he is saying.	Reordering perception In some occasions: reasoning about perception

Symbol Level II			
5#	At home, mother and father present and involved in facilitating communication	The child understands the questions without further clarification needed. He can easily answer questions with why, how, etc. Language is sometimes an obstacle for him to comprehend the questions. His mother translates the questions if he does not understand the Dutch question. After translation, he comprehended the questions. He can use complex sentences with conjunctions. He uses phrases that have cause and consequences. He can stay with one topic. The child is able to talk about issues other than those that relate to the present moment and about multiple situations.	The interviewer does not need to adjust her communication. She uses complex questions and different sort of questions (why, what, where, etc.). His mother translates some questions, and in two or three moments, she gives more information in the intended questions.
			Reasoning about perception
9	At home, parents not present	The child understands the questions without further clarification needed. He can easily answer questions with why, how, etc. The child is able to talk about issues other than those that relate to the present moment and about multiple situations. He can fantasise about situations that do not occur in everyday life. He also elaborates about what he tells with ease. He can use complex sentences with conjunctions, but overall, his sentences are short. He uses phrases that have cause and consequences. He can stay with one topic. He asks questions of the interviewer.	The interviewer does not need to adjust her communication. She uses complex questions and different sort of questions (why, what, where, etc.). The interviewer does not use any AAC.
			Reasoning about perception

Note: (Partly) unsuccessful interviews are marked with '#'.

perception'. In three cases, she used 'reasoning about perception' (Cases 4, 5, and 9).

3.3 | Themes

3.3.1 | Parental influences

In eight interviews, the parent (or parents) sat close to the child. During the interview, they remained seated close or moved around the same room. In one interview, the parents were not involved, and communication occurred only between the child and the interviewer; however, the parents could hear the conversation. In the other eight interviews, the mother (n = 4) or both parents (n = 4) participated during the interview. Their participation was either supportive to uncover the child's perspective or unsupportive when taking over answering questions for the child.

Supportive actions of the involved parent(s) included 'setting the stage' of the interview (diminish distractions by taking away play objects), explaining the procedure and setting the rules to the child during the interview, and giving specific instructions to the interviewer concerning the communication with the child. A general positive attitude to the situation by showing joy and sharing fun or providing a drink to the child and interviewer occurred as well. During the interview, supportive behaviour occurred when parents provided additional information about the child's answers to confirm or specify the answer after the interviewer had asked for confirmation. Some additional information was provided by the parents by sketching specific situations in the child's life and explaining features of these situations. Another supportive parental action included clarifying questions to and stimulation of the child in a personal communicative way. Techniques, such as starting a sentence and waiting for the child to proceed with the sentence, using words like 'and' and 'or' to stimulate the child to provide more information, and asking a specific question with only pronouncing the first sound of an activity or person to stimulate the child to think about specific activities and express these, were spontaneously used. The parental supportive actions were executed after the interviewer had asked the question and the child had given the first answer. Often, parental support started spontaneously after the interviewer had summarised the answer of the child to get confirmation for the answer.

Unsupportive actions of parents occurred when parents answered the question of the interviewer before the child did, expressed judgements about the child's perspective, and only asked the child for confirmation,

by expanding the child's answer and including personal perspectives or by providing confirmation to the interviewer without giving the child the opportunity to react.

Supportive and unsupportive behaviours of the parents occurred intermittently during the interview. This challenged the interviewer's skills to address the child as the main source of information. The analysed video material showed that the interviewer adjusted the amount of attention to parents based on their behaviour being supportive or unsupportive, indicating that she constantly made decisions.

3.3.2 | Interviewer skills

To capture the perspectives of children with heterogeneous ages and functional profiles, several interviewer's skills were visible, which were categorised in 'verbal and non-verbal communication', 'adaptation in bonding', and 'timing and flexibility'.

Verbal and non-verbal communication
Verbally, the interviewer used words and constructions of sentences that fitted the functional communication level of the child. Questions (open-ended, a choice out of two, or closed-ended) were expressed in short sentences. Child's answers were repeated or summarised for confirmation, and follow-up questions were formulated again as open-ended, a choice out of two, or closed-ended. The words used were often the same as the words the child used. A friendly tone of voice and humorous expressions supported the verbal communication. Verbal reactions given to parents during the interview were in sentences and words that align with the communication level of the child.

The interviewer used AAC in the form of gestures, pointing to an object in the room or outside and using the picture of the Talking Mats® or photographs of the child. These communication aids helped to get a perspective of the children's likes and dislikes.

Non-verbally, the interviewer showed interest in the child by looking friendly to the child, making eye contact, listening with an interested facial expression, and using facial expressions reflecting the answers the child had given. The non-verbal communication stayed addressed to the child when parents were participating in the conversation. Only in the partly successful interview the verbal and non-verbal communication was also aligned with the parent who served as a translator (Dutch–German). Less alignment with the child's level of communication, both verbally and non-verbally, was seen in the course of the interview.

Adaptation in bonding

Several interviewer's actions were observable during the interviews that showed bonding with the child and adapting reactions to the child's behaviour. The interviewer *shared personal information* to connect to the child, for instance, when a child talks about the use of a tablet in the school context:

Child:	We use an iPad in our school.
Interviewer:	That was different for me, we did not even have internet when I was in school.
Child:	Really?
Interviewer:	No way.
Child:	And no pens?
Interviewer:	Yes, we did have pens, because we had to write instead of typing.

A different example is when a child talked about getting into a fight and the interviewer told personal information about her boxing sports. Another bonding action was when the interviewer *shows interest* in the child's story or *uses jokes* to create a nice atmosphere when needed:

Interviewer:	How does showering and dressing go?
Child:	O, I never dress.
Interviewer:	No? How do you do that then? You have whoop (snaps with fingers), your clothes on?
Child:	laughs
Interviewer:	Can you teach me that trick?
Child:	No, I am not good at dressing
Interviewer:	Not good, can you tell me more about it?

Also, *physical contact* was used when the interviewer says, 'can you give me a high five', or allowing the child to give her a hug. To bond, *doing things together* was also used when the interviewer asked the child to help her with the Talking Mats® cards or when the interviewer helped the child in her play. In some cases, the interviewer *asked permission* of the child, which helped the bonding process, for instance, when the interviewer asked permission to remove a Talking Mats® card or to record the interview.

Timing and flexibility

The interviewer showed flexibility in interviewer skills when answers of the child were verbally or non-verbally inadequate. In order to be flexible, the interviewer had to analyse the correctness of the answer *in* the moment and then decide on the next question or comment and on the right moment in time to intervene (reflection-in-action). Interventions for getting the child's attention back or waiting for the child's response were necessary to obtain a collaborative atmosphere, especially when parental influence was unsupportive.

4 | DISCUSSION

This is one of the first studies, to our knowledge, that analysed the communication used by children and by the interviewer to understand how the child's perspective was obtained. The study gave insight in interview techniques and interviewer skills and how they can be used effectively in children with developmental disorders. The interviewer showed that she adapted her communication successfully in six out of nine cases. The children varied in their communication from Signal Level I to Symbol Level II (for explanation, see Figure 1). Content analysis showed themes on parental influence and interviewer skills. Overall, results showed the need to give adequate attention to the role of the interviewer in uncovering the child perspective.

We concluded that in three cases, the interviewer was unsuccessful in uncovering the child perspective. Two were completely unsuccessful, and one was only partly successful. In the original study (Lindenschot et al., 2020), the two completely unsuccessful interviews were excluded, as this was already recognised based on the course of the interview. However, the partly successful interview was included because the parent collaboration with the interviewer was accepted. The mother was asked to translate the questions, and it was recognised that she gave additional information on a few occasions while translating the question. The input of the mother did not influence the observation of the communication level, because she still asked open-ended questions about activities in the past and in the future. As mentioned in the observation (Table 1), this child was able to talk about issues other than those that relate to the present moment and about multiple situations. Thus, based on the current results, it can be concluded that the outcome of the original study (Lindenschot et al., 2020) is valid in representing this child's perspective.

This study showed the power of the interviewer being able to adapt skills and methods to uncover the child's perspective. The observed interviewer started with an interview technique based on the information of the child concerning the level of cognition and communication (if known) and adapted her interview technique and used her skills when the child responses were not adequate. Although customisation of interview methods is not very

common in research with children, the necessity is clear (Delfos, 2016; Saywitz et al., 2017; Scott, 2008; Stans et al., 2018) as interviewing children can be problematic due to several reasons. The interviewer in the current study used a combination of professional knowledge, clinical reasoning, and reflection-in-action. These factors are in line with the factors that influence communication between clients and professionals (Stans et al., 2013). In communication with children, it can be added that one must take into account the appropriate context for the communication, that the professional must be creative and skilled in different ways of communication and different AACs, and that the professional needs to be able to adapt communication and AAC to the child's communication abilities (Dedding et al., 2013; Delfos, 2016; Punch, 2002; Scott, 2008). This does not fit with the overall requested standard or uniform communication when assessing children with standardised tests. Therefore, in research and practice, we should adapt our communication to the child based on professional knowledge, clinical reasoning, and reflection-in-action instead of using a fixed method for all children.

Although it is common knowledge that we have to adapt communication to the child, a decision algorithm on how to adapt this communication is lacking and the success of this adaptation has not been previously studied. Based on the results, we suggest matching the type of questions (Blank, 2001; Westby, 2017) with the communication level of the child (Oskam & Scheres, 2016). In order to enhance communication even more, interviewer skills and techniques can be customised by adapting to the child's communication abilities or preferences or based on his (in)adequate responses. Overall, this resulted in an overview of communication levels linked to type of questions and possible interviewer skills and techniques, which we present in Table 2. This overview can be used in preparation for the interview and during the interview to guide the reflection-in-action as it combines communication level with type of questions and possible interviewer techniques and skills. In the current study, the suggested combinations in Table 2 led to success in uncovering the child perspective. Still, we suggest to further study the usability and effectiveness of the overview. In Table 2, we did not link interviewer skills, techniques, or AAC to the communication level of the child, as this should be tailored based on the preferences and overall abilities of the child (not only communication skills) in order to be successful. The overview in Table 2 can be used in practice to tailor the communication to the child.

Results showed further that parental influence was seen in supportive and in unsupportive actions, which raises the question: Should parents be present in communication focussed on uncovering the child perspective? We recommend having a clear plan for the presence of the parent(s). In three cases, it was necessary to include the parent(s) in the conversation: to translate some questions, to interpret the non-verbal reaction of the child, and to determine whether the child correctly answered the question. However, the presence of a parent can also influence the opinion of the child about the activity. We therefore propose to (1) have a parent present at the start of the interview to examine the communication level of the child and check its compatibility with the child's communication ability, (2) ask the parent to leave the room or to isolate himself/herself from the interview (e.g., reading a book), and (3) member check the information with the parent afterwards. Overall, professionals should be aware of the influence of parents and reflect on the (un)supportiveness in relation to uncovering the child's perspective.

Results showed that the interviewer plays a key role in uncovering the child perspective. Next to the importance of communicative skills of the interviewer, there are also other skills needed. To establish a collaborative atmosphere, the interviewer used personal actions like sharing personal information or telling jokes. This fits with the concept of 'therapeutic use of self', which consists of the use of intentional (non-)verbal behaviour and reactions to (1) work transparent, allowing the client to see the therapists affective responses; (2) disclose information about the therapists himself; or (3) disclose thoughts about and reactions to the client (Knight, 2012). The use of self has been recognised as being an important factor in developing a therapeutic relationship (Andolfi et al., 1993; Baldwin, 2013; Knight, 2012; Lum, 2002), which is recognisable in the current study. In order to be effective in the therapeutic use of self, professionals need to combine professional knowledge with personal knowledge and awareness (Edwards & Bess, 1998). Therefore, we suggest that professionals communicating with children are trained not only on the level of techniques or skills but also in the therapeutic use of self.

A strength of this study is that professionals with different backgrounds performed the analyses: A speech-language pathologist, paediatric psychologist, (paediatric) occupational therapist, and neuropsychologist were involved in the analysis. Although the sample of children observed in this study is small, the videos consisted of 12 hours of conversation material between the professional and the children, which can be seen as a reasonable amount of data. Another strength is that this study focussed on tailoring communication both to the child and to the desired outcome. This link made it possible to

TABLE 2 Overview of the classification levels of Oskam and Scheres (2016), linked to the types of questions (Blank, 2001; Westby, 2017), and the possible interviewer techniques and skills, based on the current research

Communication level	Types of questions
Situation Level I Not aware of communication. Current situation determines content of information	**Not possible**
Situation Level II Are aware of communication and question–answer setting. Talk about what they see	**Matching perception:** 'Show me what you like.', 'What did you like?', and 'Can you find one you like?'
Signal Level I Can communicate on situation and reality	**Selective analysis of perception:** 'What do you like?', 'How are these two different?', 'Where? Who?', and 'What is happening?'
Signal Level II Can communicate about several situations and relations between things they cannot directly see	**Reordering perception:** 'What will happen next?', 'How do you feel?', and 'Can you tell me what happened?'
Symbol Level I Can communicate outside of immediate reality. Can vary between concepts and make relations between concepts	**Reasoning about perception:** 'What would you do?', 'Why do you like ...?', and 'What will happen if you ...?'
Symbol Level II Can communicate about things they have not experienced yet; creative in communication	**Reasoning about perception:** 'What would you do?', 'Why do you like ...?', and 'What will happen if you ...?'
Interviewer techniques and skills to be used	

Verbal communication	**Adaptation in bonding**
Closed question	Share personal information
Choice-ended question	Show interest
Open-ended question	Use jokes
Ask follow-up questions	Use physical contact
Make appointment or give assignment	Doing things together
Give confirmation or repeat	Ask permission
Non-verbal communication	**Timing and flexibility**
Eye contact	Reflection-in-action (analyse response of child and adapt communication)
Facial expressions	Asking for attention
Intonation	Waiting for response
Pointing	Adapt attention for parents based on (un)supportive actions
Use AAC	
Objects	
Talking Mats®	
Picture symbols	
Hand puppet	
Gestures	
Play	

also give indications of when the alignment was successful. Nonetheless, further research to the topic of adapting the communication to the child is needed.

In conclusion, this study contributes insights into how tailor-made interviews can successfully uncover the child's perspective. We found that the interviewer plays a key role in uncovering the child perspective and thus in enabling the inclusion of the child perspective in research and care. To be successful, interviewer questions need to be adapted to the communication level of the child, and interviewer skills and techniques should be adapted to the child's responses, preferences, or communication abilities. We suggest to further study the usability and effectiveness of the overview to guide tailor-made interviewing presented in this article.

ETHICS APPROVAL STATEMENT

All procedures performed in this study were in accordance with the ethical standards of the institutional

and/or national research committee, the 1964 Declaration of Helsinki and its later amendments, or comparable ethical standards (General Assembly of the World Medical Association, 2014). The ethical board of the regional research committee provided their consent (Number 2016-2968).

PATIENT CONSENT STATEMENT

All parents and professionals signed informed consent. Where indicated, the children also signed the informed consent to recognise their volition/agency.

CONFLICTS OF INTEREST

The authors report that there are no competing interests to declare.

AUTHOR CONTRIBUTIONS

ES, ML, SD and JZ managed data collection, analysis and interpretation. ES, ML and SD managed development of the manuscript. All authors contributed to the conception of the work, data analysis and finalisation of the manuscript for publication.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are not publicly available due to privacy legislations, but transcripts of the video material are available from the corresponding author upon reasonable request.

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