JÖNKÖPING UNIVERSITY
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Strategies of Professionals in Pediatric Rehabilitation to Engage the Child in Method Implementation and Outcome Evaluation/Re-assessment

An Empirical Study Involving Greek Professionals

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ABSTRACT

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The construct of child engagement is aligned with the principles of family-centered care and children's universal rights documents. The aim of the present study was to investigate the experiences of Greek professionals, working in pediatric rehabilitation settings, regarding child engagement in the intervention process. The study aimed to describe the strategies professionals use to promote child engagement and handle child disengagement in method implementation and outcome evaluation. A qualitative approach was employed, and 11 interviews were conduced with professionals. The qualitative data was analysed by inductive thematic analysis. After the analysis, four main themes emerged: "Child engagement was described as a significant construct expressed in an individual way", "Intrinsic and extrinsic motivators used as strategies to enhance child engagement in method implementation and outcome evaluation/re-assessment", "Professionals prevented child disengagement (before it occurred) and responded to child disengagement (after it occurred)" and "Contextual factors influenced professionals' child engagement strategies". In this study, child engagement was described as a dynamic, transactional process and the Contextual model of Therapeutic Change was used to structure the discussion section. The results of the present study confirmed previous findings indicated that a supportive relationship can be built by creating a safe environment, listening, imitating, and empathizing with the child. Positive expectancies can be created by informing children about the reason why the tasks were selected and the occurrence of the re-assessment process. Coaching can be considered an effective method for building new skills to children outside the therapeutic environment.

Keywords: child engagement strategies; pediatric rehabilitation; transactions; re-assessment

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2 Introduction

The construct of client engagement is considered a central aspect of pediatric rehabilitation, and it is in line with the principles of family-centered care and children's universal rights (Epley et al., 2010; United Nations, 1989). The term 'engagement' has been described as a co-productive, multidimensional state, facilitating commitment and investment in the intervention process (Bright et al., 2014; King, Chiarello, et al., 2017). Client engagement has been linked to optimal outcomes on an affective, cognitive, and behavioral level, progressively leading to therapeutic change (D'Arrigo et al., 2020a; King et al., 2021). Within the context of pediatric habilitation, the term 'clients' includes children and parents or caregivers, receiving intervention either separately or jointly.

Children can be engaged, including feeling connected to the professional, being aware of therapeutic rationale, and displaying enthusiasm or they can be disengaged by being distracted and reluctant to follow the therapeutic plan (King et al., 2022). A qualitative study investigating the nature of child engagement in occupational therapy interventions indicated that engagement is expressed individually (D'Arrigo et al., 2020b). Understanding signs of child engagement and disengagement might be challenging for pediatric professionals.

There is a tendency towards a transactional view of child engagement, which means that the construct of engagement can be influenced by the reciprocal interaction of different variables. Child characteristics, intervention aspects, professionals' variables, and child engagement interact over the course of time in a continuous and bidirectional way (King, Chiarello, et al., 2017). Child engagement has been seen as a result of transactional processes within the contextual model of therapeutic change (King, 2017). The model indicates the importance of the role of professionals in child engagement in the different steps of the intervention (King, 2017). However, research regarding the role of professionals in child engagement is scarce.

Due to the complexity and fluidity of child engagement, pediatric professionals use various strategies to develop and maintain child engagement in therapy. These strategies are embodied in professionals' everyday practice, and they are applied automatically (Kinsella, 2018). The intervention process in therapy includes four main steps, namely assessment, goal-setting, method implementation and outcome evaluation/reassessment. Although there are several studies regarding engagement in the goal-setting

step of the process, little is known about strategies used by professionals during method implementation and result evaluation/re-assessment (Curtis et al., 2021). The present study included the perspectives of 11 pediatric professionals working in pediatric rehabilitation settings in Greece.

3 Background

3.1 Children's Universal Rights

Children's right to be engaged in decision-making processes concerning aspects of importance to them has been clearly stated in international rights documents. According to Article 12 of the United Nations Convention on the Rights of the Child (UNCRC), children, defined as anyone under the age of 18 years old, have the inalienable right to be heard in every matter that affects them (United Nations, 1989). Children's views should not be disregarded due to age, immaturity, or cognitive ability.

The implementation of UNCRC principles has facilitated children's rights to participate in healthcare processes (Quaye et al., 2019). Healthcare professionals are required to engage in a dialogue with children and consider them as partners of equal power (Gal, 2017). Nevertheless, previous research has indicated that children's engagement in healthcare processes tends to be tokenistic. Adults' opinions usually subsumed children's perspectives (O'Connor et al., 2021).

3.2 Pediatric Rehabilitation Services-The Case of Greece

Pediatric rehabilitation services comply with right-based principles. Pediatric rehabilitation professionals have the duty to engage children and their families in processes associated with planning, implementing, and evaluating therapeutic interventions (Gal, 2017). However, in pediatric rehabilitation this is a complex process, as both children and their parents/caregivers are active participants in the intervention (King et al., 2014).

In Greece, a governmental organization called "KEDDY" is responsible for determining whether a child needs to attend a mainstream or a special school (Tzenalis & Sotiriadou, 2010). Intervention programs outside school are provided in private daycare or rehabilitation centers. A group of professionals with a variety of different academic backgrounds and expertise is responsible for fulfilling the needs of children with disabilities and their families (Nancarrow et al., 2013). Interdisciplinary teams usually con-

sist of pediatricians or child psychiatrists, special educators, psychologists, occupational therapists, physical therapists, speech and language therapists, pediatric nurses, and social workers (Tzenalis & Sotiriadou, 2010).

3.3 Children's Engagement in the Intervention Process

Due to the complexity of child engagement, a variety of definitions exist in the current literature. In pediatric rehabilitation, child engagement is considered a key concept of family-centered care, significantly influencing therapeutic change (King et al., 2021). Understanding engagement in the intervention might assist in identifying factors related to an effective therapeutic session and predicting child outcomes (Hart, 2009; King, Chiarello, et al., 2017).

Child engagement in the intervention is deemed a multi-dimensional construct. According to a review conducted by Bright et al. (2014), engagement has been conceptualized both as an internal state and as a co-productive process. The state of engagement has been defined as "engaged in", which refers to the subjective experience of engagement, often accompanied by signs indicating child engagement. The process of engagement was described as "engaged with" and refers to a gradual connection developed between the child and the therapist within the context of therapy.

It should be noted that engagement fluctuates over the course of time, and it has been found to be related to a child's individual characteristics, professional variables, and intervention aspects (King, 2017). It is vital that professionals are aware of the fluidity of child engagement. The findings of a qualitative study, conducted by D'Arrigo et al., (2020), indicated that child engagement significantly varied between the sessions. Therapists who participated in the same study also highlighted that signs of engagement are manifested in different ways, depending on children's age, cognitive level, and personality traits (D'Arrigo et al., 2020b). Professionals ought to be aware of their own role in considering child engagement and they should acquire various skills.

Different groups of skills may be required in each step of the intervention process (King et al., 2007). Typically, an intervention process consists of four recurring steps, including assessment, goal-setting, method implementation, and outcome evaluation or re-assessment (Björck-Åkesson et al., 2000). During the initial steps of the intervention, problems are identified and possible explanations for these problems are discussed. The term "problem" has been defined as the experienced gap between the present situation and the desired outcome (Dunst et al., 1988). In the next phase, problem prioritization

and goal-setting usually take place based on child preferences and family needs. Finally based on the problem identification and goal-setting phase, explanations and conclusions drawn by assessment and goal setting are used to plan, implement, and evaluate the therapeutic method. Children and professionals collaborate in order to design a successful method that provides solid solutions (King et al., 2020).

3.4 Professionals' Child Engagement Strategies

Pediatric rehabilitation professionals facilitate child engagement by using a number of different strategies which are "embodied" within their practice. These strategies are usually applied in an automatic way, which means that professionals most of the time are not consciously aware of the strategies they use (Bernhardt et al., 2021). Embodiment refers to knowledge gained by clinical experience and expressed through professionals' actions and strategies (Kinsella, 2018). Understanding embodied strategies, that aim to promote child engagement, could provide a concrete guideline to novice professionals (Melvin et al., 2021). Multiple strategies have been described within the current literature, including the establishment of a supportive therapeutic relationship, therapeutic use of self, and empathic listening (King, 2021a; Taylor, 2008).

3.5 Transactional View of Engagement

The nature of the intervention is not considered the only factor influencing child engagement. Reciprocal interactions between child characteristics, professionals' skills and personality, and intervention aspects have been found to play a preponderant role in child engagement and client change. Client change has been considered a fundamental reason for receiving therapeutic intervention. However, little is known about how that change occurs (King, 2017).

In transactional models (King, Imms, et al., 2017), client change is considered a result of continuous and dynamic transactions occurring between people and contexts (Sameroff & Mackenzie, 2003). According to those models, the child and the environment ought not to be considered separate entities. Interventions should be planned considering the transactional aspect. Situational dynamics might lead to engagement or disengagement in children, care providers, and professionals (King et al., 2021).

These transactions involve the child and experiences provided by family and social environments, occurring in various situated life contexts. Transactions might refer to activity settings in home, school, community, and organizational contexts, such as pediatric rehabilitation settings (King, Imms, et al., 2017). An ethnographic study conducted

by King, et al. (2021) adopted a transactional view of engagement. The findings of this study indicated that client engagement was a core process within a system of constructs. Those constructs made therapy a perceived meaningful process, including expectations for progress, positive affect, and relationships and collaboration (King et al., 2021). Transactional models give emphasis on continuous processes occurring within a particular context, resulting in therapeutic change.

3.6 Theoretical Framework: Contextual Model of Therapeutic Change

The contextual model of therapeutic change (King, 2017) is a model of client change processes, involving transactions between professional, client, and intervention, which result in therapeutic change. Three key constructs were presented, which facilitated clients' in-session engagement and motivation for change in outside-of-session real-life environments (King et al., 2014). Figure 1 illustrated the relationships between these constructs.

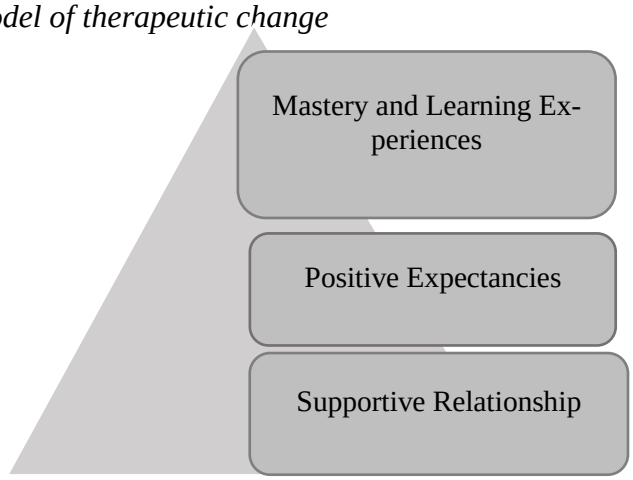
According to this model, a *supportive relationship* is based on the principles of collaboration. A supportive relationship within pediatric rehabilitation is defined as a collaborative partnership that motivates and engages the client (Wampold, 2001). Professionals deliberately use a variety of skills to motivate clients toward change. Strategies reported in the literature to enhance a supportive relationship usually include empathizing (empathic or active listening and empathic responding), encouraging, and guiding (King et al., 2014). Such a relationship enhances clients' encouragement, motivation, and engagement in therapy. Professionals are responsible for creating a positive therapeutic environment, which facilitates optimal changes.

In-session relational transactions nurture *positive expectancies.* Expectancies in therapy are defined as "anticipatory beliefs that clients bring to treatment and can encompass beliefs about the procedures, outcomes, therapists, or any other facet of the intervention and its delivery"(Nock & Kazdin, 2001, p. 155). The provision of credible interventions with solid outcomes assists in the development of positive expectancies. Expectation strategies used by professionals in clinical practice include assessing and validating clients' expectations, explaining therapy rationale and problem, negotiating, and collaborating with clients (King et al., 2014; Smart et al., 2019).

Mastery and learning experiences arise from positive expectancies in therapy. Learning opportunities and exposure to therapeutic tasks result in enhanced self-efficacy and impetus for change (King, 2017). Clients gradually are becoming more and more motivated to achieve meaningful goals, a fact that is generalized in real-life activities.

Figure 1

Contextual model of therapeutic change



4 Study Rationale

Whilst there is scientific evidence regarding child engagement in the initial steps of the intervention, knowledge about child engagement in method implementation and outcome evaluation/re-assessment is limited (Antoniadou, 2022; Curtis et al., 2021). A qualitative study, conducted by D'Arrigo et al., 2020, examined strategies used by occupational therapists targeting child engagement throughout therapy. However, it was unclear which strategies were implemented at each step of the intervention. Knowledge of whether and when a strategy is effective depending on the step of the intervention and clients' individual needs, might lead to healthcare services of high quality (King et al., 2022).

5 Study Aim

The aim of the present study was to investigate the experiences of Greek professionals, working in pediatric rehabilitation settings, regarding child engagement in the intervention process. The study aimed to describe the strategies professionals used to promote child engagement and handle child disengagement in method implementation and outcome evaluation.

6 Method

6.1 Study Design

The present study adopted a qualitative research approach with an exploratory descriptive methodology (Sandelowski, 2000). “How” and “why” questions were asked in order to elicit participants’ views regarding the topic under investigation. Professionals’ strategies to develop and maintain child engagement in method implementation and outcome evaluation were examined by gaining a deeper understanding of professionals’ personal experiences.

6.2 Participants and Sampling Strategy

A convenience sampling strategy was used during the initial steps of participant recruitment. Potential participants were contacted by email or by phone. Letters of invitation were sent by email to the participants, including information regarding the study purpose, the way, and the duration of data collection. Snowball sampling was used in conjunction with convenience sampling. The inclusion and exclusion criteria were illustrated in Table 1.

Table 1

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• Professionals working in Greek pediatric rehabilitation settings within the private, public, and community sector • Professionals delivering therapeutic interventions to children with various disabilities aged between 0 to 18 years old • Professionals with at least one year of working experience in a pediatric rehabilitation setting	• Professionals exclusively conducting assessments and giving a diagnosis

Participants were selected according to the principle of maximum variability. Professionals had various academic backgrounds including psychology, nursing, physical and occupational therapy, speech and language therapy, hippotherapy, and social work. Years of working experience in pediatric rehabilitation settings ranged from 2,5 years to 25 years. Pediatric rehabilitation services are usually provided in Greece in special schools, rehabilitation centers, and day-care centers. Thus, professionals who worked in any of the settings mentioned above were eligible to participate in the study. Invitation letters were sent to 25 professionals and 11 participated in the study. Participants’ characteristics were presented in Table 2.

Table 2

Participant Characteristics

Participant ID	Profession	Years of working experience	Therapeutic setting	Type of intervention	Age of children receiving intervention
P1	Speech and language therapist	4	Private health center	Individual speech and language therapeutic sessions	Children aged 2-13 years
P2	Physical therapist	12	Private health center	Individual physical therapy interventions	Children and adolescents aged 12-17
P3	Occupational therapist	2,5	Private health center	Individual occupational therapy sessions	Children aged 1,5-11 years
P4	Occupational therapist	6	Private health center	Sensory Integration Therapy, individual and group occupational therapy interventions	Children aged 1-17 years
P5	Child Psychologist and Psychotherapist	25	Private health center	Cognitive Behavioral Therapy, Padovan therapy, individual and group psychotherapy, Applied Behavioral Analysis (ABA)	Children aged 3-6 years
P6	Pediatric Nurse	3	Private health center	Group therapy sessions	Children aged 5-17 years
P7	Speech and language therapist	15	Private health center and public special school	Individual speech and language interventions	Children aged 2,5-17 years
P8	Child Psychologist	8	Private health center	Individual and group sessions with children, parent counseling	Children aged 12-17 years
P9	Speech and language therapist with specialization in hippotherapy	13	Private health center	Individual speech and language interventions and hippotherapy sessions	Children aged 1,5-14 years
P10	Occupational therapist	16	Private health center and public special school	Individual and group sessions	Children aged 2-12 years
P11	Occupational therapist	6	Private health center and public special school	Individual interventions	Children aged 2-17 years

6.3 Instruments

In qualitative research designs, the main instrument for data collection is the researcher (Leavy, 2017). A semi-structured interview guide was used. The interview guide was initially written in English and later translated into the Greek language. Interview questions were informed by literature, and they were open-ended, and in-depth, aiming to

enhance open communication with participants. The interview guide included questions, related to previous working experience, perceptions regarding child engagement, means of evaluating child engagement in the intervention, strategies to engage the child in method implementation and outcome evaluation, strategies to handle child disengagement in method implementation and outcome evaluation, barriers, and facilitators to child engagement in the intervention. The interview guide can be found in Appendix C.

The participants were provided with a definition of child engagement and a list of potential child engagement strategies. The list of child engagement strategies included examples of professionals' strategies found in the literature (Antoniadou, 2022; D'Arrigo et al., 2020a; Jenkin et al., 2022). A definition of child engagement was developed in English and then translated into Greek. The list was used in an attempt to provide concrete examples of strategies used by professionals in everyday practice, aiming to facilitate conversation. Examples of strategies were based on existing scientific evidence, and they referred to professionals' body language (e.g., keeping eye contact, sitting on the child's level) and communication skills (e.g., posing questions directly to the child, using strengthen-based language). A table including the list and the child engagement definition is provided in Appendix B.

6.4 Procedure of Data Collection

The process of data collection was conducted in February and March 2023. Before data collection occurred, a pilot interview had been conducted with a special educator, and her feedback was incorporated into the procedure. Professionals were interviewed individually by the researcher, using the internet platform Zoom. Each professional was interviewed once. The duration of the interviews ranged between 30 minutes to one hour and interviews were audio recorded by using an external digital recording device, after ensuring participants' consent. At the beginning of the interview, each participant was provided with the definition of engagement and a list including examples of strategies used by professionals to facilitate child engagement. Afterward, professionals were interviewed. Interview content emerged after transcription. The content of interview transcripts was stored in a computer file, separated from the list with participants' personal information. The access to this file was protected by a password, only known by the researcher. Information related to participants' personal data was deleted from the transcripts, directly after data collection.

6.5 Data Analysis

All interviews were transcribed, and the data were analyzed based on the principles of inductive thematic analysis (Braun & Clarke, 2006), first by producing themes closely linked to the data. This form of analysis is data-driven, which means that the coding process did not follow a pre-existing theoretical framework. Codes and themes occurred out of recursive processes of data collection and analysis (Thorne, 2016).

The process of coding followed the six-step approach of inductive thematic analysis, introduced by Braun & Clarke, (2006). First, the researcher familiarized herself with the data, by transcribing the audio recordings, verifying transcripts for accuracy, and thoroughly reading and re-reading the text, generated after the transcription. During the first step, some notes were kept which were used to assist the process in its subsequent phases. The qualitative software program N-Vivo 11 (QSR International, 2023), the paper and pencil method, and reflective notetaking were used to facilitate data analysis. The second step was to collate relevant data to generate initial codes, by using N-Vivo 11. A long list of initial codes was created, and the different codes were clustered into potential themes. Visual representations were used to facilitate the process of sorting the codes into themes. In the fourth step, the themes were reviewed and refined. Key ideas for refinement included moving some sub-categories to other theme categories and merging sub-categories. During this process, the initial themes, categories, and sub-categories were thoroughly discussed with another researcher to reach a consensus. At the end of this step, the final 'thematic map' was created, which fit into the data set. In the fifth step, the themes were named and defined. Clear names and definitions for each theme were generated, and each name indicated the 'story' of each theme. In the sixth step of the analysis, the citations which captured the essence of each category and sub-category were selected. The selection of the examples was carefully discussed with another colleague to increase the credibility of the study. Examples of the coding process were presented in Table 3.

Table 3

Examples of meaning units, codes, sub-categories, categories, and themes.

Meaning unit	Coded for	Sub-category	Category	Theme
"I try to understand what the interests of the child are. So maybe in the first 3 sessions, I only played with the child. You need	Learning children's interests	Professionals started by getting to know the child	Professionals built a connection with the child	Intrinsic and extrinsic motivators are used as strategies to enhance child engagement

some time to learn the child, how they react, and what they like" (P7)			
"I know beforehand, from the assessment the time during which each child can be focused to complete a task. I structure the tasks depending on this information" (P5)	Structuring the session according to children's abilities	Professionals prevented child disengagement by planning the session and setting boundaries	Professionals prevented child disengagement (before it occurred) and responded to child disengagement (after it occurred)

6.6 Ethical Considerations

The ethical substructure of the research influenced every step of the process and therefore, it was described in detail. Ethical considerations refer to values systems, ethical praxis, and reflexivity (Leavy, 2017).

The study was conducted with Greek participants and thus, the research process followed the regulations of Greece. Possible participants were approached via phone, e-mail, or in person. At first contact, the researcher introduced herself, and the purpose of the study was briefly described either verbally or via e-mail. After participants have demonstrated interest in participating, informed consent was obtained through a two-phase process. First, an invitation letter was sent to participants via email. This letter included information regarding the study rationale, the reason why this professional was selected as a participant in the study, anticipated risks, and the advantages of participation in the upcoming research. The contact information of the researcher was provided, so that participants could pose any additional questions. Second, written informed consent was obtained from the participants. The informed consent letter included information related to research aims, possible benefits, and risks, the time and commitment they had to spend during the research period, issues of confidentiality, and voluntary participation.

Participants' private information was stored in a file and deleted at the end of the research process. Participants were informed that they could withdraw at any time, without providing any reason and without any consequences. In the letter, it was clearly stated that no compensation would be provided. The original letter was written in English and then translated into the Greek language. All participants provided the researcher with written consent, which was sent via e-mail. Another significant ethical aspect was the place of data collection. Given that data collection was conducted through Zoom interviews, participants were in familiar environments, which reduced

the possibility of power imbalance (Coad et al., 2015). Relational ethics were taken into consideration and thus, establishing rapport with the participants was a prerequisite for conducting interviews. All participants had the opportunity to check the transcribed interviews and they had access to the study results. An overview of the results of the study was translated into Greek and offered to the participants. The invitation letter can be found in Appendix A.

Reflexivity refers to a researcher's place in research. The researcher did not work in a pediatric rehabilitation center during the period of data collection. Researcher's previous working experience or education might have shaped perceptions on the topic under investigation. Before and after having conducted each interview, the researcher was keeping reflexive memo notes. Even though the researcher knew beforehand two of the 11 participants, because of previous internships and volunteer work, all participants were treated equally. All participants were able to verify interview transcripts and clarify, omit, or change their answers to the interview questions. Three participants verified the content of the interviews, but no one changed anything.

6.7 Trustworthiness and Credibility

In qualitative research designs the term trustworthiness refers to the rigor of the methodology applied and to what extent readers can draw valid conclusions from research findings (Leavy, 2017). There are four major criteria to ensure trustworthiness in qualitative inquiry, namely credibility, dependability, confirmability, and transferability.

Several techniques were used to ensure trustworthiness. Member checking was conducted in order to ensure authenticity and trustworthiness. Study participants were eligible to check the transcribed interviews and make necessary changes. The transcribed interviews were provided in the Greek language to each participant by e-mail. The researcher transcribed the Greek quotations into English as accurately as possible. For the translation of the quotations, some internet platforms were used, while the translation was verified by another Greek native speaker. Emphasis was given to the selection of the most appropriate quotations in each category. The researcher worked in collaboration with another colleague in order to identify the most representative quotations for each category. The findings of the study were presented in a descriptive, narrative form, allowing thick descriptions.

Although generalizability in qualitative research is scarce, thick, and rich descriptions might result in transferability (Creswell, 2014). Professionals who participated in the

study were selected to provide data about strategies that were implemented in a variety of different settings (hospital, community, private) diagnosis (mental or physical disability), and groups (young children, adolescents). The self-reflection of the researcher was used in the study. The researcher critically reflected upon personal experiences and how these influenced data collection and interpretation. A peer debriefing process took place with another colleague familiar with the topic under investigation. Specifically, the inductive thematic analysis was discussed in detail between the two researchers, which increased the credibility.

7 Results

The inductive thematic analysis was completed, and four main themes emerged. The titles of the themes were as follows: "*Child Engagement was Described as a Significant Construct Expressed in an Individual Way*", "*Intrinsic and Extrinsic Motivators Used as Strategies to Enhance Child Engagement in Method Implementation and Outcome Evaluation/Re-assessment*", "*Professionals Prevented Child Disengagement (Before it Occurred) and Responded to Child disengagement (After it Occurred)*" and "*Contextual Factors Influenced Professionals' Child Engagement Strategies*". The first three themes answered the study aim, which was the experiences of professionals related to child engagement, and the strategies of professionals to engage the child and handle child disengagement in method implementation and re/assessment. The final theme included the factors that exist in the context and influence child engagement strategies. Even though the fourth theme did not directly answer the study aim, it was thought to be critical for examining the complex construct of child engagement. The importance of contextual factors highlighted the transactional nature of child engagement. An overview of the themes, categories, and subcategories was presented in Table 4. The table included shortened titles of the themes, categories, and sub-categories (for full titles see Appendix D).

Table 4

Overview of themes, categories, and sub-categories

Themes	Categories	Subcategories
Child engagement as a significant and individually expressed construct	Child engagement in the intervention was related to optimal therapeutic changes	
	Child engagement and disengagement were expressed in an individual way	
Intrinsic and extrinsic motivators used as strategies to enhance child engagement	Building a connection with the child (intrinsic motivators)	Starting by getting to know the child
		Making the child feel safe
		Using child interests to motivate the child or to structure therapeutic tasks
	Creating positive expectations in therapy for the child (intrinsic motivators)	Explaining the problem to the child
		Providing explanations regarding professionals' role
		Describing the reasons why tasks were chosen
		Informing that re-assessment occurred
		Negotiating with the child
	Building skills for the child (intrinsic motivators)	Enhancing mastery within-session therapeutic activities
		Enhancing mastery with outside-session therapeutic activities
	Using extrinsic motivators to engage the child	
Preventing (beforehand) and responding (afterward) to child disengagement	Preventing child disengagement by planning the session and setting boundaries	
	Responding to child disengagement by understanding the reasons for disengagement and changing activities	
Contextual factors influencing professionals' child engagement strategies	Level of family involvement in in-session and outside-session activities	
	Context of therapy	
	Type, frequency, and the step of the intervention	
	Children's age, type of disability, and personality characteristics	
	Professionals' experience and personality traits	

Note: for full titles see Appendix C.

7.1 Child Engagement was Described as a Significant Construct Expressed in an Individual Way

This theme included professionals' experiences regarding child engagement and disengagement in the intervention process. Professionals indicated the pivotal role of child engagement in the intervention and its connection to achieving optimal changes in therapy. Participants highlighted the individualized nature of child engagement in the intervention. Children significantly differed in how they displayed engagement and disengagement in therapy. The theme included two categories: "*Child Engagement in the Intervention was Related to Optimal Therapeutic Changes*" and "*Child Engagement and Disengagement were Expressed in an Individual Way*".

7.1.1 Child Engagement in the Intervention was Related to Optimal Therapeutic Changes

Participants indicated that child engagement in the intervention was crucial, and it was related to optimal therapeutic changes. Professionals mentioned that only when children were active participants, was the therapy meaningful. Child engagement in the intervention "created motivation for change" (P4) because children understood the value of the process and they put effort into the tasks. Professionals felt that it was their responsibility to engage the child in the sessions. Particular emphasis was given to engage the child from the beginning of the process "otherwise the time passes, without doing anything meaningful" (P3). Professionals also stressed the importance of engaging the parent or caregiver in the intervention. According to the participants, parents play a crucial role in the process and their engagement could assist in maintaining the therapeutic change.

Professionals said that child engagement was necessary, especially when it came to specific diagnoses, like autism spectrum disorder (ASD) or dysgraphia. Participants mentioned that children with those diagnoses are usually reluctant to change, and thus, they need to be motivated to follow the plan of the intervention. In that case, professionals noticed that child engagement was critical in order for the change to be achieved: "Children with dysgraphia usually do not want to change their handwriting… they say… I don't care what you say or what my mother says... I just don't want to, so in that case, child engagement is necessary" (P10).

Despite professionals' acknowledgement of the significance of child engagement, participants seemed to be insufficiently aware of the concept of engagement. Professionals

asked for more clarifications by posing direct questions to the researcher during the interviews. Although professionals were not consciously aware of the use of child engagement strategies, they provided many examples from their everyday practice.

7.1.2 Child Engagement and Disengagement were Expressed in an Individual Way

Professionals mentioned signs that indicated the level of child engagement in the intervention. Participants stated that some children used verbal communication to express their engagement. Expressing anticipation and wondering what was coming next, were indicators that children were engaged participants. Professionals stated that the good performance of the child in therapeutic tasks was a sign of engagement: "They put effort into the task and therefore they are engaged" (P2). Objective findings in children's bodies proved that children repeated the exercises at home and thus, they have been engaged at home as well. Professionals observed children's body posture, facial expressions, and frequency of eye contact to understand if children were active participants in the process. However, they mentioned that children with autism did not maintain eye contact and thus, it was more challenging for professionals to 'read' their body language.

Different signs of child disengagement were described by the participants. Professionals stressed that when children did not put effort into the tasks, they were disengaged. Participants stated that denial indicated that children were no longer engaged. Children expressed denial either to access the room or to perform therapeutic tasks. Professionals claimed that sometimes children might have demonstrated aggressive behavior during the sessions, such as screaming or even having tried to hurt themselves. Participants mentioned that disengaged children intended to avoid therapeutic tasks either by playing with something else or by talking about things not related to the therapeutic activity. The way that child engagement was expressed significantly differed between children. Professionals mentioned that a child's behavior might indicate engagement, while the same behavior demonstrated by another child might indicate disengagement. An example was presented below:

> Every time [name of a child] interrupts me to say something irrelevant I know that she does it because she feels connected to me, but if [name of another child] does the same, I know he does it because he wants to avoid that specific task, as it is too demanding for him (P7).

7.2 Intrinsic and Extrinsic Motivators Used as Strategies to Engage the Child in Method implementation and Outcome Evaluation/Re-assessment

This theme included professionals' strategies to engage the child in method implementation and re-assessment. Professionals used intrinsic and extrinsic motivators in order to enhance in-session child engagement. Children were intrinsically motivated when professionals used strategies to build a connection, create positive expectancies in therapy, and enhance mastery. Extrinsic motivators included rewards, such as receiving praise, toys, or sweets every time the child completes a task in a correct way. This theme included the following categories: "*Professionals Built a Connection with the Child*" "*Professionals Created Positive Expectations in Therapy for the Child*", "*Professionals Built Skills for the Child*" and "*Professionals Used Extrinsic Motivators to Engage the Child*". The first three categories were further divided into sub-categories, while the last category has no sub-categories.

7.2.1 Professionals Built a Connection with the Child (Intrinsic Motivators)

Professionals started by getting to know the child. Professionals stressed the significance of devoting time to learning about children's interests and feelings. An example was presented below:

> It is important that I understand what the child likes to play with the most. During the first 2-3 sessions I provide the child with different toys, I observe the child's preferences and I keep notes. I also ask the parents what the child usually plays with at home. My goal is to create a list including children's favorite toys which I can use as motivators during therapy (P1).

Professionals stressed the importance of examining children's feelings at the beginning of each session. Knowing children's in-the-moment state assisted them to predict children's reactions during therapy.

Professionals made the child feel safe. Professionals highlighted the importance that the child feels safe in the session. The lack of safety might turn the therapeutic environment into an intimidating place: "First, I devote some time to building a connection with children and making them feel safe. Otherwise, the child might think that I am there to tell them what to do" (P3). Professionals described how a safe environment was created through the imitation of children:

> He liked to play with cars in a specific way, without paying attention to me. First, I was observing him. Then I started imitating him. I was playing in the

> same way, and I was making the same noises as he did… Soon he started to notice me. In that way, we built a connection and a bridge of communication. He trusted me, he felt safe, and that was how we started working together (P4).

The significance of demonstrating empathy and using pauses while talking was stressed by participants. Empathic listening and empathic responding to children's feelings assisted the child in feeling safe.

Professionals used children's interests to motivate them or to structure therapeutic tasks. Professionals were aware of children's interests, and they structured the sessions according to what children found appealing. Therefore, the sessions were fun, which motivated children to complete demanding tasks:

> There was a child with a developmental delay, and he was getting tired so easily. He told me he loved Spiderman, so I had a mask of Spiderman which I used to motivate him to complete the task when he was getting tired. I was telling him, come on you can do it, just like Spiderman. So, I think knowing children's interests and using them in the session is important (P11).

7.2.2 Professionals Created Positive Expectations in Therapy for the Child (Intrinsic Motivators)

Professionals explained the problem to the child. Participants recognized the importance of discussing with the child the reasons why they attended therapies. After having had a conversation regarding children's difficulties with children, professionals noticed that children seemed to be more engaged in therapeutic tasks. Participants mentioned that problem explanation worked as an "intrinsic motivator" for children and that it was "a key factor to child engagement" (P5). Children were thought to be "the protagonists" (P2) and therefore, professionals stressed the importance of informing them about things related to their health. Providing information assisted in shaping clear expectations in children's minds regarding therapy, as "children knew what to expect from therapy" (P2). However, professionals mentioned that this strategy was mostly effective to older children with less severe disabilities. Professionals described in detail how they started a conversation regarding children's difficulties*:*

> I use simple vocabulary, but I explain in detail the reasons why they attend speech and language therapy. I place the mirror in front of them and I tell them that we are about to train their tongue, because right now their tongue does not follow their will (P7).

Professionals provided explanations regarding their own roles. The importance of discussing with the child about professionals' role was considered of great importance. The process of providing explanations assisted the child in building clear expectations about therapy and understanding that positive results might be achieved. Professionals provided the child with written information in the form of a contract regarding their own role in therapy and what they could expect later from the process. Their goal was to share the responsibility with the child, to create the rules of the session together, and to agree on things related to the process. In non-verbal children, professionals used pictures and diagrams to explain their role and the expected results of the therapeutic process.

Professionals described the reasons why tasks were chosen. Participants initiated a conversation with children regarding the reasons why each task was chosen. A connection was created between the child's difficulty, the chosen task, and future improvement, which built clear expectations to the child:

> I have a girl who has difficulty remembering things and orientation problems. When she asked why we were doing those tasks, I asked her, do you remember that you came, and I assessed you? You were confused with right and left. So now we are doing these exercises so you train yourself and you will see an improvement (P11).

Intrinsic motivators for change were created when professionals explained that children benefited from the tasks: "I told him we are trying to make your shoulders stronger and then your fingers, so you have beautiful handwriting. Then you can show your dad your beautiful letters and be proud" (P11). However, it was not always easy to explain the reasons to the child, so professionals divided one task into some smaller steps, and they provided explanations regarding each step.

Professionals negotiated with the child. Professionals negotiated with children, especially every time children appeared unwilling or too tired to complete therapeutic tasks.

> If a child doesn't want to complete the task, I negotiate with them… I say okay, if you are too tired now, you can do this task for one more time, not for 4 times, as we had agreed at the beginning… so with high functioning children we have a discussion and we find the solution somewhere in between… but in general my goal is that they complete the tasks (P4).

Professionals informed the child that re-assessment occurred. Professionals stated that they informed children when re-assessment occurred. They observed that when children were informed that re-assessment was conducted, they appeared more engaged in the process, and they were putting more effort into the tasks:

> I always inform the child that re-assessment occurs because I want the child to try their best. […] I tell them that we will do a test to check the domains which have been improved and the ones we still need to work on. I noticed that when children know that re-assessment occurs, they are more focused (P3).

7.2.3 Professionals Built Skills for the Child (Intrinsic Motivators)

Professionals enhanced mastery of within-session therapeutic activities. Professionals explained how they managed to build new skills for children within the therapeutic sessions. In some cases, professionals mentioned that they assigned the role of therapist to high-functioning children, so they structured the session, and the therapists were the ones performing the activities. Their goal was that children developed problem-solving capabilities. Professionals used skillful questioning to build this new skill in children:

> I assign to the child the role of the therapist sometimes. The child should make a schedule, and structure the activity and I am the one who should complete the activities. The goal is that the child does problem-solving on their own. In the meantime, I pose questions to the child, so they tell me where to put the obstacle and how to move my body in the correct way (P11).

Professionals also highlighted the importance of starting slowly in order to build new skills in children. They admitted that they never started the session with something incredibly difficult. They started with easier tasks so that the child feels successful.

Professionals enhanced mastery with outside-session therapeutic activities. Professionals described how they built skills in children with outside-session therapeutic tasks. Participants mentioned that they provided the child with exercises to perform at home so that the skills developed within the session are generalized in real-life situations. Professionals described how children were asked to keep notes regarding their progress at home before and after performing the tasks. In that way, not only did children repeat tasks at home, but they were also aware of their own progress. Therefore, they built skills that they could generalize:

> I ask for older children to write a diary, so they provide me with information about their condition at home. I want them to give me written feedback if they

repeated at home the exercise we did in the session and how they felt afterward (P2).

Professionals organized group real-life activities so that children build communication skills: "There is a group of children who go out and go to cafes and other shops by public transportation. The goal is that they perform real-world activities and that they develop social skills" (P5).

7.2.4 Professionals Used Extrinsic Motivators to Engage the Child

Professionals used extrinsic motivators, including praise, toys, or sweets to indulge the child to perform activities, especially the most challenging ones. Professionals also provided stickers to children as praise for having been engaged in the session. They mentioned that children put more effort into the task when they know they will receive something afterward:

> I have a boy diagnosed with intellectual disability and we learn how to tie his shoes. As this is a demanding exercise for him, he always asks me if he can have a biscuit afterward. I realized that he puts more effort while doing the task if he knows from the beginning, he will have a biscuit if he does it correctly (P4).

7.3 Professionals Prevented Child Disengagement (before it occurred) and Responded to Child Disengagement (after it occurred)

This theme included the descriptions of professionals related to handling child disengagement in method implementation and result evaluation/re-assessment. To prevent child disengagement, professionals planned the session, and they set boundaries for children. Participants also responded to the signs of child disengagement by devoting time to understanding the reason behind the disengagement and changing therapeutic activity. The theme included two categories: "*Professionals Prevented Child Disengagement by Planning the Session and Setting Boundaries*" and "*Professional Responded to Child Disengagement by Understanding the Reasons for Disengagement and Changing Activities*".

7.3.1 Professionals Prevented Child Disengagement by Planning the Session and Setting Boundaries

Professionals tried to carefully plan and organize each session so that child disengagement was prevented. They gained information about how long each child can concentrate on one specific task and they structured activities based on that information. When planning group therapy sessions, professionals focused on creating groups involving

children with similar levels of functioning. Family members, other professionals, child assessment, and observation were used as means to identify children's individual needs. Setting boundaries was used as a strategy to avoid child disengagement in the process. By creating rules and using a stricter tone of voice, when needed, professionals intended to show children that therapy sessions were not just playful or recreational extracurricular activities. During the sessions, professionals were friendly with the children, but they highlighted the rules of the therapy. Professionals' priority during the sessions was that children completed the therapeutic tasks they initiated. Sometimes professionals chose an easier task, not to train children's skills, but to be sure that the child would not leave the task incomplete.

> It is important that I set boundaries because my office is full of toys and if the child understands that they can just come, play, and leave, the session will not be effective. In younger children, I ask them to tidy the room and return the toys where they belong (P7).

7.3.2 Professionals Responded to Child Disengagement by Understanding the Reasons for Disengagement and Changing Activities

Understanding the reasons why the child was not engaged in the session was the first step in handling child disengagement. Professionals used empathic listening and empathic responding to validate children's feelings. Notes were kept by professionals during each session considering how many times each child seemed to be disengaged. By keeping notes, professionals were able to detect and remember the changes in children's behavior and they had the opportunity to reflect on their own role in children's disengagement. For example, they mentioned: "How many times did the child disengage during today's session? 15 times? In the previous session, he only did it five times…So what went wrong today? Was it my fault or was it just a bad day?" (P7). Professionals emphasized that their interpretation of the reasons related to child disengagement affected the strategies they selected to respond to these behaviors during the sessions:

> If I observe that the child is frustrated, I devote time to understanding the reasons behind that frustration. It is important to distinguish between manipulative behavior and tiredness. When a child is tired, I pick an easier activity…but when they do it for manipulation, I insist that they complete the task (P11).

Professionals demonstrated flexibility and they were willing to lower the demands of the session. When children expressed signs of fatigue or tiredness, professionals posed

questions to them, aimed to gain children's attention. Those questions were about topics not related to the intervention, such as the food they ate today. Sometimes professionals alleviated pressure on the child by choosing playful activities between therapeutic tasks. As soon as children were more relaxed, professionals tried to re-engage them in the session. When that was not possible, professionals adapted the sessions, and they followed a less demanding schedule.

> There are some children who cannot collaborate to complete the activity. There was a school-aged child who was asking for his mother all the time. In that case, I lowered the demands of the exercise, and I added more playful activities (P3).

7.4 Contextual Factors Influenced Professionals' Child Engagement Strategies

Several factors within the context influenced the strategies used by professionals to engage children in therapy. The level of family involvement, the context of therapy, the type of intervention, and children's and professionals' characteristics influenced the selection of child engagement strategies.

7.4.1 The Level of Family Involvement in In-session and Outside-session Activities Influenced Professionals' Child Engagement Strategies

Professionals highlighted that the level of family involvement in in-session and outside-session activities significantly varied between different families. When both parents were active participants in therapy, professionals observed that children were more engaged in therapy, and it was easier for therapeutic change to be achieved. Family members attended in-session therapeutic activities and the professionals' goal was that parents repeated therapeutic tasks at home with the child, so that a new skill was generalized in a real-life situation. Professionals adapted their strategies according to the level of family involvement. An example of coaching was described:

> Once I coached for oral feeding…I was in regular contact with the mother of a girl who was attending occupational therapy sessions. We were talking through Viber once per week for 8-9 months. It was an effective method because the mother trusted me, she gave me information about the school and what she tried at home, and how her daughter reacted. It worked well because we were both involved and 80% of the success was achieved thanks to the mother. This is something I can do with a limited number of parents (P4).

Professionals emphasized that it was not always easy to involve parents in therapy sessions. A number of parents were characterized by the professionals as unwilling to collaborate and sometimes they underestimated the role of the professional. Sometimes parents' presence during the intervention was characterized as challenging by the participants. Professionals mentioned that several parents did not inform their children regarding the reasons for therapy, and they denied explaining the problem to the child. When there was no parent involvement, professionals noticed that children required more time to develop new skills and learn new behaviors:

> There was a child with attention deficit hyperactivity disorder (ADHD) who was unable to stay still, even for five minutes…Within engagement in in-session activities during the year, I managed to make this child to sit and attend the entire session, which lasted 45 minutes. I provided parents with similar activities that they can perform at home so that the child could generalize the new behavior in school or at home…However, the parents never did those activities and thus, the child could only sit during the session, but she never generalized the new behavior (P8).

7.4.2 The Context of Therapy Influenced Professionals' Child Engagement Strategies

Professionals mentioned that the context of therapy influenced child engagement in the intervention and therefore, their strategies. Participants intentionally changed the environment of therapy to facilitate child engagement and optimize therapeutic outcomes. When therapeutic sessions were delivered in nature, professionals felt that children were more engaged. Professionals allowed children to take initiative and thus, the process became more interesting to them. "Sometimes, I accompany the children to the park [...]. The children are more engaged when the environment changes, they take initiative, and they prepare everything by themselves" (P6).

Professionals stressed that when a therapeutic room was fully equipped with lots of toys, children became either distracted or more engaged. A well-equipped therapeutic room was appealing to children at the beginning. However, in some cases, a room full of toys might have distracted the children who could not focus on therapeutic tasks. Professionals mentioned that when they delivered interventions to children with specific diagnoses, including attention hyperactivity deficiency disorder (ADHD) and ASD, toys and possible distractions were removed from the therapeutic room. In that

way, professionals managed to gain children's attention during the sessions. Outside distractions were eliminated by closing the window when therapeutic interventions were delivered to avoid child disengagement.

7.4.3 The Type, Frequency, and Step of the Intervention Influenced Professionals' Child Engagement Strategies

Professionals mentioned that different types of therapeutic interventions might require different child engagement strategies. There was a difference in child engagement strategies depending on the type of therapy: "In hippotherapy, the child is outside, in the natural environment, the child is not even on the ground. In children's eyes, the horse is an enormous animal…so in this type of therapy, I think in a totally different way" (P9).

Professionals stated that the frequency of therapy sessions affected their child engagement strategies. Professionals delivered therapies to children twice per week including each therapeutic session with more playful activities. When children attended the sessions that frequently, professionals mentioned they were more flexible, and they added more recreational activities to make sessions less demanding. On the contrary, when children received sessions once per week, due to the limited time, professionals used less play, and they followed a stricter schedule focused on building skills.

The step of the intervention affected professionals' strategies to engage children. Professionals mentioned that children were informed when re-assessment occurred and that made them put more effort into the tasks. On the contrary professionals mentioned that children were not aware of the first assessment because then "the children are usually shyer" (P3). Professionals stressed that particular emphasis to develop a supportive relationship with the child was given during the initial steps of therapy, especially when the assessment was conducted.

7.4.4 Children's Age, Type of Disability, and Personality Characteristics Influenced Professionals' Child Engagement Strategies

Children's age and type of disability were important factors influencing child engagement strategies. More playful activities were used to engage younger children in therapy, whereas older children were approached with more kinetic tasks. Younger children needed more time to feel safe. Children with more severe disabilities needed more time to process information and professionals used more pictures and technologies, like iPad. Professionals mentioned that providing explanations about the therapy rationale and the

problem of the child was more effective on older children and with children with less severe disabilities.

Professionals stated that a child's personality characteristics affected their strategies. Participants mentioned that some children demonstrated signs of disengagement to challenge professionals: "I know her personality and I know she tries to challenge me when she destroys toys or screams. She wants to cause my angriness. With her all I do is ignore her reactions. Only then she stops" (P10). Professionals had to 'read' each child and react according to the children's personality characteristics, aimed to individualize the sessions. Friendly behavior and relaxed therapeutic environments were not suitable for every child, so participants mentioned that they had to emphasize their professional role to engage the child in the session.

> There is a child who cannot handle jokes...he has been taking advantage of my friendliness to avoid therapeutic tasks. That's the reason why I become stricter when I work with him…I told that to him directly, so he knows why I behave this way (P4).

7.4.5 Professionals' Experience and Personality Traits Influenced Professionals' Child Engagement Strategies

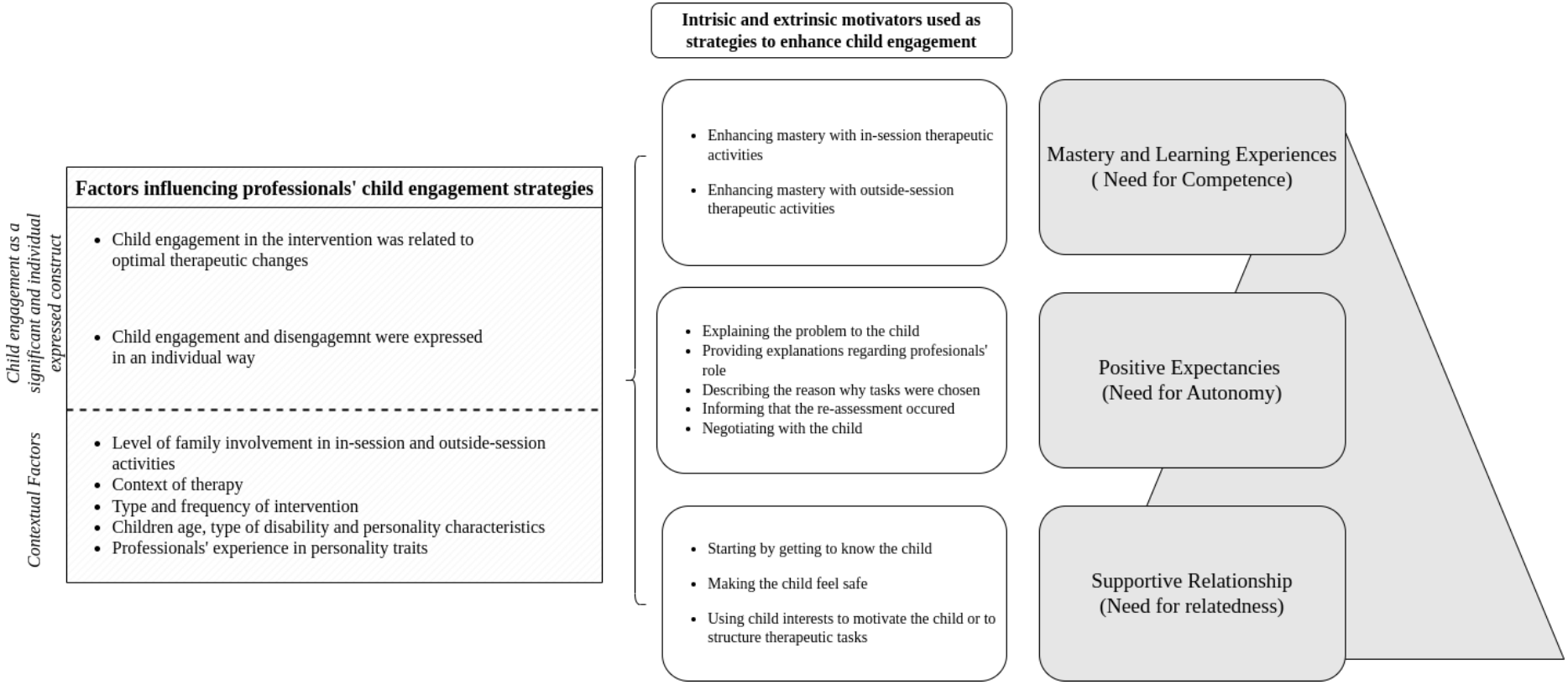
Participants mentioned that years of working experience in combination with their personality characteristics affected the selection of child engagement strategies as well as the structure of the sessions. Professionals mentioned that the more experience they gained, the more sensitive they became to children's needs. Experienced professionals could immediately understand children's feelings and they could adapt the demands of the activity according to them. Professionals' character influenced the selection of therapeutic activities during the session: "My character is a bit intense so I might scream... yes, well done, move on!! I also like to move a lot during therapy, and therefore I choose kinetic tasks" (P4).

8 Discussion

The discussion was structured according to the tenets of the Contextual Model of Therapeutic Change. Professionals initiated and changed their child engagement strategies in accordance with contextual conditions, which reflected the transactional and dynamic nature of engagement. Multiple different factors that influenced professionals' child engagement strategies were identified within the first and the last themes, named "Child Engagement was Described as a Significant Construct Expressed in an Individual Way" and "Contextual Factors Influenced Professionals' Child Engagement Strategies", respectively. The relationship between these factors, professionals' strategies, and the tenets of the contextual model of therapeutic change were illustrated in Figure 2.

Figure 2

Overview of the results in relation to the Contextual Model of Therapeutic Change



8.1 Supportive Relationship

The results of this qualitative study confirmed the significance of creating a safe therapeutic milieu for children by building a connection with them. The importance of making the child feel safe in therapy has been highlighted in the current literature. Children need a safe context in order to explore the environment, according to attachment theory (Bowlby, 1984). According to Self Determination Theory (SDT) (Deci & Ryan, 2002), professionals' strategies aiming to build a connection with children satisfy children's need for relatedness, which is one of the basic psychological needs, influencing child engagement. Creating a supportive relationship with the child is considered a bedrock of child engagement (see Figure 1).

This study indicated that professionals listened to the child in an attempt to make them feel safe. Listening was particularly mentioned as a response to child disengagement, according to the findings of the present study. A critical review conducted by King (2021) adopted a transactional view of listening, which indicated that listening was a transactional process, taking place in a situated context. This critical review highlighted that the professional's own engagement in the in-session interactions with clients was a prerequisite for effective listening (King, 2021b). According to this study, professionals' strategies are usually influenced by their personality.

The results of another case study indicated that professionals' purposeful timing of empathy, body posture, and non-verbal communication skills enhanced engagement in the therapeutic process (Bernhardt et al., 2021). Participants of the present study stated that empathy and validation of children's feelings was an effective strategy they used to build a relationship and to handle disengagement. More experienced professionals mentioned that they needed less time to understand children's feelings and they easily adapted the intervention according to children's needs. This finding is in line with the results of another study, that examined the clinical decision-making of novice and experienced professionals (King et al., 2007). This study concluded that expert therapists used customizing strategies by adopting a supportive, holistic, and strengths-based approach, focusing on each families' needs (King et al., 2007).

Professionals who were interviewed during the present study mentioned that imitating children with autism or children with limited social skills assisted in building a connection with them and hence increased engagement. A treatment was designed by Ingersoll (2010), which suggested that the therapist's imitation of children's behaviors can promote reciprocity and spontaneous imitation of children on the autism spectrum (Ingersoll, 2010). A study investigated the effect of imitation on child engagement in improvisational music therapy and found that there

was an association between the use of imitation and the child engagement in the intervention (Carpente et al., 2022). However, the effectiveness of this strategy in different types of therapy has yet to be investigated.

Intervention-related factors either constrained or facilitated professionals' strategies in building a supportive relationship with children. The frequency of the sessions influenced professionals' child engagement strategies. The results of this study indicated that a limited number of sessions restricted the time professionals devoted to building a relationship with children. When interventions were scheduled less frequently, professionals focused more on building skills than on the relationship. This finding is in line with the results of another qualitative study, which investigated the nature of child engagement in occupational therapy interventions (D'Arrigo et al., 2020b). The step of intervention influenced professionals' strategies in establishing a relationship with children. According to the findings of the present study, professionals put more effort into the relationship during the initial steps of the intervention, especially when the assessment was conducted. This finding confirms the results of a recent scoping literature review, which concluded that pediatric rehabilitation professionals mainly used relatedness strategies during assessment and goal setting (Antoniadou, 2022).

Professionals' strategies were influenced by children's individual characteristics. Children's age was a key factor, which affected professionals' approach. Younger children needed more time to feel safe in the relationship, according to the findings of the present study. This finding is aligned with data existing in the current literature, supporting that younger children mostly rely on their parents, and they need them in the therapeutic room in order to feel safe (Jenkin et al., 2022; O'Connor et al., 2021). Professionals who participated in the present study stressed that children differed in what engages them, and they showed their engagement or disengagement in different ways, depending on their personality traits. This was one of the main findings of a recent qualitative study examining engagement principles and contextual aspects (King et al., 2022). This recent study indicated that clients used verbal and non-verbal communication to demonstrate engagement and disengagement (King et al., 2022).

Despite the importance of creating a safe environment within therapy, the extensive use of relatedness strategies might restrict child engagement in the intervention. The results of two qualitative studies concluded that a high level of trust toward professionals can be related to limited child engagement in the process (Teleman et al., 2021; Vinblad et al., 2019). Therefore, professionals ought to be aware of the quality and the quantity of the strategies they use to develop a

supportive relationship with children. Along with relationship skills, like listening and empathizing, professionals should demonstrate flexibility and responsiveness (King et al., 2022). Even though engagement is a complex concept, it involves relational and dynamic principles which are bound together. Engagement is evidence-informed and therefore, it can be taught in health professional programs (Klatte et al., 2019).

8.2 Positive Expectancies

Professionals who participated in the present study highlighted the importance of providing explanations regarding the problem of the child, the professionals' role, and the reasons why tasks were chosen during method implementation. Participants also discussed how they informed children considering the occurrence of re-assessment and how they negotiated with them when implementing the method. According to the contextual model of therapeutic change, these strategies create positive expectancies in children, which enhance child engagement in the intervention (King, 2017). Despite its significance, the construct of therapy expectations has been an overlooked aspect of pediatric rehabilitation (Weinberger & Eig, 1999).

Professionals' experiences related to child engagement influenced their expectation strategies. According to UNCRC professionals in pediatric rehabilitation have the duty to safeguard children's right to make decisions of their own volition, by providing them with sufficient information (United Nations, 1989). However, professionals seemed to be inadequately informed about children's rights to be engaged in the intervention. The study participants mentioned that informing children about their problems, the professionals' role, and the reasons why tasks were chosen were mainly meaningful with older children with less severe disabilities. This attitude toward engagement and disability was supported by medical models, reproducing norms of non-participation (Moser, 2000).

The level of family involvement in the intervention affected professionals' expectation strategies. Professionals mentioned that sometimes parents either facilitated or constrained a child's engagement in the process. Participants of the present study indicated that sometimes parents do not inform their children regarding the reasons why they attend therapy. Being uniform entails the risk of being excluded from the therapeutic process, while therapy is deprived of its pedagogical value (Björck-Åkesson et al., 2000).

Even though creating positive expectancies in therapy has been found to increase therapeutic adherence and facilitate engagement, research about building positive expectancies in children is scarce. A study conducted by Smart et al. (2017) concluded that when children are aware of the process and the therapeutic rationale, they are usually more engaged (Smart et al., 2017).

However, the description of strategies used by professionals to explain the problem or their own role in the process remained abstract. In a literature review out of 13 included articles, only one examined children's expectation in therapy (Smart et al., 2019). Further research is required in order to elicit the strategies professionals use to facilitate positive expectancies, not only for parents or caregivers but also for children who receive therapy.

8.3 Mastery and Learning Experiences

The findings of the present study indicated that professionals enhanced children's mastery through exposure to in-session and outside-session therapeutic activities. Mastery is considered a prerequisite for therapeutic change. It is essential that skills and abilities developed and trained during the therapy are generalized to real-life situations (King, 2017).

Learning experiences in therapy might lead to skills generalization (Graham et al., 2013). Outside-of-session successes are considered crucial regarding client change (Armitage et al., 2017). According to previous findings, to enhance client change, pediatric professionals coach children and their families to self-regulate their goals, plan, and implement a therapeutic plan based on their needs. Coaching for oral feeding was used as a strategy by professionals who participated in the present study. Coaching has been perceived as a promising intervention method and it has received a 'yellow light' designation, which means that it can be effective, but more research is required (Kessler & Graham, 2015; Novak & Honan, 2019). Strategies used for outside-of-therapy activities are seldom described in the literature. Further research is required pertaining to competence strategies, especially in outside-of-session activities when the therapist is not present. The investigation of these strategies might be particularly useful to professionals who deliver interventions to families who live in remote areas with limited access to pediatric rehabilitation settings.

The implementation of coaching or other strategies which focus on building skills usually requires parental involvement in the process. According to the participants of the present empirical study, collaboration with parents and/or caregivers was not always effective. This finding is in line with the results of other studies which indicated that parents who attended the therapeutic interventions had the tendency to intervene, thus restricting children's participation in the process (Jenkin et al., 2022; O'Connor et al., 2021). It is evident that parental involvement can serve as both facilitators and barriers depending on the setting and professionals' approach related to children's and parent's roles in the intervention (Vinblad et al., 2019).

Given that the entire intervention process can be seen as a learning opportunity for children and their families, professionals ought to promote interventions' high educational value at each step

of the process. There is limited literature regarding the development of skills in method implementation and outcome evaluation or re-assessment. A recent study conducted by Verkerk et al. (2022), recognized the pedagogical nature of the processes of assessment and re-assessment. This finding demonstrates that children can be equal partners in the process if they are asked to (Verkerk et al., 2022).

9 Methodological Considerations

The present study aimed to investigate professionals' strategies for child engagement in method implementation and outcome evaluation/ re-assessment. Several methodological strengths and limitations ought to be considered when interpreting the results of the present study. Before the process of data collection began, the interview was piloted with another Greek professional, which increased the credibility of the findings. In-depth semi-structured interviews were conducted with pediatric rehabilitation professionals through Zoom. Conducting interviews via the Internet has been considered an effective method of data collection, which allows the participants to be interviewed from the convenience of their homes. However, during one interview internet-connection issues occurred, making the process more challenging. Also, in-person communication facilitates non-verbal communication, which in this case was restricted due to Zoom meetings. A list of professionals' strategies and a definition of child engagement were offered at the beginning of the interview in order to facilitate the conversation. However, some of the professionals' answers might have been affected by the content of the material provided. Limitations related to the sampling strategy should be discussed. A combination of convenience and snowball sampling was used. This strategy was considered suitable for the present study, as the researcher approached professionals who fulfilled specific criteria. However, the researcher had pre-established relationships with two out of 11 participants, which might have influenced the process of data collection.

After data collection was completed, peer debriefing was used to ensure the trustworthiness and credibility of the data analysis, as mentioned in the method section. However, data analysis was conducted by one researcher, which increased the possibility of personal bias. The credibility of the study results was also ensured by member checking. Study participants received the transcribed interviews, and they had the opportunity to change the content of the interviews. No one changed the content of the transcribed interviews. Interviews were conducted in the participant's and researcher's native language, which enhanced the credibility of the study. Results' categorization was performed in the Greek language. The translation of the titles of the themes, sub-themes, and citations might have distorted the meanings of the original text. For increasing

the credibility of the findings, another native Greek colleague verified the translation of the citations.

Issues of transferability are of concern. First of all, child engagement is considered an abstract construct and its definition might differ depending on the context. Given that the present study was conducted in Greek settings, the results might not be generalized to another country. All professionals who participated in the study worked in private practice, which might not reflect the practice environment of professionals working in the public sector. The profile of children receiving interventions from private services may differ in characteristics, such as economic status compared to those accessing public services. Another important variable that should be considered is the fact that all participants delivered the intervention in urban areas and thus, they had regular meetings with the families.

Triangulation was not used, which reduced the credibility of the study. The data was collected via semi-structured interviews and the sample included pediatric rehabilitation professionals. Even though criteria of variation were used to include professionals with different years of experience, academic backgrounds, and types of therapy, they were still considered a homogenous group.

10 Future Research

The present study examined pediatric professionals' experiences related to child engagement, by directly collecting data via interviews with professionals. The perspectives of children and their parents/caregivers were beyond the scope of this study, and they require further investigation. More studies with observational designs are needed to capture the relational, dynamic, and transactional process of child engagement. Multiple methods of data collection can be used, including observation of family members' and professionals' interactions in different therapeutic settings over time, and then interviews can be conducted to explore their views on engagement (Iedema et al., 2019). This study indicated professionals' strategies to handle disengagement. However, more research is needed to indicate how professionals respond to child and parent disengagement during different steps of the intervention, in different therapeutic settings. The nature of child engagement and disengagement should be further explored in different therapeutic settings where different types of interventions are provided. Finally, more research is needed regarding building skills in children when professionals are not present.

11 Conclusion

This study aimed to provide concrete descriptions regarding the strategies professionals used to engage children in method implementation and in outcome evaluation/ re-assessment. The

study also provided descriptions regarding professionals' in-session strategies to handle child disengagement. The results of the present study confirmed previous findings indicated that a supportive relationship can be built by creating a safe environment, listening, imitating, and empathizing with the child. According to the findings of this study, informing children about the reason why the tasks were selected and the occurrence of the re-assessment process, created clear expectations for children. Coaching can be considered an effective method for building new skills for children outside the therapeutic environment. Contextual factors including professionals', children's, families', and interventions' variables influenced professionals' child engagement strategies, reflecting the dynamic and transactional view of child engagement. Despite its limitations, the present study is the first one which focused on professionals' child engagement strategies in only two steps of the intervention. Further research with observational study designs is required to elicit child engagement strategies in different types of therapeutic interventions and in various settings. Knowledge generated by those studies might assist in the development of health professional programs.

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13 Appendices

Appendix A: Invitation Letter

Dear Prospective Participant,

My name is Marianna Antoniadou, and I hold a degree in Occupational Therapy from the University of West Attica, in Athens. I am currently a second-year master's student in the program titled "Interventions in Childhood" at the School of Education and Communication at the University of Jönköping, in Sweden. I am conducting my master's thesis aiming to shed light on strategies used by pediatric rehabilitation professionals for engaging the child in method implementation and outcome evaluation. The results of the study aim to provide concrete descriptions regarding professionals' strategies targeting child engagement. Insight into whether and when a strategy becomes more or less effective concerning the phase of the intervention might assist professionals in offering healthcare services of high quality.

I am interested in including professionals who deliver therapeutic sessions to children visiting pediatric rehabilitation settings in Greece. Professionals having frequent contact with children with disabilities are considered eligible to participate. Data collection will be conducted via interviews. Open and close-ended questions will be concentrated on the issues mentioned above.

Data collection will follow a specific **procedure**. Participants will be provided with a list which will include several examples of strategies commonly used by professionals to engage children in their everyday practice. The list will be used in order to facilitate the conversation. Then, participants will be interviewed about the strategies they use in their practice when they deliver therapeutic sessions. The interviews will last approximately 30 minutes and with participants' permission, they will be voiced, recorded, and transcribed. After the transcription, the tapes will be destroyed.

It is noted that participation in the present study is **voluntary**. Participants are allowed to withdraw at any time. Withdrawal from the study will not have any negative impacts on participants' professional or personal life.

Data collected via interviews, as well as information in the consent form will be **confidential**. Demographic information will not be linked to the participants' personal identity and only researchers will have access to the demographic data.

No anticipated **risks** are anticipated associated with participation in the current study. There is a possibility that participation might elicit ideas and thoughts about ways of working but this is

not estimated to be harmful. Confidentiality will be ensured, as indicated by ethical considerations related to participants' rights. As participants have the right to withdraw without any repercussions, the anticipated risks are small.

Contact information:

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Appendix B: Definition of the Term 'Child Engagement' and List of Examples of Professionals' Child Engagement Strategies

"A multifaceted state of affective, cognitive and behavioral involvement in the intervention process, which motivates clients to work on intervention tasks outside of therapy" (King et al., 2017b, p. 4).

List of Strategies

Prepare for method implementation	• Remove possible distractions from the room • Provide clear instructions about the therapeutic tasks/activities • Remind children why a task/activity is important (therapeutic rationale) • Provide a connection between goals and therapeutic tasks/activities
Develop therapeutic relationship	• Invest time getting to know child's personal interests and strengths • Active and empathic listening • Maintain eye contact • Open communication about the child's thoughts, and opinions regarding the therapeutic method
Direct questions to children	• Ask children directly if the therapeutic method helps/helped them to achieve their goals • Use simple vocabulary
Use alternative forms of communication	• Use an adaptive communication device • Communicate via visual stimuli (photographs, pictures) • Communicate via gesture (thump up-down, ask children to point)

Appendix C: Interview Questions

	Would you like to tell me some things related to your profession (years of experience, setting, age of children, and type of disability)?
Perceptions regarding child engagement in the intervention	• What does child engagement mean for you? • Do you think that child engagement in the intervention is important? If yes, why? • In what way does service providers' role influence child engagement in the intervention? (Who is responsible for engaging the child?) • In what way can child engagement affect the therapeutic outcome?
Ways/means of evaluating child engagement in the intervention	• Could you describe signs of child engagement in the intervention? • Do signs of engagement vary among children or over time? If yes, in what way? **Probe**: What are the factors that might influence the signs of child engagement? • How do you evaluate child engagement in the intervention? How do you understand that a child is engaged? **Probe**: Could you describe the means you use?
Strategies to engage the child in method implementation and outcome evaluation	• Could you describe the process of method implementation? **Probe**: Who are the active participants? What is the role of parents when implementing the method? What is your role when implementing the method? How often do you contact families during method implementation? • What do you do to promote and maintain child engagement in method implementation (The list can be used to provide some examples of strategies) • Could you describe the process of outcome evaluation? **Probe**: Who evaluates the outcomes? What is your role, parents' role and children's role in the process? • What do you do to promote and maintain child engagement in outcome evaluation? (The

	list can be used to provide some examples of strategies)
Strategies to handle child disengagement in method implementation and outcome evaluation	• What are the signs of child disengagement? • What do you do to avoid/reduce child disengagement in method implementation? • What do you do to avoid/reduce child disengagement in outcome evaluation?
Facilitators to child engagement in method implementation and outcome evaluation	• Would you describe factors that might facilitate/promote child engagement in method implementation and outcome evaluation?
Barriers to child engagement in method implementation and outcome evaluation	• Would you mention factors that might restrict child engagement in method implementation and outcome evaluation?

Appendix D: Overview of Study Results

Themes	Categories	Subcategories	Meaning units
Child engagement was described as a significant construct expressed in an individual way	Child engagement in the intervention was related to optimal therapeutic changes		"I think child engagement is the most important thing, it creates motivation for change" (P4) "It is essential, especially in children with ASD. In that case child engagement increases optimal therapeutic outcomes" (P8) "If a child is not an engaged participant in therapy, then the intervention is meaningless" (P7) "What do you mean by child engagement?" (P5) "This term is really confusing for me <…>." (P4) "Every time you say child engagement, I understand the level of activity of the child." (P9)
	Child engagement and disengagement were expressed in an individual way		"Older children usually use verbal communication to express engagement/disengagement. Younger children might express themselves in an indirect way, with non-verbal communication." (P1) "Signs of child engagement vary between different children. There are some similarities, of course, related to different diagnoses and to personal characteristics." (P5) "Children with ASD have difficulty in maintaining visual contact, so in that case, I should be able to read the body language." (P7) "When children pay attention to what I say and complete tasks I understand they are engaged" (P1) "Engaged children do what I ask them to do. Not only is it important to complete tasks, but also to complete them in the correct way. Then I understand that children put effort into the task and therefore they are engaged." (P2) "Usually when the child is not engaged, they might ignore me or leave the activity. Disengaged children might intentionally do every activity in a wrong way or they may want to talk about things not related to the session." (P3) "Sometimes I can understand that the child is disengaged because they move their legs. This movement can indicate either hyperactivity or disengagement." (P5)
Intrinsic and extrinsic motivators are used as strategies to enhance child engagement in method implementation and outcome evaluation/re-assessment	Professionals built a connection with the child (intrinsic motivators)	Professionals started by getting to know the child	"It is important that I understand what the child likes to play with the most. During the first 2-3 sessions I provide the child with different toys, I observe the child's preferences and I keep notes. I also ask the parents what the child usually plays with at home. My goal is to create a list including children's favorite toys which I can use as motivators during therapy." (P1)

			"I always start by asking the child about their day and how they feel. It is important that I know the child, their thoughts, and what they like before starting the tasks I have prepared." (P8) "I try to understand what the interests of the child are. So maybe at the first 3 sessions I only play with the child. You need some time to learn the child, how they react and what they like." (P7)
		Professionals made the child feel safe	"First, I devote some time to building a connection with children and making them feel safe. Otherwise, the child might think that I am there to tell them what to do." (P3) "I had a child with ASD, and he liked to play with cars in a specific way, without paying attention to me. First, I observed the child. Then I started imitating him. I was playing in the same way, and I was making the same noises as he did. Soon he started to notice me and that was the way we built a connection and a way of communication. He trusted me, he felt safe, and we started working together." (P4) "I use verbal communication, even to non-verbal children. I think that when the therapist uses some pauses in between and shows empathy, the child feels connected. It is important that you observe them and understand what a child needs." (P6)
		Professionals used child interests to motivate the child or to structure therapeutic tasks	"I know she loves lions, she has dyslexia, so we learn how to write by using lions." (P5) "I have a child who loves puzzles, so I keep the pieces and every time he successfully completes a task, I give him one piece." (P7) "There was a child with developmental delay, and he was getting tired so easily. He told me he loves Spiderman, so I had a mask of Spiderman which I used to motivate the child to complete the task when he was getting tired. I was telling him, come on you can do it, just like Spiderman. So, I think knowing child interests and using them is important." (P11)
	Professionals created positive expectations in therapy for the child (intrinsic motivators)	Professionals explained the problem to the child	"I think it is important that the child knows the reason why they attend therapies. I had a child with ASD, and he was asking me what his problem was. I did not mention the diagnosis, but I told him, that his mother told me that every time you meet a person you know on the street, you do not say hello, let's work on that." (P1) "The key factor to child engagement is that the child knows the problem. It works as an intrinsic motivator." (P5) "I use simple vocabulary, but I explain in detail the reasons why they attend speech and language therapy. I place the mirror in front of them and I tell them that we are about to train your tongue, because right now your tongue does not follow your will." (P7) "Some of the parents do not want us (the therapists) to talk about children's difficulties… but that is not possible…. children usually ask me why I am here?... I should be able to answer that question." (P5)

		Professionals provided explanations regarding their own role	"I try to explain what my role is, that I am not a doctor, and I will not do injections. I mention that the person who is the most benefited by the process is the child and that after the therapy they will be able to do things they love, like playing football or dancing with their friends." (P2) "I always have a conversation with the child, and I try to understand their opinions about therapy and my role are.I explain my motives so that the child knows that I am there to support them, not to show them what they do wrong." (P3) "Lots of children question my role. I think it is important that you sign a contract with the child, especially when they appear unwilling to change. This usually happens to children with learning disabilities. This contract includes explanations about my role and what they can expect from therapy." (P10)
		Professionals described the reasons why tasks were chosen	"It is not always easy to explain to a child the reasons why the tasks are chosen. I try to divide each task into smaller steps and provide explanations for each step separately." (P8) "I have a girl who has difficulty with remembering things and orientation problems. When she asked why we are doing those tasks, I asked her, do you remember when you came, and I assessed you? You were confused with right and left. So now we are doing these exercises so you train yourself and you will see an improvement." (P11) "A 9-year-old boy with dysgraphia was asking why we are doing these tasks. I told him we are trying to make your shoulder stronger and then your fingers, so you have beautiful handwriting. Then you can show your dad your beautiful letters and be proud." (P11)
		Professionals informed the child that re-assessment occurred	"I always inform the child that re-assessment occurs because I want the child to try their best. It differs from the first assessment when children are usually shyer. In re-assessment, the child is aware of the process, so I tell them that we will do a test to check the domains which have been improved and the ones we still need to work on. I noticed that when children know that re-assessment occurs, they are more focused." (P3) "When I re-assess younger children, I do not mention directly that re-assessment is conducted. However, I tell them oh now you managed to do it, do you remember at the beginning? You were not able to do this that well. Older children are informed about re-assessment, they know from the beginning that assessment will occur twice per year." (P4) "Children know that they are examined about something, even children with more severe disabilities." (P11)
		Professionals negotiated with the child	"If the child wants to play with the sand, I say okay you can do it but after you finish this task. I negotiate with children, and they tell me what they desire. Even if we have to work on motor skills, I choose 2 activities and the child chooses the other 2, so it is half-half." (P4)

			"I always like to have a conversation with the child. I suggest activities we can do, but I am willing to change it or discuss something the child wants afterward." (P6)
	Professionals built skills for the child (intrinsic motivators)	Professionals enhanced mastery of within-session therapeutic activities	"I let the child structure the activity and, in the meantime, I ask questions, like why did you place the obstacle there? Are you sure you have enough space to pass it? My goal is that the child finds the solution on their own." (P10) "I assign to the child the role of the therapist sometimes. The child should make a schedule, and structure the activity and I am the one who should complete the activities. The goal is that the child does problem-solving on their own. In the meantime, I pose questions to the child, so they tell me where to put the obstacle and how to move my body in the correct way." (P11)
		Professionals enhanced mastery with outside-session therapeutic activities	"I ask for older children to write a diary, so they provide me with information about their condition at home. I want them to give me written feedback if they repeated at home the exercise we did in the session and how they felt afterward." (P2) "There is a group of children who go out and go to cafes and other shops by using public transportation. The goal is that they build real-world activities and that they develop social skills." (P5)
	Professionals used extrinsic motivators to engage the child		"I take advantage of the toys I have in my office to bring the child inside the room. With younger children I might say, look how many toys I have here and then I start to ask things like take off your shoes". (P2) "I have a boy diagnosed with intellectual disability and we learn how to tie his shoes. As this is a demanding exercise for him, he always asks me if he can have a biscuit afterward. I realized that he puts more effort while doing the task if he knows from the beginning, he will have a biscuit if he does it correctly." (P4) "At the end of the session I might give stickers to the children, as praise for being engaged during the session." (P8)

Professionals prevented child disengagement (before it occurred) and responded to child disengagement (after it occurred)	Professionals prevented child disengagement by planning the session and setting boundaries		"I know beforehand, from the assessment the time during which the child can be focused to complete a task. I structure the tasks depending on this information." (P5) "When I prepare the group therapy session, I am very careful so that the children within the same group share similar tastes and personality characteristics. I am also careful with the schedule and the structure of the session, so I prevent disengagement." (P8) "I set boundaries with the tone of my voice. I explain to them that they should wait for the next activity." (P5) "It is important that I set boundaries because my office is full of toys and if the child understands that they can just come, play, and leave, the session will not be effective. In younger children, I ask them to tidy the room and return the toys they were playing with where they belong". (P7)
	Professionals responded to child disengagement by understanding the reasons for disengagement and changing activities		"I had a child with severe learning difficulties, and he had just started the intervention…we had met 3-4 times… and he told me I will not come ever again. I gave them time to understand his reaction and at the end of the session his mother told me he had had a terrible day at school, and he had been bullied." (P7) "If I observe that the child is frustrated, I devote time to understanding the reasons behind that frustration. It is important to distinguish between manipulative behavior and tiredness. When a child is tired, I pick an easier activity…but when they do it for manipulation, I insist that they complete the task." (P11) "In case a child has had a very difficult day and they cannot focus on the task, I might suggest that we play a game. There is no reason to insist, the therapeutic relationship is more important" (P8) "There are some children who cannot collaborate to complete the activity. There was a school-aged child who was asking for his mother all the time. In that case, I lowered the demands of the exercise, and I added more playful activities." (P3)
Contextual factors influenced professionals' child engagement strategies	The level of family involvement influenced professionals' child engagement strategies		"Once I coached for oral feeding…I was in regular contact with the mother of a girl who was attending occupational therapy sessions. We were talking through Viber once per week for 8-9 months. It was an effective method because the mother trusted me, she gave me information about the school and what she tried at home, and how her daughter reacted. It worked well because we were both involved and 80% of the success happened thanks to the mother." (P4) "Especially when it comes to stammering, I train parents in-session, so that they can continue the therapy at home…I also involve them when I want to know about the progress of the child. When they tell me they see an improvement, I know I'm on the right path. It works as a triangle…I am the orchestrator, but everyone has to be engaged, otherwise, the progress is slow." (P7)

			"There was a child with ADHD who was unable to stay still, even for five minutes…Within engagement in in-session activities during the year, I managed to make this child sit and attend the entire session, which lasted 45 minutes. I provided parents with similar activities that they can perform at home so that the child could generalize the new behavior in school or at home…However, those the parents never did those activities and thus, the child could only sit during the session, but she never generalized the new behavior." (P8) "We were learning with a school-aged boy with ASD how to wear his jacket. Even though he was doing it correctly with me in the session, his mother told me he was doing it in the wrong way with her. So, I trained the mother and first I asked her to wear the jacket to his son like I was doing it during the sessions. Then I asked her to do it outside my office, in the reception. After 2-3 weeks the boy was doing it on his own at my office and the reception. Then I asked the mother to do it at home that way. After that, the child generalized the skill." (P11)
	The context of therapy influenced professionals' child engagement strategies		"Sometimes, I accompany the children to the park, close to the clinic, and we have the session there. The children are more engaged when the environment changes, they take initiative, and they prepare everything on their own." (P6) "In the special school I used to work in, I was organizing some outside school activities. We were buying the ingredients needed from the supermarket and we were cooking all together in the kitchen of the school." (P11)
	The type, frequency, and the step of the intervention influenced professionals' child engagement strategies		"In hippotherapy, the child is outside, in the natural environment, the child is not even on the ground. In children's eyes, the horse is an enormous animal…so in this type of therapy, I think in a totally different way." (P9) "In our clinic, we are using the Padovan-Method, therefore, we structure the sessions according to this therapeutic method." (P5)
	Children's age, type of disability, and personality characteristics influenced professionals' child engagement strategies		"There is a child who cannot handle jokes...he has been taking advantage of my friendliness to avoid therapeutic tasks. That's the reason why I become stricter when I work with him…I told that to him directly, so he knows why I behave this way" (P4)
	Professionals' experience and personality traits influenced professionals' child engagement strategies		"It is important to read the child and make necessary adaptations in the session when needed. I am experienced now, and I can understand quickly when I should make the activity less demanding to facilitate child engagement." (P7) "My character is a bit intense so I might scream... yes, well done, move on!! I also like to move a lot during therapy, and I choose this type of tasks." (P4)