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Factors Associated with Physiotherapist-Caregiver Collaboration in Pediatric Rehabilitation
A mothers' Perspective

"When the Trust is Established, it is So Much Easier, it Forwards the Interaction"

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Abstract:

Pediatric physical therapists are called to cooperate and collaborate with caregivers of children in rehabilitation/therapy services. This collaboration is being studied in many professional fields of healthcare in pursuit of developing family-centered practices and concepts. Physiotherapy practice has adopted a family-centered premise but is lacking in research on the factors associated with guardian-therapist collaboration. This thesis delved into the current understanding of collaboration between parents and therapists in pediatric physical therapy settings with an objective to find and raise awareness of the factors influencing this collaboration.

The thesis incorporated qualitative research on parent perspectives and experiences regarding the factors influencing collaboration with pediatric physical therapists. Based on this research, the author presented a thematic analysis from an interview with a parent whose child is living with cerebral palsy.

The aim of this research was to unveil the contributing factors that influence collaboration between parents of children undergoing pediatric rehabilitation and their practicing physiotherapists. This study highlights the multifaceted nature of collaboration between physical therapists and parents in pediatric rehabilitation settings. The analysis of interview conducted with parent of children with cerebral palsy revealed the themes of trust, family-centeredness, and a pervasive theme on communication.

This study suggests that various aspects play a role in the collaboration between physical therapists and parents in pediatric rehabilitation. The findings of this thesis contribute to a deeper understanding of the intricacies of collaboration and the relationship between parents and physical therapists in pediatric rehabilitation settings, emphasizing that establishing trust, adopting family-centered conduct, and communication are at the core of pediatric rehabilitation and collaborative practice. The importance of articulating and documenting caregiver experiences, suggestions, and thoughts is evident, given that caregiver involvement and collaboration in the rehabilitation process are not only encouraged but also expected.

Keywords:
Physical therapist, Physiotherapy, Family-centered, Therapeutic communication, Therapeutic relationship, Parent-therapist collaboration, Pediatric physiotherapy

CONTENTS

LIST OF SYMBOLS AND TERMS

- The terms "parent" and "caregiver" are used synonymously in this writing, referring to a person or persons who are legally or otherwise responsible for the care of an individual. In pediatric rehabilitation the individual is or was at the time an underaged child.
- The term "family" in this thesis' context refers primarily to the household unit of people who are related by birth, marriage, or adoption, not to the extended family.
- Physical therapist ≡ Physiotherapist
- AI = Artificial Intelligence
- CP = Cerebral Palsy
- MI = Motivational Interview
- WHO = World Health Organization
- PA = Physical Activity
- PE = Physical Education
- MVPA = Moderate to Vigorous Physical Activity
- ICF = International Classification of Functioning, Disability and Health
- C-CG = Calgary-Cambridge Guide
- EC = Empathetic Communication

“Each family is unique; that the family is the constant in the child's life; and that they are the experts on the child's abilities and needs.”

- *CanChild, McMaster University*

1 INTRODUCTION & IMPORTANCE

While the existing literature offers limited insights into processes and strategies fostering collaboration between parents and physical therapists, such as shared decision-making and goal setting, as well as the delineation of roles and responsibilities during the planning and implementation of interventions (An et al., 2016). The *Core Competencies for Interprofessional Collaborative Practice* report emphasize the general competency for healthcare personnel's interprofessional communication skills, stating: “Communicate with patients, **families**, communities, and other health professionals in a responsive and responsible manner that supports a team approach to the maintenance of health and the treatment of disease” (Interprofessional Education Collaborative, 2016). Moreover, there is a strong emphasis on establishing trust-based and honest relationships with patients and their families (Canadian Interprofessional Health Collaborative, 2010).

The concepts of Client-Centeredness and Family-Centered approaches in rehabilitation have gained widespread acceptance and are now incorporated into the education of healthcare personnel. These approaches emphasize the need to include the patient and their family in decision-making and collaboration, recognizing them as experts in their own and their children's needs, values, and goals. The ultimate objective of these approaches is to enhance the client's or family's sense of security and quality of life. (Scholl et al., 2014; World Health Organization, 2007.)

This collaboration demands a high level of social and communicative skills from healthcare professionals. Physical therapy professionals have recognized the need for further education in the skills required to implement the family-centered philosophy effectively, thereby promoting efficient cooperation with families. (Bruce et al., 2002; Chiarello L, 2013; Giddings Cochrane et al., 1990; Iversen et al., 2003; Sparling & Sekerak, 1992.)

Parents and caregivers typically bear most of the care responsibilities for children with disabilities, which can have detrimental effects on their social, psychological, physical, and economic well-being (Liu et al., 2023). Given the invaluable role families play in rehabilitation, it is essential to develop strategies and policies that promote sustainable caregiving arrangements (Kokorelias et al., 2019).

1.1 The Use of Artificial Intelligence in This Thesis

In this thesis, Google Bard and ChatGPT are utilized as tools for language editing. The author has rewritten some of the text with the assistance of artificial intelligence to enhance its readability and comprehension while preserving the intended information.

The author has conscientiously maintained the originality of the content and adhered to copyright guidelines. Whenever the artificial intelligence tool suggested new ideas, the author meticulously compared them against the original sources and provided proper citations. All cited sources are genuine references, not AI-generated material. This can be corroborated by the employed citation management system, Mendeley, and the author's notes.

DeepL Translator was employed to translate various words and phrases from Finnish to English, upholding responsible usage of artificial intelligence applications and data privacy considerations. To create visually appealing figures and illustrations, the author utilized the web-based graphic design tool Canva. Additionally, when conducting thematic analysis, the author leveraged Miro, an online collaboration platform, as a workspace.

2 AIMS AND OBJECTIVES

This thesis delves into the current understanding of collaboration between parents and therapists in pediatric physical therapy settings. During the exploration of the theoretical foundation for the research, other healthcare professions are also discussed to provide a more comprehensive overview of the existing literature.

The thesis objectives incorporate qualitative research on parent perspectives and experiences regarding the factors influencing collaboration with pediatric physical therapists. Based on this research, the author presents a thematic analysis from an interview with a parent whose child is living with cerebral palsy.

The aim of the thesis is to explore and reveal factors influencing interactions, encounters, and collaboration between physiotherapists and parents of children in rehabilitation. In the concluding discussion, the thesis examines the implications of the research results within the context of physiotherapy practice, existing similar literature, offers suggestions for future research, and provides insights into the educational needs of physiotherapy students in the context of collaboration.

3 FAMILY CENTERED PEDIATRIC REHABILITATION & PHYSIOTHERAPY

Pediatricians and other pediatric healthcare providers play a pivotal role in connecting children and youth with disabilities to suitable community-based services through their family-centered primary care medical homes. These providers act as a bridge between the medical home and the community, guaranteeing that children and youth with disabilities receive the comprehensive care they need to flourish. (N. A. Murphy et al., 2011.)

The rehabilitation of a child may involve a multidisciplinary team comprising physical, occupational, and speech therapists (Noetzel & Dosenbach, 2017), as well as physicians from various specialties, nurses, and assistive technology/prosthetic technicians (Houtrow et al., 2019). Pediatric Rehabilitation Medicine is defined by Alexander (2022) as "specialized training and interdisciplinary collaboration to care for children and adolescents with congenital or acquired physical disabilities."

The origins of pediatric physiotherapy can be traced back to the aftermath of the 1917 polio epidemic in the United States. Physical therapists transitioned from treating war injuries to providing care for children and adolescents affected by polio. Until the 1940s, the standard treatment for polio involved bed rest and immobilization. This approach changed with the arrival of Sister Elizabeth Kenny, an Australian nurse who advocated for a more active treatment regimen incorporating physical exercise. (W. B. Murphy & American Physical Therapy Association., 1995, pp. 35, 123.) In 1950’s during the release of polio vaccine the physical therapist’s potential in rehabilitation and treatment of children with cerebral palsy (CP) was recognized (Effgen & Fiss, 2021, p. 4).

Pediatric physiotherapy is a specialized form of physical therapy provided by therapists who have acquired specific expertise in the evaluation and treatment of infants, children, and adolescents. These therapists recognize that this unique patient population presents distinct challenges and requires developmental assessments and

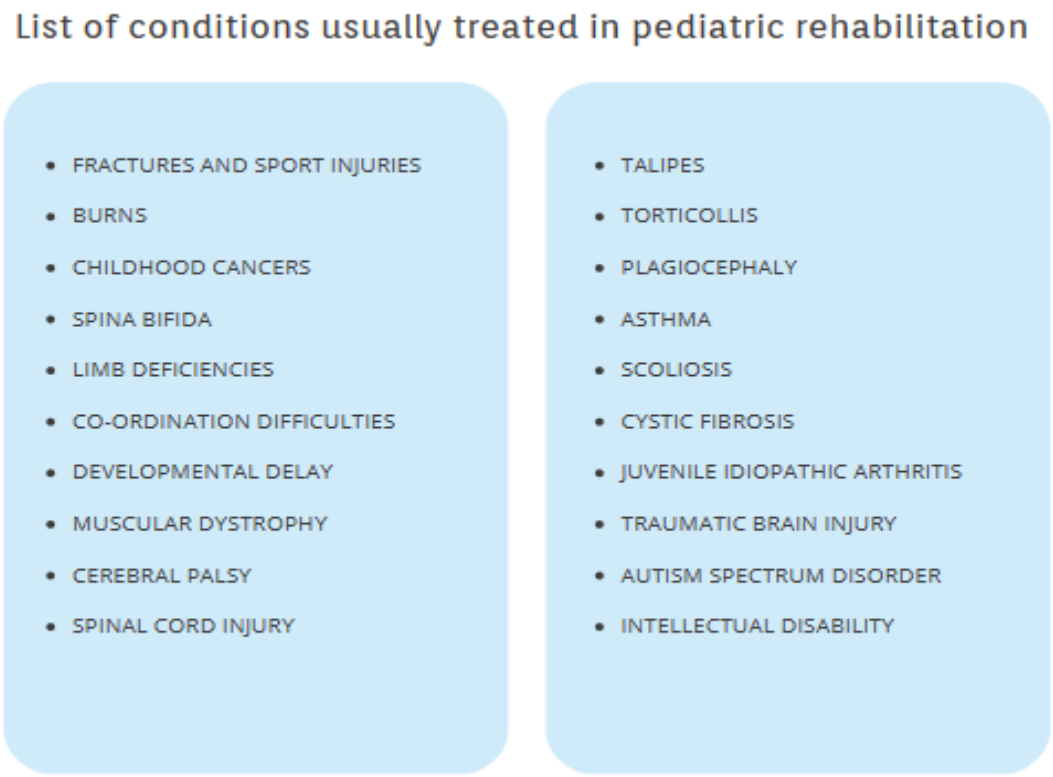
safety precautions that differ significantly from adult therapy. Pediatric physiotherapists work closely with caregivers, parents, and families to promote family involvement and family-centered care, ultimately enhancing children's independence and functional abilities. Physiotherapists have a crucial role in preventive healthcare, promoting the health and well-being of our youth populations. This endeavor demands a proactive approach that emphasizes family inclusion, education, and empowerment, as well as interdisciplinary collaboration. One of the primary goals of pediatric physiotherapy is to foster confidence and self-efficacy within families, thereby increasing child participation e.g., in recreational activities. (Association of Paediatric Chartered Physiotherapists, 2021; Burslem et al., 2016.)

A conscientious and proficient pediatric physical therapist aims to assist children in reaching their full potential, ultimately rendering the ongoing need for therapy unnecessary. It is crucial for the therapist to navigate and support the child and their family through the transition to a point where therapeutic services are no longer required. (Effgen & Fiss, 2021, p. 3.)

Physiotherapists in the pediatric field are employed in a diverse range of healthcare and other facilities and settings. These settings include schools, sports teams or facilities, childcare centers, hospitals, clinics, child development centers, and social care facilities. “Working in pediatrics encompasses all of the core skills of physiotherapy and enables a wide variety of career development and opportunities within the specialty” (Burslem et al., 2016).

Childhood disabilities can manifest in various forms, affecting a child's neurological, musculoskeletal, or cognitive systems. They may also arise from genetic syndromes or behavioral and communicative disorders. Childhood disabilities are present as complex issues and often influence the child's development. (Rosenbaum & Gorter, 2012.) Table 1 presents a list of the most common congenital, genetic, and acquired conditions treated in pediatric rehabilitation.

Table 1. Created by author with Canva. Modelling (Association of Paediatric Chartered Physiotherapists, 2021; Houtrow et al., 2019).



3.1 Promoting Physical Activity

The World Health Organization (WHO) recommends that children and youth living with disabilities engage in at least 60 minutes of moderate-to-vigorous physical activity (MVPA) daily (WHO, 2020). One significant health concern among the pediatric population is inadequate time spent engaging in physical activities. Research indicates that children with disabilities tend to be more sedentary, with approximately 75% of individuals living with a disability failing to meet the recommended levels of physical activity. (Alghamdi & Alsaigh, 2023; Liou et al., 2005; Maher et al., 2007.) Consequently, these populations characterized by lower levels of physical activity participation among individuals with disabilities, face an elevated risk of developing obesity and chronic health problems associated with sedentary behavior (Rimmer et al., 2007).

Engaging in sporting games and playing with peers constitutes a significant aspect of a child's physical activity. However, disability, with its impact on physical, sensory, and/or cognitive systems, often puts the child at a disadvantage compared to their peers. (Kasser & Lytle, 2005.) Additionally, barriers such as inadequate facility accessibility, a lack of knowledge about adapted physical activity among teaching and sporting staff, and the absence of proper adapted physical activity equipment further exacerbate the challenges faced by children with disabilities in participating fully in physical activities (Rimmer et al., 2007).

The scoping review conducted by Yu et al. (2022) on barriers and facilitators to physical activity participation in children and adolescents with intellectual disabilities reports the following findings.

> Disability-specific factors, low self-efficacy, lack of parental support, inadequate or inaccessible facilities, and lack of appropriate programs were the most reported barriers. High self-efficacy, enjoyment of PA, sufficient parental support, social interaction with peers, attending school PE classes, and adapted PA programs were the most reported facilitators.

The role of a physiotherapist is to assist children and their families in overcoming barriers to facilitate participation in sports and physical activities. Engagement in these activities is widely recognized for promoting health and well-being across all age groups. For children, we anticipate that participation in sports and physical activities will yield positive effects on their self-esteem and confidence. (Burslem et al., 2016.)

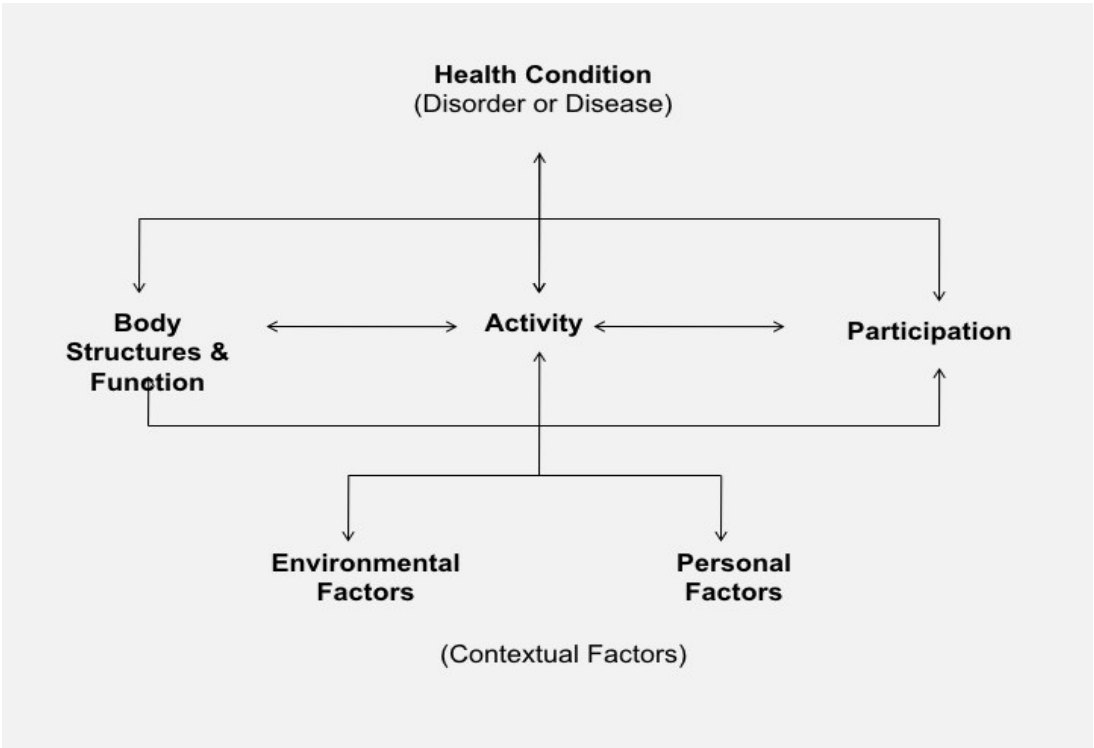
3.2 ICF, ICF-CY and F-WORDS

The International Classification of Functioning, Disability, and Health (ICF) in Picture 1 represents a universal framework created by the World Health Organization (WHO). Its purpose is to establish a shared language for discussing, coding, evaluating, studying, and measuring disability and health. The framework embodies a contemporary understanding of the individuality of disability, health, and functioning,

emphasizing a biopsychosocial perspective that considers multiple influencing factors. These factors are delineated in the model as Health Condition, Body Functions and Structures, Activities, Participation, Environmental Factors, and Personal Factors. (Center for Health Statistics, n.d.)

The ICF has categorized all illnesses, encompassing mental and intellectual conditions, within a neutral framework. This shift in focus moves away from emphasizing disability and mortality, directing attention instead towards understanding how individuals can lead fulfilling and meaningful lives irrespective of their disabilities. (Effgen & Fiss, 2021, p. 5.)

In 2007, following years of rigorous testing of the ICF model, a youth-oriented version known as ICF-CY was published. ICF-CY specifically addresses the distinctive health and well-being factors pertinent to developing children and establishes coding standards tailored for pediatric disability and ability. The necessity for a separate framework for children arises from the unique environmental and social contexts inherent in pediatric settings, such as family involvement and the specific developmental challenges faced by children. (Tsai, 2022.)



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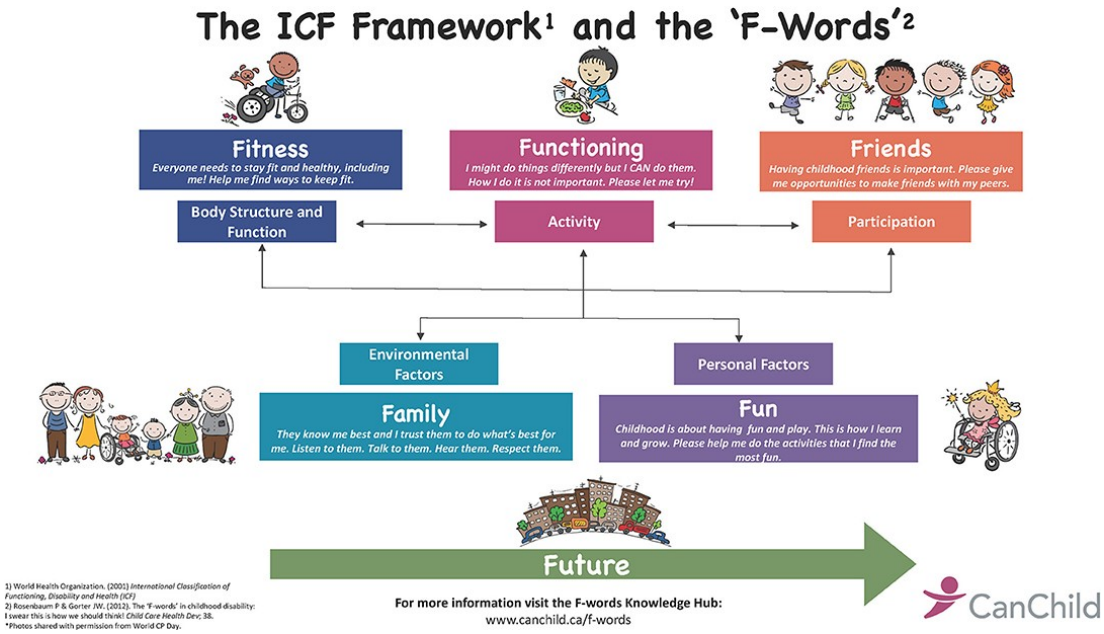
Picture 1. International classification of functioning (World Health Organization, 2001).

Children serve as valuable and essential contributors to therapeutic goal setting. Their perspectives, including the meanings they assign to daily activities and the underlying motivations behind their goals, should be integral to the therapeutic intervention process. (Costa et al., 2017).

In 2011, Rosenbaum & Gorter expanded upon the ICF and ICF-CY by introducing a unique perspective to the models and renaming them to represent a child's life situation more vividly. This adaptation was termed the "F-words," encapsulating five plus one childhood-related translations of the components from the ICF. These words include Fitness, Functioning, Friends, Family, Fun, and Future. The authors posit that the F-words aid clinicians in assessing and customizing interventions for pediatric patients, considering their individual strengths, hopes, and aspirations.

In Picture 2, readers can delve into the CanChild art, which draws inspiration from the ICF model and the contributions of Rosenbaum and Gorter. In this representation, "fitness" corresponds to body structures and function, "functioning" relates to activity, "friends" pertains to participation, "family" encompasses environmental factors, and "fun" involves personal factors. The additional sixth F-word, "future," is also represented in this framework.



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Picture 2. The ICF framework and the "F-words" (Canchild.ca website, n.d).

3.3 Family Centered Rehabilitation Approach

Family-centered care is a healthcare philosophy that acknowledges and respects the family's central role in the lives of children with special needs. In this approach, families are supported in their natural caregiving and decision-making roles, and parents and professionals are viewed as equal partners in a collaboration committed to providing the highest quality healthcare at all levels. (Brewer et al., 1989, p. 1056.) In the mid-20th century, hospitals established policies to encourage increased family participation. However, despite these initiatives, families remained passive in their role in the service process. Before this shift, parents were often away from hospitals and advised to place their children with disabilities in full-time care homes, leading to extended periods of separation. (Bamm & Rosenbaum, 2008; Jolley & Shields, 2009.)

While the family-centered approach is prominently recognized in pediatric rehabilitation, it should be regarded as a lifespan approach (Kokorelias et al., 2019). Family-centered care offers an opportunity for a preventive and encouraging approach to health and well-being throughout the entire lifespan, applicable in all service settings (Effgen & Fiss, 2021, p. 133; Kuo et al., 2012).

In pediatric healthcare, formerly family involvement has been lacking. Professionals might consider the child patient as their only concern, and discard family's resources or issues. (Rosenbaum & Gorter, 2012.) Moreover, now the family-centered ideology, which prioritizes respect, partnership, and shared decision-making between parents and service providers, is gaining recognition as a cornerstone for effective practice (Stefánsdóttir & Thóra Egilson, 2016). In the pursuit of enhancing the functional independence, participation, and overall health of the child, the therapist is concurrently striving to support and enhance the quality of life for the family (Franck & Callery, 2004).

During the past decades, the practice of pediatric physiotherapy has evolved to incorporate the inclusion of both the child and the family in goal-setting and decision-making processes. Therapists now prioritize evidence-based interventions while considering the strengths and resources of the family. Furthermore, there is a growing trend in rehabilitation settings, moving away from traditional hospital or center-based environments and towards community and home-based care. (Effgen & Fiss, 2021, p. 6.)

More than three decades ago, Shonkoff & Hauser-Cram (1987) conducted a meta-analysis on the efficacy of early intervention. Their findings revealed that interventions specifically targeting both the caregiver and child concurrently were notably more effective. Table 2 outlines examples of the child, parent, and health-care utilization benefits of family-centered practices and parent-professional partnerships. These include e.g., Improved motor and cognitive abilities of children, knowledge of child development for parents and early and continual screenings from health care utilization point of view.

Table 2. Created by author with Canva. Positive Outcomes Associated with Family-Centered Practices and Parent-Professional Partnerships modelling (Effgen & Fiss, 2021, p. 137).

Positive Outcomes Associated With Family-Centered Practices and Parent-Professional Partnerships

Child	Parent	Healt-Care
• Weight gain in neonates • Congitive function • Motor abilities • Self-awareness • Self-esteem • Self-efficacy • Socioemotional competence • Academic skills • School attendance	• Knowledge of child development • Perception of children's behaviors • Engagement in children's services and education • Nursing-related skills • Developmental appropriateness of the home environment • Effective parenting and parent-child relationship • Sense of control and empowerement • Self-efficacy • Psychological health • Family functioning	• Access to care • Appropriate referrals • Early and continual screenings • Efficient use of health-care services • Decrease visits to the emergency department • Decrease hospital readmission • Transition to adult services • Perception that needed supports and services were obtained

In their 2012 study, Darrah et al. drew conclusions from interviews with 37 program managers and 54 physical and occupational therapists. They found a deficiency in objective indicators for family-centered processes across many programs. Furthermore, both families and therapists reported restricted access to general information about community support. The authors state that: "Lack of formal processes for delivery of family-centered service, goal-setting and co- ordination between children's programs may result in inequitable opportunities for families to participate in their children's rehabilitation despite attending the same program". The authors suggest that implementing standardized program processes and policies could serve as an initial step in ensuring that every family has equal opportunities to participate in their child's rehabilitation program.

In their 2014 pilot study, Vajravelu & Solomon (2014) identified barriers and facilitators to the implementation of family-centered pediatric physiotherapy in home settings. The study's findings highlighted various barriers, including "educational

status, frustrated family members, protective family members, cultural beliefs, and external influences", while pointing out "active participation of family members" as a key facilitator. The authors, however, acknowledge limitations in generalizability due to the small sample size (based on interviews with 5 physiotherapists) and the use of a convenient sample from a small city.

Surveys were distributed to 236 parents of children with disabilities, yielding results in which, on average, parents rated family-centered services as "quite satisfactory" in terms of respectful and supportive care, but only as "limited" in the provision of general information Authors conclude that “in order to translate better into the daily life of the family, the intervention should focus more on their activities, routines and participation within the communities they live in.” (Stefánsdóttir & Thóra Egilson, 2016.)

3.4 Physiotherapist Collaboration with Guardians

Interactions with parents are frequent in rehabilitative therapy professions, particularly when children with disabilities require ongoing care. Parents may enter this relationship with a range of complex emotions stemming from their personal, familial, or professional lives. Therapists must be prepared to address and support parents, especially during challenging periods marked by strong emotions of despair, grief, anger, or denial. Therapists should conscientiously evaluate their own emotions and perhaps even reflect on their personal experiences of being parented. Unresolved conflicts within themselves have the potential to emerge and hinder therapeutic effectiveness unless identified early in the process. (Anderson & Hinojosa, 1984.)

The collaborative service delivery model is defined as a blend of transdisciplinary team interaction and an integrated service delivery approach (Effgen & Fiss, 2021, p. 25). Research indicates that these collaborative service delivery models have reduced waiting times and improved attendance at therapy sessions but also increased therapist caseloads (Bell et al., 2010). Dunst et al. (2000) defined the caregiver-professional cooperation as follows: “Parents and other family members working together with professionals in pursuit of a common goal where the relationship between the family

and the professional is based on shared decision-making and responsibility and mutual trust and respect.”

In pediatric rehabilitation, guardians are integral members of a collaborative team. This underscores the importance of effective written and verbal communication between the family and the therapist. (Effgen & Fiss, 2021, pp. 21, 22.) Research findings suggest that professionals working with parents often establish collaborative relationships with caregivers by imparting knowledge and skills related to therapy interventions, with less emphasis placed on addressing parents' worries and needs (Bamm & Rosenbaum, 2008; Hinojosa et al., 2002).

Kruijsen-Terpstra et al. (2016) sought to explore the experiences and needs of parents concerning the physical and occupational therapy provided to their children with cerebral palsy. The authors identified four themes, consistent with findings from earlier studies. Parents' needs were categorized into four key descriptions: Information, communication, partnership, and empowerment.

An et al. (2016) established a well-defined four step practice model (Figure 1), to guide therapists in delivering family-centered care and fostering collaboration between guardians and professionals. The model consists of first understanding child/family needs, preferences, and routines, followed by:

1. Mutually agreed-upon goals
2. Shared planning
3. Shared implementation
4. Shared evaluation of child and family outcomes

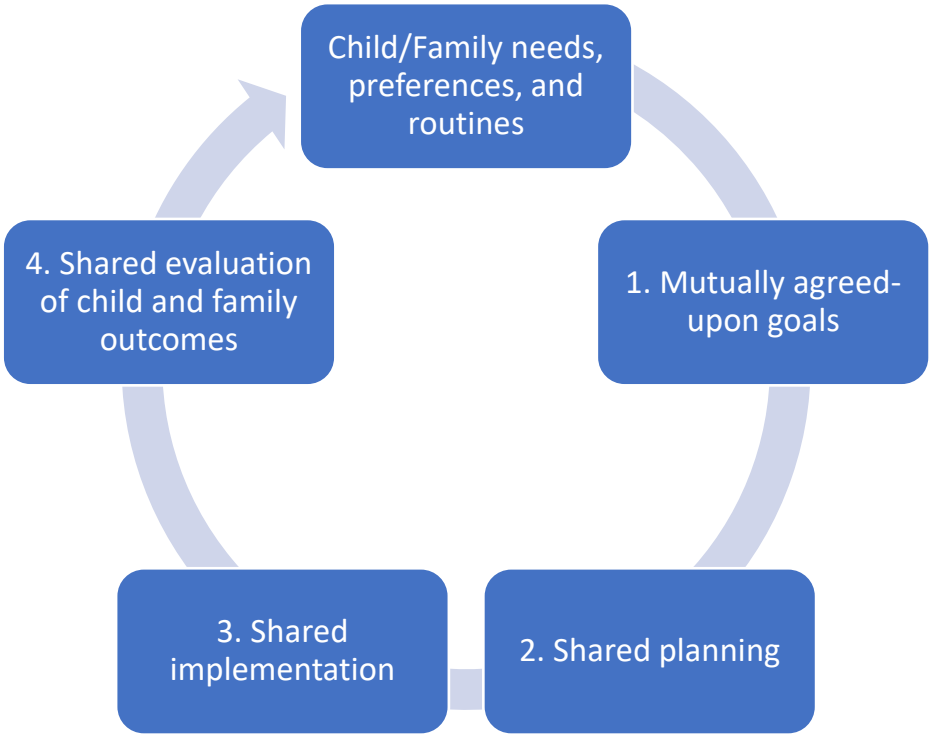


Figure 1. Model of Family-Professional Collaboration: A 4-Step Process of Collaborative Service Delivery. Modelling (An et al., 2016).

In their investigation into collaborative goal setting among mothers of children in child development services, Forsingdal et al. (2014) discovered that, although family-centered practice emphasizes negotiation and collaborative goal setting, parents may not always be entirely prepared to take on these highly collaborative roles. The research also underscores the impact of "therapist factors" affecting the collaboration i.e., "education around the goal, opportunity for parent input into goal setting and relationship with parent & child" and "parent factors" i.e., "parent's belief in therapy goal, parent expectations, parent priorities, burden felt by parents and parental context and resources".

Parental involvement in physical therapy is increasingly recognized to yield positive health outcomes for the child. This participation can also enhance parental self-efficacy, confidence and reduce parental stress. However, for some parents, involvement in physical therapy may add to their already existing caregiving responsibilities, potentially causing additional stress. Further attention and studies should investigate the parent health and-wellbeing outcomes of participation in their children's therapy. (Jansen et al., 2003.)

3.5 Family Burden

While many parents effectively navigate adjusted parental responsibilities following a diagnosis of their child's physical or intellectual disability, the reaction to the diagnosis varies among parents. For some, it becomes a source of distress, while for others, it brings a sense of relief. Studies underscore an elevated risk for caregivers to encounter adverse effects on their mental and physical well-being due to the demands of caregiving. Ultimately, these challenges can have a lasting impact on their overall sense of well-being. (Davis et al., 2010; Whittingham et al., 2013.)

The most frequently reported adverse health effects among parents enduring prolonged caregiving burdens include various intensities of depressive and anxiety disorders. However, these health effects appear not to be exclusively linked to the child's disability. Instead, they encompass personal, social, and economic aspects of the parents and the family. (Davis et al., 2010; Tseng et al., 2016.)

In a study conducted by Gugała et al. (2019), data were collected from 190 parents of children with cerebral palsy (study group) and 111 parents of typically developing children (control group). The results indicated significantly higher levels of anxiety and depression among parents with children living with cerebral palsy. The study identified several factors contributing to the increased prevalence of anxiety and depression symptoms, including "lack of social support, particularly perceived and received support, unsatisfactory parental health status, poor economic status of the family, challenging living conditions, sense of coherence, loneliness, parent’s gender, and the child’s intellectual disability".

Recognizing and pinpointing modifiable factors among these predictors of anxiety and depression in parents with disabled children should be an integral component of pediatric care and family support. The burden on caregivers is profoundly individual and subjective, given that no parent or family structure is identical. The perceived burden can fluctuate based on personalities, life circumstances, and the interpretations and meanings ascribed to the situation by parents. The well-being and health of parents

in these caregiving roles is more influenced by both their personal resources and the social support networks available to them. (Antonovsky, 1987.)

To date, parents of children with disabilities such as cerebral palsy continue to express that their needs are unmet within existing healthcare and welfare structures. These parents perceive deficiencies in various realms, including social and financial support, psychological assistance, information dissemination about cerebral palsy conditions, and the organization of family functioning. (Mohd Nordin et al., 2019.)

Research examining the quality of life of parents with children diagnosed with cerebral palsy suggests that this situation may have a detrimental impact on the parents' quality of life and mental health. Interventions should target the promotion of self-efficacy and empowerment within families, aiming to enhance the overall well-being of the entire family unit. (Guillamón et al., 2013.)

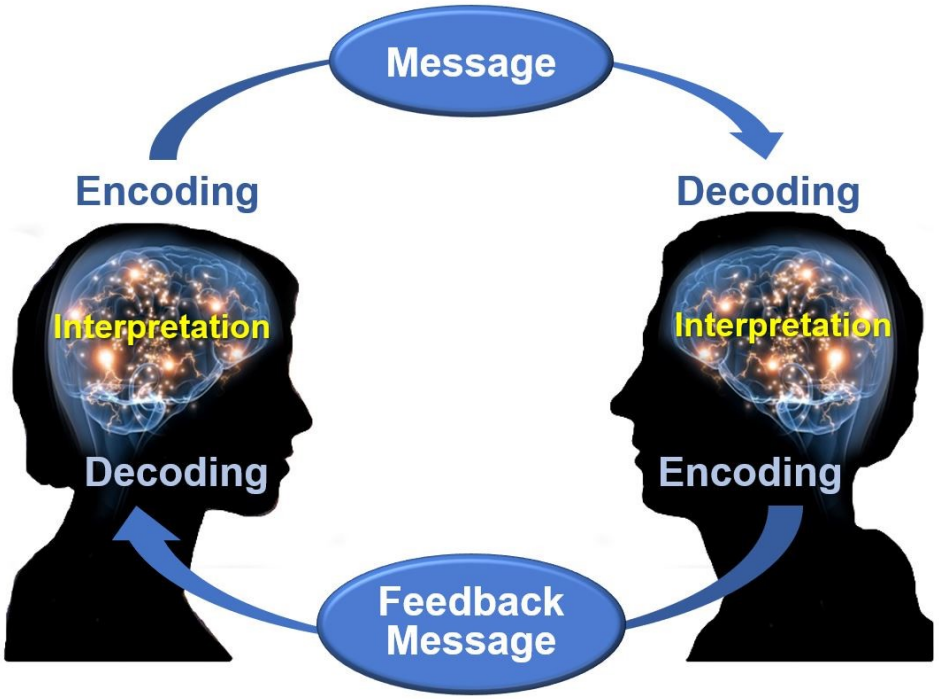
4 COMMUNICATION IN HEALTHCARE

Individuals engage in continuous interaction with their surroundings. Our sense of self and our awareness of existence stem from these interactions, particularly person-to-person interactions. These interactions can be intentional or unintentional, originating from our subconscious, where we exchange signals with others, such as through their appearance. When referring to person-to-person interactions, we typically focus on intentional engagement in communication. (Launonen, 2023, p. 7.)

4.1 Definition

The word 'communication' originates from the Latin word 'communicare,' which translates to 'to make common' or 'to share' (Weekley, 1967). Later, DeVito (1986) elaborated by defining communication as a process between a sender and a receiver for conveying a message (Slater, 2002; University of Minnesota, 2015). Nicki Stanton, in her book 'Communication,' defines human-to-human communication as having four main objectives: to be heard, to be understood, to be accepted, or to provoke an action (Stanton, 1990, p. 1).

In Figure 3, readers can view the communication cycle originally modeled by Shannon & Weaver (1948). The model depicts a conversation involving two individuals, with both parties engaged in interpretation. One person encodes the message, while the other decodes it. The cycle persists as the receiver then encodes a message for decoding by the counterpart.



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Picture 3. The Communication Cycle from (Shannon, 1948).

Communication can be verbal or nonverbal. The distinction between the two is blurred, as technological advancements enable even nonverbal individuals to utilize voice-assisted writing tools. We employ words in speech or written form to communicate, but the absence of a universal language means that the ability to speak and write does not guarantee effective communication with everyone. (Launonen, 2023, p. 7.)

When aiming to communicate effectively through speech, one should consider cultivating the following skills and adopting specific practices:

1. **Clarity of Intent and Messaging:**
    - Express your thoughts with clarity, employing common and easily understandable language.
2. **Understanding of Subject and Audience:**
    - Familiarize yourself with the topic and tailor your message to suit the audience, avoiding provocative statements that might reveal personal biases.
3. **Emotional Awareness:**

- Monitor and regulate your emotions, projecting a demeanor that is polite, friendly, and empathetic.

4. **Authenticity and Personality:**
    - Be genuine and showcase your personality to connect with your audience.
5. **Relaxation and Body Language:**
    - Keep your body relaxed, maintain eye contact with your audience, and present yourself with a tidy appearance and good posture to convey confidence, professionalism, and enthusiasm.
6. **Speech Practice:**
    - Regularly practice your speeches, focusing on perfecting elements such as volume, tone, and speed.
7. **Effective Pauses:**
    - Utilize intentional pauses to underscore key messages and enhance overall delivery.

(Stanton, 1990, p. 11.)

Beyond verbal communication, we also convey messages through intentional or unintentional nonverbal methods. The recipient interprets these cues, thereby constructing a more comprehensive understanding of the communicator's central message. Examples of cues that individuals may interpret include facial expressions, body posture, gestures, spatial orientation and distance, appearance, as well as the tone and volume of our voice. (Stanton, 1990, p. 3.)

4.2 Communication for Health

In the realm of healthcare communication, the importance of demonstrating empathy and building rapport cannot be overstated. Listening skills and the use of open-ended questions have become increasingly valuable tools, essential for ensuring patient satisfaction and promoting health outcomes. (Vogel et al., 2018.) “Physiotherapists also use their strong communication skills to teach, empower and promote physical wellbeing and independence by maximizing individuals’ potential and participation” (Burslem et al., 2016).

When engaging in a conversation with a patient, the healthcare professional should employ active listening principles. This involves demonstrating attentiveness through open body language, an engaged posture, a friendly demeanor, and brief interjections to convey understanding, interest, and encourage further elaboration. Active listening fosters empathy and strengthens the patient-professional relationship. (Doas, 2015.)

Clinicians' proficiency in communication is a significant concern, as effective communication has been demonstrated to yield improved health outcomes (Street et al., 2009), and enhanced adherence to treatment (Haskard Zolnierek & Dimatteo, 2009). Moreover, communication-related issues between healthcare professionals and patients appear to be the primary catalyst for patient complaints and dissatisfaction with care (Towle, 1998). Potential solutions are proposed, as seen in a recent paper by Hoffmann et al. (2020), where the authors emphasize the importance of shared decision-making, patient-centeredness, effective communication, and patient education embedded in the highest quality of care to prevent patient dissatisfaction.

4.3 Assessing Clinical Communication

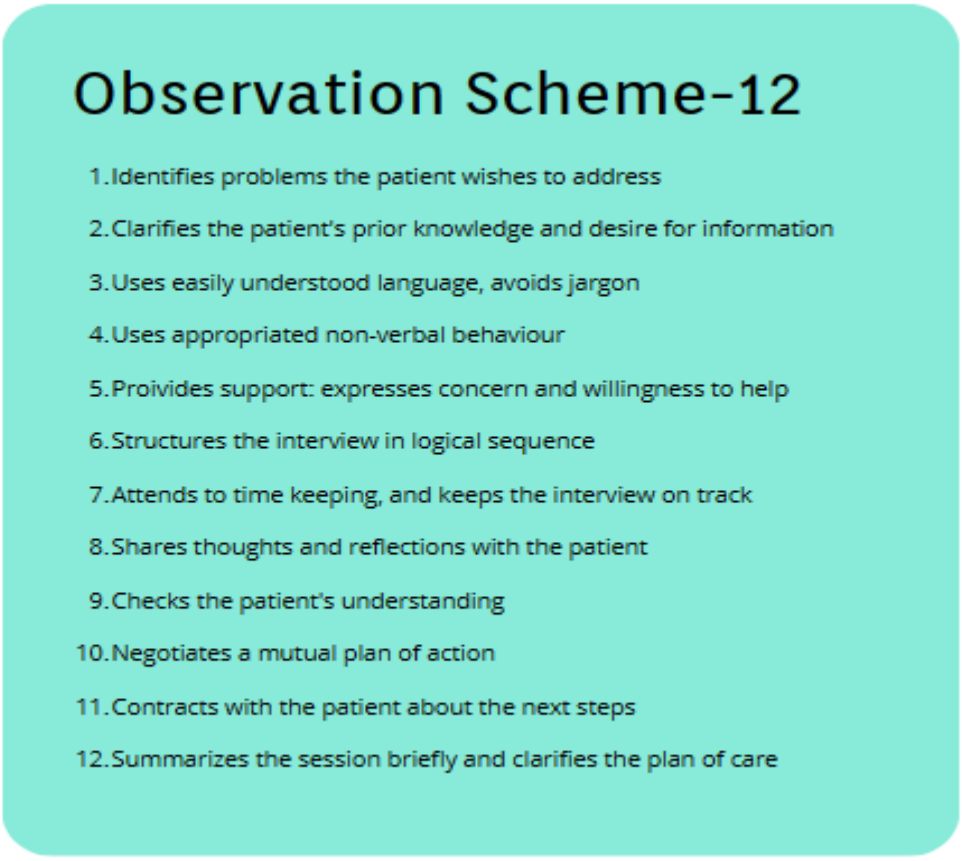
The Calgary-Cambridge Guide (C-CG), developed by S. M. Kurtz & Silverman (1996), served originally as a tool to define, and teach doctor-patient clinical communication within the communication curriculum of medical students. Subsequently, the C-CG tool has been utilized to evaluate professional communication skills also in other consultation situations. (E. D. Iversen et al., 2020.)

The C-CG divides the observation of consultation communication into four categories: initiating the session, gathering information, providing information and planning, and closing the session. Each category includes specific assessment pointers. Building relationships with the patient and providing structure are common to all categories and throughout the consultation or interview. (S. Kurtz et al., 2003.)

The C-CG has served as the foundation for numerous new communication assessment tools. In an intervention study by E. D. Iversen et al. (2020) tested their developed tool,

the Observation Scheme-12 (Table 3), and found it to be reliable and objective for assessing communication skills from an audiotape.

Table 3. Created by Author with Canva. Modelling Observation Scheme-12 Codebook by (E. D. Iversen et al., 2020).



King et al. (2012) recognized the necessity for a specific assessment tool to evaluate the listening and communication skills of pediatric rehabilitation personnel. Consequently, they developed a measure named ELICS to assess effective listening and interactive communication skills in delivering children's rehabilitation services. The authors emphasize that lacking such a tool makes it challenging for professionals to critically assess their strengths and weaknesses in this domain. They argue that engaging in this assessment process can help practitioners gain self-awareness and insight, which is crucial for the development of their expertise. ELICS encompasses six core groups of listening and face-to-face communication skills essential for effective collaboration with families in delivering children's services. The authors detail these skill groups as follows:

- Skill to start people talking (rapport building skills)
- Skills to keep people talking (facilitation or information elicitation skills)
- Skills to understand what people are saying and feeling (skills to understand the client's perspective)
- Skills to establish a relationship (relationship-building skills)
- Skills to reach common ground (negotiation skills)
- Skills to help people move forward (skills to facilitate implementation)

The ELICS measure condenses the main reasons for listening in a clinical situation to "understand, develop a relationship, and decide on the next step" (G. A. King et al., 2012).

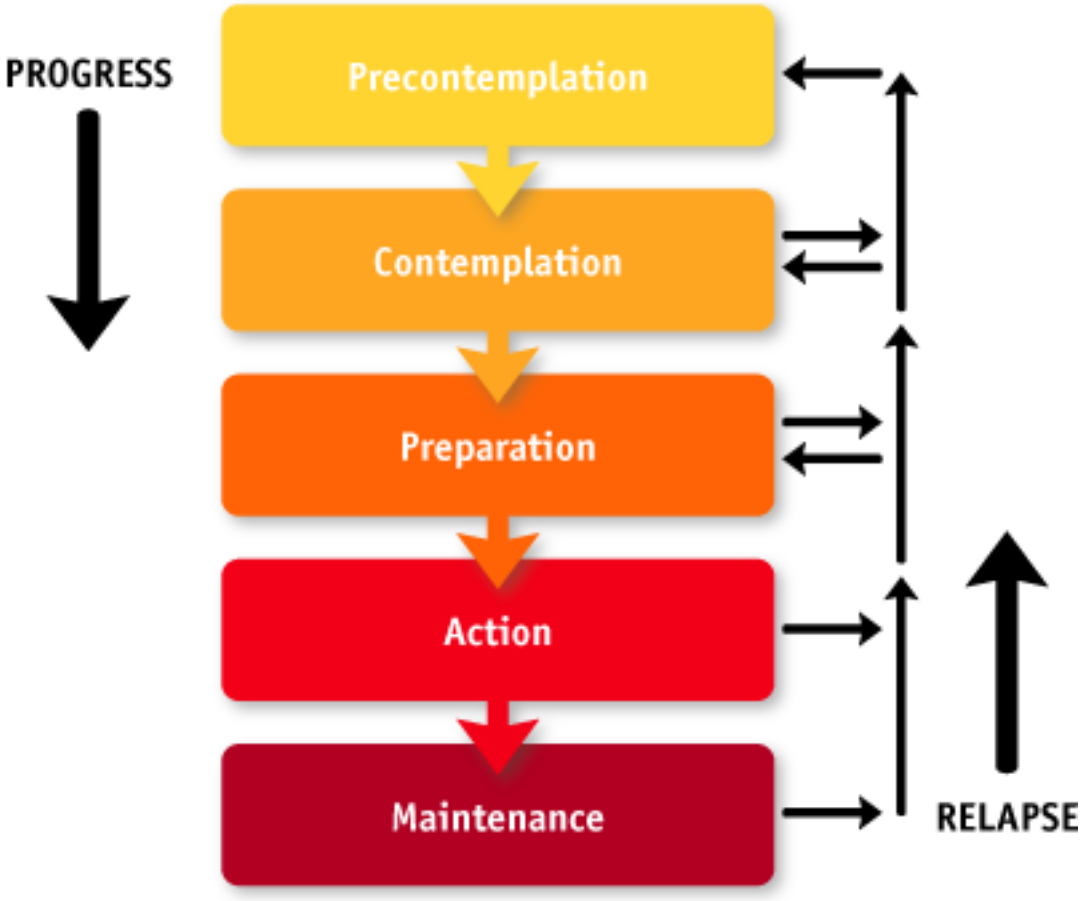
4.4 Motivational Interview

The Motivational Interview (MI) method, developed by clinical psychologist William Miller in 1983, was originally designed to assist patients in changing addictive behaviors. Over time, this method has demonstrated positive clinical outcomes, as confirmed by meta-analyses, particularly in the realm of substance abuse treatment. Additionally, MI has been found effective in promoting various healthy behaviors such as exercise, weight loss, and healthy eating, and it has shown promise in enhancing patient adherence to treatments. (Bischof et al., 2021; Marder, 2018.)

The challenge in applying the method lies in its assumption that patients are personally ready to change. Assessing readiness to change in healthcare is often facilitated by the Transtheoretical Model, as depicted in Picture 5. This model encapsulates stages ranging from precontemplation and contemplation to preparation, action, and maintenance, providing a comprehensive framework for understanding and evaluating an individual's readiness to engage in behavioral change (Prochaska & DiClemente, 1983).

The goal of employing MI methods is to assist patients in enhancing their health behaviors, whether by improving existing habits or discontinuing risky or harmful

behaviors. The MI technique comprises five key elements of intervention: asking open-ended questions, offering positive affirmation and encouragement, summarizing the patient's thoughts, and fostering self-efficacy and motivation-promoting statements. The overarching aim of MI is to express empathy, thereby facilitating effective communication between the care provider and the patient. Establishing effective communication in healthcare holds the potential to significantly impact health outcomes positively. (Babaii et al., 2021; Bischof et al., 2021.)



This Photo by Unknown Author is licensed under CC BY-SA

Picture 4. Transtheoretical Model of Change by (Prochaska & DiClemente, 1983).

4.5 Barriers to Communication

There are multiple factors that may constrain effective person-to-person communication in healthcare environments (Al-Kalaldeh et al., 2020). Figure 2 illustrates some of the common barriers to functioning communication, including

differences in perception, stereotypes, difficulties in self-expression and language, emotional barriers, personal barriers, physical and environmental barriers, and socio-psychological barriers.

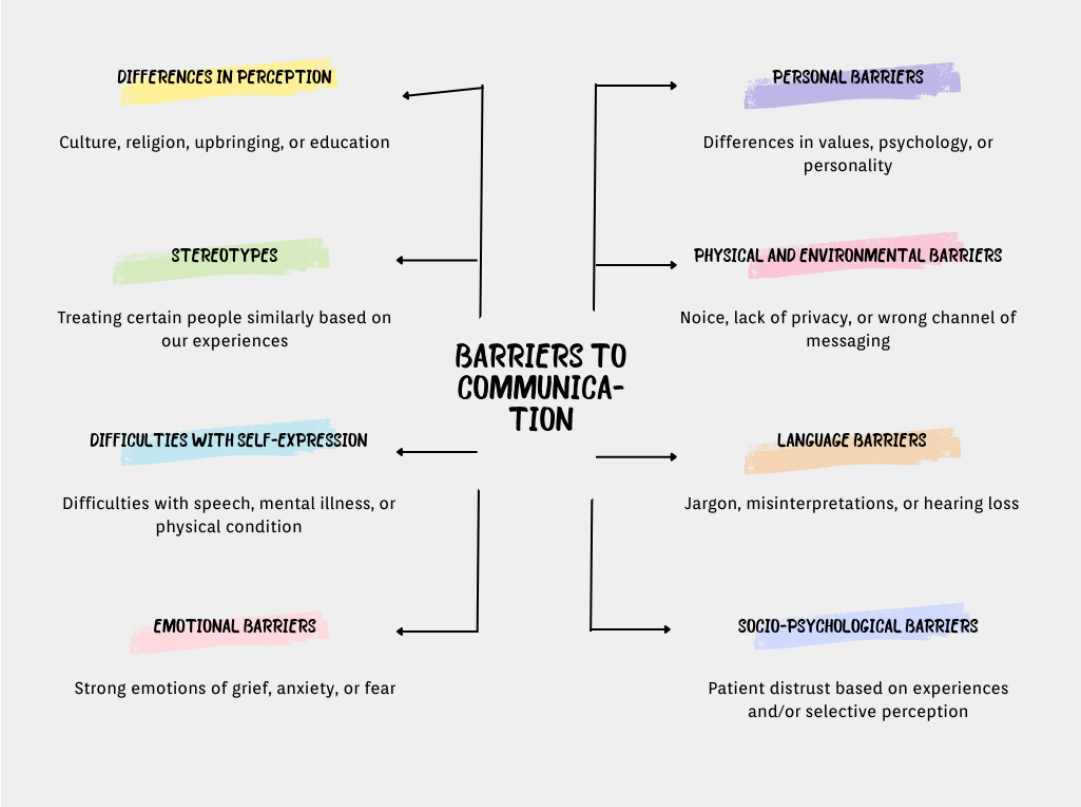


Figure 2. Created by the Author with Canva. Barriers to Communication. Modelling (F. Learning Studio.com, 2022; Stanton, 1990).

Results from a study that investigated patient-provider communication regarding diabetes self-management unveiled concerning findings, pointing to barriers hindering effective and meaningful healthcare communication. The data analysis of provider and patient interviews led to the identification of three prominent themes as barriers: "Providers' Focus on 'Numbers' Rather than Patient Concerns," "Patient Lack of Preparation for Appointments," and "Providers 'Talking Down to' Patients." The identified barriers have the potential to adversely affect the relationship between patients and providers, impeding meaningful discussions about their healthcare. (Kirk et al., 2023.)

When clinicians were surveyed about practicing empathetic communication (EC), the responses unveiled a few prevalent misconceptions and barriers to EC. These included

the belief that EC is synonymous with sympathy and can deplete professional resources, the perception that there is insufficient time to engage in EC, a deficiency in education regarding communication skills, and a perceived lack of relevance to acute treatment. (Hardee, 2003.)

4.6 Therapeutic Relationship

The concepts of "therapeutic alliance" and "working alliance" emerged from psychodynamic theory, where they are defined as the extent to which the client-therapist partnership engages in cooperative, goal-oriented work (Bordin, 1979). When analyzing therapeutic alliance in pediatric physical therapy through interviews with parents and their children, Crom et al. (2020) found that establishing trust in the physical therapist is essential for both parties to feel safe and secure. This need for trust was identified as encompassing both the therapist's relational and technical skills, with relational skills being perceived as more valuable based on the responses of parents and children. Additionally, the authors introduced two other crucial aspects of client and parent needs: need for proper information sharing and a need for collaborative goal setting and intervention planning (negotiation).

The therapeutic relationship between physical therapists and their patients is considered to be crucial for practicing patient-centered care and achieving positive therapeutic outcomes, patient satisfaction, and treatment adherence. However, the specific factors that contribute to this care-enhancing relationship remain unclear. In their qualitative study, Miciak et al (2018) identified four conditions that promote the establishment of a strong therapeutic relationship (Figure 3). These descriptive conditions outline the necessary conditions for therapeutic relationships including commitment, being present, receptive and genuine.

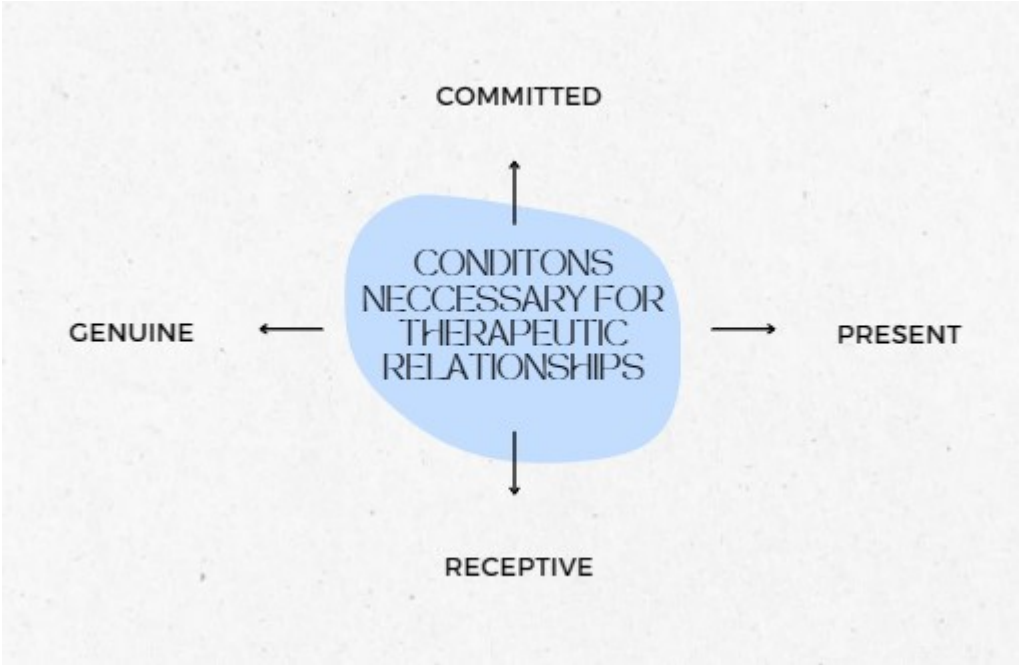


Figure 3. Created by author with Canva. The Necessary Conditions of Engagement for the Therapeutic Relationship in Physiotherapy Modelling (Miciak et al., 2018).

O'Keeffe et al.'s (2016) Qualitative Systematic Review and Meta-Synthesis identified four themes encompassing various interpersonal, clinical, and organizational factors that influence patient-physical therapist interactions and relationships.

1. Physical therapist interpersonal and communication skills (i.e., presence of skills such as listening, encouragement, confidence, being empathetic and friendly, and nonverbal communication)
2. Physical therapist practical skills (i.e., physical therapist expertise and level of training, although the ability to provide good education was considered as important only by patients)
3. Individualized patient-centered care (i.e., individualizing the treatment to the patient and taking patient's opinions into account)
4. Organizational and environmental factors (i.e., time and flexibility with care and appointments)

The authors assert that additional research is necessary to pinpoint which of these themes actually influences patient-therapist interactions. Nevertheless, awareness of these factors by physical therapists could improve patient interactions in their clinical practice.

4.7 Therapeutic Communication

Therapeutic communication is a dynamic interaction between a healthcare professional and a patient, where the professional intentionally aims at promoting understanding, building rapport, and facilitating behavioral change. It encompasses a range of verbal and nonverbal strategies that foster trust, empathy, and a sense of safety for the patient. (Mosby, 2013.) The professional must be aware of their use of language as well as non-verbal cues. The application of therapeutic communication should strive to assist patients in exploring their options and emotions independently. (Sherko, 2013.)

In their 2017 concept analysis, Abdolrahimi et al. examined 30 articles focusing on communication between nursing students and patients. They identified the defining attributes of therapeutic communication as “an important means in building interpersonal relationships, a process of information transmission, an important clinical competency, a structure with two different sections and a significant tool in patient centered care”.

Effective communication and, more specifically, adept listening skills are crucial for the successful delivery of rehabilitation services to children. Pediatric physical therapists need to possess high-level skills to navigate clinical interactions in a holistic, strengths-based, and family-centered manner, ensuring client comprehension, satisfaction, and collaborative decision-making. Various listening skill types, such as receptive listening, exploratory listening, consensus-oriented listening, and action-oriented listening, play a key role in facilitating this process. (King et al., 2012.)

Via therapeutic communication, healthcare personnel should build a relationship, ascertain the patients' concerns and needs, and assess the patient's perceptions, including specific actions such as behavior and messages (Sherko, 2013). In the field of physical therapy, practitioners place immense importance on client education as a means of establishing therapeutic rapport. Therapists integrate client education into their practice by involving the patient in discussions during assessment, goal setting,

addressing patient concerns, explaining the rationale behind procedures and techniques, and when planning exercise programs. (Harman et al., 2011.)

5 THESIS PROCESS

The thesis process commenced during the fall of 2022, guided by the research methods and thesis curriculum of SAMK University of Applied Sciences. During this period, the initial thesis plan was formulated. Following its presentation to the PH20SP class and thesis supervisors, the plan was approved by the degree manager on November 2, 2022. The author's original intention was to conduct a qualitative study involving multiple semi-structured interviews with parents of children with disabilities caused by central nervous system accident, defect, or illness, aiming to achieve sufficient data saturation for qualitative analysis. The aim was to collect data that encompassed parents' perceptions, experiences, and opinions regarding parent-physical therapist communication, interaction, and collaboration.

To gather data, the author reached out to several third-party organizations across Finland, seeking their willingness to distribute an invitation letter for the research study. In the spring of 2023, a single eligible volunteer contacted the author, expressing their willingness to participate. Due to time constraints and resource limitations, the author decided to proceed with the research involving only this one participant. Subsequently, the process continued with scheduling a video call-based interview with the participant. The interview was conducted on June 9, 2023. Furthermore, the thesis process during the spring of 2023 encompassed conducting a thorough literature search and review, preparing for the interview, and commencing the report and theoretical framework writing. The process continued into the fall of 2023, involving refining the theoretical framework, meeting with the thesis supervisor, analyzing the data, and finalizing the thesis with the conclusion and discussion sections.

The limited number of participants (1) could be attributed to the specific, personal, and sensitive nature of the research topic. This sensitivity might have discouraged potential participants from openly sharing their experiences and opinions. To gain a deeper understanding of the factors influencing participation in this type of research, further investigation is warranted. As illustrated in Figure 4, the thesis process unfolded in chronological order.

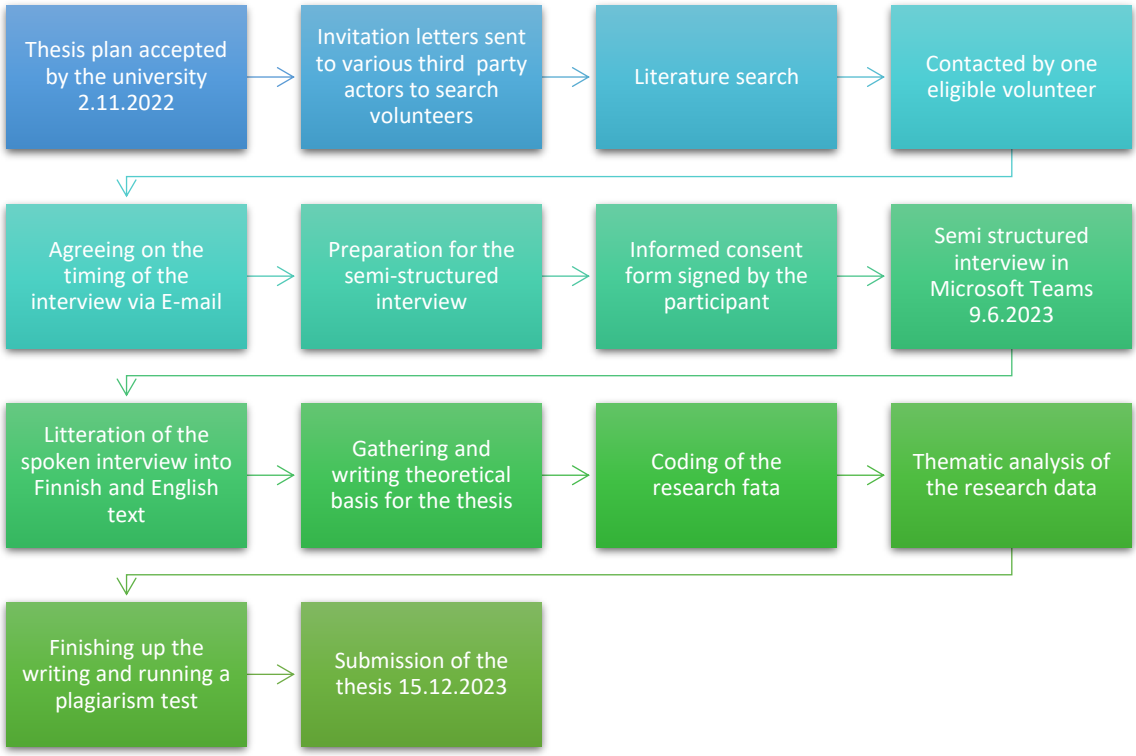


Figure 4. Thesis Process in Chronological Order.

6 RESEARCH METHOD

Qualitative research is often viewed as the counterpart to quantitative research. While qualitative research seeks to uncover meaning from psychological, social, or cultural constructs, quantitative research is centered on numerical statistics, quantities, and causal relationships. (Anttila, 2006, pp. 275, 233). Alasuutari, (2011, p. 32) argues in his book, "Laadullinen Tutkimus 2.0," that in human and social sciences, the dualistic separation is unnecessary. All research shares common aims of objectivity, logical thinking, and honesty in presumptions and biases. Despite differences in data collection and analysis, the two methods should be considered mutually reinforcing rather than mutually exclusive.

The research adheres to the grounded theory method developed by Barney Glaser, Anselm Strauss, and Juliet Corbin (1967-1990). In this approach, the theory is derived from empirical research data, and it does not involve testing pre-existing theories or hypotheses. Grounded theory can serve as the overarching research approach for the entire work or be regarded as a philosophy for data analysis. This methodology is particularly suitable for research endeavors where the goal is to generate novel information from the data, especially in cases where there is limited previous research on the subject. (Anttila, 2006, p. 376; Kallinen & Kinnunen, n.d.)

Grounded theory is an inductive reasoning method, signifying that the research approach involves examining individual cases and then extrapolating from them to generalize the newly generated data within a broader context and to other studies. It may be perceived not as a source of absolute truths but rather as a means of uncovering qualities and phenomena. In contrast to induction, deductive reasoning does not seek to generate novel information; instead, its goal is to align and compare existing literature, premises, and truths with the research data. (Tieteen termipankki website, n.d.)

The researcher's philosophical foundation is rooted in hermeneutics. Hermeneutic scholars view interview data as a message and the researcher as the interpreter. This

framework is believed to foster a discourse between the researcher and their empirical material. Hermeneutics encompasses the study of interpretation and understanding. (Anttila, 2006, p. 305.)

6.1 Research Questions and Problem Statement

Research Question

What factors are influencing parent-physiotherapist collaboration in pediatric physiotherapy?

Population: Parent of children with cerebral palsy (CP)
Intervention: Conducting semi-structured interview
Comparison: Comparing with previous literature in the discussion
Outcomes: Identifying themes related to factors influencing cooperation and collaboration between parents of children and physical therapists in pediatric rehabilitation.

The PICO model is employed in this context to formulate the research question. It is a tool and framework commonly utilized by researchers or clinicians to define specific questions. (Richardson et al., 1995.)

6.2 Participant Selection

Inclusion criteria: Caregivers of a child with a central nervous system related disability who have extensive experience working with physical therapists in their child's rehabilitation.
Exclusion criteria: Caregivers of a child with other than central nervous system-related disability or who lack experience working with physical therapists.

The researcher reached out to four Finnish associations whose members included individuals or family members affected by illnesses impacting the central nervous system. The purpose was to seek publicity for the welcome letter (see Appendix 1) and

attract volunteers for the research. All the associations were cooperative and made considerable efforts to enhance the visibility of the letter. Fortunately, one eligible volunteer responded by email and expressed willingness to participate.

6.3 Semi-Structured Interview

There are differing views on the purpose and significance of research interviews. The realistic view characterizes interviews as a process where "the data represents the reality outside of the interview," while the idealistic perspective sees interviews as a means through which "reality is constructed from the interaction during the interview." (Ruusuvuori & Tiittula, 2005, p. 10.) Research interviews can be categorized into structured or unstructured types. Structured interviews typically utilize a predetermined set of questions that are asked in a consistent order to all participants. This approach, sometimes referred to as a "formal interview," ensures standardization and comparability across interviews. Conversely, unstructured interviews follow a more conversational format, allowing respondents to elaborate freely, share stories, and provide detailed explanations. This flexibility enables the interviewer to explore unanticipated topics and gain a deeper understanding of the respondent's perspectives. (Ruusuvuori & Tiittula, 2005, p. 11.)

Data collection for this research was conducted through the use of the semi-structured interview method, also referred to as a thematic interview. Interviews represent a common and widely used qualitative research data collection approach in behavioral, human, and social sciences. This method is particularly suitable when the research question necessitates data derived from people's opinions, experiences, beliefs, values, or attitudes. In a semi-structured interview, the interaction between the interviewer and respondent resembles a "conversation-like" discussion. However, the interviewer has predetermined themes, guiding the conversation toward discussing them. These themes are chosen with the intention of eliciting information that directly addresses the research question. (Hirsjärvi & Hurme, 2004; Jyväskylän Yliopisto, 2021.)

6.4 Thematic Analysis

Thematic analysis is a qualitative data analysis method in which the researcher identifies and captures the essential themes necessary for addressing the research questions (Eskola, 1998, pp. 174–180). Breaking down the interview transcription into smaller segments and labelling (coding) the text with similar meanings or frequent repetitions in the material aids the researcher in categorizing the codes into larger pools of themes later. Typically, when writing the results, the researcher supports the creation of themes by providing quotations from the interview. (Hirsjärvi & Hurme, 2004; Kallinen & Kinnunen, n.d.) The purpose of the analysis is to construct a narrative and concise description of the phenomena and themes discussed during the interview. Following the thematic analysis and the composition of results, it is important to contextualize the findings within the broader scope of existing literature. (Tuomi & Sarajärvi, 2009, p. 105.)

In this research, the analytical process involved transcribing the text into both English and Finnish, extracting meaning from the text, and coding these passages by color groups based on the observed strength and repetition of the message. The next step included grouping similar codes together and labeling them under an umbrella theme. Finally, the extracted meaning was narrated into a final document, attaching the findings within the broader scope of the thesis. (Hirsjärvi & Hurme, 2004.) Coding may be defined as: “Codes are rags or labels for assigning units of meaning” (Miles & Huberman, 1994). And the themes as: “Themes are a common, recurring pattern across a dataset clustered around a central organizing concept” (Braun & Clarke, 2022).

6.5 Ethical Considerations

In any research involving human subjects, a signed informed consent form stands as one of the most crucial ethical considerations. This signifies that the researcher appropriately informs participants about the aims and goals of the research while outlining the rights of the volunteers. Additionally, other vital aspects of ethically conducted research include ensuring confidentiality, respecting privacy, and

thoroughly evaluating and informing participants about the potential consequences of their participation. (Hirsjärvi & Hurme, 2004, p. 20.)

As shown in Appendix 2 (Informed Consent Form), the researcher provides information to the respondent regarding the commitment, workload, and potential consequences associated with participation. In this research, potential harm of partaking is defined as "possible psychological stress caused by dealing with personal and possibly sensitive topics." The respondent's personal information is exclusively managed by the author on his private computer and files. All materials used in this study are pseudonymized and anonymized. Furthermore, the interview material is deleted upon the completion of the research.

6.6 Disadvantages and Errors

The study's main drawback is its small sample size, resulting in low data saturation with only one participant. The author considers the lack of resources in marketing the study invitation and the nature of the sensitive and personal topic to reason the low volunteer enrollment. Due to time constraints, the author had to move forward with the study instead of attempting to gain more participants. To address this limitation in future studies, using surveys instead of interviews for data collection may be considered to achieve larger sample sizes. However, there is a potential compromise in the data quality with this approach. Despite the limited number of participants (only 1), the interview yielded valuable knowledge, insights, and interesting perspectives. This richness in data allowed for the conduct of thematic analysis.

To critically evaluate the research, the author employed a qualitative research appraisal tool developed by the Joanna Briggs Institute. This tool comprises ten sets of questions that assess the appropriateness of the qualitative methodology employed in relation to the research objectives. The user responds to the questions in a checklist format by selecting from the options "yes," "no," "unclear," or "not applicable." (Joanna Briggs Institute, 2020, p. 3.)

7 RESULTS

Thematic data analysis uncovered three primary themes and six subthemes that influence parent-physiotherapist collaboration. The identified themes are establishing trust, family-centeredness, and a pervasive theme on communication.

The grouping stage of the analysis yielded six groupings that serve as subthemes:

1. Reaching three-way trust.
2. Preferred physiotherapist characteristics.
3. The parent reflects on their child's well-being.
4. Considering family resources.
5. The physical therapist’s situational awareness.
6. Collaborating with families involves listening and information-sharing skills, as well as an understanding of the family and child.

The interconnectedness of factors influencing human-to-human communication and the intricacies of professional relationships and collaboration between parents and therapists contribute to the overlapping nature of the identified themes. Table 4 provides an illustration of data-driven reasoning, including coding examples, groups (subthemes) and the three emergent themes. The themes, subthemes and insights from the data will be further explored in the results chapter.

Table 4. Data-Driven Reasoning and Coding Examples. Created by the Author with Canva.

Coding Examples	Grouping	Themes
"I would describe the relationship between parent and the physiotherapist as confidential. Trust is the word that comes up most important to me. When the trust is achieved then it's really easy and natural to have that communication... when that trust is established... it forwards the interaction" "Or maybe the relationship turns more honest after the trust is established... you dare to bring it all into the conversation" "For my child, it's kind of an absolute prerequisite that it's the same person (physiotherapist), because it takes time to acquaintance and build trust"	Reaching Three-Way Trust	Communication Trust Family-Centeredness
"I think that calmness is an important quality in a therapist.... The parent gets the feeling that now they have time for me" "I'm the type of person who wants to see some expertise from there... that they have to be able to professionally justify why something is being done" "It is important that the physiotherapist speaks Finnish and not Latin... The physiotherapist has to make sure that the client understands what they're talking about, they can't just hide behind their jargon" "you cannot be late..."	Preferred Physiotherapist Characteristics	
"The child is really aware of her own challenges...So she doesn't want them to be picked apart any further all the time" "But then I, as a mother, naturally mirror it to my child and their hopes and wishes and other things... So, I cannot think about it just like through the theoretical knowledge" "Then there's the physiotherapy situation with the child, who hates all movement because it is painful and uncomfortable and she has felt inferior to classmates and friends in it"	The Parent Reflects on Their Child's Well-Being	
"But otherwise all the doctor visits or physiotherapy visits eat up those resources" "I do not consider that from the health care system me or our family really gets any resources" "From quite an early age we have started to have movie nights... So they are also kind of resource-giving because they're fun for the whole family" "Sometimes physiotherapists do not consider the current resources of the family" "At one point, when the child was very strongly opposed to physiotherapy, it also took more resources going there"	Considering Family Resources	
"If you see a therapist for the first time and they excitedly explain all of the joys and benefits of a walk in the forest, but then you know that you have tried it, and that the reality is that we all are dripping with sweat and tears... And I just don't have the strength to explain to them that it's quite challenging" "But of course, if the physiotherapist notices that the parent does not know something, then of course I would assume that they would tell or explain and kind of share that information about the disease itself too"	Physical Therapist Situational Awareness	
"Of course, if you know your customer, then you can follow up and sense on whether the plan really has been implemented by the parents in the way that has been promised... but it requires that trusting relationship with the therapist" "We have been lucky enough that the rehabilitative physiotherapist has stayed the same for a long time, so they have gotten to know the child properly" "Maybe the fact that you really believe those parents... Or it just comes down to listening to those parents really, what they have to say and what they tell you, and appreciating the message those parents share about the child" "If you give instructions...Don't give those pre-printed instructions.. Rather discuss it together with the family first like, which one of these options would you feel more comfortable with? Which one would you be able to implement?... Do not arrive at that situation with a ready-made answer, rather arrive to conclusions together with the family"	Collaborating with Families Involves Listening and Information-Sharing Skills, as well as Understanding of the Family and Child	

7.1 Trust

Trust emerged as a pivotal element shaping the parent-physical therapist relationship. The participant highlighted the importance of building trust as a foundation for effective communication and collaboration.

> I would describe the relationship between parents and the physiotherapist as confidential, trust is the word that comes up most important to me. When the trust is born or achieved then it's really easy and natural to have that communication, but before that, it's kind of like that, it can be a bit too polite before, but then when that trust is established, so then it's so much easier, it forwards the interaction.

The participant shared concerns about maintaining complete honesty while reporting on treatment adherence.

> From what I know of other parents in the same situation, nothing else is as common as being there, let’s say at the doctor's office or at the physiotherapist's office and nodding that yes, yes, we do these exercises 18 times a day, but then we go home, and nothing gets done. So sometimes it is also like from the client's point of view the lack of communicating and being honest about the situation or the resources that are lacking for rehabilitation.

The therapists have a responsibility in establishing a supportive and trusting environment that encourages open and honest communication from parents.

> Or maybe the relationship turns more honest after the trust is established. That you dare to say that you have not trained this week or like you dare to bring it all into the conversation when you know that the therapist won’t be punishing you in their response.
>
> Of course, if you know your customer, then you can follow up on whether the plan really has been implemented by the parents in the way that has been

> promised or said that way, but it requires that trusting relationship with the therapist.

Reaching Three-Way Trust

Fostering three-way trust encompasses trust between the therapist, the child patient, and the caregiver(s). By establishing a rapport with the child and demonstrating trustworthiness, the therapist may indirectly instill trust in the parents, promoting their acceptance of the therapy.

> For my child, it's kind of an absolute prerequisite that it's the same person (physiotherapist), because it takes time to acquaintance and build trust…

> I think there are just the same differences in customers, as in all other people, that some want and endure such pushing to the limits in a completely different way than others, here It becomes really important to know your patient first and become aware of like even the little messages that they say nonverbally or verbally and receive listen and respect them.

> So, in a way, the physiotherapist must be incredibly careful to mirror the feelings of the client and the starting points (emotional & physical capacity) of the client in that how hard they can push the client and how far it is worth taking the exercise situation... That it should not be the therapist's own goal, that somehow goes above the interaction and message from the child client.

Preferred Physiotherapist Characteristics

Respondent elaborates on some of the characteristics that therapist should possess to promote trust-building and enhance collaboration with families. Expertise, calmness and showing the family that you have time for them and being attentive holds value.

> I'm the type of person who wants to see some expertise from there, that the physiotherapist doesn't just say that this should be done because I say so, but

> that they have to be able to professionally justify why something is being done or why something should be done differently, I do need things like that…Now, you do not need to throw in some kind of research or statistics on every issue, but to see that they are experts in their own field and pursuit and can justify their actions. That is important to me.

> Well, I think that kind of calmness is an important quality in a therapist, that you don't somehow rush 100 things like that at once, but just like somehow that the parent gets the feeling that now they have time for me, that they stop here to listen and tell and introduce themselves and explain and you don't kind of rush into action right away and have 10 forms to fill out and in a terrible hurry and like this.

Being constantly late is not professional conduct.

> …And you cannot be late. It is annoying, if you arrange an appointment with the physiotherapist is in time that suits you and then they always arrive 10 minutes late, that is really annoying.

Having a clear and understandable language is important. Moreover, the therapist needs to check the client/parent comprehension of the subject at hand.

> It is important that the physiotherapist speaks Finnish and not Latin that if the therapist kind of lean too much on professionalism or something like you have memorized all these muscle names, then the client just might not be able to listen to it, or the physiotherapist has to make sure that the client understands what they're talking about, they can't just hide behind their jargon.

> …Maybe different to doctors that prefer to speak like pure Latin and muscle names and like Latin names and some angular factors and then again, the physiotherapist maybe can put it into words then in Finnish so that the ankle doesn't bend when we are talking about some ankle range of motion angle.

> So maybe the physiotherapist is talking through the functional activity, while the doctor is talking about the same thing in Latin… I think physiotherapists can communicate in really understandable language without jargon.

Parents need to cooperate with multiple professionals during child rehabilitation. The factors influencing this co-operation with individuals might arise from more personal than professional specific qualities.

> I do not see such a significant difference in co-operating with physiotherapists compared to other health care professionals, I think the differences might are more like personal qualities than profession-specific qualities... it's more like that people are different and you get along better with some people and a bit weaker with others.

The Parent Reflects on Their Child's Well-Being

The parent reflects on the therapy based on the feelings, hopes, and wishes of their child. This is a one factor to be considered as a pediatric physical therapist collaborating with families.

> If we talk about physiotherapy, but then I, as a mother, naturally mirror it to my child and their hopes and wishes and other things. So, I cannot think about it just like through theoretical knowledge.

> The child is really aware of her own challenges, but that is just that when she is fully aware of them, she doesn't want them to be picked apart any further.

> …And then there's the physiotherapy situation with the child, who hates all movement because it is painful and uncomfortable for her, and she has felt inferior to classmates and friends in it.

7.2 Family-Centeredness

Practicing family-centered principles in pediatric physiotherapy setting seems to be meaningful. This behavior is described below in examples ranging from knowing the child and caregivers, considering the family's current resources for the rehabilitation and for, having situational awareness in information giving and in exercise instructions to listening and appreciating the information received from the family unit.

> They have always asked my opinions like if there are any goals or hopes or something else, that yes, I feel that if there had been something I needed to express then yes it would have been heard and considered.

Considering Family Resources

Physical therapists ought not to be thinking that the therapy or other visits in health care are the factors usually promoting the resources of families/parents/patients.

> I do not consider that from the health care system me or our family really gets any resources. Well, maybe some adaptation training courses could be like that. There when you are in full care for a week, they have actually been resource-inducing procedures… But otherwise all the doctor visits or physiotherapy visits eat up those resources, especially the doctor visits when you go there to hear what is wrong and focus on all the negative or that what is not age-appropriate, so it takes a lot of resources, until afterwards I understand that the child is the same when going to the doctor and coming from the doctor's office, even though there is a list of diagnoses listed in between. But these clearly take away the resources.

> Then, at one point, when the child was very strongly opposed to physiotherapy, it also took more resources going to the physiotherapy, when you first fight for an hour to get there and then it's the therapy itself and then the aftermath, so there have been times when that physiotherapy has been a burden in practice more than a benefit.

Rather, the resource inducing aspects might arise from somewhere else, but should also be brought to discussion.

> From quite an early age we have started to have movie nights, so to speak, like with the whole family, so they are also kind of resource-giving, because they're fun for the whole family. So that, and then also swimming is our family thing, yes also that it is a nice trip even though it is tiring and all, but they are such things that we do as a family and bring resources to us.

> I personally like to exercise so jogging or something like that brings me those resources and just lying down. I also like to just lie down and watch Netflix, so these kinds of things load my resources.

By discussing the current resources of the family, there can be a common ground achieved in for example figuring out what amount and method of home exercising is achievable currently.

> Then the fact that the physiotherapist listens to the parents in such a way that if the parents say, for example, that there are not enough resources for stretching every night, then let's think of some other solution together or some other way or something that motivates the child in such a way that it becomes achievable then to reach the physiotherapist's goals therapy…Sometimes physiotherapists do not consider the current resources of the family.

Physical Therapists Situational Awareness

Situational awareness is needed in many parts of therapy including information giving, exercise instructions and especially during first visits.

> But of course, if that physiotherapist notices that the parent does not know something, then of course I would assume that he would tell or explain and kind of share that information about the disease itself.

> That if you see a physiotherapist once or for the first time and they excitedly explain all of the joys of a walk in the forest, and then you know that or that you have tried it and you know that the reality is that we all are dripping with sweat and tears from everyone... And I just don’t have the strength to explain to them that it's quite challenging. Sure, from the point of view of that physiotherapist, I understand that he recommends it because there would be uneven terrain to walk and stuff, but that if a child falls every twenty seconds, it doesn't really enhance the possibility for them to enjoy exercise.

> Then it doesn't work like the same kind of encouraging messages that would be shouted next to a normal football match, for example, but that you have to think about it from a completely different perspective than with a client that is familiar and enjoys exercising.

Working with Families Involves Listening and Information-Sharing Skills, as well as Understanding of the Family and Child

The parent of the child in rehabilitation is not a patient or client per se but it may only help the clinician to conduct themselves according to situation by thinking that they have 2 clients at once. Just like you would want to create a trustful relationship with your clients you should aspire to that with caregivers and other family members. Creating this trust-based collaboration with the parent seems to aid and fluidify communication.

> The child client and parent come as a package in that you can't think that purely that child is just the customer, but the parent is too, even though no entries are made for him, and it's not like that as a client, but the parent’s really are a big part of the rehabilitation.

Giving information about the ongoing therapy (also, other than exercise instructions) has value to parent. Especially during the early stages of a child’s life, the family/parent involvement in the therapy sessions seems to be inherently important.

> I think the information giving roles between the rehabilitation team has been okay, that then again, I've discussed with the physiotherapist more about functional capacity and not so much about the diagnosis or how did it happen or what it effects on or whatever, that maybe the discussions with the physical therapists have been more about the functional capacity perspective.

> I think it's at least that knowing what's going on in the physiotherapy is really important, because otherwise you might not recognize the change yourself, and then on the other hand, you might not understand what the child is even telling you if she tells me that they did something with some miracle gadget, then if you don't yourself have any idea about what has actually been done in there, then you can't talk with your child. If the child is still small, then you really have a need to get some idea of what they are actually doing in physical therapy.

> We have alternated that when we have been like with a physiotherapist who you see just that one time, like in some assessment situations, then I have often been involved in the session. Because the child would not have agreed to co-operate if there had not been any familiar person with her. But once she is with her regular physiotherapist, then they've been able to be between themselves doing what they do and then at the end the physiotherapist has kind of told me what they've done or given me instructions and like that, but yes, it depends also of the age of the child, that then, of course, when she was a baby, of course I was in there all the time, that the older the child gets, the more independently they naturally handle it.

One of the cornerstones of family-centered practice might involve collaborating in the planning, goal making and implementation of the therapy. An authoritarian approach for example by not discussing therapy timing is not suitable.

> We did have hopes for the timing of the physiotherapy. It would have been really hard, if it had just come like, you know, that you now have an appointment then and then, that if you hadn't been able to influence it at all, then it would have been more of a burden than a benefit, because for a parent it means that you have

> to arrange your work schedule according. Take absence from there and you need to drive the child back and forth. And maybe arrange some place for siblings to be during and other things. If it would have been just a given time at a random point. That would have been tough…It was important to be able to influence the timing.

In prolonged, ongoing therapy, it might also be difficult for the parents and the patient to come up with certain goals.

> But other than that, like the content of physiotherapy, I find it really difficult to make something up. Like every time they ask when we need to make those GAS goals for the KELA and then try to come up with some even a bit pretentious goal, because we don't have or even the child hasn't expressed anything they'd like to learn or something like that, it's always been hard to come up with them, but of course if you're the kind of person who somehow has clear goals, Then it will be easier.

A major part of the therapy usually happens at home or other environments outside the clinics/hospitals. So, by reasoning the benefits of given methods and by giving instructions to caregivers mobilize the potential for the therapy to become more impactful.

> Because then again, if the child sees a physiotherapist once or 2 times a week, but if you can get those parents to understand something, like the meaning of stretching or guiding them to modify a particular muscle or something. And they can do it every day or every day more than once, so there will be so many more repetitions than just doing those things there at the physiotherapist's clinic. Then you will probably be able to draw out that treatment efficacy in a completely different way… The parents play an integral part in the child's rehabilitation.

The instructions and plans should also be made in a collaborative manner.

> And then maybe the fact that if you give instructions and stuff, you give them in such an open way that you don't kind of give a pre-printed instruction, that here's this week or a day training program for you and you start to implement it but in such a way that you discuss it together with the family first like which of these options would feel more comfortable with? Which one would you be able to implement, or like, how does this seem like? Do not arrive at that situation with a ready-made answer, but rather arrive at conclusions together with the family…. In the end it (the rehab) is a team effort.

The parents are the experts of their child and need to be heard. By listening to the parents, the therapist gains valuable information about their patient child and family situation.

> Maybe the fact that you really believe those parents in a way that or it just comes down to listening to those parents really, what they have to say and what they tell you and kind of appreciating the message those parents say about that child… Listening to the parents is the keyword.

> Even though it may not immediately open up from a professional point of view, it is perhaps the core message of the family as a whole that the parents then tell, it is very important to keep your own communication channels open and listen to the client family.

The relationship and interaction between the parent and the therapist seems to differ from e.g., friendships.

> Of course, it is that the physiotherapist is an expert, and they are kind of the one who knows the content of that thing, like the theory and reasoning behind the therapy…It is different from the fact that if I am, for example talking to a friend on an equal footing, of course it will affect that interaction and it is different.

The therapist might usually only consider the “necessary” assistive aid equipment’s. The physical therapist might want to broaden their view with assistive technology also

into the realm of active/leisure time assistive aids. Even by mentioning the possibilities for rental options might have value and even promote the child patient/family to find a meaningful mode of physical activity.

> We have tried active assisted aids, but the physiotherapist did not inform us about these. Like we have been to somewhere like where we have been able to try a trail bike or a ski sled or something like that, then we've kind of gone to such demonstrations in our free time, and we've even used them. But with physical therapy there has not been these experiments

> Now I do not remember how we got the information back then. I do bet that it has come through some kind of association activity, the information about trial days and rental opportunities for this active assistive equipment, I don't remember it being through a physiotherapist, but if we hadn't had that information, it would have been gloomy afterwards if I had found out like now that ha-ha such things would have existed.

In pediatric rehabilitation having high turnover in therapists might be undesirable.

> Well, we have been lucky enough that the rehabilitative physiotherapist has stayed the same for a long time, so they have gotten to know the child properly.

> …They always offered that if the physiotherapist is sick so that someone else like a substitute comes in to take care of the session. It didn't work at all, that it did require her own familiar therapist.

7.3 Communication

Communication is always present in physiotherapy practice and its value should be appreciated.

> Functioning communication is when both parties feel heard…then it is interactive communication in my opinion.

> This is an important message. Really the physiotherapist is in close contact with the family and meets them regularly and are dealing with kind of sensitive topics and the development of the child and their functional abilities, so the interaction and communication is really important there.

Therapists should consider their nonverbal communication too.

> Non-verbal communication is especially important… And so, especially if I think about my child now, they are very important to her. She has a bit of sense sensitivities, so she senses quite accurately all the huffs, puffs, or anything else that comes from the therapist, and she registers them all very accurately.

It is important to find ways to communicate and discuss with the parents, also outside of the immediate environment of the therapy clinic.

> Well, we've had all kinds of version over the years on how we discuss with the professional, and then of course for example at a doctor's office there's no alternatives, when it's only the one hour that's allotted, then you just go through these things and the child has to be there when they've just been measured and stuff so there hasn't always been the option to speak one on one, but yes, with those rehabilitative physiotherapists, they've found ways that work out.

> With someone we have exchanged WhatsApp messages, had phone calls with someone and even had like meetings in their reception room, that in quite diverse ways we have communicated in different situations about important things that parents should know, but there is no need to deal with it in the child's presence.

It should be considered what and how something is being said during child's presence.

> Definitely the discussions should happen so that the child is not right next to you. It is terrifying for a child's self-esteem to listen week after week to what

they did not know or what did not work out. In my opinion it doesn't belong to the child's ears, and it can increase just that resistance and weaken the motivation for the whole physiotherapy… So that the child should hear only the positives and successes, of course you can go through praises and such, but then the more detailed analysis of what is not good or functioning now only between the parents and therapist.

8 CONCLUSIONS

The aim of this research was to unveil the contributing factors that influence collaboration between parents of children undergoing pediatric rehabilitation and their practicing physiotherapists. This study highlights the multifaceted nature of collaboration between physical therapists and parents in pediatric rehabilitation settings. The analysis of interview conducted with parent of children with cerebral palsy revealed the themes of trust, family-centeredness, and a pervasive theme on communication as factors contributing to collaboration.

Physical therapists have acknowledged the need for additional training in applying family-centered practices, enhancing communication skills, and fostering collaboration. (Bruce et al., 2002; Chiarello L, 2013; Giddings Cochrane et al., 1990; Iversen et al., 2003; Sparling & Sekerak, 1992.) The findings of this thesis contribute to a deeper understanding of the intricacies of collaboration and the relationship between parents and physical therapists in pediatric rehabilitation settings. Similar research to this thesis, done in the field of physical therapy, is highlighted in the following discussion chapter.

The identified themes from the research offer insights for physiotherapy practitioners on potential considerations when collaborating with parents and the core aspects of parent-professional collaboration. The importance of articulating and documenting parent experiences, suggestions, and thoughts is evident, given that caregiver involvement and collaboration in the rehabilitation process are not only encouraged but also expected.

The interviewee emphasizes the need for parents to feel heard and for therapists to carefully listen and believe the messages from caregivers regarding their child and family's resources and individual situations. Additionally, the participant mother highlights the significance of topics like interaction and communication in pediatric care, given that physiotherapists regularly interact with families and engage in discussions of sensitive topics.

The study analysis presents some challenges. Due to low data saturation, the representation of the emerging themes could be skewed towards a particular perspective. Additionally, the interviews were conducted in the native languages of the participants and the author, and then transcribed into English. Language transcription always carries the risk of misinterpretation or message loss. Despite efforts to maintain objectivity, the emerging themes and subthemes are inevitably influenced by the authors' interpretation, knowledge, and personal perceptions on the subject.

Because of limited data saturation, broader generalizations from these results are not possible. Nevertheless, the perspectives and themes derived from the respondent interviews are particularly insightful and could be valuable for future research replication and raising awareness among physical therapists and other interested readers.

During their education, physiotherapy students concentrate on addressing the physical, pain, and movement-related issues associated with patient care. Beyond the apparent focus on these aspects, there are social and psychological factors that significantly influence the overall process. Being mindful of more than what may be considered "profession-specific," such as musculoskeletal, neurological, and functional capacity issues, can assist patients and their families in defining and achieving goals, enhancing well-being, and ensuring satisfaction and adherence to care. The adoption and application of a holistic biopsychosocial model by physiotherapists are paramount in delivering high-quality patient care that our pediatric patients and their families deserve.

9 DISCUSSION

The purpose of this study was to enhance the understanding of the factors influencing therapeutic collaboration and communication between parents and therapists in pediatric physical therapy. The study adopted a qualitative, thematic interview approach. One parent (n=1) of a child living with cerebral palsy participated in the study and underwent an interview. The data collected were analyzed using a thematic analysis method.

The study's results revealed collective factors—trust, family-centeredness, and communication—that play a role in structure of parent-therapist collaboration in pediatric rehabilitation. These themes emerged from the specific and individual context of the participant interviewed, encompassing their personal factors, the circumstances of their child, and the dynamics within their family.

In the subsequent chapter, the study's findings are discussed in relation to previous research. The contribution of these results to the practical aspects of the field of physical therapy is highlighted. Additionally, suggestions for further research are presented, along with identification of educational needs for physical therapy students.

Research in the field of physical therapy has uncovered findings similar to those presented in this study. For instance, Crom et al. (2020) highlighted the significance of therapeutic alliance (i.e., collaboration) as emphasized by parents, children, and therapists in their research. The study identified common themes, including the "importance of trust in physical therapists," transparency in information sharing, and negotiation regarding treatment goals and tasks. Trust also emerges as one of the three themes discovered in the research conducted by Stefánsdóttir and Thóra Egilson (2016).

Research conducted by Kruijsen-Terpstra et al. (2016) explored parents' experiences and needs regarding physical and occupational therapy for their young children through interviews. The study revealed themes related to information, communication,

partnership, and the parental empowerment process. Additionally, An et al. (2016) proposed strategies, such as "open communication," to foster collaboration among mothers of children with physical disabilities coinciding with the results of this thesis. Understanding that the aforementioned studies from the field of physiotherapy are reasonably small in size, more research is definitely needed.

In their randomized controlled trial, An et al. (2019) aimed to investigate the impact of a collaborative intervention approach on parent-therapist interaction. The study comprised a control group and an experimental group of therapists. The experimental group received information and strategies for enhancing collaboration with parents in goal setting, planning, and implementing interventions. The results of the study indicate that parents and therapists in the experimental group engaged in more interactions, leading to an increase in parent participation. Therapists in this group exhibited higher frequencies of behaviors such as "seeking information," "providing information," and displaying "positive behavior." This study and its findings demonstrate that with additional training, therapists can achieve substantial and positive outcomes in collaboration with their child patients' parents.

An additional illustration of the effectiveness of training in communication and collaboration skills is evident in a study conducted by G. King et al. (2017). In this study, pediatric rehabilitation clinicians underwent solution-focused coaching to enhance their personal listening goals, accompanied by video simulation training. The participants reported experiencing immediate changes in their clinical and interprofessional practices, attributing these improvements to the enhanced self-reported listening skills.

The theme of "family-centeredness" may not have surfaced in the themes of the studies presented, possibly because of its broad nature or the lack of public knowledge of the term in parent populations. The author acknowledges that this theme emerging in the thesis’s research could have been more specifically defined within a niche, contributing to family-centeredness in rehabilitation.

Family-centered care itself is widely recognized as the most effective approach in pediatric rehabilitation, yielding favorable outcomes for both caregivers and children. (Alharbi et al., 2023). Family-centered practice encompasses principles such as respectful treatment of families, collaborative partnerships with parents, effective communication, and providing comprehensive treatment options to empower families to make informed decisions about their care (Almasri et al., 2018; Dunst et al., 2002, 2007; S. King et al., 2004).

Pediatric physical therapists face challenges in implementing family-centered care, including issues such as inadequate education, frustration on the part of the family, protective family members, cultural considerations, and external influences. The active and willing participation of family members is viewed as a facilitator for family-centeredness, as highlighted by Vajravelu & Solomon (2014). Additionally, studies in the nursing field suggest that practitioners, particularly nurses in this instance, may lack communication towards parents and may fail to engage in negotiations, hindering the collaborative nature of family-centered care and parent involvement (Corlett & Twycross, 2006).

The journey with this thesis was undoubtedly challenging, primarily due to the author's inexperience in writing longer papers and conducting research. Nevertheless, the author acknowledges the invaluable lessons gained from this experience, which have contributed to a deeper understanding of the subject matter and provided tangible clinical insights. These lessons will undoubtedly prove beneficial in the author's future career as a physiotherapist.

9.1 Suggestions for Future Research

Future research is needed to establish a comprehensive understanding of the factors and themes that facilitate or hinder collaboration between physiotherapists and parents in pediatric physiotherapy. This research did not include a rigorous literature review but a preliminary search using terms like "(physiotherapist* OR "physical therapists" OR "physical therapist") AND (communication OR encounter OR interaction) AND (parent* OR father OR mother OR guardian*)" in databases such as PubMed,

Cochrane, Google Scholar, and Finna yielded a very limited number of articles specifically focused on parent-provider collaboration in the physical therapy field.

Building upon the foundation of this thesis, it would be beneficial to expand the research by conducting similar interviews with a larger and more diverse group of parents to determine whether the themes identified in this thesis are consistent or require revision. This broader approach could potentially generate a richer pool of themes and uncover new ideas and concepts for future research. Additionally, the research approach could be shifted towards phenomenological interviewing and analysis, which would allow adept exploration of lived experience and meaning of the caregiver's message.

Incorporating interviews with pediatric physical therapists into these future research projects would provide a more comprehensive understanding of the dynamics between parents and physical therapists. Gaining insights from both parties would facilitate constructive discussions about potential improvements in collaboration, ultimately contributing to the provision of the highest quality rehabilitation care for children.

9.2 Physical Therapy Student Educational Needs

Given the demonstrated effectiveness of empathetic collaboration and communication in enhancing patient adherence and health outcomes, it is plausible to hypothesize that these principles extend to interactions with parents in pediatric rehabilitation. The author proposes that Finnish physical therapy curricula should place greater emphasis on collaborative and communicative approaches within pediatric physiotherapy courses. Considering that the physical therapy degree falls within the applied sciences domain, it is logical to emphasize strategies for fostering trust-based relationships, effective communication, and empathetic engagement with future patients and their families/parents.

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INVITATION LETTER. APPENDIX 1

Hei vanhempi,

Nimeni on Sampo ja opiskelen kolmatta vuotta fysioterapeutiksi Porissa, Satakunnan ammattikorkeakoulussa. Olen tekemässä opinnäytetyötäni aiheesta "Vanhemman kokemuksia fysioterapeutin kanssa toimimisesta lapsen kuntoutusprosessin aikana. Esimerkkejä ja malleja kohtaamisesta, yhteistyöstä ja kommunikaatiosta". Opinnäytetyöhöni liittyen etsin haastateltaviksi vapaaehtoisia vanhempia, joilla on kokemusta aiheesta. Haastatteluja on yksi ja se kestää noin. 40–60 minuuttia. Haastattelut toteutetaan tulevan kevään/kesän aikana videoyhteyspalvelu Microsoft Teamsin välityksellä. Haastatteluista kerättyjä tietoja käsitellään anonyymisti ja luottamuksellisesti. Haastattelumateriaali hävitetään työn valmistuttua viimeistään 1.1.2024. Valmis työ ladataan julkiseen näkyvyyteen THESEUS.fi sivustolle.

Opinnäytetyöni aiheen rajauksen vuoksi toivon saavani mukaan vanhempia, joiden lapsella on todettu keskushermostoon (aivot ja selkäydin) vaikuttava vamma tai sairaus, jonka kuntoutusprosessissa on ollut mukana fysioterapeutti tai fysioterapeutteja. Opinnäytetyön tavoitteena on tuoda esiin vanhemman ja fysioterapeutin yhteistyötä edistäviä ja/tai estäviä toimintamalleja. Tarkoituksenani on myös esittää mahdollisia vuorovaikutukseen liittyviä koulutustarpeita tuleville fysioterapeuteille.

Jos olet kiinnostunut osallistumaan, voit olla yhteydessä minuun alta löytyvän sähköpostiosoitteen välityksellä. Lähetän vapaaehtoisille viiden (5) euron arvoisen kahvilalahjakortin haastatteluiden päätyttyä. Vastaan mieluusti kysymyksiin ja tarjoan lisätietoa osallistumiseen liittyen. Kiitos mielenkiinnostanne ja mukavaa kevään jatkoa!

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INFORMED CONSENT FORM. APPENDIX 2

TIETOA TUTKIMUKSEEN OSALLISTUVALLE VAPAAEHTOISELLE JA TIETOON PERUSTUVAN SUOSTUMUKSEN ANTAMINEN

Alla kuvaan fysioterapeutin ammattikorkeakoulututkintooni liittyvän opinnäytetyön aihetta ja siihen sisältyvää tapaustutkimusta. Selvitän vapaaehtoisen osallistujan työpanoksen, oikeudet ja lopuksi pyydän tietoon perustuvaa suostumusta.
Tutkimuksella ei ole rahoittajaa. Työn tilaaja: Satakunnan Ammattikorkeakoulun HYVO osaamisalue.

Tutkimuksen aihe ja tavoitteet

Olen valinnut aiheekseni tarkastella fysioterapeutin ja lapsen huoltajan välistä kohtaamista ja kommunikaatiota. Olen erityisen kiinnostunut kuntoutusprosessia edistävistä tai heikentävistä toimintamalleista, terapeuttien kommunikaatiovalmiuksista ja roolista osana moniammatillista terveydenhuollon tiimiä. Tarkoituksenani on myös esittää mahdollisia vuorovaikutukseen liittyviä koulutustarpeita tuleville fysioterapeuteille. Haluaisin kuulla huoltajan omakohtaisia kokemuksia fysioterapeuttien kanssa toimiessa lapsen kuntoutusprosessin aikana.

Vapaaehtoiselta pyydetty ajankäyttö

Vapaaehtoiselta pyydän osallistumista 40-75min. kestävään videopuheluun kanssani, jolloin keskustelemme aiheesta.

Tietojen kerääminen ja työn aikataulu

Tiedot kerätään haastateltavan kanssa sovittuna ajankohtana puolistrukturoidun haastattelun yhteydessä Microsoft Teams palvelun videopuhelussa. Työ valmistuu ja tallennettu haastattelu tuhotaan viimeistään 1.1.2024.

Tiedonhallinta ja luottamuksellisuus

Haastattelu perustuu vapaaehtoisuuteen ja osallistumisen voi keskeyttää missä tahansa prosessin vaiheessa. Haastattelutilanteessa toivon osallistujan pyytävän aiheen ohittamista tai haastattelun keskeyttämistä, jos tilanteesta aiheutuu minkäänlaista harmia tai haittaa.

Haastattelu nauhoitetaan ja tallennetaan litterointia varten allekirjoittaneen henkilökohtaiseen OneDrive palveluun, kahden salasanan taakse. Haastattelusta saamaani tietoa käytän opinnäytetyössä anonyymisoituna ja seuraan tutkimusmenetelmäni eettisiä ohjeita tunnistamattomuuden takaamiseksi. Henkilötietoja ei käsittele muut kuin allekirjoittanut eikä niitä luovuteta kolmansille osapuolille. Työn valmistuttua tallennettu haastattelu tuhotaan ja kirjoitettu työ julkaistaan THESEUS.fi verkkosivulle julkiseen näkyvyyteen.

Osallistumiseen liittyvät mahdolliset riskit ja hyödyt

Aiheen luonteeseen liittyen haastatteluissa käsiteltävät asiat ovat hyvinkin henkilökohtaisia ja voivat herättää voimakkaita tunteita, joten mm. psyykkisen stressin kokemisen riski on olemassa. Haastattelija on luvannut kiittää haastateltavaa osallistumisesta kymmenen (10) euron arvoisella kahvilalahjakortilla.

Lisää vapaaehtoisen oikeuksista

EU:n yleinen tietosuoja-asetus (EU 2016/679), art. 12, 13, 14

Rekisteröityjen oikeudet ja niiden mahdollinen rajoittaminen. Rekisteröidyillä on EU:n yleisen tietosuoja-asetuksen (GDPR) nojalla seuraavat oikeudet:

- **oikeus tutustua tietoihin**
  Rekisteröidyllä on oikeus saada tietää, mitä tietoja yliopistolla on hänestä tai saada vahvistus siitä, että yliopisto ei käsittele hänen henkilötietojaan.

- **Oikeus oikaisuun**
  Rekisteröidyllä on oikeus saada yliopiston hallussaan pitämät virheelliset, epätarkat tai puutteelliset henkilötiedot oikaistua tai täydennettyä ilman aiheetonta viivytystä. Lisäksi rekisteröidyllä on oikeus saada tarpeettomat henkilötiedot poistetuksi yliopiston järjestelmistä.

- **Oikeus tietojen poistamiseen**

Poikkeuksellisissa olosuhteissa rekisteröidyillä on oikeus saada henkilötietonsa poistetuksi rekisterinpitäjän rekisteristä ("oikeus tulla unohdetuksi").

- **Oikeus käsittelyn rajoittamiseen**
  Tietyissä olosuhteissa rekisteröidyillä on oikeus pyytää yliopistoa rajoittamaan henkilötietojensa käsittelyä, kunnes heidän tietojensa oikeellisuus tai heidän tietojensa käsittelyn peruste on asianmukaisesti tarkistettu ja mahdollisesti tarkistettu tai täydennetty.

- **Oikeus vastustaa**
  Tietyissä olosuhteissa rekisteröidyt voivat milloin tahansa vastustaa henkilötietojensa käsittelyä pakottavista henkilökohtaisista syistä.

- **Oikeus tietojen siirrettävyyteen**
  Rekisteröidyllä on oikeus saada kopio yliopistolle toimittamistaan henkilötiedoista yleisesti käytetyssä, koneellisesti luettavassa muodossa ja siirtää tiedot toiselle rekisterinpitäjälle.

- **Oikeus tehdä kantelu valvontaviranomaiselle**
  Rekisteröidyllä on oikeus tehdä valitus vakituisen asuinpaikkansa tai työpaikkansa valvontaviranomaiselle, jos hän katsoo, että hänen henkilötietojensa käsittelyssä rikotaan tietosuoja-asetuksen (EU 2016/679) säännöksiä. Lisäksi rekisteröidyt voivat käyttää muita hallinnollisia menettelyjä valittaakseen valvontaviranomaisen päätöksestä tai hakeakseen oikeussuojaa.

Allekirjoittamalla todistan ymmärtäväni tässä dokumentissa mainitut tiedot koskien vapaaehtoista osallistumista Sampo Putkurin opinnäytetyön tapaustutkimukseen. Allekirjoitetun suostumuksen perumiseen riittää sanallinen ilmoitus.

PAIKKA JA AIKA: [redacted] 6.6.23

ALLEKIRJOITUS:

X [redacted]

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