The Impact of Parent Coach Professional Development

on the Clinical Practice of Early Interventionists

by

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Abstract

Early childhood organizations and funders highlight the crucial role of Early Intervention (EI) service providers in empowering families to support children with developmental delays. Research underscores the significance of training and coaching for parents' skill development (Dunst & Trivette, 2009; Fixsen et al., 2005). However, researchers often train or coach caregivers in efficacy studies, ignoring community-based EI providers as natural change agents. To put effective programs into common use, we must attend to developing the coaching skills of EI providers (p. xiii, Odom, 2013) because, despite its emerging popularity, the use of parent coaching (PC) among (EI) professionals has been inconsistent to date (Douglas et al., 2020; Meaden et al., 2017). Many factors contribute to the poor uptake of parent coaching, including inadequate Professional Development (PD) opportunities (Douglas et al., 2020; Williams & Sawyer, 2023). Given the limited literature on PD for PC, this dissertation aims to present a detailed PD model for learning PC skills called Relationship Strength-based (RSB) coaching and a study evaluating its effectiveness, feasibility, and acceptability. This dissertation is written in paper-based style, with Chapters two, three, and four prepared for publication. Chapter one introduces the purpose and organization of the dissertation; chapter two presents a detailed PD model of RSB Coaching. Chapter three provides a case study of RSB coaching and is a practical resource for early interventionists and others working with young children with disabilities. It has been submitted to Young Exceptional Children. Chapter four describes a study evaluating the effectiveness, feasibility, and acceptability of the RSB PD with nine in-service EIs. All nine participants improved their PC skills, found the training useful to their EI practices, and indicated their intent to use coaching in their future EI work. The feasibility of implementing a ten-month PD program was challenging for the community organization, and considerations to make the PD

more feasible are examined. Finally, Chapter Five summarizes the research program, detailing the contributions, limitations, and future directions.

Preface

This thesis is an original work by Michaela Jelen. This thesis research received research ethics approval from the University of Alberta Research Ethics Board, Project Name "The impact of parent coach training on the clinical practice of early interventionists," Study ID Pro00115869, on February 3, 2022. This thesis research also received a certificate of ethical approval from the Health Research Ethics Board at Vancouver Island Health, Project Name "The impact of parent coach training on the clinical practice of early interventionists", Study Number H2022-024, on June 22, 2022.

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Chapter I: Introduction

The shift from expert-driven to collaborative care in health, educational, and social services occurred in the 1970s and 80s and has been described as a 'movement' that changed how services are provided to children with complex needs and their families. Family-Centred Practice (FCP), an example of collaborative care, respects the pivotal role of families. "Parents and professionals are seen as equals in a partnership committed to the development of optimal quality in the delivery of [care]" (Brewer et al., 1989, p. 1055). It follows that, within the framework of FCP, parents play a pivotal role as decision-makers in determining the most suitable support and services for their child.

Parent coaching operationalizes FCP by clearly outlining a process for working with families (Rush & Shelden, 2020; Williams & Sawyer, 2023). The parent coach walks alongside parents to support them in learning strategies to guide their child's development within their family context. Parents and coaches set goals collaboratively and work together to achieve them. It is an equal partnership. Joint planning, problem-solving, reflection, and information sharing are key activities within a coaching session (Rush & Shelden, 2020).

Early childhood organizations (e.g., Division Early Childhood of the Council for Exceptional Children) and provincial funders (e.g., Alberta Children's Services, British Columbia Ministry of Children and Families) highlight the crucial role of Early Intervention (EI) service providers in empowering families to support children with developmental delays. Research underscores the significance of training and coaching for adults' skill development (Dunst & Trivette, 2009; Fixsen et al., 2005). However, researchers exploring the efficacy of Parent Coaching (PC) often take on the role of parent trainers or coaches, ignoring community-based EI providers as natural change agents. To put effective parent coaching programs into

common use, as Sam Odom, a pioneer in the field of EI, said, to transmit the "journal article to the block corner," we must attend to developing the coaching skills of EI providers (p. xiii, Odom, 2013).

There is a need to develop the PC skills of EI providers. Survey research has revealed that while FCP has broad appeal to professionals working in EI, there is limited evidence that EI professionals use FCP principles (Elenko et al., 2019; Francois et al., 2015) and related coaching strategies (Douglas et al., 2020) with the families they support. For example, while many EI professionals engage in dialogue with parents around strategies specific to child goals, few help parents learn *how* to implement EI strategies themselves; instead, they model effective strategies with the child while parents passively watch (Rush, 2018; Williams & Sawyer, 2023). As a result, parents become more reliant on experts and less likely to demonstrate the skills that will help their child's development. In their survey of EI providers using caregiver coaching, Douglas et al. (2020) found that most interviewees did not find their preservice or in-service training sufficient to learn PC. Furthermore, EI professionals consistently reported that several coaching practices (Hanft et al., 2011) were challenging to implement, so they did not utilize them. The authors recommend that EI providers have better access to PC training to support them in better understanding how to use coaching practices and utilize them consistently. In their position paper, Romano & Schnurr (2022) articulate that there are few studies on training EI providers in coaching and identify a need to develop and evaluate PD approaches for PC models.

Given the limited extant literature on PD for PC, this dissertation aims to present a detailed PD model for learning PC skills up to the level of clinical competency, the Relationship Strength-based (RSB) coaching approach, and a study evaluating its effectiveness, feasibility,

and acceptability. This dissertation is written in paper-based style, with Chapters two, three, and four prepared for publication.

Chapter two presents a detailed PD model of the newly developed RSB coaching approach. This paper is under review with Topics in Early Childhood Special Education. It lays out the foundational elements of RSB coaching and details the activities that make up the PC process. Chapter two also delineates how the RSB coaching PD was conceptualized and structured around an established framework of clinical competency (i.e., Miller's pyramid, Miller 1990). Finally, Chapter two reviews the literature used to develop an observational measurement tool (i.e., the parent coaching competency rating scale, PCCRS) and describes how the PCCRS is utilized in the RSB coaching PD program.

Chapter three provides a case example of RSB coaching and is a practical resource for early interventionists and others working with young children with disabilities. It has been submitted to Young Exceptional Children. The case example introduces an EI provider and a parent of a child with developmental delays. It outlines how the EI provider and parent enter into a PC relationship. The case example uses the RSB coaching approach to illustrate how they work together to develop and address goals the parent wants to accomplish with their child.

Chapter four describes a pilot study evaluating the effectiveness, feasibility, and acceptability of the RSB coaching PD with nine in-service EIs. This mixed-method case study design outlines how the RSB coaching PD was implemented in a community-based EI program on Vancouver Island. The research questions that guided the study explored the extent to which the PD program impacted the PC clinical competency of the participants. Further, the study explored participants' experiences, the feasibility of the PD program in a real-world setting, and the acceptability of the RSB coaching PD.

Finally, chapter five summarizes the research program, detailing the contributions, limitations, and future directions. The reviewed work underscores the importance of customized PD to enhance PC practices for EI providers in community-based settings.

Qualitative research requires researchers to interpret data used to draw research conclusions. Researchers must acknowledge biases, values, and backgrounds related to the data analysis and interpretation of results (Creswell, 2014). I am an applied researcher who strives to find practical solutions to research problems that have the purpose of ameliorating experiences related to early intervention with children with developmental disabilities and their families. As an early interventionist who has worked with children and families for over 25 years, I consistently lean in on my experiences with children and families and relate them to my strong belief in the importance of family-centred practice (Brewer et al., 1989). My biases, experiences, and beliefs inform the methodology described in this paper-based dissertation.

Note: tables and figures are integrated into the text of chapters two, three, and four for easy readability.

Glossary of Terms

Acceptability. The perception of stakeholders that a treatment, service, practice, or innovation is agreeable, palatable, or satisfactory. Lack of acceptability has long been noted as a challenge in implementation (Davis 1993). Acceptability should be assessed based on the stakeholders' knowledge of or direct experience with the specific intervention, practice, technology, or service dimensions within a particular setting (Proctor et al., 2011).

Assessment of Clinical Competency. Measuring the same construct more often allows for replication, thereby improving the reliable aggregation and interpretation of assessment results (van der Vleuten et al., 1991; 2005; 2010). Ongoing evaluation of student competence can occur

across assessment methods over time points, with different assessors, with varying opportunities for practice, with instructor feedback, and with time for self-reflection during the professional development program (van der Vleuten et al., 2010). The most robust assessment of clinical competence involves combining assessment information across sources and time points.

Caregiver. The primary carer of a child. In this paper, caregiver and parent are used interchangeably.

Clinical Competence. Clinical competency implies professionalism, appropriate communication, the understanding and contextual application of content knowledge, practical skills, and clinical reasoning (Epstein & Hundert, 2002; Thampy et al., 2019). Competence is "the judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served" (Epstein & Hundert, 2002, p. 226). Clinical competencies represent a predetermined set of skills, activities, or protocols (i.e., fidelity) and imply the capability of independent clinical reasoning as per the predetermined program or set of skills that are not always observable but present. To demonstrate knowledge and performance of predetermined practice, strong clinical competence denotes a way of being (Cruess et al., 2018).

Early Intervention (EI) Professional. This paper uses the terms professional, practitioner, and provider interchangeably. In this paper, EI professionals represent the fields of speech-language pathology, physical therapy, occupational therapy, and infant development specialists working with children aged zero to five with developmental delays or disabilities.

Feasibility. Feasibility is whether a new treatment or innovation can be successfully used or carried out within a given setting (Karsh 2004). While feasibility is related to appropriateness, the two constructs are conceptually distinct. For example, a program may be appropriate for a

service setting because it is compatible with its mission or service mandate but not feasible due to resource or training requirements (Proctor et al., 2011).

Fidelity. A predetermined set of skills, activities, or protocols outlines a program's implementation (Dane & Schneider 1998). Fidelity measurement tools are commonly used in prescribed EI programs (e.g., Rogers et al., 2021; Ingersoll & Dvortcsak, 2019) and guide how the programs are meant to be implemented per manualized protocols. Fidelity measurement tools are typically intended to be used to evaluate program implementors.

Parent. The primary carer of a child. In this paper, parent and caregiver are used interchangeably.

Parent Coaching. Parent coaching is interchangeably used with caregiver coaching. Parent coaching operationalizes FCP by clearly outlining a process for working with families (Rush & Shelden, 2020; Williams & Sawyer, 2023). The coach walks alongside caregivers to support them in learning strategies to guide their child's development within their family context. It does not have a distinct curriculum of skills, supports, and strategies that guide the coaching sessions. It is a set of clinical practices rather than a prescribed set of intervention targets for the EI provider to teach the parents. Parents and coaches set goals collaboratively and work together to achieve them. It is an equal partnership. Joint planning, problem-solving, reflection, feedback, and information sharing are critical activities within a coaching session (Friedman & Woods, 2012; Kemp & Turnbull, 2014; Lorio et al., 2020; Loiro et al., 2012; Rush & Shelden, 2020). In coaching, the aim is for parents to demonstrate new skills with coach support and learn how to become critical decision-makers about their child's development. The EI professional coaches and supports the parent in learning support, strategies, developmental information, and skills to help them achieve their goals for themselves and their child. The parent is the 'expert' on their

child, family context, and home circumstances. The coach is the 'expert' on supports, strategies, and developmental information that parents need to achieve their goals. In coaching, these two types of expertise are equally balanced.

Parent Training. Parent training involves a one-way flow of information from 'expert' EI professional or related source (i.e., online webinar) to parent or caregiver. The training may occur in groups (i.e., Carter et al., 2011), one-on-one, or through synchronous or asynchronous in-person or online webinars or workshops (e.g., Martin et al., 2022). Parents seek to learn about intervention or developmental information specific to their child. The aim is to teach a prescribed set of content rather than use processes that scaffold the learning. The 'expert' (i.e., EI provider or source of information) determines the content and pace at which information is provided.

Parent Mediated Intervention. Parents or caregivers learn to implement evidence-based intervention with their child. EI providers support parents in learning a prescribed set of intervention targets for the EI provider to teach the parents. An overarching goal is for caregivers to implement intervention with their children to increase child learning opportunities (Meadan & Daczeitz, 2014; Oono et al., 2013). A parent coaching style of support is often used as the mechanism to support parents in learning the specified skills (e.g., Brian et al., 2022; Meadan et al., 2020; Mirenda et al., 2021; Wainer et al., 2017; Rogers et al., 2021); however, the EI professional guides the goal identification and the content, skills, and strategies that the parent will learn.

Professional Development. In this paper, there are times when training is used to replace the term professional development. However, what is always implied is respecting adult learning principles related to the learners. That is, rather than training participants in a specified set of skills, professional development in the RSB model implies that the trainer is using adult learning

principles to consistently draw on participants prior experiences, understand their internal motivations for learning about RSB, understand their rationale for needing to know specific content, and meet them where they are at in their readiness to learn. This becomes particularly relevant during level three of the RSB coach professional development program; how the trainer responds to the coach related to family dynamics requires responsivity from the trainer to the coach in working through the RSB coaching content.

Commonly Used Abbreviations

DM. Defining mastery. An activity of the RSB coaching approach.

EI. Early Intervention. Representative of all early intervention disciplines specific to young children with developmental delays or disabilities.

EIP. Early Intervention Program. The program at Island Health where the participants from the described study (i.e., chapter four) worked.

FCP. Family centered practice.

LF. Laying the foundation. An activity of the RSB coaching approach.

JP. Joint Planning. An activity of parent coaching and the RSB coaching approach.

PC. Parent coaching. Used synonymously with caregiver coaching.

PCCRS. Parent coaching competency rating scale. The rating scale used in the RSB coaching approach.

PD. Professional development.

PO. Practice and observation. An activity of parent coaching and the RSB coaching approach.

RSB. Relationship strength based coaching approach.

TI. Topic Instruction. An activity of the RSB coaching approach.

References

Brewer, E.J., McPherson, M., Magrab, P.R. & Hutchins, V.L. (1989) Family-Centered, Community-based: coordinated care for children with special health care needs, *Pediatrics, 83*(6), 1055-1060.

Brian, J., Solish, A., Dowds, E. et al. (2022). "Going Mobile"-increasing the reach of parent-mediated intervention for toddlers with ASD via group-based and virtual delivery. *Journal of Autism and Developmental Disorders, 52*, 5207-5220. https://doi.org/10.1007/s10803-022-05554-7

Carter A.S., Messinger D.S., Stone W.L., Celimli S., Nahmias A.S., Yoder P. (2011). A randomized controlled trial of Hanen's "More Than Words" in toddlers with early autism symptoms. *Journal of Child Psychology and Psychiatry: 52*(7); pp. 741–752.

Charlin, B. & van der Vleuten, C. (2004). Standardized assessment of reasoning in contexts of uncertainty: the script concordance approach. *Evaluation & the Health Professions, 27(*3), pp. 304-319.

Cruess, R.L., Cruess, S.L., Steinhert, Y. (2016). Amending Miller's Pyramid to include professional identity formation. *Academic Medicine, 91(2)*, p. 180-185.

Creswell, J. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th Edition ed.). SAGE Publications, Inc.

Dane, A. V., & Schneider, B. H. (1998). Program integrity in primary and early secondary prevention: Are implementation effects out of control? Clinical Psychology Review, 18, 23-45.

Davis, F. (1993). User acceptance of information technology: System characteristics, user perceptions and behavioural impacts. *International Journal of Man-Machine Studies, 38*, 475–487.

Douglas, S. N., Meadan, H., & Kammes, R. (2020). Early interventionists' caregiver coaching: A mixed methods approach exploring experiences and practices. *Topics in Early Childhood Special Education, 40(*2), 84–96.

Dunst, C.J. & Trivette, C. (2009). Let's be PALS: an evidence-based approach to professional development. *Infants & Young Children, 22(*3), 164-176.

Elenko, B. (2019). Preparing occupational therapists for effective family-centered best practice in early intervention. *Infants & Young Children, 23(*4), 270-279.

Epstein, R.M., & Hundert, E.M. (2002). Defining and assessing professional competence. *JAMA, 287(*2), p. 226-234.

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation research: A synthesis of the literature.* University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Francois, J.R., Coufal, K.L., & Subramanian, A. (2015). Student preparation for professional practice in early intervention. *Communication Disorders Quarterly, 36(*3), 177-186.

Friedman, M., Woods, J., & Salisbury, C. (2012). Caregiver coaching strategies for early intervention providers: moving toward operational definitions. *Infants & Young Children, 25(*1), pp. 62-82.

Hanft, B. Rush, D. & Shelden, M. (2011). *The Early Childhood Coaching Handbook.* Baltimore, MD: Brookes Publishing.

Ingersoll, B. & Dvortcsak, A. (2019). *Teaching social communication to children with autism & other developmental delays: the project ImPACT guide to coaching parents*. The Guilford Press: New York, NY.

Karsh, B. T. (2004). Beyond usability: Designing effective technology implementation systems to promote patient safety. *Quality and Safety in Health Care, 13*, 388–394.

Kemp, P. & Turnbull, A. (2014). Coaching with parents in early intervention: an interdisciplinary research synthesis. *Infants & young children, 27(*4), 305-324.

Lorio, C.M., Romano, M., Woods, J.J., & Brown, J. (2020). A review of problem solving and reflection as caregiver coaching strategies in early intervention. *Infants & Young Children, 33(*1), 35-70.

Lorio, C.M., Woods, J.J., & Snyder, P. (2021). An exploration of reflective conversations in early intervention caregiver coaching sessions. *Journal of Early Intervention, 45(*4), 1-25.

Meadan, H., Chung, M. Y., Sands, M. M., & Snodgrass, M. R. (2020). The cascading coaching model for supporting service providers, caregivers, and children. *The Journal of Special Education*, 54(2), 113–125.

Meadan, H. & Daczewitz, M.E. (2014). Internet-based intervention training for parents of young children with disabilities: a promising service-delivery model. *Early Child Development and Care, 185(*1), pp. 155-169.

Meadan, H., Douglas, S., Kammes, R., & Schraml-Block, K. (2018). "I'm a different coach with every single family": Early Interventionists' beliefs and practices. *Infants & Young Children, 31(*3), pp. 200-214.

Martin, J.G., Rivard, M., Patel, S., Lanovaz, M.J., & Lefebvre, C. (2022). Randomized controlled trial on an online training to support caregivers of young children with intellectual and developmental disability managing problem behaviours at home. *Journal of Child and Family Studies, (*31), pp. 3485-3497.

Miller, G. (1990). The Assessment of clinical skills/competence/performance. *Academic Medicine (September Supplement), 65(*9), pp. S63-S67.

Mirenda, P., Smith, V., Colozzo, P., Vismara, L.A., Ungar, W.J. & Kalynchuk, K. (2021). Training coaches in community agencies to support parents of children with suspected autism: outcomes, facilitators and barriers. *Journal of Autism and Developmental Disorders, DOI:* https://doi.org/10.1007/s10803-021-05363-4

Odom, S. L. (2013). Foreword. In T. Halle, A. Metz, & I. Martinez-Beck Applying Implementation Science in Early Childhood Programs and Systems (p. xii – xiv). Paul H. Brookes: Baltimore, MD.

Oono, I. P., Honey, E. J., & McConachie, H. (2013). Parent-mediated early intervention for young children with autism spectrum disorders (ASD). Cochrane Database of Systematic Reviews, Issue 4. Art. No.: CD009774. DOI: 10.1002/14651858.CD009774.pub2.

Proctor, E., Silmere, H., Raghaven, R., et al. (2011). Outcomes for Implementation Research: Conceptual Distinctions, Measurement Challenges, and Research Agenda. Administration and Policy in Mental Health, 38, 65-76.

Rogers, S.J., Dawson, G., & Vismara, L.A. (2021). *Coaching parents of young children with autism: promoting connection, communication, and learning.* The Guildford Press: New York, NY.

Romano, M., & Schnurr, M. (2022). Mind the gap: Strategies to bridge the research-to-practice divide in early intervention caregiver coaching practices. *Topics in Early Childhood Special Education*, 42(1), 64–76.

Rush, D. (2018). From Couching to coaching: how do we get families engaged in early intervention? It starts with us communicating their enormous influence on their children's development. *ASHA Leader*, Vol *23(*10), 46-52.

Rush, D., & Shelden, M. (2020). The Early Childhood Coaching Handbook, second edition. Paul H. Brooks Publishing: Baltimore, MD.

Thampy, H., Willert, E. & Raman, S. (2019). Assessing clinical reasoning: targeting the higher levels of the pyramid. *Journal of General Internal Medicine, 34(*8), p.1631-6. DOI: 10.1007/s11606-019-04953-4

Vismara, L.A., McCormick, C.E.B., Wagner, A.L. et al. (2018). Telehealth parent training in the Early Start Denver Model: results from a randomized controlled study. *Focus on Autism and Other Developmental Disabilities, Vol 33(*2), pp. 67-79.

van der Vleuten. C., Norman, G., & De Graaff, E. (1991). Pitfalls in the pursuit of objectivity: issues of reliability. *Medical Education,* 25(2), 110-118.

van der Vleuten C., & Schuwirth L. (2005). Assessing professional competence: from methods to programmes. *Med Educ*. *39(*3): 309–317.

van der Vleuten, C. P. M., Schuwirth, L. W. T., Scheele, F., Driessen, E. W., & Hodges, B. (2010). The assessment of Professional Competence: Building Blocks for theory development. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *24*(6), 703–719.

Wainer, A.L., Pickard, K. & Ingersoll, B.R. (2017). Using web-based instruction, brief workshops, and remote consultation to teach community-based providers a parent-mediated intervention. *Journal of Child Family Studies, 26,* 1592-1602.

Williams, C.S. & Sawyer, G.E. (2023). Going beyond "I'm a coach": Adopting a caregiver coaching framework in EI. *Young Exceptional Children, 27(*1), pp. 3-15. https://doi.org/10.1177/10962506231153

Chapter II: Relationship and Strength-based Coaching: Professional Development Framework

Abstract

Despite the growing popularity of parent coaching (PC) in Early Intervention (EI) settings, its integration among professionals has been inconsistent, impeding its potential impact. This paper addresses the challenges associated with the underutilization of PC, including diverse interpretations of coaching and insufficient professional development (PD) opportunities for in-service early interventionists (EIs). Building on the existing literature, the paper introduces a comprehensive PD model to facilitate adopting the newly developed Relationship Strength-based (RSB) approach to PC. The paper outlines the key components of the PD model, emphasizing its potential to enhance practitioners' skills and confidence in implementing RSB parent coaching. Given the limited body of literature on PD for parent coaching, the paper provides insights that can inform the refinement of training strategies for early interventionists and ultimately improve outcomes for families participating in EI programs.

Despite its emerging popularity, the use of parent coaching (PC) among Early Intervention (EI) professionals has been inconsistent to date (Meadan et al., 2018). Many factors contribute to the poor uptake of PC, including disparate definitions (Lorio et al., 2020) and inadequate professional development (PD) opportunities for in-service early interventionists (EIs) (Williams & Sawyer, 2023). Given the limited literature on PD for PC, this paper aims to present a detailed PD model for learning a PC framework, the Relationship Strength-based (RSB) approach. The PD program will lay the foundation for a subsequent study evaluating its effectiveness, feasibility, and acceptability (i.e., Chapter 4).

The RSB coaching framework and its PD were developed for this dissertation work. It is informed by an examination of parent coaching literature, encompassing peer-reviewed publications (e.g., Brian et al., 2022; Friedman et al., 2012; Kemp & Turnbull, 2014; Lorio et al., 2020; Lorio et al., 2021; Wainer et al., 2017) and manuals from established parent coaching programs (e.g., Ingersoll & Dvortcsak, 2019; Rush & Shelden, 2020; Rogers et al., 2021; Woods, 2021). Additionally, the author leveraged her experience in PC and training others in coaching. A synthesis of this comprehensive review shaped the components of RSB, detailed in the paper's first section. In the second section, the RSB coaching PD program is outlined. The PD is organized around four components of Miller's pyramid of clinical competence (Miller, 1990). The initial two levels (Knows and Knows How) emphasize learner knowledge, while the subsequent levels (Shows How and Does) focus on behaviours leading to clinical competence. Accordingly, assessments were developed to measure learner knowledge and clinical competence.

Development of the Relationship and Strength-Based Coaching Approach

Several authors (e.g., Freidman et al., 2012; Kemp & Turnbull, 2014; Lorio et al., 2020, 2021; Rush & Shelden, 2020; Woods, 2021) describe PC frameworks which include implementation procedures, examples of the practices or coaching activities, and tools to assess implementation. Romano and Schnurr (2022) suggest that EIs adopt only one coaching framework to increase the likelihood of implementation fidelity. Closely following the guidance from one framework will enhance their professional practice and the overall quality of services provided to children and families.

The RSB coaching framework developed for this dissertation has much in common with other coaching approaches (e.g., Rush & Shelden, 2020; Woods, 2021) and draws heavily from established PC practices described in the extant literature (i.e., Friedman et al., 2012; Kemp & Turnbull, 2014; Lorio et al., 2020; Meadan et al., 2020). Like other parent coaching approaches, RSB has the foundational elements of Family-Centered Practice and Adult Learning Principles. Unlike other approaches, it emphasizes establishing a Therapeutic Relationship throughout the coaching process and articulates the necessary and sufficient conditions for promoting its occurrence.

Family-Centred Practice

The most fundamental aspect of RSB coaching is Family-Centred Practice (FCP). The emergence of FCP in the 1980s represented a pivotal shift from expert-led approaches to collaborative support for families. This transition signified a profound paradigm shift, encapsulating a transformative movement in providing services for children with complex needs and their families (Rouse, 2012). Expert-driven care, prevalent before this shift, positioned families as passive recipients, guided by others in making clinical decisions for their children,

fostering an implied hierarchical relationship where the EI provider was perceived as knowing more than the parent (Rush, 2018; Williams & Sawyer, 2023). In contrast, FCP explicitly emphasizes an equal partnership between parents and EI providers throughout the relationship.

Rouse's (2012) review of FCP highlights the pivotal role of families in their children's care. She advocates for empowering them to make decisions for their children. The characteristics of FCP, such as cultural sensitivity, inclusivity, informed family choice, unbiased information sharing, meaningful parent involvement, individualization, flexibility, coordination, responsiveness, and mutual recognition of knowledge and expertise, serve as guiding principles for the partnership between EI providers and parents (Rouse, 2012). In practical terms, parents must be equipped with comprehensive information about their children's issues to participate as active decision-makers. For EI providers to fulfill their role effectively, they need a clear understanding of the family context, the parent's knowledge base, the strengths of both parent and child and the presenting issues. EI providers can offer the necessary information by listening, respecting, and understanding parents, enabling informed decision-making that aligns with the child's and family's goals. In FCP, the child's challenges and family dynamics are inseparable. FCP asserts that children exist within the intricate fabric of their families and the broader community, aligning with Bronfenbrenner's systems theory (Dunst et al., 1988; Rouse, 2012). When the coach comprehends the systemic contextual factors surrounding the child, they can discern and leverage the strengths within the family dynamic. This enables them to empower parents to make decisions that align with their motivations for seeking EI services.

Therapeutic Relationship

The second fundamental aspect of RSB Coaching involves creating a secure learning environment through a therapeutic relationship. Discussions involving challenges with a child

and family often require parents to divulge vulnerabilities and uncomfortable truths or provide examples of challenging situations. Creating a safe space is crucial for parents to freely share this information and pose questions, ensuring maximum benefits for all involved in the PC process. Although numerous PC resources stress the importance of the parent and coach relationship (e.g., Friedman et al., 2012; Kemp & Turnbull, 2014; Lorio et al., 2021; Rogers, 2021; Rush & Shelden, 2020; Woods, 2021; Ziegler et al., 2019), there is limited guidance on achieving effective collaboration and creating a secure space for communication.

Carl Rogers mapped out the "necessary and sufficient conditions" (Prochaska & Norcross, 2018, p. 109) for an effective therapeutic relationship in his writings on person-centred therapy. The six conditions of a therapeutic relationship in psychotherapy align with the relationship between a parent and coach in EI. The conditions illustrate how a safe, trusting, reciprocal, and collaborative relationship can be established between a parent and their EI coach (see Table 2.1).

Table 2.1

Necessary and Sufficient Conditions for a Therapeutic Relationship and their Relation to PC*

	Conditions for a Therapeutic Relationship*	Implications for PC
1	Relationship	The parent and coach are in a relationship intending to impact each other. The parent is the help seeker, the coach is the help giver.
2	Vulnerability	The parent is vulnerable when sharing and demonstrating their skills and knowledge to the coach (this is necessary for the coach to provide helpful and contextual suggestions for change). The coach is honest and vulnerable in their collaborative work with parents.
3	Genuineness	The parent coach is genuine, freely and deeply themselves, and fully present during the coaching sessions. The coach creates a safe space so the parents can be themselves and fully present.
4	Unconditional Positive Regard	The coach is on the same side as the parent. The coach does not take offence when the parent is honest, shares feelings or impressions of information that differ from coach perspectives.
5	Accurate Empathy	The parent coach emphasizes understanding the reality that the parent lives supporting their child. The coach withholds any biases and does not let bias impact the coaching session or relationship.
6	Perception of Genuineness	For the parent to trust the coach, the EI professional must be perceived as genuine (and not just act that way).

*Adapted from Prochaska & Norcross, 2018

Without a therapeutic relationship, an EI professional might not create the conditions for a parent to feel safe and meaningfully engage in learning, practice new skills in front of another person, process new information, and reflect on integrating new practices into daily routines.

The need to build a therapeutic relationship was examined in a qualitative study of EI in pediatric physical therapy by Crom et al. (2020). The findings suggested that the therapeutic relationship between ten parent-child dyads and their physical therapist was related to effective parent engagement. Specifically, Crom et al. (2020) found that for parents to be motivated to participate in their child's treatment, they need to trust their physical therapist and were more likely to do so if the communication and social skills of the therapist were strong. "This implies that [therapists] should pay attention to how verbal and non-verbal information is communicated" (p. 11). Bringing attention to verbal and non-verbal communication directly relates to concepts identified by Carl Rogers' therapeutic relationship and how a coach can establish a climate of safety and trust. As outlined by Carl Rogers (1957) and those who have explored the development of a therapeutic relationship (e.g., Crom et al., 2020; Prochaska & Norcross, 2018), a coach must truly be genuine in their alignment with parents and desire to understand their perspectives, not just act as a 'polite expert.' This sincerity requires intentionality on the part of the coach to foster a strong therapeutic relationship with the parent.

Adult Learning Principles

The third foundational element of the RSB coaching framework is an awareness and an ability to apply adult learning principles. While several authors have associated adult learning principles with PC (e.g., Friedman et al., 2012; Kemp & Turnbull, 2014; Rush & Shelden, 2020; Sone et al., 2021), none have explicitly explored how the principles are reflected in the PC process. For example, Friedman and colleagues (2012) state that "adults learn best when they are actively engaged with the material and when their learning has an immediate context in which the content can be applied… adults also need opportunities to try new skills to master their use" (p. 65). Like Friedman et al. (2012), other seminal resources (e.g., Kemp & Turnbull, 2014; Rush

& Shelden, 2020; Sone et al., 2021) fail to list the six adult learning principles, first introduced by Knowles (1968, as cited in Knowles, 2012 and Merriam & Baumgartner, 2020), nor do they provide descriptions of how the six principles are exemplified in PC (i.e., Table 2.2).

Table 2.2

Adult Learning Principles and Relation to PC

	Adult Learning Principle*	Definition	Relation to PC
1	Self-Concept	Adults are responsible for their own learning and able to self-direct the learning they seek.	A parent is self-directed in seeking new information to learn from the EI provider to help their child. They are self-motivated to participate in PC.
2	Prior Experience	Adults have accumulated experiences on which they can draw and relate to the current circumstances of learning.	The parent has a rich background of experience specific to parenting their child. Their experiences will inform the PC process, goals, and outcomes.
3	Readiness to Learn	Adults are developmentally ready to learn new information related to their life experiences.	The parent is ready to learn skills that can help them address the goals they have for their child. Individual levels of readiness will impact the PC process, goals, and outcomes.
4	Problem Centered	The learning adults are seeking is oriented to their current context.	The parent enters into the coaching relationship wanting to address specific concerns they have. They have a focus on what they hope to achieve through PC.
5	Need to Know	Adult learners need a rational to know how the new information will apply to their situations and context.	For parents to be engaged in learning, they need to know that the information shared with them is going to help address problems and achieve goals they have for themselves and their child.
6	Internally Motivated	Adults have an intrinsic motivation to learn new information.	The parent enters the PC relationships with their own reasons and motivations for being there. Their motivations drive the activities that occur within a PC relationship.

*Adapted from Merriam & Baumgartner, 2020

For a coach to foster dialogue to understand the family context and support parents in identifying goals for themselves and their child, they need to understand the parents' motivation for seeking EI services for their child. The coach needs to suspend their thoughts regarding what the parent should learn or focus on and, first, understand the parent as an adult learner who has prior experiences and can self-direct the learning they seek.

Activities of RSB Coaching

Laying the Foundation for PC

To meet parents where they are at and set helpful goals for PC sessions, the EI provider must first understand their personal and their child's goals in the family context. There are three components to the Laying the Foundation (LF) process. 1) The coach must have a conversation with the parent to understand their context and support the parent in determining goals that will guide their coaching sessions; 2) the coach will write agreed upon goals down and share them with the parent, and 3) the coach will spend time identifying the content materials that will guide the coaching sessions related to the family context and goals.

To align with FCP and meet the individual needs of families, build on family strengths, and ensure strategies and supports fit within the family context, the coach initiates their contact by engaging in a detailed conversation to understand how they can best offer support to the family. The coach must refrain from 'telling' parents what they 'should' do and share their opinions of the supposed simplicity of the support or strategy they suggest. Instead, they need to create a safe space for the parent to share their struggles or issues. The coach asks questions and learns what the parent hopes to gain from the EI sessions. The coach understands that the parent is there voluntarily and has their reasons for seeking out EI for their child. Understanding what

the parent hopes to learn to support their family and child differently can help determine how the PC sessions will be structured and what goals will guide them.

Suppose the parent has an expectation that does not align with what the coach can provide. In that case, the coach can share this information in these early moments of the PC relationship and offer, instead, what they can work on together or refer to a colleague who is better suited to support the parent's goals. The coach's job during LF is to listen, not tell. The coach should actively listen to better understand the parent's concerns, and when this occurs, the parent and coach can lay out their goals for PC.

Because all families and circumstances are different, there is no one set of questions to lay the foundation for parent coaching. The EI provider must approach each new parent relationship with an open mind, guided by the foundational elements of PC. The coach's role in this conversation is to understand how they can best help the parent and child in each unique circumstance and utilize adult learning principles to understand what the parent needs to know and how their prior experiences inform their readiness to learn.

Once the goals for the PC sessions have been collaboratively agreed upon, they are written down and shared with the parent. This record of PC goals will help the coach and parent in their time together; the goals will act as a road map for future PC sessions. The coach then takes time to think through the goals and consider what materials or resources will guide the instruction or support they intend to bring to the coaching relationship. Materials supporting this content might be books specific to EI, research-based citations, written handouts or visuals developed explicitly for the PC sessions, existing digital videos, web-based content, or some other form of information that they can share with the parents and anchor the expertise that the coach is bringing to the PC relationship.

The coach must understand what parents "know" about and acknowledge what they "don't know." If the parent has goals outside the coach's content expertise, the coach should refer the family to other supports. The coach must feel confident that they can help parents achieve their goals and share relevant information to meet the family context and parent needs. To be a successful coach, the EI provider must be well-versed in the support, skills, and information they will share with the parent (Stewart & Applequist, 2019).

Structure of PC

To effectively align with FCP, the session frequency, duration, and specific details will vary in each circumstance. An open and honest discussion around parent, child, and coach availability must be part of the conversation. For example, meeting once or twice weekly for twelve weeks may allow parents and coaches to address more goals or complex problems. In contrast, meeting once per month for six months may require different goals, with possible coach check-ins by phone or email to support parents' skills at home. These decisions about the structure of the PC sessions and related activities must be made collaboratively with the coach and parent for useful and productive time together.

PC Session Activities

While coaching activities vary by framework (e.g., Early Childhood Coaching Model, Rush & Shelden, 2020; Triadic Framework, McCollom & Yates, 1994), the overarching concepts remain the same in the RSB coaching approach. In general, within each coaching session, the parent and coach develop a plan for the session (joint planning); next, tied to the joint plan, the coach teaches the parent something new; next, there are opportunities to practice the plan and new information with coach feedback; then, the parent and coach reflect on the practice; and

finally, the coach supports the parent in determining how they will utilize the plan in their family contexts. The activities that make up the RSB Coaching are outlined in Table 2.3.

Table 2.3

Relationship Strength-Based Coaching Activities

RSB Coaching Activities	
Laying the Foundation	Occurs prior to coaching sessions. Coach and parent have in depth conversation to set the stage for the subsequent coaching sessions. Coach reviews PC process. Parent and coach collaboratively determine goals that will guide coaching sessions. Coach writes goals down and shares with parent. Coach affirms content to guide coaching sessions.
	Session Activities
Joint Planning	Occurs at the start of the session. Parent and coach collaboratively determine what the coach will support the parent to learn and what the session will focus on.
Topic Instruction	The coach teaches the parent something new. The topic instruction is directly tied to the joint plan that was collaboratively determined by the parent and coach. The topic is linked to the parent context and goals from Laying the Foundation.
Practice and Observation	The coach supports the parent to talk through or actively practice the newly learned information, strategies, or skills while the coach observes, listens, and supports.
Reflection	The coach intentionally creates space for both the parent and the coach to share their reflections on the focus of the session. The parent is encouraged to share reflections about session strategies, activities, and coach insights.
Feedback	The coach offers feedback about the parent's practice, reflections, and shares information related to the session topic.
Defining Mastery	The coach creates space for the parent to consider how the session topic will fit within their home environment and unique family context. The parent defines how they will determine if the new information, support, or strategy is making a difference in their home environment.

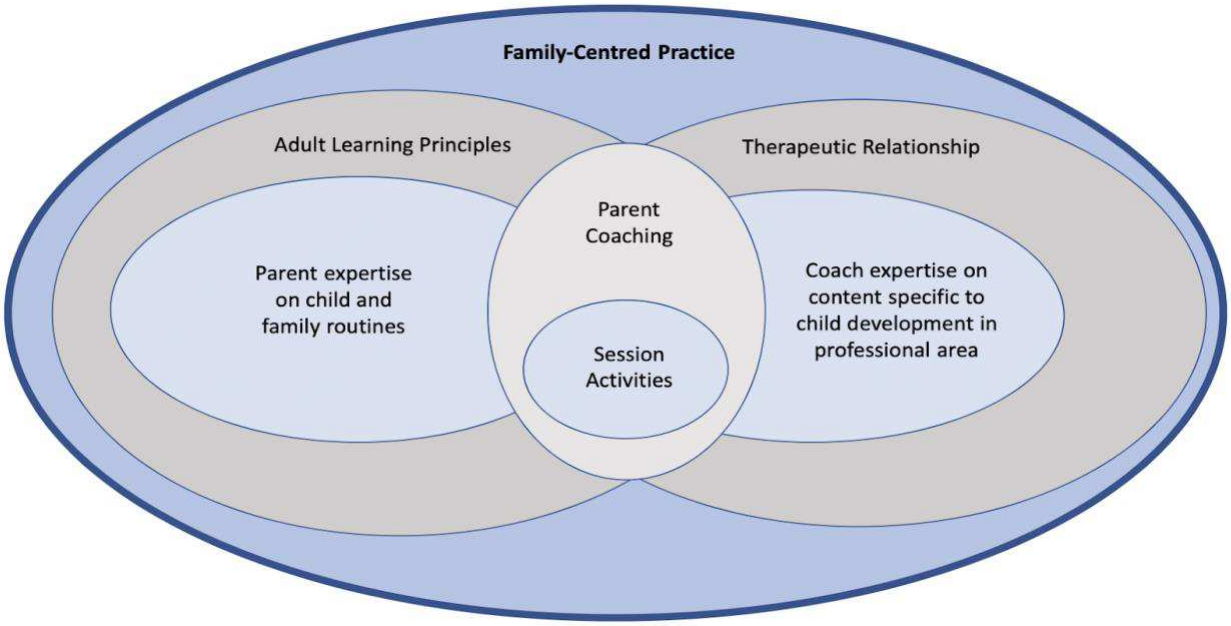
Putting it All Together

In sum, RSB coaching builds parent and family capacity by establishing a solid relationship with parents, theorized as foundational for effectively building capacity (Kemp & Turnbull, 2014; Zeigler et al., 2019). Effective coaching requires the parent and coach to bring their expertise to the interactions. The parent must share their expertise about their child and family routines, and the EI coach should bring expertise from their professional training and relevant clinical experiences. PC sessions involve interactions between a coach, parent, and child. FCP, the therapeutic relationship, and adult learning principles are pillars that hold up the key session activities.

The multifaceted elements of RSB depicted in Figure 2.1 can be imagined to expand or reduce in size depending on the nuanced circumstances in each session. For example, sometimes, a coach must focus more on building the therapeutic relationship; at other times, they must draw more on the parent's expertise. Sometimes, a coach must highlight parent motivations or be sensitive to parents' readiness to learn (i.e., adult learning principle) to share relevant expertise about child development. To engage in this dynamic way with parents, an effective coach should understand all foundational elements involved in the parent coaching process and individualize the structure and process according to individual parent needs. The hallmark of professional competence in any set of clinical skills, including coaching, lies in the ability to engage in habitual and intentional clinical reasoning and communication, capable demonstration of skills and knowledge, and understanding of emotions and values within uncertain contexts and to solve problems that lack clear definitions (Charlin & van der Vleuten, 2004; Epstein & Hundert, 2002).

Figure 2.1

Elements of the RSB Parent Coaching Framework



Professional Development Program to Achieve Clinical Competence in RSB Coaching

It has been acknowledged that developing early interventionists' clinical competence in PC is complex and multifaceted (Lorio et al., 2021; Mirenda et al., 2021; Stewart & Applequist, 2019; Ward et al., 2020). Clinical competency implies professionalism, appropriate communication, and the understanding and contextual application of content knowledge, practical skills, and clinical reasoning (Charlin & van der Vleuten, 2004; Epstein & Hundert, 2002; Thampy et al., 2019). The degree to which EI professionals reach clinical competence in PC after PD has received limited research attention. In a meta-analysis of caregiver coaching, Sone et al. (2021) found that most PC studies emphasize parent and child outcomes, but few examine if the PC was delivered competently. Further, in a systematic review of research

reporting results of PC, Ward et al. (2020) found that PC professional development activities or processes were not well described. They conclude that "there needs to be a commitment to providing training in coaching practices by EI services providers. This training must be delivered within a framework that ensures professionals can achieve fidelity to coaching-based interventions" (Ward et al., 2020, p. 2865). In other words, for EI providers to attain clinical competence in PC, we must identify the PD activities that contribute to it.

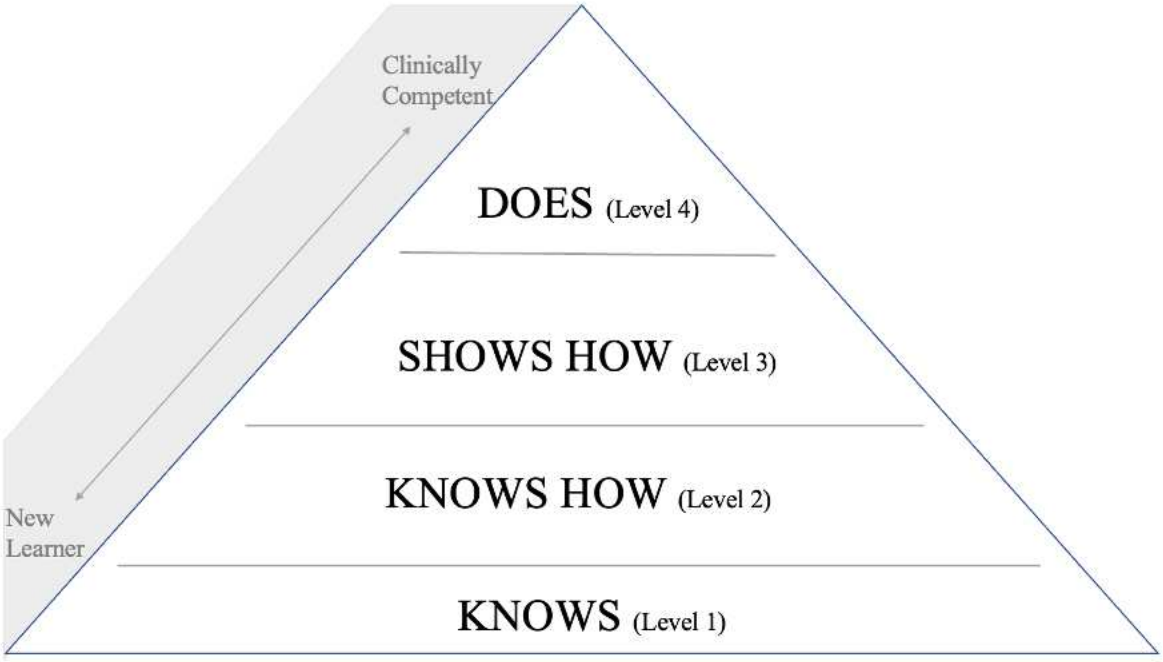
Framework for Clinical Competency Professional Development

Miller's pyramid (1990) profoundly influenced health science education. In 1990, he proposed a pyramidal structure comprising four parts to serve as a framework for assessing the various levels of proficiency in clinical practice, encompassing both its art and science. Acknowledging the essential link between teaching and assessment, Miller advocated for educational institutions to employ instructional techniques and evaluation methods in the framework's tiers, especially the higher ones. Furthermore, recognizing the influential role of assessment in shaping learning, Miller accurately foresaw that adopting his proposed structure would lead to modifications in learning patterns and instruction in clinical training programs (Cruess et al., 2016).

Miller's pyramid employs a systematic four-level sequence for learning new clinical skills (see Figure 2.2). '*Knows*' sits at the bottom of the pyramid to make up foundational knowledge; '*Knows how*' implies conceptual understanding of how the knowledge can be applied to clinical practice; '*Shows how*' relates to performing skills; *'Does'* relates to independent proficiency.

Figure 2.2

Miller's Pyramid



Others have contributed to Miller's (1990) work (e.g., Cruess et al., 2016; Epstein & Hundert, 2002; Heeneman et al., 2020; Torre et al., 2021; van der Vleuten et al., 2017) by clarifying that assessment within each tier is imperative. Multiple assessment points within each tier ensure that trainees are adequately prepared to move from the bottom of the pyramid to the top (van der Vleuten et al., 2017). As a trainee moves up the pyramid, assessing skills becomes more challenging due to the knowledge demands and metacognitive processes involved in performing a skill in the third (i.e., shows how) and fourth (i.e., does) tiers (Thampy, 2019). In the words of van der Vleuten and colleagues (2005), "Assessment is not merely a measurement problem, as the vast literature on reliability and validity seems to suggest, but is also very much

an instructional design problem" (p. 39). Thus, learning and assessments must be carefully integrated at each level of the PD pyramid.

The following section describes the RSB coaching PD content delivery and activities. Subsequently, the assessment at each level is described.

RSB Professional Development Activities

The RSB coaching PD is delivered using two general types of activities. First, small group-based synchronous online instruction and activities to impart foundational knowledge at levels one and two, and second, practical application at levels three and four involving one-on-one feedback and support for implementing coaching with parents. The PD delivery draws on research showcasing the efficacy of PD incorporating individualized coaching support from trainers (Hsieh et al., 2009; Wasik & Hindman, 2011). Evidence suggests the superiority of PD involving one-to-one coaching, tailoring guidance on adopting new or evidence-based skills within the learner's current content knowledge, and available resources, as opposed to group-based PD methods relying solely on brief workshops or coursework (Desimone, 2009; Powell & Diamond, 2013; Romano & Schnurr, 2022).

Level One: Foundational Knowledge of RSB Coaching. Level one content reviews what PC is and contrasts how it differs from traditional expert-driven EI (e.g., Kasari et al., 2022), parent-mediated intervention (e.g., Rogers et al., 2021), and parent training programs (e.g., Carter et al., 2011). The foundational elements of PC - FCP, adult learning principles, and therapeutic relationship - are reviewed in detail. Finally, the PC activities, including LF, are reviewed. Supplementary reading drawn from the peer-reviewed literature is shared.

Level one content is delivered in a workshop-style format over three two-hour training sessions. Activities include lectures, videos, and facilitated group conversations. After each two-

hour workshop, participants are asked to complete an online 10 - 25 short answer and multiple-choice questions based on the session's content. Participants are also asked to complete a reflective journal of four guiding questions exploring the information participants took away from the day's session. These assessments are meant to support participant learning, and results are shared with the participants at the start of the next workshop and used to guide the conversation. Any incorrect answers are reviewed and used as a point of discussion at the group level to ensure that participants fully understand the foundational elements of PC.

Level Two: Learning How to Parent Coach. In level two, the focus shifts to "how to" parent coach. The activities include role-playing with other trainees, reviewing coaching scripts and detailed video examples of PC, and opportunities for participants to engage in PC activities with the support of each other. The video examples include explicit examples of PC sessions and activities (i.e., LF, joint planning, topic instruction, practice and observation, reflection and feedback, defining mastery). Foundational elements (i.e., FCP, adult learning principles, therapeutic relationship) are woven into discussions.

Level two also involves introducing the assessment used to rate the demonstration of PC in a clinical interaction between a parent and coach. This assessment tool, the Parent Coaching Competency Rating Scale (PCCRS; Appendix A) is described in more depth later in the paper. The components of the PCCRS include RSB coaching activities and three other global coaching competencies: relationship, modelling, and session structure.

The 'relationship' competency operationalizes aspects of FCP and the therapeutic relationship that must be demonstrated consistently throughout coaching interactions. Modelling, on the other hand, is a practice that is discouraged in RSB coaching. Like other parenting programs (e.g., Brian et al., 2022), directly demonstrating strategies to parents by working

directly with the child may detract from parental self-efficacy, an important consideration when working with adult learners (Merriam & Baumgartner, 2020). By avoiding modelling, the parent coach remains committed to assisting parents in developing their parenting style, enhancing positive parent-child interaction, and fostering parental empowerment (Brian et al., 2022). Another global competency is 'session structure.' This competency refers to the coach's ability to maintain a logical, focused session structure, stay on topic, and guide the PC activities to flow naturally from the parent and coach's joint plan.

After reviewing the PCCRS components, participants are encouraged to rate the proficiency of RSB coaching activities when video examples are shown. These first opportunities occur during group workshop-style activities so participants can learn from each other's observations and experiences with the PCCRS.

Level two content is covered over four two-hour training sessions and can be delivered in person or online. After each two-hour workshop, participants are asked to complete an assessment and reflective journals to support learning. Level two assessments include a mixture of objective (i.e., multiple choice, true/false) and subjective (i.e., short answer, fill in the blank, case study scenario application) questions. Similar to level one assessments, the intent of the assessment is *for* learning (van der Vleuten et al., 2017), not for any other evaluative purpose and incorrect answers are integrated into the next workshop to support participant learning. Participants are encouraged to draw on their experiences and practice different ways of interacting with the parents on their caseloads. The final assessment for learning activity in level two involves watching an entire PC session and using the PCCRS to rate and code, and discuss observations as a group. The end of level two training involves participants making arrangements to practice PC with families they are working with during level three.

Table 2.4

RSB Coaching PD Level One and Two Content and Assessment

Weekly Schedule and Miller's Level		Content	Assessment Activities
Week 1	Level 1	-PC defined -Coaching vs. Training -Family-centred practice	-Quiz, 22 questions -Self-reflection journal
Week 2		-Adult Learning Principles -Therapeutic Relationship -Overview of RSB Activities	-Quiz, 16 questions -Self-reflection journal
Week 3		-Laying the Foundation - PC Session Activities -Video of PC session	-Quiz, 10 questions -Self-reflection journal
Week 4	Level 2	-Coach content expertise - Attending to relationship -Parental self-efficacy -PC Session flow	-Quiz, 10 questions -Self-reflection journal -Case example
Week 5		-Refining expertise and PC content -Putting it all together -Case study review	-Watch 30min PC video -Quiz related to video -Self-reflection journal
Week 6		-Joint planning and topic setting - PCCRS introduced	-Quiz, 27 questions -Self-reflection journal
Week 7		-Putting it all together -PCCRS in depth	-Watch 60min PC video -PCCRS coding
Week 8		-Watch full PC session together -Practice PCCRS coding -Plan for level 3 practice	-Quiz, 8 questions -Self-reflection journal

Level Three: Practicing PC. To ensure the PC practice is meaningful to the EI work of the participants, practice opportunities should ideally fit within existing workplace structures and schedules. Participants self-select parent-child dyads they intend to work with, and as part of the LF conversation, they can share that they are learning about PC. It is strongly suggested that all

interactions between parent and coach are video recorded so that the coach can watch their practice sessions and, using the PCCRS, code their PC competencies. The trainer can watch select PC sessions and code their PC competencies using the PCCRS. During regular one-to-one meetings between the trainer and coach, codes are contrasted and act as discussion points to help guide practice and ensure that feedback on coaching is relevant, timely and useful to the participant. Ideally, as recommended by van der Vleuten et al. (2017) and Wisniewski et al. (2020), the feedback will be supported by a positive trainer-trainee relationship. Reflection and feedback conversations between coach and trainer will draw on the foundational elements from levels one and two, and the PCCRS will guide the trainer in providing support. Decisions around the amount, duration, and frequency of one-on-one meetings are collaboratively decided upon with the trainer and each participant.

During Level three, participants are asked to practice the entire PC process (i.e., laying the foundation and an appropriate number of PC sessions to achieve the selected goals) with at least three parent-child dyads.

Level Four: Demonstrating Competent PC. After completing levels one, two, and three, it is anticipated that participants will be confident in their PC abilities and able to engage in clinically competent PC. As a demonstration of their PC abilities, participants will put together a final submission package. This package will include (1) a recording of the LF conversation(s) (either video or audio), (2) written goals, (3) evidence of resources/materials that the coach to guide coaching content, (4) one video recording of a complete PC session, (5) a completed PCCRS for the PC session video. The trainer will then use the entire PCCRS to code all the items in the final demonstration package.

Assessment of RSB Coaching Clinical Competence

The trainer determines the participant's final clinical competence by examining the array of assessment tools, including satisfactory demonstration of knowledge during levels one and two and consistent demonstration of competence on the PCCRS during levels three and four (Heeneman et al., 2020; Torre et al., 2021; van der Vleuten et al., 2017).

Accordingly, there must be varied and multiple sources of assessment to ensure competency across all levels of Miller's Pyramid; the higher up the pyramid a student moves, the more assessment points are needed to confirm clinical competency during learning (van der Vleuten et al., 2017). For example, at the knows and knows how levels, objective assessments (e.g., multiple-choice, true/false, matching) may suffice for trainees to demonstrate an understanding of factual content. However, demonstration of shows how and does, at the top of the pyramid, requires more robust forms of assessment, such as the direct observation of trainees using the competency-based PCCRS.

To create reliable assessment instruments for a PD program, a large sample of students are traditionally required to determine if an assessment method results in an adequate reliability coefficient (i.e., 0.8 or higher; van der Vleuten et al., 2005). According to van der Vleuten and colleagues (1991), reliability is defined as "the extent to which examinee scores are stable or reproducible across different but similar samples of items, raters, testing sites, time of day, patients, etc." (p. 112). However, in training programs with integrated clinical complexities involved in the competent demonstration of skills, a large sample of students is often not available during the phase of test construction, especially with nuanced and context-specific competencies. Furthermore, objective assessments (i.e., multiple-choice, true/false, matching) are not appropriate when assessing complex competencies as they trivialize what they intend to

assess (Norman et al., 1991; Thampy et al., 2019). Thus, in most instances of clinical training, a single assessment instrument is not a reliable demonstration of student learning. More sampling of the evaluated construct increases the stability of the measurement.

Furthermore, assessments should ideally coincide with a positive relationship between the learner and teacher (van der Vleuten et al., 2017). Assessment results should include or be followed up with meaningful and contextual feedback as they can serve multiple functions: "assessment *of* learning, assessment *for* learning and assessment *as* learning" (van der Vleuten et al., 2017, p. 608). That is, assessment results can guide feedback after evaluative activities, provide guidance during assessment activities, and provide a summative evaluation of learner competence and understanding.

Wisniewski et al. (2020) conducted a meta-analysis of 435 studies exploring various aspects of feedback and its impact on student learning. They found that feedback that contains information directly relevant to contextual knowledge is most effective. Furthermore, appropriately timed "high-information feedback" (p. 12) is most helpful when it supports a learner to understand the impact they have on the task at hand and how to improve their behaviour during the next practice opportunity by doing more or less of something, or, by shifting their behaviour and understanding what impact this shift will have next time.

Integrating feedback into authentic and valid assessment is a concept introduced previously. In reviewing evidence and consequences of performance assessments, Messick (1994) notes that "transparency and meaningfulness are serious issues at the heart of authentic assessment… the problems and tasks posed should be meaningful to the students. That is, students should know what is being assessed, and the criteria and standards of what constitutes good performance should be clear to them. This applies to how the performance will be scored

and what steps might be taken or what directions moved in to improve performance" (Messick, 1994, p. 16). When integrating this knowledge into the construction of and review of assessments, the feedback provided to learners must be timely, relevant, and helpful and move them towards understanding how to improve their knowledge or clinical competency demonstration.

In summary, the more complex the clinical skills, the more challenges exist to validly and reliably measure clinical competence (Solomon et al., 2000; van der Vleuten et al. 2010; Thampy et al., 2019). Solomon and colleagues (2000) looked at 165 students who completed an eight-week 'medicine clerkship' and the utility of rating scales as a demonstration of clinical competency. They conclude that "judgements about the validity of using a particular measure for a specific purpose should be made based on the integration of information from various sources" (Solomon et al., 2000, p. 135). In addition, integrating well-constructed assessment into a learning program has the potential to provide helpful feedback to support learner development of clinical competence.

Measuring Clinical Competency in RSB Coaching. The predominant tools utilized when assessing competency through observational measurement, typically aligned with levels three (shows how) and four (does) of Miller's pyramid, are checklists and global rating scales (van der Vleuten et al., 2017). Behavioural checklists enumerate specific behaviours indicative of competent performance, allowing raters to mark their presence or absence. In contrast, global rating scales focus on broader competencies, providing written descriptions of behaviours or the quality of interactions or activities. Raters employ Likert scales to categorize competencies as poor, adequate, or good (van der Vleuten et al., 1991). Research suggests that when evaluated by clinicians with robust clinical expertise, global rating scales are superior indicators of overall

competence than behavioural checklists (Solomon et al., 2000; Thampy et al., 2019). Specifically, global rating scales prove most effective for assessing intricate skills and knowledge. However, their reliability hinges on raters well-versed in the specific clinical processes they aim to evaluate, offering a more comprehensive overview of overall performance (Norman et al., 1991; Solomon et al., 2000; Thampy et al., 2019).

Clinical Competency in PC. The RSB Coaching approach intends to support EI providers from any discipline working with parents and children with developmental needs that suit the EI provider's professional background and training. To capture the nuance around the presence, absence, and emergence of clinical competencies and to align with best practices related to measuring complex clinical competencies, a global rating scale was developed with clearly delineated clinical competencies specific to PC without emphasis on specific EI disciplines or content.

The Parent Coaching Competency Rating Scale (PCCRS). The PCCRS (Appendix A) was developed to capture the competencies for RSB coaching. A global rating scale ensured room for variability and nuance in demonstrating and observing PC clinical competence.

Twelve competencies are described and defined. Each can be rated on a five-point Likert scale. A rating of one indicates that the coach is not yet demonstrating competency, a rating of three indicates the coach is demonstrating competency in an emerging manner, and a rating of five indicates a strong demonstration of clinical competency. For each of the twelve items, the one, three, and five scores are clearly described with examples of the presence or absence of coach behaviours that would correspond with each rating. Scores of two or four are used if the observation does not align with a one, three, or five. Instructions to raters are to select the code closest to the observed activity's overall quality.

PCCRS is broken up into two main sections. The first is to examine how the coach engages in the LF process. Three competency items (i.e., items A-C) are outlined in this first section. Ratings for these three items required the rater to observe the LF interaction(s) between coach and parent, examine the written documentation of the PC plan or goals that were identified in the LF conversation(s), and examine the written, digital, or other material that the coach has identified as the content they intend to draw from to support the parent to understand the EI considerations that the coach brings to the PC relationship. This first section of the PCCRS is meant to be competency coded only once before the commencement of PC sessions or at a time if PC sessions indicate that new goals must be decided upon.

The second section of the PCCRS can be utilized for competency coding after any or all PC sessions. Nine competency areas are intended to be coded after an entire PC session is observed. It is strongly recommended that notes be taken during observations to substantiate final codes with examples. The nine competencies are: 1) joint planning, 2) topic instruction, 3) practice and observation, 4) defining mastery, 5) reflection, 6) feedback, 7) relationship, 8) modelling, and 9) session structure.

Summary

Despite the increasing popularity of PC within EI contexts, its integration among professionals has been inconsistent, hindering its potential impact. This paper explored some of the challenges contributing to the underutilization of PC, including varied interpretations of coaching and insufficient opportunities for professional development (PD). Drawing upon existing literature, the paper introduced a comprehensive PD model designed to facilitate adopting the RSB coaching approach. The hierarchical structure of Miller's Pyramid, consisting of four components, functioned as a framework for the PD, guiding the integrated learning

opportunities. Recognizing the crucial connection between teaching and assessment, the PD uses instructional methods and evaluation techniques at various levels of the framework, particularly focusing on the upper tiers, which are closely linked to clinical competency. Given the dearth of literature on PD tailored specifically for PC, this paper offers insights that can guide the refinement of training strategies for EIs, ultimately leading to improved outcomes for families engaged in EI programs.

References

Brian, J., Solish, A., Dowds, E. et al. (2022). "Going Mobile"-increasing the reach of parent-mediated intervention for toddlers with ASD via group-based and virtual delivery. *Journal of Autism and Developmental Disorders, 52*, 5207-5220. https://doi.org/10.1007/s10803-022-05554-7

Carter A.S., Messinger D.S., Stone W.L., Celimli S., Nahmias A.S., Yoder P. (2011). A randomized controlled trial of Hanen's "More Than Words" in toddlers with early autism symptoms. *Journal of Child Psychology and Psychiatry: 52*(7); pp. 741–752.

Charlin, B. & van der Vleuten, C. (2004). Standardized assessment of reasoning in contexts of uncertainty: the script concordance approach. *Evaluation & the Health Professions, 27(*3), pp. 304-319.

Crom, A., Paap, D., Wijma, A., Dijkstra, P. U., & Pool, G. (2020). Between the lines: a qualitative phenomenological analysis of the therapeutic alliance in pediatric physical therapy. *Physical & Occupational Therapy in Pediatrics*, *40*(1), 1-14.

Cruess, R.L., Cruess, S.L., Steinhert, Y. (2016). Amending Miller's Pyramid to include professional identity formation. *Academic Medicine, 91(2)*, p. 180-185.

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38(*3), 181–199.

Dunst, C.J., Trivette, C.M., & Deal, A. (1988). *Enabling and empowering families: Principles and guidelines for practices.* Cambridge, MA: Brookline Books.

Epstein, R.M., & Hundert, E.M. (2002). Defining and assessing professional competence. *JAMA, 287(*2), p. 226-234.

Friedman, M., Woods, J., & Salisbury, C. (2012). Caregiver coaching strategies for early intervention providers: moving toward operational definitions. *Infants & Young Children, 25(*1), pp. 62-82.

Heeneman S., De Jong L., Dawson L., et al. (2021). Ottawa 2020 consensus statement for programmatic assessment – 1. Agreement on the principles. *Medical Teacher 43(*10), p. 1139-1148. DOI:10.1080/0142159X. 2021.1957088.

Hsieh, W. Y., Hemmeter, M. L., McCollum, J. A., & Ostrosky, M. M. (2009). Using coaching to increase preschool teachers' use of emergent literacy teaching strategies. Early Childhood Research Quarterly, 24, 229–247.

Ingersoll, B. & Dvortcsak, A. (2019). *Teaching social communication to children with autism & other developmental delays: the project ImPACT guide to coaching parents*. The Guilford Press: New York, NY.

Kasari, C., Gulsrud, A.C., Shire, S.Y. & Strawbridge, C. (2021). *The jasper model for children with autism: promoting joint attention, symbolic play, engagement, and regulation*. The Guilford Press.

Kemp, P. & Turnbull, A. (2014). Coaching with parents in early intervention: an interdisciplinary research synthesis. *Infants & young children, 27(*4), 305-324.

Knowles, M.S., Holton, E.F., and Swanson, R.A., (2012). *The adult learner: the definitive classic in adult education and human resource development*. New York, NY: Routledge.

Lorio, C.M., Romano, M., Woods, J.J., & Brown, J. (2020). A review of problem solving and reflection as caregiver coaching strategies in early intervention. *Infants & Young Children, 33(*1), 35-70.

Lorio, C.M., Woods, J.J., & Snyder, P. (2021). An exploration of reflective conversations in early intervention caregiver coaching sessions. *Journal of Early Intervention, 45(*4), 1-25.

Meadan, H., Chung, M. Y., Sands, M. M., & Snodgrass, M. R. (2020). The cascading coaching model for supporting service providers, caregivers, and children. *The Journal of Special Education*, 54(2), 113–125.

Meadan, H., Douglas, S., Kammes, R., & Schraml, K. (2018). "I'm a different coach with every family": Early interventionists' beliefs and practices. *Infants and Young Children, 31(*3), 200–214.

Merriam, S.B., & Baumgartner, L.M., 2020. *Learning in Adulthood: a Comprehensive Guide, 4th Edition*. Joseey-Bass: Hoboken, NJ.

Messick S. (1994). The interplay of evidence and consequences in the validation of performance assessments. *Educ Res,* 23, p. 13–23.

McCollum, J. A., & Yates, T. J. (1994). Dyad as focus, triad as means: A family centered approach to supporting parent-child interactions. *Infants & Young Children, 6(*4), 54–63.

Miller, G. (1990). The Assessment of clinical skills/competence/performance. *Academic Medicine (September Supplement), 65(*9), pp. S63-S67.

Mirenda, P., Smith, V., Colozzo, P., Vismara, L.A., Ungar, W.J. & Kalynchuk, K. (2021). Training coaches in community agencies to support parents of children with suspected autism: outcomes, facilitators and barriers. *Journal of Autism and Developmental Disorders, DOI:* https://doi.org/10.1007/s10803-021-05363-4

Norman, G.R., van der Vleuten, C., De Graaff, E. (1991). Pitfalls in the pursuit of objectivity: issues of validity, efficiency and acceptability. *Medical Education,* 25, p. 119-126.

Powell, D. R., & Diamond, K. E. (2013). Studying the implementation of coaching-based professional development. In T. Halle, A. Metz, & I. Martinez-Beck (Eds.), *Applying Implementation Science in Early Childhood Programs and Systems* (pp.97-116). Baltimore: Paul H. Brookes Publishing Co.

Prochaska, J.O. & Norcross, J.C., (2018). *Systems of Psychotherapy: A Transtheoretical Analysis*. Oxford University Press.

Rogers, C. & Farson, R.E., (1957). *Active Listening*. Industrial Relations Center: the University of Chicago, Illinois.

Rogers, C. (1965). The therapeutic relationship: recent theory and research. *Australian Journal of Psychology, 17(*2), 95 -108.

Rogers, S.J., Dawson, G., & Vismara, L.A. (2021). *Coaching parents of young children with autism: promoting connection, communication, and learning.* The Guildford Press: New York, NY.

Romano, M., & Schnurr, M. (2022). Mind the gap: Strategies to bridge the research-to-practice divide in early intervention caregiver coaching practices. *Topics in Early Childhood Special Education*, 42(1), 64–76.

Rouse, E. (2012). Family-centered practice: empowerment, self-efficacy, and challenges for practitioners in early childhood education and care. *Contemporary Issues in Early Childhood, 13(1)*, 17-26.

Rush, D. (2018). From Couching to coaching: how do we get families engaged in early intervention? It starts with us communicating their enormous influence on their children's development. *ASHA Leader*: *23*10, 46-52.

Rush, D., & Shelden, M. (2020). The Early Childhood Coaching Handbook, second edition. Paul H. Brooks Publishing: Baltimore, MD.

Schuwirth, L.W., & van der Vleuten, C.P.M (2011). Programmatic assessment: from assessment of learning to assessment for learning. *Medical Teacher, 33,* pp. 478-485.

Solomon, D., Szauter, K., Rosebraugh, C.J., & Callaway, M.R. (2000). Global ratings of student performance in a standardized patient examination: is the whole more than the sum of the parts? *Advances in Health Sciences Education, 5,* p. 131-140.

Sone, B.J, Lee, J., & Roberts, M.Y. (2021). Comparing instructional approaches in caregiver-implemented intervention: an interdisciplinary systematic review and meta-analysis. *Journal of Early Intervention,* 1-22, DOI: 10.1177/1053815121989807

Stewart, S. L., & Applequist, K. (2019). Diverse families in early intervention: Professionals' views of coaching. *Journal of Research in Childhood Education, 33(*2), 242–256.

Thampy, H., Willert, E. & Raman, S. (2019). Assessing clinical reasoning: targeting the higher levels of the pyramid. *Journal of General Internal Medicine, 34(*8), p.1631-6. DOI: 10.1007/s11606-019-04953-4

Torre et al., Rice, N.E., Ryan, A., et al. (2021). Ottawa 2020 consensus statements for programmatic assessment - 2. Implementation and practice. *Medical Teacher 43(*10), p. 1149-1160.

van der Vleuten C., Sluijsmans D., Joosten-ten Brinke D. (2017) Competence Assessment as Learner Support in Education. In: Mulder M. (eds) Competence-based Vocational and Professional Education. Technical and Vocational Education and Training: Issues, Concerns and Prospects, vol 23. Springer, Cham. https://doi.org/10.1007/978-3-319-41713-4_28

van der Vleuten, C., Sluijsmans, D., & Joosten-ten Brinke, D. (2016). Competence assessment as learner support in education. *Technical and Vocational Education and Training: Issues, Concerns and Prospects*, 607–630. https://doi.org/10.1007/978-3-319-41713-4_28

van der Vleuten. C., Norman, G., & De Graaff, E. (1991). Pitfalls in the pursuit of objectivity: issues of reliability. *Medical Education,* 25(2), 110-118.

van der Vleuten C., & Schuwirth L. (2005). Assessing professional competence: from methods to programmes. *Med Educ*. *39(*3): 309–317.

van der Vleuten, C. P., Schuwirth, L. W., Driessen, E. W., Dijkstra, J., Tigelaar, D., Baartman, L. K., & van Tartwijk, J. (2012). A model for programmatic assessment fit for purpose. *Medical Teacher*, *34*(3), 205–214.

van der Vleuten, C. P. M., Schuwirth, L. W. T., Scheele, F., Driessen, E. W., & Hodges, B. (2010). The assessment of Professional Competence: Building Blocks for theory development. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *24*(6), 703–719.

Wainer, A.L., Pickard, K. & Ingersoll, B.R. (2017). Using web-based instruction, brief workshops, and remote consultation to teach community-based providers a parent-mediated intervention. *Journal of Child Family Studies, 26,* 1592-1602.

Ward, R., Reynolds, J.E., Pieterse, B., Elliot, C., Boyd, R., & Miller, L. (2020). Utilisation of coaching practices in early intervention in children at risk of developmental disability/delay: a systematic review. *Disability and Rehabilitation, 42(*20), 2846-2867. https://doi.org/10.1080/09638288.2019.1581846

Wasik, B. A., & Hindman, A. H. (2011). Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development. Journal of Educational Psychology, 103, 455–469.

Williams, C.S. & Sawyer, G.E. (2023). Going beyond "I'm a coach": Adopting a caregiver coaching framework in EI. *Young Exceptional Children, 27(*1), pp. 3-15. https://doi.org/10.1177/10962506231153

Wisniewski, B., Zierer, K. & Hattie, J. (2020). The power of feedback revisited: a meta-analysis of educational feedback research. Frontiers *in Psychology, 10(3087), 1-14. DOI*: 10.3389/fpsyg.2019.03087

Woods, J. (2021). *FGRBI key indicators manual (6th ed.)* [Unpublished manual]. FGRBI Partners.

Ziegler, S. A., Dirks, T., & Hadders-Algra, M. (2018). Coaching in early physical therapy intervention: the COPCA program as an example of translation of theory into practice. *Disability and Rehabilitation, 41(*15), pp. 1846-1854. https://doi.org/10.1080/09638288.2018.1448468

Chapter III: Parent Coaching "What does it look like?": A Case Example of Relationship Strength-Based Coaching

This Chapter provides a case study of parent coaching utilizing the RSB approach. It is written as a practical resource for early interventionists and others who work with young children with delays or disabilities. The paper has been submitted to Young Exceptional Children.

Abstract

The current paper presents a case example of an RSB coaching session. Penny is an adept parent coach who employs a relationship strength-based (RSB) coaching framework in her practice. Her interactions with Hugh exemplify how she puts into action the core tenets of RSB coaching, including family-centred practice, adult learning principles, and fostering a therapeutic relationship. Penny carefully designs her coaching sessions to uphold these pivotal elements. Tailoring her approach to accommodate the unique dynamics of Hugh's family and her coaching relationship with him and his toddler, Winston, Penny supports Hugh's decision-making and involvement in his son's development.

Introduction

Coaching is an approach to intervention that is growing in popularity among professionals who work with parents of young children with delays or suspected disability. Intervention studies of parent coaching (PC) have demonstrated positive child outcomes, including increased conversational turns, advances in language development (Ferjan Ramírez et al., 2020) and improvements in early imitation and play skills (e.g., Akamoglu & Meadan, 2019). However, despite emerging support for PC, "research in this area continues to be challenged by varying definitions of coaching and the component practices" (Lorio et al., 2020, p. 35). Williams and Sawyer (2023) describe several coaching frameworks and suggest that early interventionists choose one that best matches personal preferences and philosophies. Common across frameworks is a family-centred philosophy that recognizes the pivotal role of families in all aspects of the care of their children. The Relationship Strength-based coaching approach (RSB; Jelen & Smith, submitted), is a family-centred practice that draws on adult learning principles and the interventionists' ability to establish a relationship with parents who are responsible for the decisions about their children.

The current paper uses a fictionalized case-based approach to demonstrate the different components of RSB coaching. Early Interventionist Penny illustrates the RSB Coaching Activities by sharing her coaching interactions with Hugh, the parent of Winston, a two-year-old with delays in language development.

Table 3.1

Relationship Strength-based (RSB) Coaching Activities

RSB Coaching Activities	
Laying the Foundation	Occurs prior to coaching sessions. Coach and parent have in depth conversation to set the stage for the subsequent coaching sessions. Coach reviews PC process. Parent and coach collaboratively determine goals that will guide coaching sessions. Coach writes goals down and shares with parent. Coach affirms content to guide coaching sessions.
	Session Activities
Joint Planning	Occurs at the start of the session. Parent and coach collaboratively determine what the coach will support the parent to learn and what the session will focus on.
Topic Instruction	The coach teaches the parent something new. The topic instruction is directly tied to the joint plan that was collaboratively determined by the parent and coach. The topic is linked to the parent context and goals from Laying the Foundation.
Practice and Observation	The coach supports the parent to talk through or actively practice the newly learned information, strategies, or skills while the coach observes, listens, and supports.
Reflection	The coach intentionally creates space for both the parent and the coach to share their reflections on the focus of the session. The parent is encouraged to share reflections about session strategies, activities, and coach insights.
Feedback	The coach offers feedback about the parent's practice, reflections, and shares information related to the session topic.
Defining Mastery	The coach creates space for the parent to consider how the session topic will fit within their home environment and unique family context. The parent defines how they will determine if the new information, support, or strategy is making a difference in their home environment.

Laying the Foundation for Coaching

When a pediatrician noted Winston was behind in his language development, his dad Hugh contacted the local child development centre. He was referred to Penny, an early interventionist with a background in early communication development. Before agreeing to take on the case, Penny met Hugh and Winston for an hour-long meeting. She explains to Hugh that she is interested in learning about the challenges he is experiencing with Winston and any worries he might have. Hugh says that he is worried about Winston's development. He has noted some developmental differences between Winston and his peers. Penny quietly listens and takes some notes. She asks questions to gain clarification on Hugh's thoughts and descriptions. She then describes that the type of support she can provide is parent coaching. By working together, they will act as a team to achieve Hugh's goals for Winston. She will share her knowledge of child development and early intervention, and Hugh will share his knowledge of Winston. Penny clarifies that the sessions focus on Hugh engaging with Winston while she supports, observes, and offers feedback. The goals they select must also fit Penny's expertise. For example, when Hugh talks about Winston's delays in motor development, Penny is explicit that she is not a physical therapist, and that is not a goal she has the specific knowledge to help him with. She, however, will refer him to her colleague to help with these motor goals. Before the session ends, Penny and Hugh decide on four goals that will guide their sessions together. The goals are selected based on the information and worries Hugh has shared with Penny in the language that makes sense to him. First, they will work on Winston using words to make requests. Second, they will work on supporting Winston in following simple instructions. Third, they will work on Winston's play; Hugh gave Winston a new Lego set for his last birthday and wants to play with it with Winston. However, the play never goes the way he had envisioned. Finally, they will

support Winston in learning more appropriate ways of asking for items, explicitly learning how not to grab them. Hugh describes the constant grabbing that occurs during bathtime and bedtime. Hugh is very excited about achieving the goals, and Penny feels confident she can give him the specific information he needs to achieve them. Before she concludes the 'Laying the Foundation' session, Penny probes what Hugh has been doing to address these and other goals and what seems to have helped or hindered progress in the past. As she listens to Hugh, she observes Winston at play and his communicative attempts to get his Dad's attention. Just before she leaves, she sets up the time of their first coaching session. She describes the basic structure: joint planning with Hugh for the session, topic instruction, practice and observation, reflection and feedback, and supporting Hugh to think through how he will measure success with the strategies they discuss and invites Hugh to determine how the strategy will fit within his home environment.

When Penny returns to her office, she documents the goals and gathers the resources to help her teach Hugh about early language development (see Table 3.2, coaching goals and resources). Penny is careful to use Hugh's language when writing the goals. She anticipates working with Hugh to develop visual supports for both the bed and bath routines and gathers some examples she created with other families. She also expects Hugh to benefit from understanding more about early language development and how to structure his household to support productive interactions with Winston.

Table 3.2

Coaching Goals and Resources

Goal	Some steps to Consider	Potential Resources and Materials
Teach Winston words to make requests	- Share information on language development - Evidence-based strategies to support language development (e.g., modelling, following lead, linguistic mapping, verbal routines)	-Help is in Your Hands (Modules One and two): https://www.helpisinyourhands.org - (Rogers & Stahmer, 2024) -Hanen More than Words: https://www.hanen.org/Programs/For-Parents/More-Than-Words.aspx (The Hanen Centre, 2016)
Teach Winston to follow simple instructions	-Support Hugh to ensure Winston is attending to salient elements providing instructions - Support Hugh to consider routines with instructions - Share information on language development	-Help is in Your Hands (Modules One, two, and three): https://www.helpisinyourhands.org (Rogers & Stahmer, 2024) -Hanen More than Words: https://www.hanen.org/Programs/For-Parents/More-Than-Words.aspx (The Hanen Centre, 2016)
Teach Winston how to play with his new Lego set	-Share information about the developmental stages of play -Support Hugh to consider play activities to for building Winston's play skills	-Core Domains (p. 14-38). *The Jasper Model for Children with Autism*. Guilford. (Kasari et al., 2021) -Hanen More than Words: https://www.hanen.org/Programs/For-Parents/More-Than-Words.aspx (The Hanen Centre, 2016)
Teach Winston alternative ways to communicate during bath and bedtime (i.e., to not grab and hit)	- Review ABCs of learning - Review the routines in place make adjustments within Hugh's context	-Let's get technical: How children learn (pp. 194-217). *An Early Start for Your Child With Autism*. Guilford. (Rogers et al., 2012) -Visual supports (Boardmaker): https://www.myboardmaker.com/Login.aspx (Tobii Dynavox, 2024) -Help is in Your Hands (Modules Four): https://www.helpisinyourhands.org (Rogers & Stahmer, 2024)

Joint Planning

Penny arrives at Hugh's home and checks how Hugh and Winston are doing. Hugh acknowledges that after their first Laying the Foundation session, he carefully tries to interpret what Winston might communicate through gestures and vocalizations. Penny needs to clarify some details about bed and bath routines. Hugh shares that he encounters challenges during bath time, but after he announces that it is 'Bath Time,' Winston verbally protests and runs away. Penny actively listens, asking insightful questions and swiftly recording essential information. Penny reviews her notes, extracting critical statements and words that merit further reflection and discussion. This process allows for a comprehensive exploration of positive moments and challenges. Winston engages with Hugh throughout this check-in conversation, driving a train along his leg. Hugh adeptly manages this dual focus, actively participating in the conversation while keeping Winston occupied and happy.

Family-centred Practice

Family-centred practice is a foundational element of parent coaching. The way that Penny laid the foundation for coaching and checks in with Hugh at the start of each session acknowledges that by building on unique family strengths, families and parents can be empowered (Rouse, 2012). In family-centred practice, parents are critical information sources when deciding which supports and services are best for their child. Thus, decisions about the type and quality of care rest in the parents' hands (Brewer et al., 1989; Rouse, 2012). This reciprocal relationship allows both parties to learn from each other about their respective expertise. The clinician contributes knowledge about child development and interventions, and the parent(s) contributes knowledge about their child and the family context (Dunst & Dempsey, 2007). These two types of behaviours are evident in the example between Penny and Hugh. For

Penny to be able to share her expertise in a way that is helpful later in the session, she needs to have a deep understanding of Hugh's perspectives on what Winston said or did and his priorities.

Observation

Satisfied with the insights gained from the brief check-in, Penny suggests a play session to witness firsthand how Hugh applies strategies to get Winston to pay attention to him during play. Observing a seven-minute interaction, Penny notes successful instances of sharing the train, Winston's enjoyment of fast wheel spinning, and a scenario where Hugh withholds the train and prompts Winston to ask for it. When Winston becomes frustrated, he grabs the train and leaves the interaction; Penny suggests an alternative activity to keep him engaged. Hugh pulls out a box of toys, and Winston selects more trains and cars. As Winston explores the toys, Penny and Hugh continue their conversation, aligning their observations with plans for the session.

Developing the Session Plan

After the observation, Penny asks Hugh to share his impressions and reflections on the play with the train. Hugh is happy with the few times Winston requested the wheel spinning but is relieved that Penny could see Winston grabbing and running away when he became frustrated. Penny asks if this is similar to what happens in the bath or at bedtime, and Hugh acknowledges that it is very similar. They talk about the similarities and differences in detail.

Penny asks what Hugh would like to focus on today; Hugh asks if there is some way they could somehow work on hitting and running away behaviour, even though it is not one of the goals they set during Laying the Foundation. Penny agrees that this is an excellent direction, given what they have talked about and what she observed during the initial play. She also provides Hugh with information about how communication and behaviour are related. She links

the goal of focusing on challenging behaviour to their initial goals. She also confirms with Hugh that behaviour is an area in which she can provide support. Penny then seeks agreement that the focus during the remainder of the session today will be on components related to challenging behaviour. Hugh agrees.

Penny draws information from Hugh through the check-in and observation to ensure she can contextualize the information she will share with Hugh. She ensures that what they focus on specifically meets what Hugh needs to know to address the goals for himself and Winston. Penny addresses Hugh's internal motivations for learning and gets at his challenges with Winston by being problem-centred and understanding what he specifically hopes to learn. She must ensure that Hugh is ready to learn the information they agree she will teach him during the coaching session. Penny addresses Hugh's goals by building on what he has shared with her and drawing on his prior experience.

Adult Learning Principles

By understanding adult learning principles (Knowles, 2012), coaches recognize that parents are learners who will be motivated if they perceive the learning as applicable to help them parent or support the developmental issues they are facing. In the case example, Penny acknowledges that Hugh has prior experience, which guides the session's focus. Penny draws information from Hugh and observes his readiness to understand what he wants to focus on before she shares her clinical knowledge. By drawing information from Hugh and observing his interactions with Winston, Penny can better appreciate his internal motivation for learning. This helps her fill in the gaps in what Hugh 'needs to know' during their time together.

Topic Instruction

Penny decides it would be helpful to review the ABCs of behaviour using the short online video from Help is in Your Hands (Module Four). These materials define Behaviour, Consequences, and Antecedents in a way that guides parents to learn new skills to observe ways children behave to get their needs met, how we respond to behaviours, and what happens before a behaviour occurs or behavioural triggers. She spends some time relating Winston's behaviour to the video descriptions. She carefully notes that some behaviours we want to see more of (e.g., using words) and some we want to see less of (e.g., grabbing, yelling). During her conversation, Penny is careful not to discuss too many points simultaneously. She knows this is all new information for Hugh and is a big topic to focus on. She frequently pauses, allowing space for Hugh to comment or ask questions. She also asks questions to check Hugh's understanding. She is careful not to frame her questions as "test questions" but as opportunities for Hugh to reflect on the information she shared. Hugh demonstrates his buy-in by nodding and relating the information to Winston. Penny works hard to link the information she shares to the conversation she and Hugh had at the start of their session and to the play activity she observed with the train. Penny and Hugh decide that their joint plan for the remainder of the session would be "identifying behavioural triggers (or antecedents)" before Winston engages in a behaviour that Hugh wants to see more of or before unwanted behaviour that Hugh wants to decrease. They talk through what some practice activities might be and what challenges they might anticipate in these activities.

Practice and Observation

Penny, Hugh, and Winston get to work with their plan in place. Hugh chooses the truck book and puts it beside the beanbag chair, where Winston is leaping and flopping. He catches

Winston in the air mid-beanbag jump and helps him playfully into the beanbag. Hugh plays a tickle game to keep Winston in the beanbag. Penny remains on the couch and watches; during the tickle game, she suggests getting the book and seeing if that helps settle Winston down. Hugh skillfully gets Winston settled on the beanbag chair; he quickly grabs the book and holds it between his face and Winston's. Winston eagerly reaches for the book. When it is clear that they are settled into a book routine, Penny quietly moves closer to Hugh and Winston, careful not to interrupt the flow and positioning herself so she can see clearly what is happening and quietly labels the antecedent, behaviours, and consequences for Hugh to hear. This continues for about 8 minutes. At the end of the book, Winston eagerly gets up and leaps into the beanbag chair. Penny suggests they leave him to play in the beanbag and discuss the practice.

Reflection & Feedback

Penny then asks Hugh about his impressions of the book activity. He responds that it was good and looks at her expectantly. Penny then asks whether it was helpful to identify antecedents, behaviours, and consequences. She asks him if there were any antecedents he was intentionally using to get Winston to engage in some behaviours. Hugh labels a couple; however, he admits that once they got into the book, he almost forgot about the focus as he was so engrossed in the book with Winston. Penny chuckles and acknowledges that it can be hard to focus on something new, especially when so many exciting things are happening. Hugh refers to the few antecedents Penny labelled during the interaction and states that it was constructive when she reminded him of them while interacting with Winston and the book. Penny is conscious of sharing her impressions later as Hugh is eager to discuss his experiences. She tries to support and extend Hugh's reflections. Penny then shares how impressed she is with the book activity. She acknowledges what she saw using strategies like waiting, pointing, and following his son's

lead. Hugh agrees and appears pleased, evidenced by his facial expression and body language. He then expands on a few times where he was engaging in those strategies intentionally and shows his happiness when he starts to link his understanding to those strategies being antecedents for Winston's words.

At this point, Winston has made his way to the couch, dump truck in hand. He sits beside Hugh just like he did earlier in the session. Winston tries to give Hugh the truck. Hugh mindlessly pats Winston on the leg but continues engaging with Penny as he is eager to read through the table she filled out about their joint plan of 'identifying antecedents.' Winston lets out a little scream and throws the dump truck at Hugh. This interrupts the flow of the conversation as Winston runs away and begins jumping in his beanbag chair. Penny acknowledges that the moment looked difficult and frustrating for Hugh as he tried to converse and was interrupted by a flying dump truck. She uses the opportunity to identify the unwanted behaviour. She asks Hugh to consider what might have been the trigger or what occurred before Winston screamed and threw the dump truck. Hugh demonstrates understanding by nodding, commenting, and reflecting on what he could have done differently to prevent the challenging behaviour. He wonders out loud if he should have stopped talking to Penny and engaged with Winston when he first gave him the truck. Penny talks through this idea with Hugh. She links the conversation to the session topic. She is careful not to point out what Hugh did "wrong" but instead wonders out loud what might have happened if Hugh provided attention to Winston sooner. Hugh acknowledges that identifying antecedents makes much sense but must be practiced. He asks if they could talk about the bathtime routine in the last 15 minutes they have together. Penny and Hugh have a detailed conversation about the bathtime routine related to the session topic of 'identifying antecedents.'

Defining Mastery

To close the session, Penny creates space for Hugh to consider how the session topic will fit into his home environment. She aims to help Hugh define how he will figure out how to integrate the new information, determine whether or not he has mastered new skills, and if he needs more support to ensure the strategy is making a difference in their home environment. To achieve this, Penny encourages Hugh to identify his weekly goals. Hugh decides on first, being more intentional about his antecedents in trying to get Winston to use more words or request items he wants; second, he decides he wants to think through any challenging behaviours, trying to prevent them by noticing antecedents before they result in behaviours, but if he is unable to avoid them, writing down antecedents and behaviours to report back to Penny the following session. Penny asks if there are specific times of the week that Hugh wants to focus on the antecedent identification, and he identifies bedtime stories, bathtime, and breakfast. They loosely decided to continue with more of the Help is in Your Hands modules. The first two focus on early language development. She clarifies that this can be the focus, but only if Hugh finds it helpful.

As Hugh walks Penny to the door, they confirm the date and time of their next coaching session. Hugh thanks Penny for coming, and she wishes him luck with his practice activities. Penny pulls out her notebook and writes notes from today's session when she gets to her car. She jotted down key things that Hugh said she wanted to check in on the next session. She writes down what Hugh decided to practice, when, and the materials they focused on. She notes where they might continue in the next session if Hugh's practice goes as planned. In the meantime, Hugh tidies up the living room while reflecting on how much he appreciates how genuine Penny is during their coaching sessions and the positive regard and empathy she demonstrates for him and Winston. He is thankful that he feels safe when Winston demonstrates challenging

behaviours in front of Penny and thinks about how respectful and open Penny is to his choices as a parent.

Therapeutic Relationship

The importance of the coach's relationship with the parent is frequently referenced in the parent coaching literature (e.g., Friedman et al., 2012; Kemp & Turnbull, 2014; Lorio et al., 2020; Rush & Shelden, 2020). Without a therapeutic relationship, an early interventionist might not create the conditions for a parent to feel safe and meaningfully engage in learning, practice new skills in front of another person, process new information, and reflect on integrating new practices into daily routines. Crom et al. (2020) found that for parents to be motivated to participate in their child's treatment, they needed to trust their therapist and were more likely to do so if the communication and social skills of the therapist were strong. "This implies that [therapists] should pay attention to how verbal and non-verbal information is communicated" (p. 11). For example, when Penny listened to Hugh reflect on his impressions of the session, she noticed his verbal and non-verbal communication to guide her responses and clinical impressions. This information guided how she shared her perspectives and participated in the conversation. When Winston throws the truck at Hugh, Penny acknowledges Hugh's frustration once she observes his body language. She tried to describe what she saw rather than telling Hugh only what she thought. When Hugh shared that he forgot what he was practicing in the PC session, Penny chuckled because he smiled sheepishly at her when he shared this information with her. Penny's responses are guided both by what Hugh says and what he does. She is careful in her selection of words and actions during their session. She is intentional in what she says and considers the meaning behind her words, facial expressions, and actions.

A coach supports a parent in thinking about their actions and intentions, in other words, to understand what they are, or are not, doing with their child (Lorio et al., 2021). Penny asked about Hugh's impressions after the practice activity of Hugh reading the truck book with Winston. He shared that it took a lot of work to think about the topic they were focusing on, and later in the session, he acknowledged the importance of the topic but needed more time to process and practice. Supporting learning in PC is accomplished by actively engaging the parent in the session activities and reflecting on parent actions to understand their impact better while simultaneously strengthening the activity of reflecting itself (Rush & Shelden, 2020).

Putting it all Together

Through the case example, we have explored the foundational elements of parent coaching. Parent coaching is nuanced, and because it is based on contextual details within and around a parent coaching session, it must also be dynamic and responsive to the parent's changing needs (Friedman et al., 2012; Kemp & Turnbull, 2014). Sometimes, a coach needs to focus more on building a therapeutic relationship. Sometimes, a coach must highlight or bolster parent motivations before sharing their expertise. Grounded in family-centred practice (i.e., Brewer, 1989), the reciprocal relationship between parent and coach allows both to learn from each other and support children and families to learn, develop, and grow.

References

Akamoglu, Y., & Meadan, H. (2019). Parent-implemented communication strategies during storybook reading. *Journal of Early Intervention, 41(*4), 300–320. https://doi.org/10.1177/1053815119855007

Brewer, E.J., McPherson, M., Magrab, P.R. & Hutchins, V.L. (1989). Family-centred, Community-based: Coordinated care for children with special health care needs, *Pediatrics, 83*(6), 1055–1060.

Crom, A., Paap, D., Wijma, A., Dijkstra, P. U., & Pool, G. (2020). Between the lines: A qualitative phenomenological analysis of the therapeutic alliance in pediatric physical therapy. *Physical & Occupational Therapy in Pediatrics*, *40*(1), 1-14.

Dunst, C.J. & Dempsey, I. (2007). Family-Professional Partnerships and Parenting Competence, Confidence, and Enjoyment. *International Journal of Disability, Development and Education, 54*(3), 305–318.

Ferjan Ramírez, N., Lytle, S. R., & Kuhl, P. K. (2020). Parent coaching increases conversational turns and advances infant language development. *Proceedings of the National Academy of Sciences, 117*, 3484–3491. doi:10.1073/pnas.1921653117

Friedman, M., Woods, J., & Salisbury, C. (2012). Caregiver coaching strategies for early intervention providers: moving toward operational definitions. *Infants & Young Children, 25(*1), 62–82.

Jelen, M., Harder, J. & Smith,V. (under review). Relationship Strength-based Coaching: A Professional Development Framework. Topics in Early Childhood Special Education.

Kasari, C., Gulsrud, A.C., Shire, S.Y. & Strawbridge, C. (2021). *The jasper model for children with autism: promoting joint attention, symbolic play, engagement, and regulation*. The Guilford Press.

Kemp, P. & Turnbull, A. (2014). Coaching with parents in early intervention: an interdisciplinary research synthesis. *Infants & Young Children, 27(*4), 305–324.

Knowles, M.S., Holton, E.F., and Swanson, R.A., (2012). *The adult learner: the definitive classic in adult education and human resource development*. New York, NY: Routledge.

Lorio, C.M., Romano, M., Woods, J.J., & Brown, J. (2020). A review of problem solving and reflection as caregiver coaching strategies in early intervention. *Infants & Young Children, 33(*1), 35–70.

Lorio, C.M., Woods, J.J., & Snyder, P. (2021). An exploration of reflective conversations in early intervention caregiver coaching sessions. *Journal of Early Intervention, 45(*4), 1–25.

Prochaska, J.O. & Norcross, J.C., (2018). *Systems of Psychotherapy: A Transtheoretical Analysis*. Oxford University Press.

Rouse, E. (2012). Family-centered practice: empowerment, self-efficacy, and challenges for practitioners in early childhood education and care. *Contemporary Issues in Early Childhood, 13(1)*, 17–26.

Rogers, S.J., Dawson, G., & Vismara, L. (2012). *An Early Start for Your Child with Autism: Using Everyday Activities to Help Kids Connect, Communicate, and Learn*. New York: The Guilford Press.

Rogers, S.J. & Stahmer, A. (2024). Help is in your hands. https://www.helpisinyourhands.org

Rush, D., & Shelden, M. (2020). The Early Childhood Coaching Handbook, second edition. Paul H. Brooks Publishing: Baltimore, MD.

The Hanen Centre (2016). More Than Words® — The Hanen Program® for Parents of Autistic Children or Children Who May Benefit from Social Communication Support. https://www.hanen.org/Programs/For-Parents/More-Than-Words.aspx

Tobii Dynavox (2024). Boardmaker. https://www.myboardmaker.com/Login.aspx

Williams, C.S. & Sawyer, G.E. (2023). Going beyond "I'm a coach": Adopting a caregiver coaching framework in EI. *Young Exceptional Children, 27(*1), 3–15. https://doi.org/10.1177/10962506231153

Chapter IV: A Pilot Study of the Relationship Strength-based (RSB) Coach Professional Development: Acceptability, Feasibility, and Effectiveness

Abstract

This study explores the efficacy and reception of a community-based Professional Development (PD) program of Relationship Strength-based (RSB) Coaching within an Early Intervention (EI) setting. Drawing upon existing literature on parent coaching (PC) in EI, which emphasizes family-centred practice (FCP) and adult learning theory, the RSB framework focuses on establishing therapeutic relationships with parents. Despite growing interest in coaching-based PD, research on its outcomes remains scarce. This study addresses this gap by assessing the impact of RSB coaching PD on EI practitioners' competency and their experience regarding the implementation of the PD, specifically related to acceptability and feasibility. Utilizing Miller's Pyramid as an instructional model, the PD program was piloted with nine participants over ten months. Results indicate improvements in PC competency among participants, influenced by motivation, practice opportunities, and engagement with foundational PC knowledge. The study underscores the importance of tailored PD to enhance PC practices in EI.

Parent Coaching (PC) is a way for Early Intervention (EI) practitioners to engage with families and meet the goals of family-centred practice (FCP) (Friedman et al., 2012; Kemp & Turnbull, 2014; Williams & Sawyer, 2023). PC operationalizes FCP by clearly outlining a process for working with families (Rush & Shelden, 2020), utilizing the principles of adult learning theory to engage in developmentally appropriate practices (i.e., Childress 2021), and drawing from the field of psychotherapy (i.e., Prochaska & Norcross, 2018) to establish a therapeutic relationship with parents. The therapeutic relationship facilitates a safe space for the parent to learn strategies to guide their child's development within their family context.

In efficacy studies of PC, researchers often train or coach parents, ignoring community-based EI providers as natural change agents. To put effective programs into common use, we must attend to developing the coaching skills of EI providers (p. xiii, Odom, 2013) because, despite its emerging popularity, the use of parent coaching (PC) among (EI) professionals has been inconsistent to date (Douglas et al., 2020; Meaden et al., 2018). Many factors contribute to the poor uptake of PC, including disparate definitions of coaching (Lorio et al., 2020; Ward et al., 2020) and inadequate training opportunities (Romano & Schnurr, 2022). Additionally, the majority of PC studies focus on child or parent outcomes (e.g., Rogers et al., 2018; Salisbury et al., 2018; Sone et al., 2021) and provide few insights into the training activities or methods used to develop EI providers' clinical competency (Romano & Schnurr, 2022).

In their systematic review examining coaching practices in EI, Ward et al. (2020) found that EI practitioners report regularly using coaching. However, the PC fidelity of what is being described needs to be clarified. Further, in their survey of EI professionals utilizing coaching, Douglas and colleagues (2020) found that 74% of survey respondents felt their preservice

training did not prepare them to understand or implement coaching. The EI professionals who had experienced some form of coach training reported that it was inadequate to use with families appropriately. Interview respondents recommended better mentorship or supervision when learning coaching. Douglas and colleagues (2020) conclude that there is an inconsistency in providers' understanding of the specific practices that make up coaching, which is a rationale for better PD in PC.

Relationship Strength-based (RSB) Coaching Model Professional Development

The RSB coaching framework draws heavily from established PC practices (e.g., Friedman et al., 2012; Kemp & Turnbull, 2014; Lorio et al., 2020; Rush & Shelden, 2020). Like most other PC approaches in EI, RSB coaching has the foundational elements of FCP and adult learning principles. The RSB coaching approach also emphasizes establishing a therapeutic relationship between the coach and parent and articulates the necessary and sufficient conditions that coaches must understand to promote its facilitation.

As suggested by researchers endorsing PC practices (e.g., Kemp & Turnbull, 2014; Lorio et al., 2020; Romano & Schnurr, 2022; Ward et al., 2020), there is a need for a consistent and systematic framework to guide a program of learning focused on teaching well-defined PC that includes measurement of clinical competence. The RSB coaching PD is organized around four components in Miller's Pyramid of Clinical Competence (Miller, 1990). The initial two levels (Knows and Knows How) emphasize learner knowledge, while the subsequent levels (Shows How and Does) focus on behaviours leading to clinical competence. Assessment points at each level ensure trainees progress through the pyramid effectively (van der Vleuten et al., 2017). Advancing levels pose greater challenges in assessing skills due to increased cognitive demands (Thampy et al., 2019). According to van der Vleuten and colleagues (2005), assessment is a

measurement and instructional design issue, necessitating integration with learning at each PD pyramid level.

As implied above, another difference between the RSB coaching approach and other established frameworks is that a competency coding measure guides the PD. This measure is used to evaluate the implementation of RSB coaching in EI and, importantly, as a teaching tool to deepen trainees' understanding and reflection of RSB coaching in practice. As EI professionals become familiar with the foundational components of PC, such as FCP, adult learning principles, and the therapeutic relationship, they also develop the ability to observe and evaluate their own and others' PC practices. This leads to eventually mastering the skills outlined in the competency coding measure.

Professional Development of Parent Coaching Practices

Four studies examined professional development (PD) outcomes of EI practitioners learning PC practices (Harbin et al., 2023; Meadan et al., 2020; Mirenda et al., 2021; Wainer et al., 2017). In all four, the emphasis was on teaching providers an early intervention program (i.e., Early Start Denver Model (ESDM), Mirenda et al., 2021; Project IMPACT, Wainer et al., 2017) or a prescribed set of strategies (i.e., triadic strategies, Harbin et al., 2023; communication strategies, Meadan et al., 2020) in addition to parent coaching skills. Thus, these studies examined the effect of training focused on the parent-mediated implementation of an evidence-informed intervention rather than the effect of training on coaching practices alone. For example, in their study of training EI providers to use ESDM, first independently and then coaching parents, Mirenda et al. (2021) found it difficult to conclude the reasons for substantial variability in clinical skills attained by the 31 EI providers who learned PC. The competency

score for trainees ranged from 38-93%. Author speculations for the variability were centred on trainee or family characteristics rather than aspects of the training program.

The field of implementation science addresses the challenges of conceptualizing and evaluating successful implementation (Proctor et al., 2011). Some studies gauge implementation success by only assessing the clients' clinical outcomes (e.g., parents or children), while others measure the effectiveness of implementation by examining dimensions that interact with the environment, such as acceptability and feasibility (Proctor et al., 2011). Acceptability is the perception among implementation stakeholders that a treatment, service, practice, or innovation is agreeable, palatable, or satisfactory. Lack of acceptability has long been noted as a challenge in implementation (Davis, 1993). Acceptability is often assessed based on the stakeholder's knowledge of or direct experience with various program dimensions, such as its content, complexity, or comfort. Feasibility refers to whether a new treatment or innovation can be successfully used or carried out within a given agency or setting (Karsh, 2004). For example, a program may be appropriate for a service setting because it is compatible with its mission or service mandate. Still, it may not be feasible due to resource or training requirements. Thus, when the implementation of PD fails, it is important to know if the failure occurred because the PD was ineffective (PD failure) or if a PD was not an acceptable or feasible fit (implementation failure). Conceptualizing and measuring implementation outcomes enhances comprehension of implementation processes, facilitates studies on implementation strategies' relative efficacy, and improves implementation research efficiency.

Given the limited literature on PD for PC, the present research examines the effectiveness, feasibility and acceptability of a community-based PD program in Relationship Strength-based (RSB) coaching.

The following research questions guided this work:

1. To what extent does PD in RSB coaching impact participant's PC competency?
2. What is the participant experience of the RSB coaching PD program?
    a. How acceptable is the RSB coaching PD?
    b. How feasible is the RSB coaching PD in a community-based EI program?

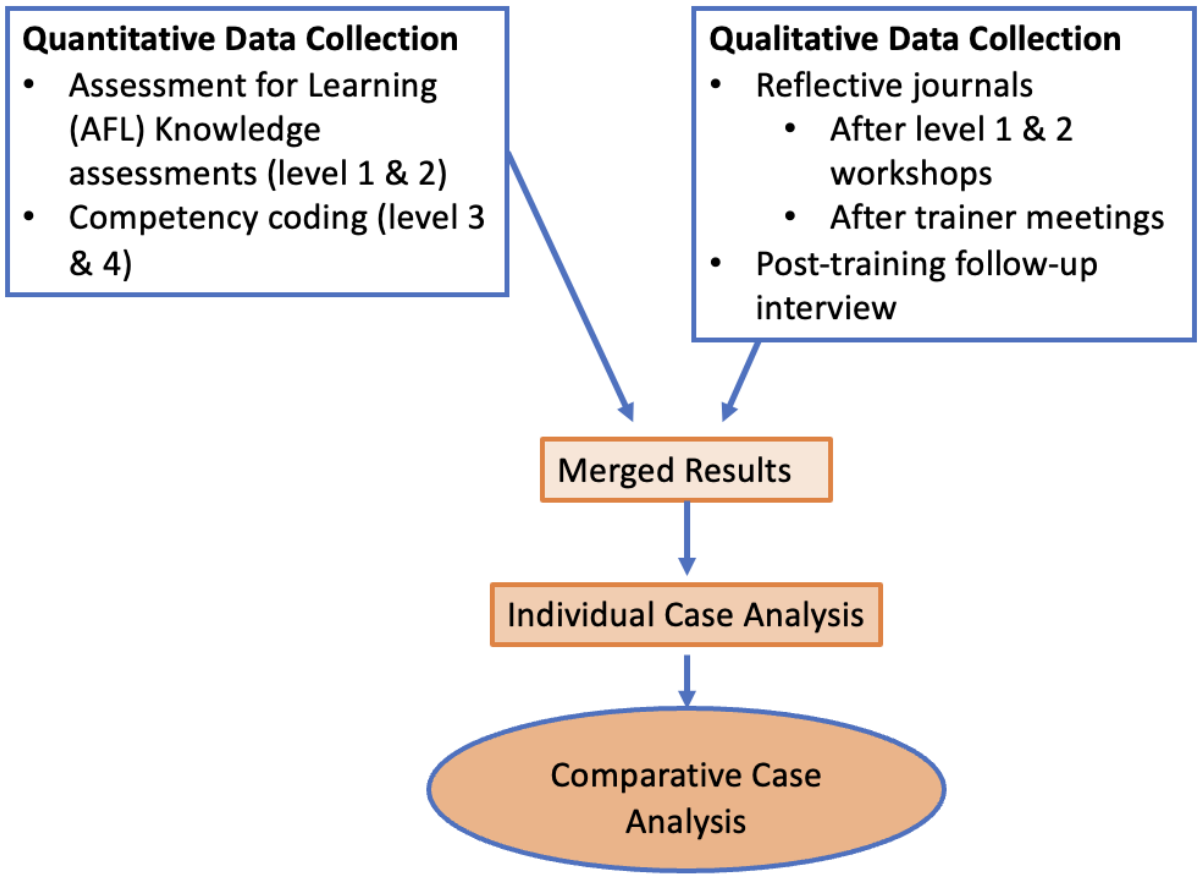
Method

Research Design

A mixed-method case study design with a convergent approach (Creswell & Plano Clark, 2018; Figure 1) was used to examine the research aims. Case comparisons were used to explore which aspects of the training program contribute to developing clinical competence in coaching. The convergent mixed method approach guided the interpretation of results by simultaneously collecting qualitative and quantitative data. Quantitative data examined differences before and after the learning and assessment program. Qualitative data explored participants' PD experiences. Finally, the quantitative and qualitative data were merged for individual cases and then across all cases to explore how the PC PD contributed or detracted from the participants' learning and the level of clinical competence achieved.

Figure 4.1

Mixed Method Case Study Design with a Convergent Approach



Participant Sample and Recruitment

Context. The RSB coaching PD was implemented at the Early Intervention Program (EIP) at Island Health in Victoria, BC. The EIP provides services for children diagnosed with or at risk of developmental delay and serves families living in Victoria and surrounding areas. EIP team members include speech-language pathologists, occupational therapists, physical therapists, infant development consultants, and social workers. The EIP is mandated to work with families

and address family goals related to their child's development, emphasizing FCP (Island Health, 2020).

Funding for the research was provided through a Mitacs Accelerate grant in collaboration with the Island Health EIP. Implementation details of the RSB coaching PD program were reviewed and adapted with input from an advisory group composed of three employees of the EIP at Island Heath to ensure it met their goal of training EI clinicians within their organization. The advisory committee members included the EIP manager and two clinical leads within the program. The coach trainer (i.e., lead author) met with the advisory group three times before PD commenced. Specific information discussed included participant inclusion criteria, the process for selection of EIP clinicians to participate, logistics of how the PD program would fit within existing work and caseload structures, data gathering processes, consent required with all involved, timing of the training phases, and how the practice coaching opportunities would fit within the EIP. It was decided that the project would commence after the summer holidays, in September, and continue for at most ten months, with final data collection by mid-June. Ethical approval for the study was obtained from the Research Ethics Offices at the University of Alberta and Island Health (see Appendix F).

Participants' expectations were outlined at the start of the project and guided by the RSB coaching PD as outlined in Chapter Two. Specifically, requirements included engaging in eight synchronous weekly workshops, completing online assessment activities after each workshop, choosing three families to practice RSB coaching with, video capture of all coaching sessions, competency coding select videos of their coaching sessions, completing reflective journals for the duration of the project, and attendance of one-on-one and group meetings to reflect on their

coaching practice. Participation in the project allowed participants to reduce their caseload by one client to free up time for project requirements.

Participants

Based on the advisory group's recommendation, all EIP clinicians except social workers were included in the participant selection criteria. Other inclusion criteria included self-identified interest in participation, employees working full-time hours, a commitment to participate for the ten-month study duration, and willingness to engage in data collection requirements. All inclusion criteria were clearly outlined during a presentation introducing the research project to the entire EIP staff.

All 45 EI professionals employed at the Island Health EIP were offered the opportunity to participate in the training. Eleven EI providers applied to participate in the project. One was not eligible as she needed to work more hours to be able to commit to the study time commitment. Ten were approved for participation. One changed her job halfway through the project and withdrew after partially completing the PD. In total, complete data was collected for nine participants. Four speech-language pathologists, two occupational therapists, two physical therapists, and one infant development specialist were represented across the nine participants. Specific disciplines are not identified in the descriptive information or reporting of results to maintain participant anonymity. All nine participants were assigned a pseudonym to protect their privacy.

Table 4.1

Participant Characteristics

Participant	Highest Degree	Time Working in EI	Prior Exp. With PC
Abby	Masters	11-15 years	Read About
Betul	Bachelors	0-5 years	No Experience
Cassandra	Masters	11-15 years	Taken Workshop
Deirdra	Masters	6-10 years	Read About
Elizabeth	Masters	0-5 years	No Experience
Francine	Masters	6-10 years	Taken Workshop
Gisella	Bachelors	16-20 years	Taken Workshop
Habebbah	Bachelors	11-15 years	Taken Workshop
Isla	Bachelors	11-15 years	No Experience

RSB Coaching PD Trainer. The RSB Coaching PD program was developed and delivered by the lead author, a doctoral student, as her dissertation project. She has a Master's degree in special education, is trained as a behaviour consultant, and has more than 20 years working with families supporting children with various developmental needs, in addition to experience in PC and training others in PC practices. She participated as a PC trainer in an early intervention and parent coach research project (i.e., Mirenda et al; 2021; Mirenda et al., 2022; Smith et al., 2021) in British Columbia between 2017-2020. This project focused on teaching EI providers to learn PC to support parents in implementing an evidence-informed early intervention model for young children with suspected autism.

RSB Coaching PD. The RSB coaching PD is organized around four components in Miller's Pyramid of Clinical Competence (Miller, 1990). The initial two levels (Knows and Knows How) emphasize learner knowledge, while the subsequent levels (Shows How and Does) focus on coaching behaviours leading to clinical competence. Accordingly, assessments were developed to measure learner knowledge and clinical competence. The PD is delivered using two general types of activities. First, small group-based synchronous online instruction and activities

to impart foundational knowledge at levels one and two, and second, practical application at levels three and four involving one-on-one feedback and support for implementing coaching with parents.

The first group-based workshops (i.e., levels one and two of the RSB coaching PD) were conducted on Zoom for eight consecutive weeks. The nine participants were split into two groups for levels one and two. Group one involved four speech-language pathologists, and group two involved two physical therapists, two occupational therapists, and one infant development specialist. Online assessment activities followed each workshop, with the intent to help participants think critically through content.

Upon completing levels one and two, participants independently planned their practice activities (i.e., level three). Practice occurred with one family at a time so participants could still commit to their regular caseload. Participants independently selected families with whom to practice coaching. The trainer was available to discuss questions or considerations during family selection and goal identification.

Participants were provided iPads and asked to record all coaching interactions with the participating families. In most cases, this allowed technological challenges with video recording to be ironed out early in the practice phase. Participants engaged in all aspects of coaching as detailed in the RSB coaching framework (i.e., Chapter Two), including independently setting goals with parents and determining how many PC practice sessions they would need to work through the goals (i.e., the LF process). The trainer offered suggestions and feedback during meetings with each participant to help guide these decisions.

Finally, level three involved trainer feedback. The trainer had regular one-on-one meetings with each participant. The frequency of meetings was determined collaboratively

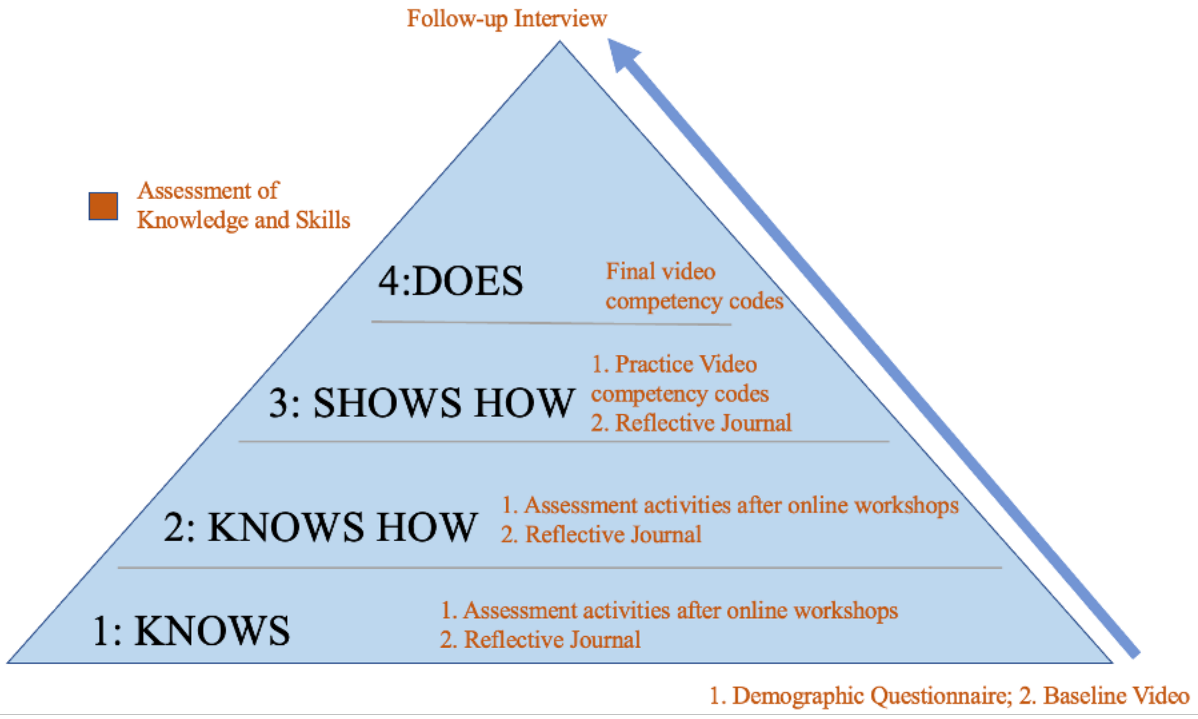
between the trainer participants based on each circumstance. Meeting topics were specific to PC practice and trainer-participant reflection on PC videos. The Parent Coaching Competency Rating Scale (PCCRS) (Appendix A) was used as a feedback and competency coding reflection tool. Regularly scheduled group meetings were made available for all participants to attend as they felt were useful. Group meetings provided opportunities for peer support, brainstorming around specific issues, and sharing experiences and successes. There was no requirement to attend meetings; however, all participants regularly took advantage of one-on-one and group meetings.

Data Collection

As shown in Figure 4.2, data were captured throughout the study at each training level.

Figure 4.2

Data Collection Points within the RSB Coaching PD Program



Demographic Data

Before beginning the training, participants provided written consent to participate in the study and completed a demographic questionnaire (Appendix D) that included questions about prior experience and education.

Quantitative Data

PC Knowledge Assessment. Each participant completed a pre-test comprising questions from level one and two PD content. After each of the eight synchronous weekly workshops (i.e., levels one and two), participants completed the multiple-choice and short-answer quizzes on the session content. Each quiz included 8 – 27 questions. After all level two workshops were completed, the percentage of correct responses was averaged for each participant's overall PC knowledge score.

PC Skills. Using their iPad cameras, participants recorded a baseline video of themselves engaging in EI using FCP before the start of the PD program. No other instructions, training, or coaching were provided. During PC practice (i.e., level three), participants recorded videos of PC sessions. All coaching interactions were videoed so participants could reflect on their practice and select examples of their best PC sessions to be used for project data. Participants selected at least one video from each practice family to watch, competency code, and use for reflective practice during one-on-one feedback meetings. Upon completing the RSB coaching PD, participants were asked to select a final video of themselves engaging in PC to indicate their best coaching demonstration (i.e., level four).

Participant-selected videos were competency-coded using the PCCRS (i.e., items D-K; Appendix A). A score of 5 is a strong demonstration of clinical competency, 4 is close to a strong demonstration, 3 is an emerging demonstration but room for improvement, 2 is an emerging

demonstration with much room for improvement, and 1 is no indication of clinical competency. Each participant had three video demonstrations of PC coded: 1) baseline, 2) during level three practice, and 3) a participant selected a 'best practice' video submitted at the end of the PD program. The Laying the Foundation (LF) items (i.e., A-C) were not coded using the PCCRS due to inconsistent or inadequate data collection. As an alternative, the absence or presence of LF components (i.e., LF conversation, written goals shared with the parent, and demonstration of content to guide PC), when the information was available, is detailed in Table 3.

A trained research assistant who was blind to the study timepoints coded the video using the PCCRS. Before the study commenced, the research assistant and coach trainer independently coded ten PC session videos, resulting in an Inter Observer Agreement (IOA) of 84%. During the study, a random sample of five PC videos from level three practice was also independently coded, resulting in an IOA of 83%. Only competency codes from the trained research assistant were used as data points to ensure there was no bias from the study trainer and author. She was blind to the condition of the study during all competency coding.

Qualitative Data

Semi-structured Participant Journals. Participants were asked to complete semi-structured journal entries throughout the PD program. In levels one and two, journal entries were completed after each online workshop. Questions that guided the level one and two reflective journal entries inquired about essential takeaways from each workshop, plans to practice, and any other reflections they wanted to share about the training. In level three, journal entries were completed after each one-on-one and group meeting. Questions that guided written journal entries at level three included participants' perspectives of the most essential points of the

meeting, plans to practice, goals to accomplish in their next practice PC session, and any other reflections they wanted to share about their practice experience.

Final Interviews. Participants completed a semi-structured interview at the end of the project. This involved a 20–45-minute interview, recorded online using Zoom with the academic supervisor who had not participated in PD but was familiar with the project. Participants were asked to share their overall experiences with the training, share their thoughts about coaching, and offer suggestions about ways to enhance the training program. Participants were also asked whether the assessments impacted their clinical competency development. Interviews were transcribed and explored for themes related to the research questions. Please see Appendix C for the questions that guided the semi-structured interviews.

Data Analysis

Quantitative

Descriptive statistics were used to calculate the means of the participant's RSB parent coaching knowledge (levels 1 and 2) and clinical competency. Repeated-measures ANOVAs were used to evaluate changes in participant knowledge and clinical competency of RSB Coaching. Multiple regression analyses were used to test whether participant backgrounds or knowledge of parent coaching predicted the best performance of RSB coaching post-PD. These inferential statistical tests were conducted, acknowledging their exploratory nature given the recommendations (Stevens, 1996) that, to increase generalizability, 15 participants per predictor are needed for a reliable equation. Thus, given the small sample of 9 participants in the present study, generalizability beyond this limited cohort must be made cautiously. To compute all statistics, SPSS Mac version 29.01.0 was used.

Qualitative

To understand the impact and experience of the PD, case study methodology (i.e., Yin, 2018) was applied to explore the full range of evidence gathered from each participant. Yin (2018) recommends exploring each case before making broad conclusions about any within-case patterns. This ensures that each case's integrity and holistic features are well understood. The case study method was suitable because of the relatively small sample of participants, the unique context and experiences each participant had, and because the work and data collection occurred in real-world settings. As each participant's trajectory during the project varied, individual case exploration helped ensure that the contextual variables of each participant's experience learning and practicing coaching were factored into the final analysis and conclusions. For example, as adult learners, each participant had their prior knowledge or experience with coaching, unique experiences and understanding of the level one and two content, different engagement with the assessment activities, varied practice opportunities and timelines during level three practice, and individualized focus during competency coding practice and trainer meetings during the program of learning.

Mixed Analysis

These multiple participant data sources were triangulated before making broad conclusions specific to the research questions.

The credibility of multiple data sources ensures that the interpretation of qualitative and quantitative findings is accurate (Creswell, 2014). To support the thematic analyses' trustworthiness, validity strategies described by Creswell (2014) and Yin (2018) were utilized to explore the qualitative data for each participant. Triangulation of themes uncovered for each case story occurred throughout the data analysis. When discrepant data was found, contradictory

information was clearly described. All possible sources of data from each participant were explicitly explored to gain clarity on the accurate interpretation of results and described in each participant's case story.

The cross-case analysis explores patterns, similarities, and differences across the cases. It follows the case stories to understand the impact of the PD on participants' PC clinical competency (i.e., research question one) and their overall experiences with the RSB Coaching PD program (i.e., research question two). The patterns across the cases helped describe, understand, and illustrate the PD program's impact and experience. For the thematic group analyses, in addition to clarifying biases, the author engaged in ongoing self-reflection during the coding process. Analysis, interpretations, and reflections were shared with the dissertation supervisor as recommended by Saldaña (2009). This process included questions, reviewing and discussion of the thematic coding and analyses to increase the credibility of the findings. Guided by Yin (2018), a case-based approach to cross-case analysis was used to maintain the integrity of each individual case story for the broader analysis across all participants. Individual cases were explored and compared with each other to identify within-case and cross-case patterns and themes. This information guided tentative interpretations and a more in-depth exploration of themes across cases. The data was reviewed within each case and across cases on multiple occasions.

The cross-case analysis included aggregating the data and conducting statistical tests to determine group differences in knowledge and competency from before and after the training. This was conducted using a repeated measures ANOVA, which will be later described. Data were also explored to examine group participant factors that may have predicted parent coaching competency.

Results

As Yin (2018) recommends, to ensure that all participants were accurately represented in the final cross-case analysis, a case story was created by individually exploring each participant's quantitative and qualitative data. The nine case stories are summarized below. Following the individual case exploration, the cross-case analysis is summarized. This presents a summary of the effectiveness of the PD related to the number of practice opportunities and trainer feedback meetings. Participant interpretations of the PD program's acceptability and feasibility and three cross-case themes resulted from the reflective journals and the final interviews. Finally, the individual case studies and cross-case analysis results are utilized to answer the two research questions that guided this work.

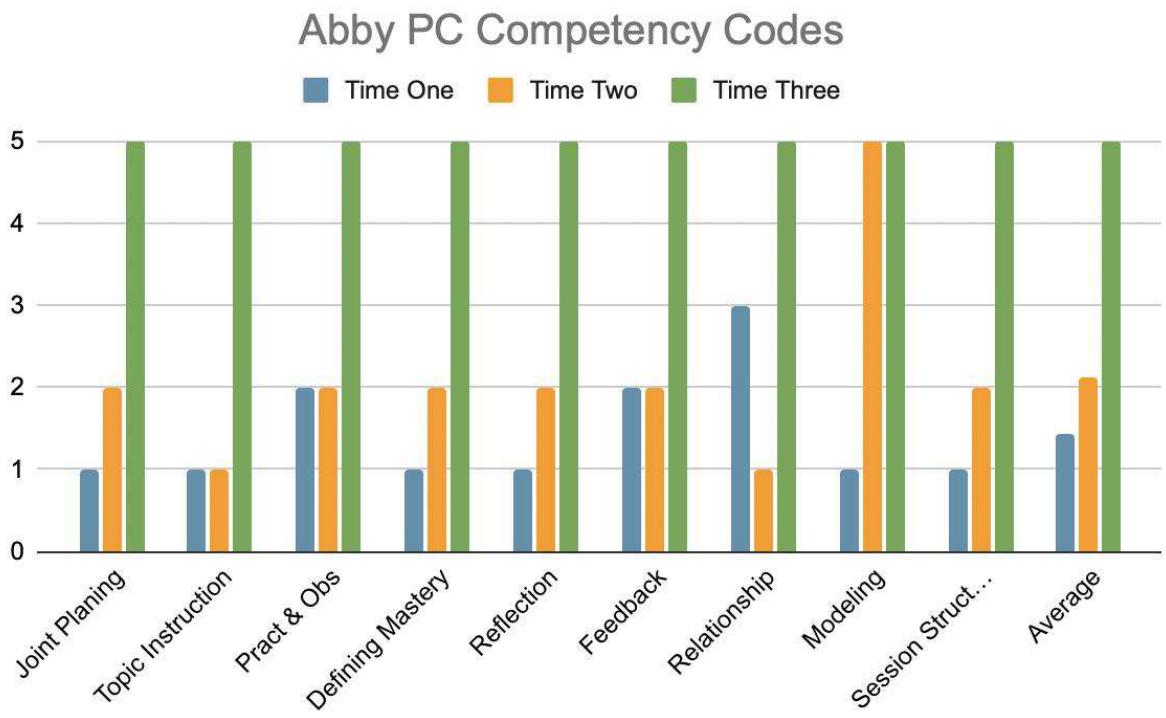
Case Stories

Abby. Abby is an early interventionist with a Master's degree. Before participating in the PD, she had read about PC. She worked as an Early Interventionist for 15 years. During levels one and two of the training, Abby demonstrated an interest in learning about PC; however, she persistently debated its merits and challenges compared to other ways of delivering EI support. She expressed frustration with the terminology covered in the level one and two workshops, "*I felt like there was a lot of jargon and a lot of theory, which I know is important, but it would have been nice to have talked a bit less about the theory and more about how to implement it in our kind of setting."* Her baseline score on PC knowledge before the PD was 61% and her average score after the level one and two workshops was 84%. Her suggestions for improvement included condensing the level one and two training, "*I found it very difficult to keep everything in my mind having it once every week. I found it very hard for me to really remember everything I think I learned for myself. I work better when I do it in a big mass chunk."*

Level three practice positively impacted her PC competency, as evidenced by her level four video competency scores. She completed all three LF activities for two of her practice families and none of them for one of her practice families. Her average rating across the nine PC competency codes on the five-point Likert scale was 1.44 before the PD. This increased to 2.11 during level three practice and 5.0 on her final video. Abby worked with three families during her level three practice. She reported that all three parents found the coaching helpful and that she would continue to utilize PC after the PD program ended Abby used the PCCRS to competency code herself and discussed her codes with the trainer twice during level three practice. This activity impacted her practice positively, and noticeable competency shifts occurred following this self-competency coding and reflection. Her reflective journals also indicated this. In her final interview, she reported that she found the learning valuable once she began practice, "*Just getting in there and then, I think, reflecting on it [during one-to-one feedback] was really helpful… I really like the way [the PC session] is set up. So, talking in the beginning about what we're gonna work on, setting the goal, practicing, reflecting. I like that setup. That's something that I didn't do before… I think coaching is valuable; I think it's definitely something we could use."*

Figure 4.3

Abby's PC competency codes across the PD training



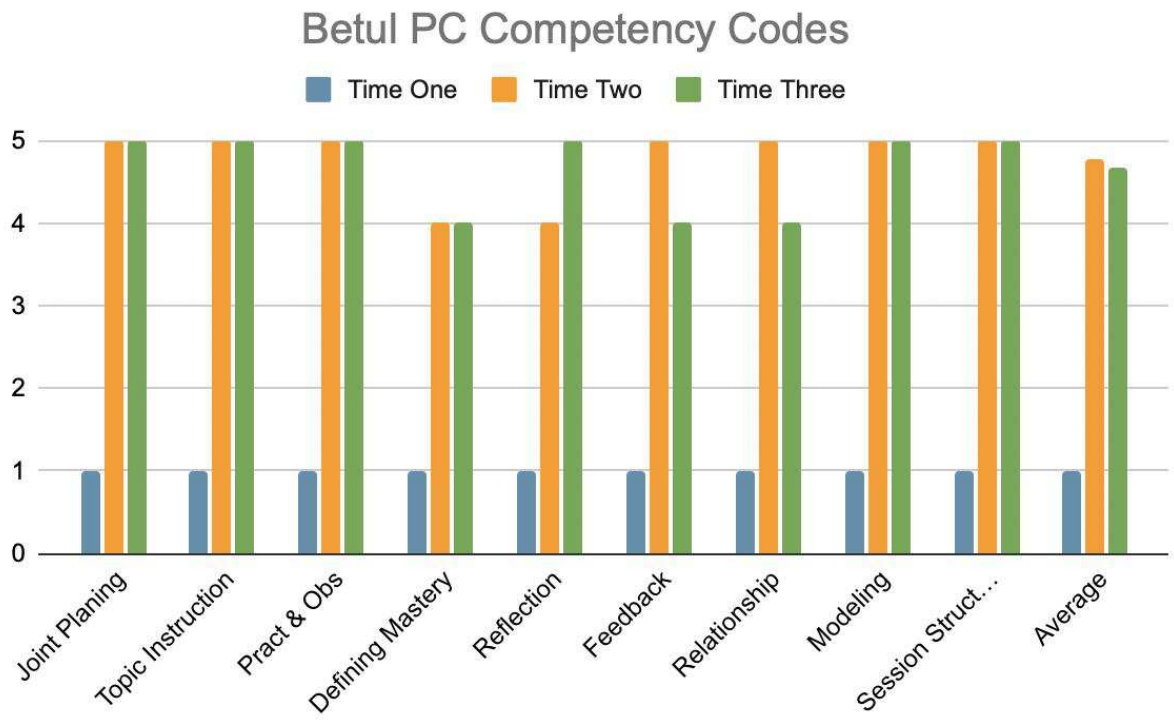
Betul. Betul is an early interventionist with a Bachelor's degree. Before the PD, she had no experience with coaching. She had been practicing in the field of early intervention for zero to five years. During levels one and two, Betul demonstrated an interest in learning about RSB Coaching. She struggled with time management when completing the homework after levels one and two and filling in reflective journals to document her practice during level three, "*There could have been less forms to fill out. That took a lot of time, and it was frustrating. I just felt like there was way too much data that we were being asked to complete."* She found the theoretical learning at levels one and two helpful. She enjoyed watching video examples of coaching before beginning her level three practice, "*watching the video clips where we got to watch other people doing parent coaching was the most useful for me."* Betul appreciated practice competency

coding but did not like the knowledge assessments after the level one and two workshops. She found the practice at level three most positively impacted her learning. Her journal reflections during all levels of training indicated that she was exploring, learning, and understanding the nuances of PC. Her suggestions for improving the training involved fewer assessments for learning and more hands-on practice earlier in the training process. At baseline, Betul obtained a score of 61% on the assessment. Her average score after level one and two was 79%. "*I wish we could have had more hands-on practice in between [learning about the foundational principles] somehow, because questions don't arise for me until I start doing the work."*

Betul practiced coaching with three families. She reported that all three parents found the coaching helpful. Some challenges that she experienced were specific to the parent's ability to participate in the coaching process due to language barriers and high needs related to socio-economic challenges. Betul reflected that having a deliberate goal to focus on during parent coaching sessions helped provide coaching during her scheduled EI time with families. Betul provided evidence of one of three LF activities for two of her practice families and all three for her third practice family. Betul completed the PCCRS and discussed her codes with her trainer three times during her level three practice. Betul's average rating across the PCCRS competency codes on the five-point Likert scale was one before the start of training, suggesting no PC competency skills. Her competency codes increased to 4.78 during level three practice and were 4.67 on her level four video. She demonstrated high CC across all nine codes in her time two and three videos. For a breakdown of her ratings on the nine competency codes, please see Figure 4.4. Overall, Betul found the PD process valuable, "*I feel like I have another tool in my toolbox to use parent coaching."* She plans on utilizing it in her EI practice.

Figure 4.4

Betul's PC competency codes across the PD training



Cassandra. Cassandra is an early interventionist with a Master's degree. Before the PD on RSB Coaching, she had taken a workshop about PC. She had 15 years of experience as an early interventionist. During all levels of PD, Cassandra demonstrated a strong interest in learning about coaching and spent time sourcing written materials that positively impacted her learning. During levels one and two, she was consistently asking for further opportunities to expand her knowledge and reflected on her experiences trying to integrate new information, "*I find myself often thinking about the content and concepts over the week, trying to make sense of how to incorporate it into sessions. I am looking forward to the future sessions where we really unpack how these concepts apply to Early Intervention Program sessions."* She regularly shared past experiences and linked them to how they differed or supported the content reviewed in all

aspects of the training. At baseline, Cassandra received 58% on her knowledge assessment, her average score after level one and two workshops was 88%.

During level three practice, Cassandra demonstrated high engagement. She practiced with three families. She was eager to meet with the trainer for one-to-one meetings to reflect on her practice experience and increase her knowledge. She provided evidence of all three LF activities for two of her practice families and two of three for one practice family. She competency-coded one PCCRS which she shared with the trainer for feedback. Her reflective journals consistently commented on what was helpful about the feedback process incorporated into level three, "*It was really helpful to have the chance to verbally reflect back on my first coaching session. I appreciated how you highlighted how the goals actually did fit with one another. That connection helped me to see the big picture, too."* Her reflections after one-to-one sessions with the trainer and group sessions with peers consistently supported her advancement of knowledge specific to coaching, "*I enjoy now, at this point in the project, that coaches have more experience to talk about in the community of practice meetings. I'm finding it more relatable now that everyone is practicing with their second or third family."*

In her reflections about the training overall, Cassandra suggested that some level one content could have been condensed and suggested that practice opportunities be added into level two. *"I think [level one] probably could have been condensed for our audience who are experienced practitioners in EI. I found level two more interesting, partially because there were more real-life video examples, and we had some practice with the coding. I think level two could have included more practice opportunities."*

The main challenges Cassandra experienced during the coaching practice were related to session cancellations due to illness. She reflected that RSB coaching positively impacted all three

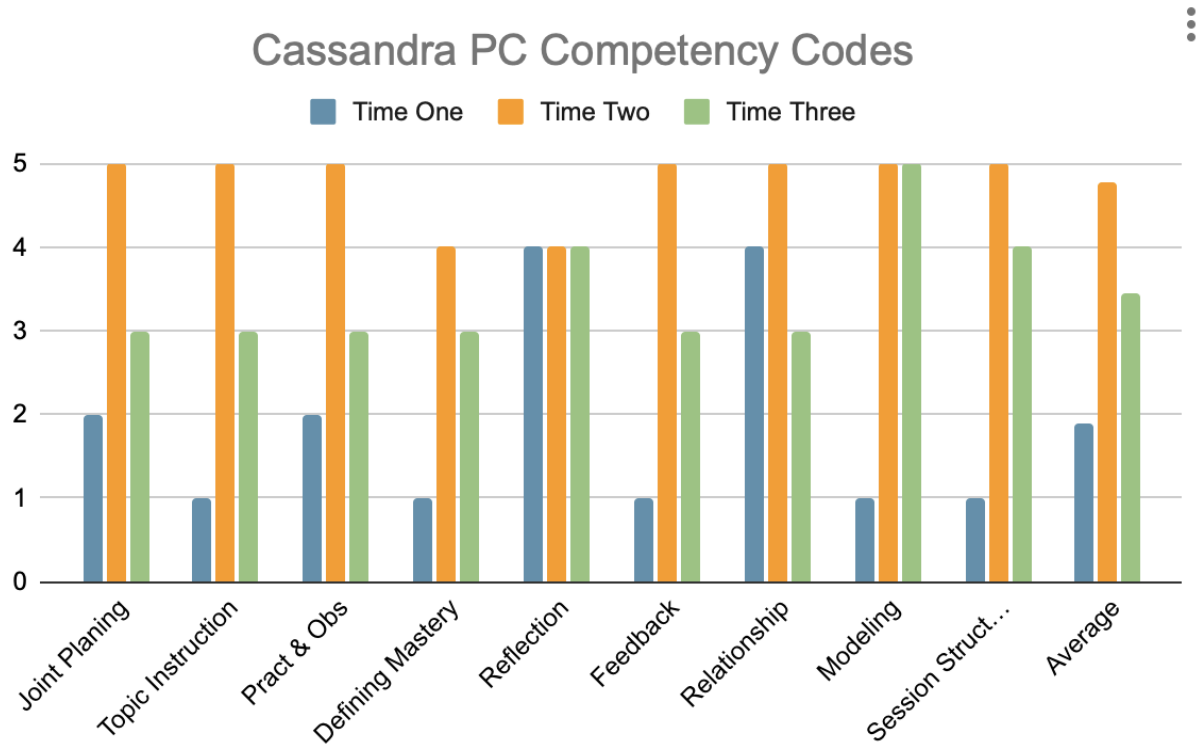
families and is an intervention process she plans to utilize in her practice. In her comments specific to level three practice, Cassandra found the one-to-one feedback from the trainer helpful, mainly when they could review specific examples for Cassandra's coaching practice videos.

When reflecting on the training overall and the impact the level one and two knowledge had on her ability to utilize PC in level three and beyond, she found that the overall training positively shifted her knowledge about PC, "*I would say because of the content knowledge [in level one and two], I definitely know more about parent coaching. I would also say my practice has changed. I think I've learned new skills as a clinician, and I feel like I've been changing my approaches kind of overall with my families. Not just the ones participating in the project. My impression from families is that it has been really helpful. So that's also kind of rewarding, you know? Okay, it's not just our clinicians; it's actually having a real impact for families."* When further probed about her reflections on the impact of PC on families, Cassandra shared, "*They just seem like they're a bit happier with where their child is at, and whether that's because they feel more confident or they're gaining skills, but they just seem much more empowered."*

Cassandra's average rating across the PC competencies on the five-point Likert scale was 1.89 before the training. Notably, she demonstrated high competency at baseline in two areas: reflection and relationship. She was diligent in capturing videos of all level three practice opportunities. Her competency increased to 4.78 during level three practice and was 3.44 on her level four PC demonstration video.

Figure 4.5

Cassandra's PC competency codes across the PD training



Deirdra. Deirdra is an early interventionist with a Master's degree. Before the PD, she had read about PC. She had been practicing EI for six to ten years. She demonstrated interest in learning about PC during levels one and two. Her reflective journals indicated engagement with the workshop content. During the early stages of the training, she regularly commented on the time required to complete homework activities, the high caseload pressures in her work, and the heavy content covered in level one and two training. "*The parent coaching course is taking more time than I anticipated, so I am not able to devote as much study time as I would like to it. I still need to attend to my caseload and clients' needs… The level of information feels like half a university course, not a workshop worth of information. It is a struggle to put as much time as I*

would like into the coaching course because the information and training is valuable, and it will improve my clinical work." She found the theoretical learning at levels one and two challenging and did not consistently participate in group discussions or dialogue. This was further exemplified in her follow-up interview when asked about the level one and two workshop content, "*I'm going to be really honest with you, and tell you that [level one and two content] went in one ear and out the other…I think I would have been better able to absorb it had I not been so stretched* [time-wise]. *We are really busy with our caseloads, and we don't have a lot of extra to take home that extra level of learning. The type of learning that I would expect if I were doing a graduate level course or something like a certificate for fees or something, so I can*, *you know, that would give me an extra designation so I could get more pay for the rest of my career. But I thought it was really heavy on the theory."* Further feedback about level one and two training indicated that the assessment activities after the workshops hindered rather than helped her motivation to continue in the project. Deirdra's baseline knowledge assessment scored 23%. Her average score in the level one and two workshops was 71%.

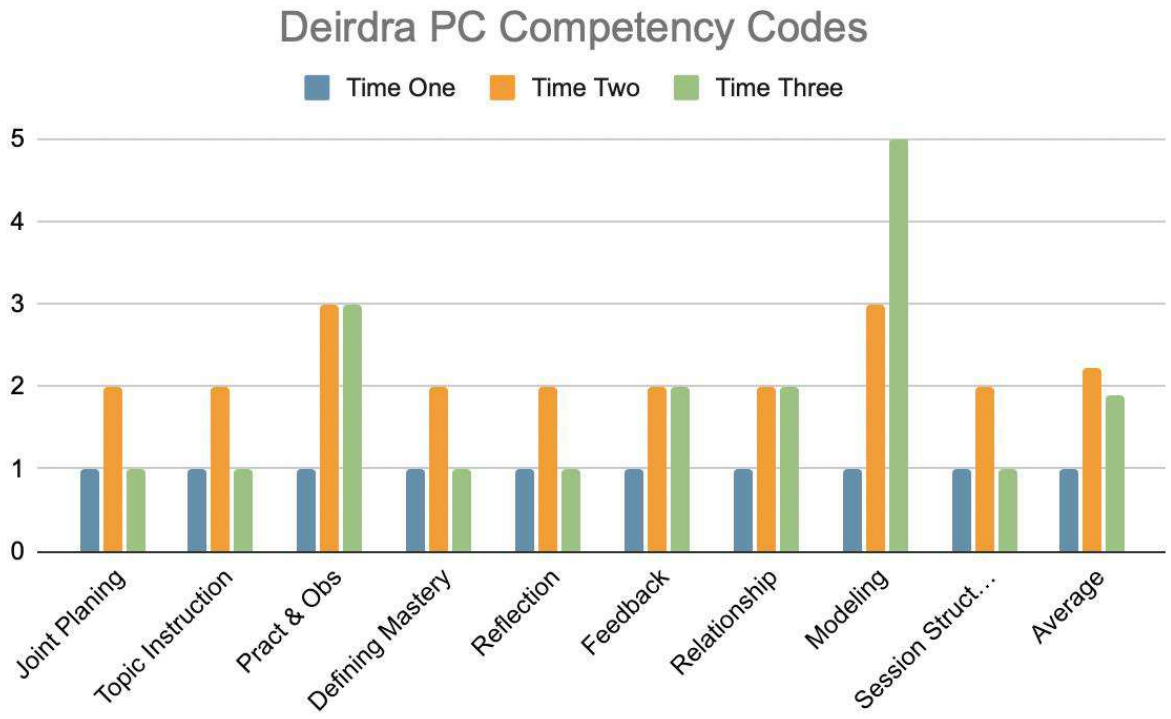
Deirdra described a lack of motivation due to time constraints to begin level three practice and reported that this impacted her challenges in finding a family for practice. Once she began with her first practice family, she frequently requested one-on-one meetings with the trainer, "*talking [one-on-one] with [the trainer] was most helpful for me."* She began to demonstrate shifts in her attitude towards the project requirements, as evidenced by her reflective journal entries and conversational feedback during and after one-on-one feedback sessions. This trend also began to show in her PC competency codes. She reported finding PC positively impactful in her interactions with parents. In her follow-up interview, Deirdra said that level three was most helpful for her learning.

During level three, likely because she started her practice later than others, Deirdra practiced with two rather than three families; however, she did competency code herself using the PCCRS to share and discuss with the trainer three times during this practice. Deirdra completed two of three LF activities for both of her practice families. She reported that both parents she worked with found the coaching helpful. During level three, she indicated that PC improved the outcomes she was used to seeing with families. She reported that she intends to use RSB coaching in her future practice, "*I think it really has improved my practice, and I'm able to provide a better service to the families I work with."*

Deirdra's average rating across the PC competencies was 1.0 or no competency before the PD. This increased to 2.2, or low competency, and slightly decreased to 1.89 on her level four parent coaching demonstration video. All nine codes increased slightly from baseline in at least one of her post-baseline videos; the majority did not reflect emerging or high competency. As the trainer, I hypothesize that her competency scores would have continued to increase if she had a third family to practice with due to her increasing engagement with the process and motivation to begin understanding how her clinical practice was shifting through the lens of the PCCRS competency ratings. Deirdra's reflections about level three practice support this hypothesis. *"I would have liked a longer length of time for phase three. That way, scheduling clients, you know, dealing with vacations, sick leave and all of the things that happen, I would've been able to get into it and get more out of it had we mad maybe six to nine months, maybe even a year to see three families and have the one-to-one feedback with [the trainer]. That, for me, would've been ideal, I would have loved that… I wish I could have worked with three families [for the project]."*

Figure 4.6

Deirdra's PC competency codes across the PD training



Elizabeth. Elizabeth is an early interventionist with a Master's degree. Before the PD, she had no experience with PC. She had been practicing EI for less than five years. During levels one and two, Elizabeth demonstrated enthusiasm for learning about PC by engaging in the workshops. She indicated that the level one and two assessment activities were time-consuming, "*The homework is getting super demanding and time-consuming and is taking time and energy away from my clinical work."* Elizabeth scored 58% at baseline, her average score after level one and two assessments was 82%. In her follow-up interview, Elizabeth indicated that the content from levels one and two was heavy and too theoretically based, "*I kind of wonder if it would have been more effective to complete those eight weeks condensed into maybe two or three sessions and just get right to the point, show a few videos, and get to the practice."* She also

indicated that more emphasis on the competency coding earlier on would have been helpful, "*[Working] backwards might have been a better idea. Like looking at the competency coding first… [After I coded my first video] I realized that I should have spent more time looking at the competency coding, even before starting my parent coaching [practice].”* Her competency codes during level three practice supported this sentiment; although five competencies went up in her time two video, four remained the same as her baseline. She did not complete any practice PCCRS competency coding to share with the trainer until her third and last practice family. She only completed one of three LF activities for her first two practice families. After she used the PCCRS and reflected on her codes with the trainer, there was a marked improvement in all her codes compared to her baseline. This also resulted in her providing evidence of two of three LF activities for her third practice family. Her average rating the PC competencies was 1.0 or no competency before training. This increased to 2.67 during level three, or low to moderate, and was 4.33, or high, on her level four parent coaching demonstration video.

Elizabeth indicated that the one-to-one feedback with the trainer was most impactful in level three rather than the group feedback sessions, "*I think that was really helpful to talk about my individual cases. I found that more effective than group sessions because you want to get into the nitty-gritty of your client, and it's hard to do that when you are in a group.”* Her reflective journal entries further supported this, "*thanks for hashing things out with me. Brought more clarity.”* Technological challenges related to capturing video of parent coaching sessions during level three practice were a barrier for Elizabeth. However, she persisted and captured adequate video for the study data requirements.

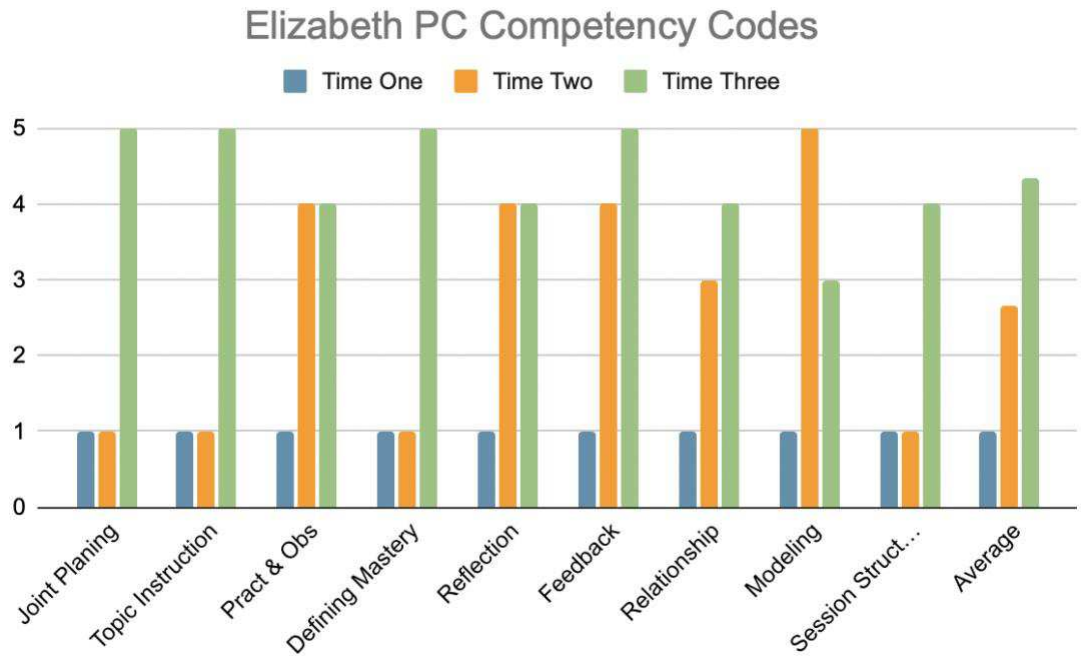
Elizabeth reported that all three parents found the coaching helpful. Some challenges she experienced were specific to parents' ability to participate in the coaching due to socio-economic

reasons and setting the goals too broadly at the outset of coaching. She reflected that once she engaged in open, targeted, and honest communication with the parents, they could set a more realistic goal for themselves and their children.

In her follow-up interview, Elizabeth reported that overall, she found the PD helpful to her clinical practice and positively impacted the families she works with. "*I think definitely it's been a really good experience. Giving the reigns over to the parent and putting a lot more of the responsibility and power into their hands. We always try to do that, but with parent coaching, you're really letting go of that. It's definitely more empowering for parents. And it puts them a little bit more in the hot seat and gets their brains working in a different way that if they're just sitting there on the receiving end of a consultation.*"

Figure 4.7

Elizabeth's PC competency codes across the PD training



Francine. Francine is an early interventionist with a Master's degree. Before the PD, she had taken a workshop about PC. She had been practicing EI for approximately ten years. Francine demonstrated a strong interest in learning about PC at all levels of the PD. She consistently contributed to group discussions and shared reflections about what she was practicing in her early intervention work with her level three practice families and other families on her caseload. She demonstrated a high level of engagement throughout the entire project. She was eager to meet with the trainer for one-to-one meetings, reflect on her practice experience, increase her knowledge about PC, and immerse herself in the learning. Her reflections on theoretical components and practical experiences indicated in-depth engagement with the learning material and laid out detailed and clear plans to practice her PC skills. For example, after a level two session, she had clear goals to integrate the learning into her work, "*I am really liking the process of thinking through my content. I think I often have a million things running through my head that we can work on or strategies I can teach, so then I pull too many out at once. Thinking through my content helps me pick one thing at a time."* At baseline, Francine received 52% on her assessment. Her average score after level one and two was 95%, the highest of all the participants.

When asked about suggestions for improvement, Francine commented that she would have appreciated more videos and videos showing families in a range of developmental circumstances as it would have been more reflective of the demographic she works with during level one and two training, "*One thing I would love to see would be more video examples of a wider range of goals and disciplines... what do you do with the six-month-old who's working on rolling, or that four-year-old pre-K kid with fine motor deficits, or palsy or…"*

During the level three training, she practiced with three families. She coded three practice videos using the PCCRS, which she shared and reflected on with the trainer. She provided evidence of all LF activities for all three practice families. The main challenge she experienced during the PC practice was session cancellations due to illness. She reflected that coaching positively impacted all three families and that it is a model she plans on utilizing in her practice going forward. "*I believe in the power of coaching. I think it provides more opportunity for the child to learn new skills, and I think it gives parents the tools and confidence they need to support their child.*" Francine consistently indicated that she plans to continue using coaching in her future work. She appreciated completing the PD with her work colleagues from different disciplines and commented that it is rare for learning opportunities in EI to cross different professions. Having the ability to connect with her peers was something she found helpful to her learning.

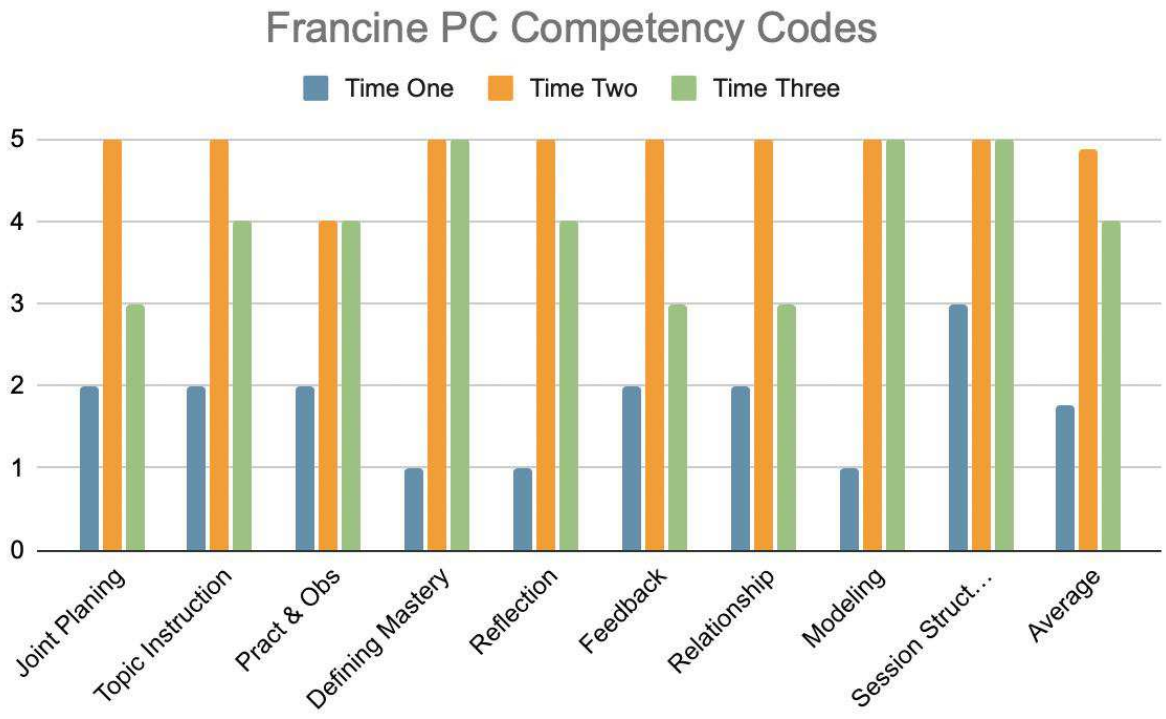
During level three practice, Francine explored the structure of her coaching sessions to accommodate specific child and parent needs. She found a way to integrate all the RSB coaching session activities while accommodating specific nuances of family dynamics. This flexibility demonstrated a strong understanding of the foundational principles of RSB coaching, which resulted in consistently high competency codes. She found the one-to-one meetings with the trainer useful for supporting her practice, "*I think the one-to-one meetings I had with [the trainer] were probably the most helpful, and I liked that had flexibility. So my first family, I met with her much more regularly and then in my second family a little less because I hopefully knew what I was doing a little bit more and then it kind of tapered off. I think that worked quite well. It sort of felt like I was being coached to do coaching…"* She also appreciated competency coding her practice videos, "*I found the competency coding helpful. It felt like a bit of a pain at the time.*

I watched this whole video, it took up a lot of time, but I did find it helpful. Both for noticing what I was doing well but also, noticing what I could do better. So I did like the competency coding."

Her average rating across the nine PC competency codes on the five-point Likert scale was 1.78 before the start of training. This increased to 4.89 during level three practice and was 4.0 on her level four PC demonstration video. Her time two and time three competency was noticeably higher across all nine competency codes, demonstrating consistently high PC competency for six areas and moderate to high competency for three.

Figure 4.8

Francine's PC competency codes across the PD training



Gisella. Gisella is an early interventionist with a Bachelor's degree. Before the PD, she had taken a workshop about PC. She had been practicing EI for almost 20 years. Gisella demonstrated an interest in learning about PC. Her journal reflections indicated an interest in

deepening her understanding of coaching and comments on how the foundational principles and session activities can improve her practice in EI. She found the PD and homework to be time intensive and had competing challenges; however, she remained committed to working through the training content, "*I am very tired this week, have had sick kids, etc. Coaching practices have not been my top priority. However, I think this demonstrates how as a parent coach, we need flexibility around what happens for families too."* She found some of the learning in levels one and two to be a lot, "*I may be overthinking the coding, but it all seems a little overwhelming to me."* At baseline, Gisella received 58% on her assessment. Her average score after level one and two was 80%. Gisella recommended reducing the information covered in levels one and two so that future participants get right to the practice coaching activities of level three.

Gisella experienced challenges during level three practice specific to caseload pressures around selecting families to practice with for the project and supporting parents' mental health difficulties, which impacted the coaching process. She ultimately ran out of time and only practiced with two families. She used the PCCRS to competency code two practice videos to share with the trainer. She provided evidence of two of three LF activities for one practice family, and three of three LF activities for the second practice family. Gisella found the overall time commitment to the project difficult due to other time pressures, including a heavy caseload, which impacted her overall experience. "*I think the logistics of the training is what made it not so great, just the time restrictions and then the family restrictions. It wasn't the specific training, it was the time parameters and the timelines. I had competing family commitments then trying to fit everybody into the project and trying to have time to do the project all while doing my regular job… there was a lot of sickness and illness too."*

Once she began level three practice, she demonstrated shifts in her understanding of coaching activities, as evidenced by reflective journals. She appreciated the one-to-one meetings, "*It feels good to be able to share some wins and also get constructive feedback on where to go in my next coaching session."* She found coaching helpful and reported improved outcomes she was used to seeing with families during EI. She reported that both parents with whom she practiced coaching found it helpful. She found level three most impactful for her learning. In addition to appreciating one-to-one support, Gisella also appreciated the informal connection with colleagues who were also part of the project, "*So, it was easy for us while we were eating our lunch to talk about it, discuss. It was nice to have people who were in the training program who were close to me so we could bounce ideas off each other. We could talk about our experiences."* A recommendation made by Gisella was to include competency coding of peers during level three. Partially due to technological issues capturing her videos to code but also because she found coding herself challenging, "*if I was coding somebody else, I don't think I would overthink it as much as I'm overthinking [videos of] myself."*

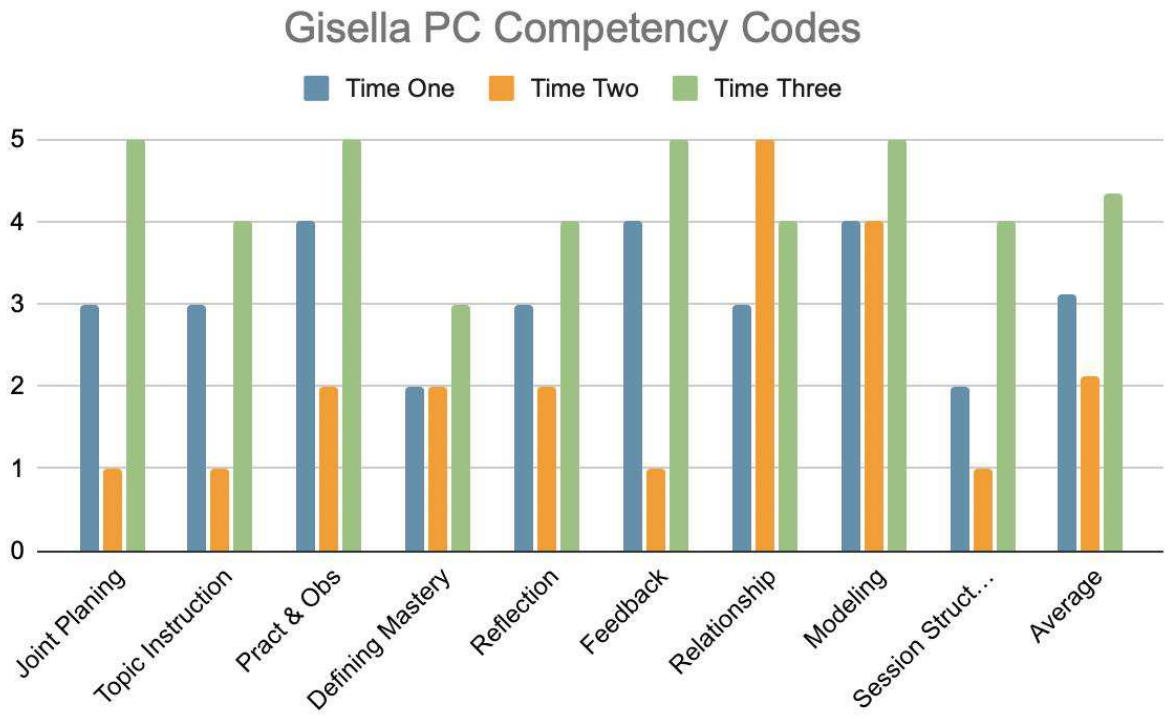
Her average rating was 3.11 before the start of training, with three areas indicating high competency, four areas indicating moderate competency, and two areas suggesting low competency. Her competency codes decreased to an average of 2.11 during level three practice. Gisella indicated trouble with technology and could not capture PC sessions that she wanted to share. Her time two video is likely a poor indicator of her actual PC knowledge and competency at that point in time. "*I had some big technical issues with the ipad… it was too bad because I think some of my best coaching work [was not captured]."* Gisella's final video demonstrated an increase to 4.33. Gisella increased on all nine PC competencies when comparing her baseline to

the time three video. She demonstrated high competency in eight areas and moderate competency in one.

Overall, Gisella found that the PD impacted how she interacts with families and her ability to build strong relationships with them. She indicated support for coaching becoming something other colleagues could learn, "*I think it would be great to at least get the basics of parent coaching for everybody. It would be wonderful for staff to be able to interact this way with families and really understand [them] in a better manner."* She reported that she intends to use coaching in her future EI practice.

Figure 4.9

Gisella's PC competency codes across the PD training



Habeeba. Habeeba is an early interventionist with a Bachelor's degree. Before PD, she had taken a workshop about PC. She had been practicing EI for 11-15 years. During levels one and two, participant Habeeba demonstrated interest in learning about coaching. This was

evidenced by her consistently engaging in dialogue about RSB's theoretical underpinnings and specific activities. She had some personal challenges which impacted her ability to complete all of the follow-up activities: *"I have some personal stressors going on right now, outside of work." S*he reported that the time required to complete homework activities was impacting her ability to commit to the process as she wanted to due to other high caseload pressures. Habeeba did not find that the assessments after level one and two workshops were helpful to her learning. Her baseline assessment was 61% and her average score after level one and two was 77%.

Habeeba found the theoretical learning during levels one and two useful, "*I thought [the level one and two content] really really helpful. I enjoyed having the reading materials for review because I struggle with retention. So it's nice to be able to reflect back. And [the trainer] did a lot of repetition, and I like the way she brings it back to the flow chart and having that kind of visual. I found it really, really helpful as well because it kind of helped organize how you're going to communicate or structure the session that you have with your family…. She had really well thought out visual descriptions of everything… helped [me] understand how they fit together."* At the start of levels one and two, she suggested that the information presented was something she already knew and was used to doing in her EI practice. In her follow-up interview, when asked about levels one and two, Habeeba shared that coaching differed from what she had done before. "[*At first], I thought I had a concept of parent coaching. But the concepts that [the trainer] taught us were new to me. There was a lot of familiar material packaged in a slightly different way. And then, as [I] worked into the implementation of it, I recognized that it was quite a novel way. So, in fact, coaching was new to me."*

During the level three, she practiced with two families. Habeeba consistently requested one-on-one meetings with the trainer and demonstrated shifts in her behaviour, as evidenced by

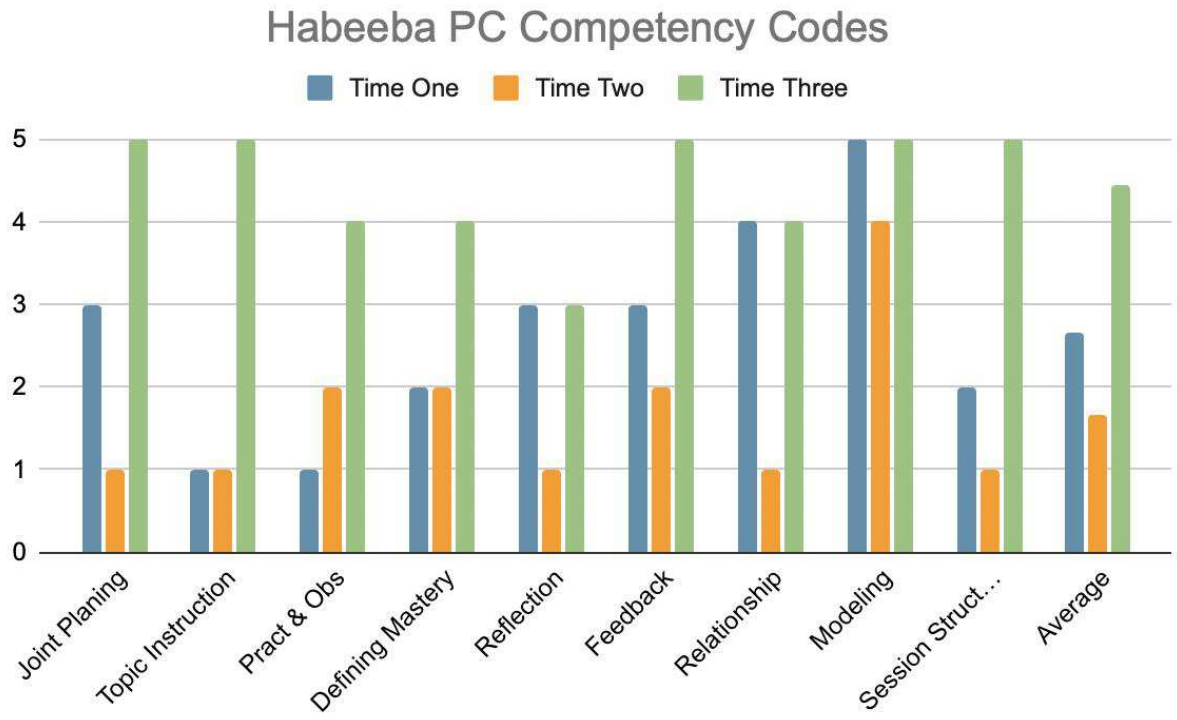
her competency codes on practice videos. She used the PCCRS to competency code and shared her codes with the trainer twice. She provided evidence for one of three LF activities for one practice family and two of three for the second family. Habeeba reported that she found the one-on-one meetings helpful for her learning, "*I found that it was really helpful for me to learn because it's almost like I didn't really know what I was doing wrong, or not, maybe that's a bit of a harsh way to put it, but even just to identify the areas I could expand or develop. So I found that really helpful, that kind of coaching me was really helpful".* She also found the group meetings useful for her learning, "*I found it helpful to hear where everybody else is in their process and to hear the problem solving offered by [the trainer] and the group."* She reported that both parents she worked with found the coaching useful. Once she began level three practice, she found coaching improved the outcomes she was used to seeing with families during EI. Habeeba reported, "*I'm so happy I chose this family to coach! I think it made a big difference for their [child]."* Overall, she expressed gratitude for participating in the project and felt it improved her clinical skills, "*I'm really grateful to have been part of the learning process. It's shifted my practice in positive ways. So yeah, feel very lucky to have done this."*

At baseline, Habeeba demonstrated moderate competency in three areas and high competency in two. The remaining four areas demonstrated poor PC competency. Her average rating across the nine PC competency codes was 2.67 before the PD. This dropped to 1.67 during level 3 practice. In her journal reflections and follow-up interview, Habeeba indicated that the practice family she was working with during that time was experiencing stressors related to their child's medical issues. The goals they had set at the start of practice were no longer relevant, and coaching was challenging due to competing family stressors, "*I think that I didn't necessarily have ideal clients to work with [for my first practice family], so for example… there was just so*

much changing medically for their child and they themselves had some personal struggles that they were going through…" The second and final family she practiced with went more smoothly, and one of their sessions was coded for the final coaching demonstration video. This resulted in an increase to 4.4 in her PCCRS competency. In her final video, Habeeba demonstrated high competency in six areas and moderate competency in the remaining three.

Figure 4.10

Habeeba's PC competency codes across the PD training



Isla. Isla is an early interventionist with a Bachelor's degree. Before the PD, she reported that she had no experience with PC. She had been practicing EI for almost 15 years. Isla demonstrated a strong interest in learning about PC during the PD program. She consistently contributed to group discussions, demonstrated learning during her reflective journal entries, and

shared reflections about understanding shifts throughout the PD program. After an early level one training workshop, when sharing an example of something she tried, Isla reported, "*It felt like a huge shift to move from a therapy provision model to a parent coaching model. Didn't work well as parents have come to expect to be more hands-off and let us do all the therapy during the sessions. This will require a huge systemic shift if we are going to move towards this model."* She began integrating coaching activities into her work with families during levels one and two. In her reflective journal, she shared her experiences and reflections: "*Had an amazing talk with one of our families today. [The parent] actually got a bit emotional when I was describing coaching as he felt he was not heard when he went through the Early Intervention Program with his older child. He felt like no one listened to him about what was happening at home. He was so happy to hear that we were taking [coach training]. I said that he was the expert of his child and we were there to hopefully provide good support and suggestions around the goals he identified for himself and [his child]."* Her reflective journals indicated strong engagement with level one and two content.

During level three practice, Isla demonstrated a solid commitment to shifting her understanding, knowledge, and behaviour during early intervention sessions. She practiced with three families. Isla provided evidence of one of three LF activities for her first practice family, and two of three LF activities for the second and third practice family. She shared three PCCRS competency codes with the trainer for one-on-one feedback. Isla did not report any challenges with coaching during her practice. She reflected that coaching positively impacted all three families and that it is a model she plans on utilizing in her EI work going forward. In reflecting on the coaching process for one of her families, Isla reported that "*This family benefitted from the*

frequent contact, feedback around their child, and space to ask questions and discuss their fears to have the confidence and understanding to continue to monitor [their child's development]."

Isla was eager to meet with the trainer for one-to-one and group meetings, reflect on her practice experiences, increase her knowledge about PC, and immerse herself in the learning. She found the one-on-one feedback helpful, "*it was great to receive feedback on the scoring of previous sessions and compare it with my scoring, thank you!"* She found watching the videos of others and herself helpful, in particular, when competency coding. She also indicated that the content from levels one and two was helpful to reflect on and help her practice the skills in level three.

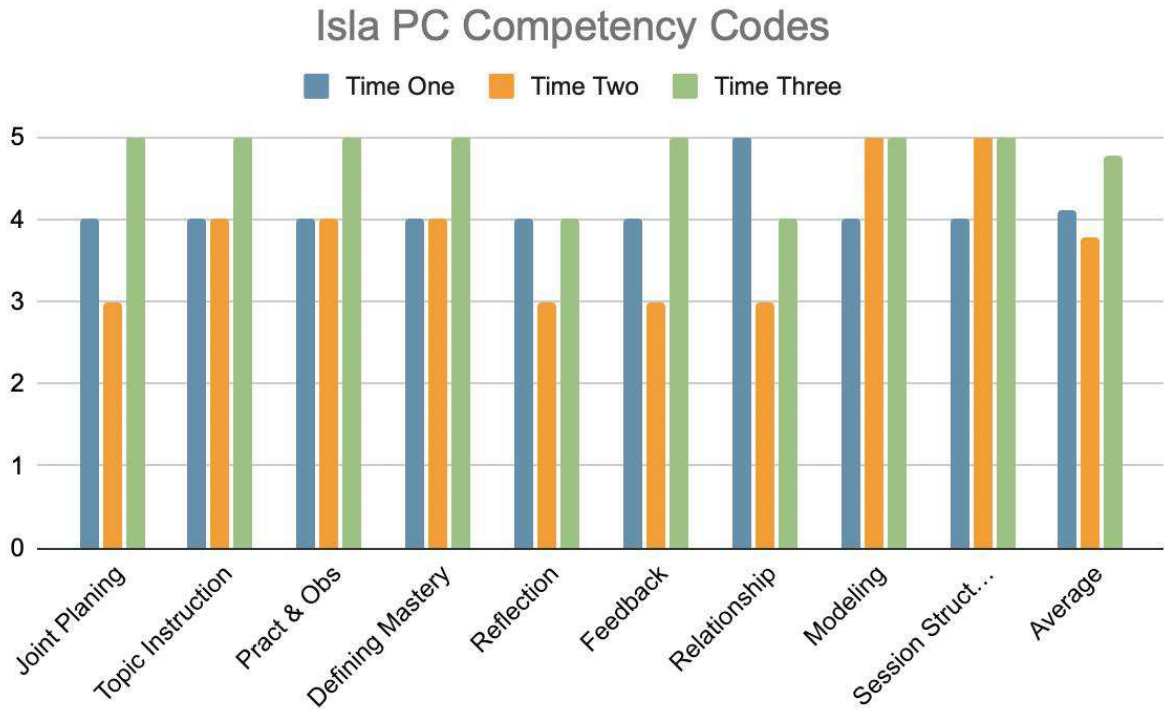
Isla's baseline knowledge assessment score was 52%. Her average score after level one and two workshops was 77%. Her average rating across the nine PC competency codes was 4.11 before the start of training. This decreased to 3.8 during level three practice and was 4.8 on her final video. At baseline, she demonstrated high PC competency across all nine indicators. At time two, her video showed moderate competency in four areas and high competency in five. By her third video, she demonstrated a higher PC competency than her baseline in seven areas, the same level of competency in one area, and one areas of lower PC competency. Her final video, however, consistently indicated high competency.

Although she indicated that she had no experience with PC before the project, during her follow-up interview, Isla shared that her close colleague was someone who had in-depth experience with PC and that she had learned about it from that individual. However, before the project, she did not think it would work in her EI discipline. She exhibited high competency before the professional development commenced, as demonstrated by her baseline video competency codes. It is hypothesized that she did not know the underpinnings of PC, resulting in

her not understanding that she was engaging with parents using a coaching interaction style. This was further supported by her reflective journal entries and follow-up interview, *"Before parent coaching, I would say most of my sessions were more hands-on and me doing the things. And then maybe at the very end, I'd be like, okay try this and I sometimes would get the parents to try it once or twice or something, but it was much more emphasis on me having my hands off them doing it, and brainstorming. How did that feel? Where do you think you could do that? And so leaving the home feeling really comfortable that, hey, they've got the skills to do it and I think some of it comes from confidence as a therapist. I've been doing this a long time."* Although Isla demonstrated a natural PC interaction style at baseline, she indicated that the project significantly impacted her EI practice and intends to continue using PC during her work.

Figure 4.11

Isla's PC competency codes across the PD training



Cross-Case Analysis

Increases in PC Knowledge and Clinical Competency after the RSB Coaching PD Program. All nine participants increased their PC knowledge and clinical competency after completing the RSB Coaching PD program (Table 2). Eight participants (i.e., all but Deirdra) moved from no or low PC competency at baseline to high PC clinical competency in at least one subsequent video. Deirdra moved from no PC to low PC competency at times two and three. For a summary of pre -and post-PC knowledge scores (covered in levels one and two), level three coaching practice and PCCRS coding opportunities, number of meetings with the trainer, and baseline (i.e., T1), practice (i.e., T2), and best performance (i.e., Best) PCCRS competency codes for each participant, please refer to Table 4.2.

Table 4.2

Numeric Data by Participant During RSB Coaching Professional Development

Participant	Level 1&2		Level 3				
	Pre	Post	Tot Sess[d]	Tot Fam[e]	L3 Self-CC[b]	Feedback meetings	PCCRS Codes[c]
Abby	61%	84%	15	3	2	6	T1: 1.4 T2: 2.1 Best: 5.0
Betul	61%	79%	15	3	3	6	T1: 1.0 T2: 4.8 Best: 4.7
Cassandra	58%	88%	17	3	1	5	T1: 1.9 T2: 4.8 Best: 4.8
Deirdra	23%	71%	11	2	3	6	T1: 1.0 T2: 2.2 Best: 2.2
Elizabeth	58%	82%	16	3	1	7	T1: 1.0 T2: 2.7 Best: 4.3
							T1: 1.8

Francine	52%	95%	14	3	3	7	T2: 4.9 Best: 4.9
Gisella	58%	80%	11	2	2	6	T1: 3.1 T2: 2.1 Best: 4.3
Habeeba	61%	77%	14	2	1	7	T1: 2.7 T2: 1.7 Best: 4.4
Isla	52%	77%	17	3	3	6	T1: 4.1 T2: 3.8 Best: 4.8

Note. This table reviews aggregated level one and two assessment scores, level three opportunities for coaching practice and self-competency coding, details about level three feedback meetings, and aggregated coaching video competency codes.

[a] Scores from assessment activities (i.e., online quiz) after each level one and two workshop.

[b] Participant self-competency codes that shared with the trainer and referred to during one-on-one or group feedback meetings during level three. [c]T1 represents the baseline video; T2 represents the level 3 practice video; T3 represents the Level 4 final Video. All videos were competency-coded by a research assistant blind to the conditions of the study. Items D-K on the PCCRS are aggregated and reported. [d] Total number of RSB Coaching practice sessions across all families. [e] Total number of practice families for the project.

To compare if participant PC post-PD knowledge or skills significantly differed from baseline, one-way repeated measures ANOVAs were conducted. Significant differences were found for pre and post-knowledge ($F(1, 8)=72.28$, $p<.001$, $\eta 2\text{partial} =.90$). Significant differences were found for improvements in RSB clinical competency over time (i.e., PCCRS scores) ($F(1, 8)=28.59$, $p<.001$, $\eta 2\text{partial} =.78$). Post-hoc analysis revealed a trending significant difference from baseline to time two ($p = .07$) and significant differences from baseline to best

coaching ($p < .001$) and time two to best coaching ($p = .02$), indicating steady growth in coaching competency throughout the ten-month PD program.

Table 4.3

Evidence of Participant Laying the Foundation during Level 3 Practice

Participant	L3 Practice Family and Evidence of Laying the Foundation CC[a]								
	1			2			3[b]		
	LF Convo	Written Goals	Content	LF Convo	Written Goals	Content	LF Convo	Written Goals	Content
Abby	√	√	√	X	X	X	√	√	√
Betul	√	X	X	√	X	X	√	√	√
Cassandra	√	√	√	√	√	X	√	√	√
Deirdra	X	√	√	√	X	√	N/A	N/A	N/A
Elizabeth	√	X	X	√	X	X	√	X	√
Francine	√	√	√	√	√	√	√	√	√
Gisella	√	X	√	√	√	√	N/A	N/A	N/A
Habeeba	√	X	X	√	√	X	N/A	N/A	N/A
Isla	√	X	X	√	√	X	√	√	X

[a]Laying the foundation was coded for evidence of three items. 1) evidence of laying the foundation conversation (i.e., video, audio, transcript), 2) written goals, and 3) evidence of content selection and materials to guide coaching sessions.

Predictors of RSB Clinical Competency: To determine which aspects of the PD predicted the participant's best clinical competency of RSB a multiple regression was conducted in two blocks. The first block of predictors included baseline knowledge (Level 1 and 2 Pre; see Table 2) and Post Level 1 and 2. The second block included the Level 3 activities, including the number of practice coaching sessions, self-competency coding, and the number of trainer feedback meetings. The overall model was significant ($F(2, 6)=33.36$, $p<.001$) with an adjusted R-squared of .82, indicating that the overall model explained 82% of the variance. However, only the Beta coefficients for baseline knowledge (ß = .75) and post level 1 & 2 knowledge (ß =

.37) were significant (p = .001 and .027, respectively), indicating that these two variables best predicted the Best Coaching Clinical Competence scores.

Acceptability and Feasibility of the RSB PD Program. Data from participant reflective journals and follow-up interviews were reviewed carefully for themes regarding the PC Training Program's effectiveness, feasibility, and acceptability. This exploration resulted in three broad themes that were consistent among participants: (1) activities that supported learning, (2) areas for improvement, and (3) merits of parent coaching. All qualitative data was then closely examined a second and third time to understand these three themes further, resulting in sub-themes for each broad category. For examples of participant quotes within each theme, please see Table 4.4.

Table 4.4

Participant Reflections about RSB Coaching Professional Development

Participant	Activities that Supported Learning	Recommendations	Merit of RSB Coaching
Abby	*"Just getting in there and then, I think, reflecting on it [during one-to-one feedback] was really helpful"*	"*I found it very difficult to keep everything in my mind having it once every week. I found it very hard for me to really remember everything I think I learned for myself. I work better when I do it in a big mass chunk."*	*"I really like the way [the PC session] is set up. So, talking in the beginning about what we're gonna work on, setting the goal, practicing, reflecting. I like that setup. That's something that I didn't do before."*
Betul	"*Watching the video clips where we got to watch other people doing parent coaching was the most useful for me."*	"*There could have been less forms to fill out. That took a lot of time, and it was frustrating. I just felt like, there was way too much data that we were being asked to complete."*	"*I feel like I have another tool in my toolbox to use parent coaching,"*
	"*I enjoy now, at this point in the project, that coaches have*	*"I think [level one] probably could have been condensed for our audience who are experienced practitioners in*	"*[Parents] just seem like they're a bit happier with where their child is at, and*

Cassandra	*more experience to talk about in the community of practice meetings. I'm finding it more relatable now that everyone is practicing with their second or third family."*	*EI. I found level two more interesting, partially because there were more real-life video examples and we had some practice with the coding. I think level two could have included more practice."*	*whether that's because they feel more confident or they're is gaining skills, but they just seem much more empowered."*
Deirdra	*"Talking [one-on-one] with [the trainer] was most helpful for me."*	"*I think I would have been better able to absorb it had I not been so stretched, we are really busy with our caseloads and we don't have a lot of extra to take home that extra level of learning."*	"*I think it really has improved my practice, and I'm able to provide a better service to the families I work with."*
Elizabeth	*"I think that was really helpful to talk about my individual cases. I found that more effective than group sessions because you want to get into the nitty-gritty of your client, and its hard to do that when you are in a group."*	*"I kind of wonder if it would have been more effective to complete [level one and two] in maybe two or three sessions and just get right to the point, show a few videos, and get to the practice."*	"*Giving the reigns over to the parent and putting a lot more of the responsibility and power into their hands. We always try to do that, but with parent coaching, you're really letting go of that. It's definitely more empowering for parents."*
Francine	"*I found the competency coding helpful. It felt like a bit of a pain at the time. I watched this whole video, it took up a lot of time, but I did find it helpful. Both for noticing what I was doing well but also, noticing what I could do better. So I did like the competency coding."*	"*One thing I would love to see would be more video examples of a wider range of [parent and child] goals and [different EI] disciplines..."*	"*I believe in the power of coaching. I think it provides more opportunity for the child to learn new skills, and I think it gives parents the tools and confidence they need to support their child.*"
Gisella	"*It was nice to have people that were in the training program who were close to me so we could bounce ideas off each other. We could talk about our experiences."*	"*I think the logistics of the training is what made it not so great, just the time restrictions... It wasn't the specific training, it was the time parameters and the timelines."*	"*I think it would be great to at least get the basics of parent coaching for everybody. It would be wonderful for staff to be able to interact this way with families and really understand [them] in a better manner."*
Habeeba	"*I enjoyed having the reading materials [from levels one and two] for review because I struggle with retention. So it's nice to be able to reflect back… I like the way she brings it back to the flow chart and having that kind of visual.*		"*I'm really grateful to have been part of the learning process. It's shifted my*

	I found it really, really helpful as well because it kind of helped organize how you're going to communicate or structure the session that you have with your family."	"*[The assessments were] one area that I didn't feel enhanced my learning.*"	*practice in positive ways. So yeah, feel very lucky to have done this.*
Isla	"*It was great to receive feedback on scoring of previous sessions and compare it with my scoring, thank you!"*	"*I would just hope that moving forward, [the reflective journals and assessments' are] decreased.*"	"*This family benefitted from the frequent contact, feedback around their child, and space to ask questions and discuss their fears to have the confidence and understanding to continue to monitor [their child's development].*"

Theme One: Activities that Supported Learning. In theme one, activities that supported learning, all nine participants found that level three PC practice, competency coding, and one-on-one meetings with the trainer were most helpful to their learning and experience. Of all the sub-themes, these were the only three identified by all nine participants. Five participants found the foundational knowledge taught in levels one and two helpful, and four participants found the community of practice groups helpful during level three practice. To see a summary, please see Table 4.5.

Table 4.5

Activities That Supported Learning During RSB Coaching PD

Participant	Level 1 & 2 Foundational Information	Level 3 Practice Coaching	Practice Competency Coding	One-on-one feedback with Trainer	Community of practice meetings
Abby		√	√	√	
Betul	√	√	√	√	
Cassandra	√	√	√	√	√
Deirdra		√	√	√	
Elizabeth		√	√	√	
Francine	√	√	√	√	√
Gisella		√	√	√	√
Habeeba	√	√	√	√	√
Isla	√	√	√	√	

Theme Two: Recommended Improvements to the RSB Coaching PD Program. In the second theme, areas for improvement, the most consistent sub-theme was reducing the content in levels one and two and getting to the level three practice more quickly. Six participants offered this recommendation. Five participants suggested that there were too many assessments. Similarly, four participants found the reflective journals time-consuming and not helpful to their learning. Three participants wanted more videos to competency code in levels one and two, and four wanted more time to practice in level three. The last sub-theme involves challenges with competing workload pressures, which are not directly related to the PD program but impact their ability to commit fully to the project. Four participants addressed this issue. To see a summary, please see Table 4.6.

Table 4.6

Recommended Changes to the RSB Coaching PD

Participant	Condense L1&2	More videos to competency code in L1&2	More time for L3 practice	More time for training	Fewer assessments in L1&2	Less Reflective Journals
Abby	√					
Betul		√	√	√	√	√
Cassandra	√					
Deirdra	√		√	√	√	√
Elizabeth	√	√			√	√
Francine		√		√		
Gisella			√	√		
Habeeba			√		√	
Isla	√				√	√

Theme Three: Acceptability of Parent Coaching. Within the third theme, acceptability of PC, seven participants spoke about the positive impact the process and structure of PC had on their relationships with parents. Five participants appreciated the PC process's flexibility and its positive impact on their ability to meet parents where they were in their learning. Four

participants appreciated the simplicity of the goal-setting process and found this made the goals more realistic and attainable than how they had previously set EI goals with families. Six participants appreciated the structure of the sessions and found a higher frequency of visiting families helpful. Finally, four participants commented on the PC process being empowering for parents. For a summary of these sub-themes, please see Table 4.7.

Table 4.7

Acceptability of RSB Coaching

Participant	Session structure and frequency of sessions	Positively impacts relationship with parents	Ability to address parent goals	Attainable goals	Empowers parents
Abby	√	√			
Betul	√			√	√
Cassandra		√	√	√	
Deirdra	√		√	√	√
Elizabeth		√	√	√	√
Francine	√	√	√	√	
Gisella		√		√	
Habeeba	√	√		√	
Isla	√	√	√		√

Discussion

In response to the emerging popularity of PC and the lack of research on PD for EI professionals to learn PC, the present research is the first implementation of the RSB coaching PD program and examination of its effectiveness in changing EI practitioners' knowledge and practice in PC. The PD program was developed using Miller's Pyramid as an instructional framework and was sequentially and systematically piloted with nine Early Interventionists in their service setting over ten months. The training program included foundational knowledge (Level One: Knows), demonstrations of how to use this knowledge in parent coaching (Level Two: Knows How), opportunities to perform or use the knowledge of PC (Level Three: Shows

How), and engaging in PC with families (Level Four: Does). Accordingly, assessments for learning were used throughout the training program. A mixed-method case study design with a convergent approach (Creswell & Plano Clark, 2018) was used to examine the effectiveness and experience of the PD. Overall, the study yielded promising findings.

The Extent to Which Professional Development Impacted PC Clinical Competency

All nine participants significantly improved their RSB coaching clinical competency from baseline to the end of the project. As indicated by reflective journals and post PD interviews, factors that impacted increased coaching knowledge and skills included motivation, time, and commitment to the PD; coaching practice opportunities and competency coding practice; meetings with the RSB trainer; previous experience or knowledge about PC; and engagement with level one and two foundational knowledge. Regression analyses revealed that both background knowledge and knowledge gained during levels one and two of the PD significantly contributed to the participants' best performance in RSB coaching.

Examining the assessments across the entire PD program to make conclusions about each participant's clinical competency was drawn from a recommendation made by researchers evaluating complex programs of learning and assessment (i.e., van der Vleuten et al., 1991; 2005; 2010; 2017). Measuring the same and overlapping constructs often improves the reliable aggregation and interpretation of assessment results. In the present study, some participants indicated they did not find the assessment activities helpful during their learning. Nonetheless, the case analyses and statistical analyses revealed that all levels of the Miller Pyramid contributed to participant learning and outcomes.

Applying foundational information (i.e., information learned in levels one and two) during competent clinical reasoning (i.e., during practice and demonstration at levels three and

four) can be challenging to assess. Instructional programs with the best outcomes integrate the learning objectives and clinical competencies across levels one, two, and three to support learner understanding of when to draw on what skill, competency, or concept during a clinical demonstration in level four (van der Vleuten et al., 2017; Thampy et al., 2019). Thus, it is less important to focus on each assessment instrument than to ensure using a broad sample of measurement tools across the learning activities. Using an array of tools helps gain a reliable estimate of clinical competence. It helps to ensure that the demonstration of clinical skills accurately reflects the learner's foundational and practical knowledge during the intended clinical application (Heeneman et al., 2020; Torre et al., 2021; van der Vleuten et al., 2017).

Research into professional development grounded in Miller's Pyramid suggests that assessments should ideally coincide with a positive relationship between the learner and teacher (van der Vleuten et al., 2017). Assessment results should include or be followed up with meaningful and contextual feedback as they can serve multiple functions: "assessment *of* learning, assessment *for* learning and assessment *as* learning" (van der Vleuten et al., 2017, p. 608). That is, assessment results can guide feedback after evaluative activities, provide guidance during assessment activities, and provide a summative evaluation of learner competence and understanding. This finding was consistent with the present study.

Feasibility and Acceptability of Professional Development in a Community Setting

The second goal of this study was to understand the participants' experiences engaging in the RSB coaching PD. The participants found that the PD was acceptable, and the activities positively influenced their clinical practice. They reported that they intend to continue using RSB Coaching in their work with families. All nine participants found that video review or discussion of their coaching practice sessions with families through one-on-one meetings where the trainer

provided feedback was most impactful for their learning. This aligns with Wisniewski et al.'s 2020 findings in their meta-analysis of 435 studies exploring various aspects of feedback and its impact on student learning. Providing timely and "high-information feedback" (p. 12) is most helpful when it supports a learner to understand the impact they have on the task at hand and how to improve their behaviour during the next practice opportunity by doing more or less of something, or, by shifting their behaviour and understanding what impact this shift will have next time.

Integrating feedback into authentic and valid assessment is a concept that has been introduced previously. In reviewing evidence and consequences of performance assessments, Messick (1994) notes that "transparency and meaningfulness are serious issues at the heart of authentic assessment… the problems and tasks posed should be meaningful to the students. Students should know what is being assessed, and the criteria and standards of what constitutes good performance should be clear. This applies to how the performance is to be scored and what steps might be taken or what directions moved in to improve performance" (Messick, 1994, p. 16). When integrating this knowledge into the construction and review of assessments, the feedback provided to learners must be timely, relevant, and helpful, moving them towards understanding how to improve their knowledge or clinical competency demonstration.

Relevant feedback also relates to one case example (i.e., Isla), who demonstrated RSB coaching competency before the training but did not know she was. Lorio et al. (2021) state that "effective caregiver coaching requires knowledge of various coaching strategies including when, where, and how to use strategies to support caregiver intervention implementation" (p.21). Lorio and colleagues suggest that EI clinicians must understand the foundational elements of PC before learning how to engage in the contextual and nuanced activities involved. The foundational

information Isla learned in levels one and two was hypothesized to impact her purposeful PC demonstration. She learned 'when, where, and how to use strategies' through the training. Based on her reflections and feedback, it appears that Isla solidified her understanding of level one and two foundational concepts through competency coding in her PC practice sessions. Friedman et al., 2012 suggest that EI providers must be introduced to the rationale and theoretical grounding of PC before they can understand the process, what it looks like and why it can be helpful in their work with families. As demonstrated in her reflective journals, Isla demonstrated engagement in learning at all levels of PD program.

This case story also relates to points made by Solomon and colleagues (2000), who looked at 165 students who completed an eight-week 'medicine clerkship' and the utility of rating scales to demonstrate clinical competency. They conclude that "judgements about the validity of using a particular measure for a specific purpose should be made based on the integration of information from various sources" (Solomon et al., 2000, p. 135). Integrating various assessments into a learning program has the potential to provide helpful feedback to support learner development of clinical competence. In the case of Isla, her baseline video indicated competent PC skills was insufficient to make conclusions about her clinical competence. However, the integration of her level one and two assessment scores, her experience in competency coding, trainer feedback, and self-reflections about her changing skills make the case that her demonstration of RSB Coaching in her final video matches her knowledge about the process, its theoretical underpinnings, and rationale.

All participants suggested the RSB PD changed their clinical practice, and all indicated that they intend to use newly learned skills. Nonetheless, experiences with the PD and outcomes differed across participants. The ability and willingness to fully commit to the PD influenced

their perspectives on PC. Participants who had little or no journal reflections about time pressure, competing workload pressures, technological challenges, or personal constraints (i.e., Cassandra, Elizabeth, Francine, Isla) reported more merits of PC than those who indicated challenge with time, workload pressure, or technological difficulties in their journals and/or follow-up interview.

All participants indicated that level three practice, one-on-one feedback, and competency coding were the most useful for their learning. All participants found the competency coding of videos of themselves or others helpful. Participants were free to decide if they wanted one-on-one meetings with the PC trainer and whether or not they joined group meetings. Regardless of how many practice families they worked with, all participants chose to attend five, six, or seven meetings, the median being six meetings. Trainer feedback and opportunities for reflection and discussion occurred during the meetings. All participants indicated the meetings were helpful to their learning, although not all participants found the group meetings as helpful as the one-on-one meetings with the trainer.

A consistent theme in the follow-up interviews was that the learning at levels one and two of the training could be condensed. Participants also recommended that levels one and two include more practice with competency coding, more opportunities to watch videos of PC sessions, and less emphasis on the theoretical underpinnings of PC.

When asked about improvements to the training, three participants who practiced with two families reflected that they would have appreciated more time to practice. All other participants who worked with three families had between 14 and 17 practice PC sessions and had total level one and two assessment scores between 78% and 95%. These findings suggest that

prior knowledge of PC, engagement with level one and two training content, and increased opportunities to practice aid in learning about and demonstrating clinically competent PC.

Regarding feasibility, a consistent theme expressed within the reflective journals and follow-up interviews was that participants found that PC with families took up more time than the EI practitioners typically devoted to each client on their caseload. Comments related to time intensity were related to competing work pressures due to the project taking up more time than was allotted in their work environment, "*I am finding that only being allowed to have one less family is not giving me enough time. A few hours a week for this project looks more like the time I spend on three families/month."* Four participants indicated that they completed some of the project requirements during personal time, which caused time pressures, "*this is taking up way more time than expected. For me - having a whole week blocked off and doing it daily might be easier and not having to juggle my caseload and learn this at the same time. I'm finding that things keep coming up, and this keeps getting pushed to the side."*

However, reflective journal entries throughout the training indicated that participants found the learning thought-provoking, and many indicated they enjoyed the concepts covered. Early in the level one training, most participants indicated excitement about the learning in their journal reflections. After the second level one workshop, one participant indicated that she was already bringing the concepts covered in the training into their EI work: "*I find myself often thinking about the content and the concepts over the week, trying to make sense of how to incorporate it into sessions. I'm looking forward to the future sessions where we really unpack how these concepts apply to [my EI practice]."* Five participants consistently referred to too many level one and two assessments and disliked the reflective journals; for example, after the seventh weekly workshop, one participant shared, "*The homework is getting super demanding*

and time-consuming and is taking time and energy away from my clinical work." However, other participants indicated that they found the level one and two foundational concepts helpful to their practice and impactful for their work. Early on, after the second level one workshop, a participant shared in her reflective journal, "*[I'm] loving the learning - blowing my mind…"* Furthermore, some participants found the level one and two assessment activities helpful to their understanding of the knowledge, even if they did not enjoy completing the assessments. After the sixth workshop, one completed her homework and journal reflection. In this reflection, she shared, "*It was helpful to take the time to think through the parent goals and the related content, skills, and resources. If I hadn't taken the time and effort to do the homework exercise, I don't think I would have had such clarity in my mind about specific skills, how I'd approach them, etc."*

Participants were all provided with an iPad to capture PC video sessions in level three. PC session videos were then uploaded to a secure drive within Island Health. Two participants consistently encountered time-intensive issues related to technological challenges, occasionally capturing the entire PC session and often uploading videos to the shared drive. This resulted in difficulties and frustrations during level three practice, with three participants in particular. In her follow-up interview, one participant shared, *"I had some big technical issues with the iPads. I think I tried three and had to factory reset that way. So there was some technical issues, which was too bad because I think some of my best coaching work, there was one where the iPad shut off after 20 minutes and there was this really great. moment with the families at the end of that session."*

All participants found the learning most impactful once they began using the PC skills and capturing video during level three practice. They also all appreciated the one-to-one

meetings, and four participants shared an appreciation for learning from their peers during group meetings. All participants found that competency coding themselves using the PCCRS was helpful to their learning, although not always something they enjoyed. One participant shared, "*Taping yourself is a really helpful and agonizing process, but helpful way to determine how you're communicating, whether you're sometimes missing those opportunities that present themselves.*" Along the same lines, another expressed, "*I found the competency coding helpful. It felt like a bit of a pain at the time. I watch this whole video. I like it took up a lot of time but I did find it helpful. Both for noticing what I was doing well, but also noticing what I could do better. So I did like the competency coding.*" One participant described the video recording of PC sessions as one of the most critical elements of the training. She appreciated that all the practice PC sessions were captured to be able to focus on her PC skills. In reflecting on what were the most useful components of the training, she shared, "*If [the PC session] doesn't get videotaped and watched by [the trainer] and the therapist, if they don't have to do that. I think a lot will be lost. That was a big part of [my learning]. People hate seeing themselves on videos, right? but by the third or fourth session, you're forgetting the video is there.*"

A consistent theme in the follow-up interviews was appreciation for participation in the project and support offered during one-to-one meetings. There were also many comments, both within the reflective journals and the follow-up interviews, about appreciation that the PC could be adjusted to fit the parameters around the EI program at Island Health. After a group meeting, one participant expressed, *"I appreciate you listening to us and how we can make this fit into our service model."* Another participant talked about the applicability of PC across all EI disciplines in her follow-up interview, "*It was interesting [to learn about parent coaching] across disciplines. And so I think I understood some of those concepts deeper and more generally*

because we were able to talk about [with other disciplines]. What does it look like for a physio? What would that look like for this OT goal and not specific to a diagnosis or not? Kind of specific to those other areas. So I really appreciated that."

Overall, the experience of the nine participants was positive. In the follow-up interviews, all participants were asked if they would recommend the PC training to be offered to their colleagues at Island Health. All nine participants indicated that they felt the training would benefit their colleagues. There were suggestions around the logistics of potential future offerings of the PD. For example, one participant shared, "*Yes. I think everyone should have the opportunity to be trained in parent coaching. I think it doesn't always work within our time constraints and logistics and with the populations that we work with, especially, on our team. I mean, we all have clients that work better with it than not but particularly in my clientele, I just found it to be really hard to find ideal candidates [to practice with]. So I think if everyone is trained in it that, we have the opportunity to use it as we deem appropriate. As another one of the tools in our belt.*" Another participant shared that PC is useful, and she appreciated that it can be modified based on the individuals the EI provider is working with, both families and colleagues working with the same family "*I think coaching is valuable, I think it's definitely something that we could all use. I like that [this project allowed space for] one single person to [work with a family]. That makes sense, and then it's that consistent person that [families are] getting the same feedback from, and [the EI provider] can do more coaching… I like [this] version of coaching, I think it actually makes for better service.*" Finally, participants consistently shared gratitude for being part of the project. For example, "*I'm really grateful to have been part of the learning process and it's shifted my practice and positive ways. So yeah, feel very lucky to be able to have done this.*"

Limitations

This study was complex and involved several different components, from developing the RSB Coaching PD to developing a competency coding system grounded in existing research on PC and related concepts to training EI providers in the learning program. As such, there were limitations around the stability of the measurement tools used in assessment for and of learning because this was the first time they were utilized in a research capacity.

There were also limitations related to selecting families with which participants practiced PC. Families who agreed to participate in the project may differ from a larger population accessing EI services. Not all families would likely agree to be video recorded during EI sessions. Furthermore, it is unknown if using the iPad to capture the PC session affected the interactions captured in the video. To minimize these issues, participants were asked to record all PC sessions so that those being recorded could get used to the presence of the iPad. Participants chose which PC sessions to include in competency coding and/or share with the trainer.

Additional limitations of this study include the fallibility of video capture and observational data. Participants, at times, needed help to capture suitable video or PC opportunities for competency coding. Either the entire session was not captured, it was captured but unable to be seen or heard, or there were challenges with the technology not allowing the session to be shared with others for competency coding. Furthermore, competency coding using a global rating scale is not absolute. Despite the extensive training and expertise of the coder, there is interpretation and discretion in selecting a code, so it is difficult to ascertain that the 'final' codes used across the five-point global rating scale adequately represent the clinical competency of the participant. There was a substantial effort made to mitigate this limitation by ensuring the coder was blind to the timepoints of the study and did not have an existing

relationship with the participants, thereby reducing bias and allowing the participants to self-select videos for coding that they felt were adequate representations of their PC skills.

Conclusions

Overall, all nine participants learned about and improved their demonstration of PC and found the experience of RSB Coaching PD practical and positively influenced their clinical practice. The PD activities aligned with their real-world practice and facilitated learning. Specifically, practicing PC with families, competency coding, and receiving individualized feedback from the trainer were reported as most effective were endorsed by the participants and knowledge of coaching predicted clinical competency of coaching skills. Experiences with levels one and two training varied. Some participants found the learning necessary for their level three practice, while others found it too detailed. To enhance the feasibility of the PD, levels one and two should be condensed and involve more opportunities for practicing PC skills. Participants consistently shared the positive impact the process and structure of RSB Coaching had on their relationships with parents, suggesting that it empowers parents to take more ownership over their child's EI. Participants also appreciated the RSB session structure and flexibility, its positive impact on how interventionists connect with parents, and the goal-setting process. Importantly, EI practitioners reported constructing more realistic and attainable goals with families after the PD.

References

Childress, D.C. (2021). *Pause & Reflect: Your guide to a deeper understanding of early intervention practice.* Baltimore, MA: Paul H. Brookes Publishing.

Creswell, J. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th Edition ed.). SAGE Publications, Inc.

Creswell, J.W., & Plano Clark, V.L. (2018). *Designing and Conducting Mixed Methods Research, third edition.* Sage Publications Inc.

Davis, F. (1993). User acceptance of information technology: System characteristics, user perceptions and behavioural impacts. International Journal of Man-Machine Studies, 38, 475–487.

Douglas, S. N., Meadan, H., & Kammes, R. (2020). Early interventionists' caregiver coaching: A mixed methods approach exploring experiences and practices. *Topics in Early Childhood Special Education, 40(*2), 84–96.

Friedman, M., Woods, J., & Salisbury, C. (2012). Caregiver coaching strategies for early intervention providers: moving toward operational definitions. *Infants & Young Children, 25(*1), pp. 62-82.

Harbin, S.G., Fettig, A., & Kelly, E.M (2023). Virtual practitioner training and coaching of a triadic approach in early intervention: a mixed methods investigation. *Journal of Early Intervention,* 1-21. https://doi.org/10.1177/10538151231200777

Heeneman S., De Jong L., Dawson L., et al. (2021). Ottawa 2020 consensus statement for programmatic assessment – 1. Agreement on the principles. *Medical Teacher 43(*10), p. 1139-1148. DOI:10.1080/0142159X. 2021.1957088.

Island Health (2020). Early intervention program family handbook. Retrieved on June 9, 2022:https://www.islandhealth.ca/sites/default/files/children-youth-family/cyf-rehab/documents/early-intervention-program-family-handbook.pdf.

Karsh, B. T. (2004). Beyond usability: Designing effective technology implementation systems to promote patient safety. Quality and Safety in Health Care, 13, 388–394.

Kemp, P. & Turnbull, A. (2014). Coaching with parents in early intervention: an interdisciplinary research synthesis. *Infants & young children, 27(*4), 305-324.

Lorio, C.M., Romano, M., Woods, J.J., & Brown, J. (2020). A review of problem solving and reflection as caregiver coaching strategies in early intervention. *Infants & Young Children, 33(*1), 35–70.

Lorio, C.M., Woods, J.J., & Snyder, P. (2021). An exploration of reflective conversations in early intervention caregiver coaching sessions. *Journal of Early Intervention, 45(*4), 1-25.

Meadan, H., Chung, M. Y., Sands, M. M., & Snodgrass, M. R. (2020). The cascading coaching model for supporting service providers, caregivers, and children. *The Journal of Special Education*, 54(2), 113–125.

Meadan, H., Douglas, S., Kammes, R., & Schraml-Block, K. (2018). "I'm a different coach with every single family": Early Interventionists' beliefs and practices. *Infants & Young Children, 31(*3), pp. 200-214.

Meadan, H., Lee, J.D., Sands, M.M., Chung, Y. & Garcia-Grau, P. (2023). The coaching fidelity scale (CFS): Development and evaluation of an observational measure of coaching fidelity. *Infants & Young Children, 36(*1), pp. 37-52.

Messick S. (1994). The interplay of evidence and consequences in the validation of performance assessments. *Educ Res,* 23, p. 13–23.

Miller, G. (1990). The Assessment of clinical skills/competence/performance. *Academic Medicine (September Supplement), 65(*9), S63-S67.

Mirenda, P., Colozzo, P., Smith, V., Kroc, E., Kalynchuk, K., Rogers, S.J. & Ungar, W.J. (2022). A randomized, community-based feasibility trial of modified ESDM for toddlers with suspected autism. *Journal of Autism and Developmental Disorders, DOI:* https://doi.org/10.1007/s10803-021-05390-1

Mirenda, P., Smith, V., Colozzo, P., Vismara, L.A., Ungar, W.J. & Kalynchuk, K. (2021). Training coaches in community agencies to support parents of children with suspected autism: outcomes, facilitators and barriers. *Journal of Autism and Developmental Disorders, DOI:* https://doi.org/10.1007/s10803-021-05363-4

Odom, S. L. (2013). Foreword. In T. Halle, A. Metz, & I. Martinez-Beck Applying Implementation Science in Early Childhood Programs and Systems (p. xii – xiv). Paul H. Brookes: Baltimore, MD.

Proctor, E., Silmere, H., Raghaven, R., et al. (2011). Outcomes for Implementation Research: Conceptual Distinctions, Measurement Challenges, and Research Agenda. Administration and Policy in Mental Health, 38, 65-76.

Prochaska, J.O. & Norcross, J.C., (2018). *Systems of Psychotherapy: A Transtheoretical Analysis*. Oxford University Press.

Romano, M., & Schnurr, M. (2022). Mind the gap: Strategies to bridge the research-to-practice divide in early intervention caregiver coaching practices. *Topics in Early Childhood Special Education*, 42(1), 64–76.

Rush, D., & Shelden, M. (2020). The Early Childhood Coaching Handbook, second edition. Paul H. Brooks Publishing: Baltimore, MD.

Saldaña, J. (2009). *The Coding Manual for Qualitative Researchers.* Sage Publication Ltd.

Smith, V., Colozzo, P., Mirenda, P., Kalynchuk, K., Ungar, W., Denomy, N., Trafford, L., & Altani, A. (2021). Parent and Child Early (PACE) Coaching for children at risk for autism: Understanding implementation. Abstracts of the International Society for Autism Research Virtual Meeting 616-617.

Solomon, D., Szauter, K., Rosebraugh, C.J., & Callaway, M.R. (2000). Global ratings of student performance in a standardized patient examination: is the whole more than the sum of the parts? *Advances in Health Sciences Education, 5,* p. 131-140.

Stewart, S. L., & Applequist, K. (2019). Diverse families in early intervention: Professionals' views of coaching. *Journal of Research in Childhood Education, 33(*2), 242–256.

Stevens, J. (1996). *Applied multivariate statistics for the social sciences* (3rdedn).Mahway, JR: Lawrence Erlbaum.

Thampy, H., Willert, E. & Raman, S. (2019). Assessing clinical reasoning: targeting the higher levels of the pyramid. *Journal of General Internal Medicine, 34(*8), p.1631-6. DOI: 10.1007/s11606-019-04953-4

Torre et al., Rice, N.E., Ryan, A., et al. (2021). Ottawa 2020 consensus statements for programmatic assessment - 2. Implementation and practice. *Medical Teacher 43(*10), p. 1149-1160.

van der Vleuten C., Sluijsmans D., Joosten-ten Brinke D. (2017) Competence Assessment as Learner Support in Education. In: Mulder M. (eds) Competence-based Vocational and Professional Education. Technical and Vocational Education and Training: Issues,

Concerns and Prospects, vol 23. Springer, Cham. https://doi.org/10.1007/978-3-319-41713-4_28.

van der Vleuten, C., Sluijsmans, D., & Joosten-ten Brinke, D. (2016). Competence assessment as learner support in education. *Technical and Vocational Education and Training: Issues, Concerns and Prospects*, 607–630. https://doi.org/10.1007/978-3-319-41713-4_28

van der Vleuten. C., Norman, G., & De Graaff, E. (1991). Pitfalls in the pursuit of objectivity: issues of reliability. *Medical Education,* 25(2), 110-118.

van der Vleuten C., & Schuwirth L. (2005). Assessing professional competence: from methods to programmes. *Med Educ*. *39(*3): 309–317.

van der Vleuten, C. P., Schuwirth, L. W., Driessen, E. W., Dijkstra, J., Tigelaar, D., Baartman, L. K., & van Tartwijk, J. (2012). A model for programmatic assessment fit for purpose. *Medical Teacher*, *34*(3), 205–214.

van der Vleuten, C. P. M., Schuwirth, L. W. T., Scheele, F., Driessen, E. W., & Hodges, B. (2010). The assessment of Professional Competence: Building Blocks for theory development. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *24*(6), 703–719.

Wainer, A.L., Pickard, K. & Ingersoll, B.R. (2017). Using web-based instruction, brief workshops, and remote consultation to teach community-based providers a parent-mediated intervention. *Journal of Child Family Studies, 26,* 1592-1602.

Ward, R., Reynolds, J.E., Pieterse, B., Elliot, C., Boyd, R., & Miller, L. (2020). Utilisation of coaching practices in early intervention in children at risk of developmental disability/delay: a systematic review. *Disability and Rehabilitation, 42(*20), 2846-2867. https://doi.org/10.1080/09638288.2019.1581846

Williams, C.S. & Sawyer, G.E. (2023). Going beyond "I'm a coach": Adopting a caregiver coaching framework in EI. *Young Exceptional Children, 27(*1), pp. 3-15. https://doi.org/10.1177/10962506231153

Wisniewski, B., Zierer, K. & Hattie, J. (2020). The power of feedback revisited: a meta-analysis of educational feedback research. Frontiers *in Psychology, 10(3087), 1-14. DOI*: 10.3389/fpsyg.2019.03087

Yin, R. K. (2018). Case Study Research and Applications: Design and Methods (6th ed.). Thousand Oaks, CA: Sage.

Ziegler, S. A., Dirks, T., & Hadders-Algra, M. (2019). Coaching in early physical therapy intervention: The COPCA program as an example of translation of theory into practice. *Disability and Rehabilitation*, 41(15), 1846–1854.

Chapter V: Discussion

PC is among several avenues for promoting family involvement and learning in EI (Rush & Shelden, 2020). The primary objective of PC is to assist parents in acquiring new skills or adopting behaviours that have been demonstrated or hypothesized to result in enhanced outcomes for their children (Williams & Sawyer, 2023). Research indicates a disparity between the perceived value of coaching practices by EI professionals and the actual implementation of these practices (Meadan et al., 2018). Notably, there is a discrepancy between self-reported usage and documented application during EI sessions (Douglas et al., 2020). Recognizing this, Romano and Schnurr (2022) suggest that EIs adopt an evidence-based coaching framework to bolster the fidelity of coaching implementation. Such frameworks provide concrete procedures, examples of practices in action, and tools for assessing implementation. These components offer a more precise understanding of how to execute coaching effectively, upholding FCP principles, and potentially supporting and motivating EI practitioners to implement practices with fidelity. Reports from EI practitioners indicate that structured coaching processes and accompanying materials enhance their coaching practices (Stewart & Applequist, 2019) and that better training frameworks are required to support EI providers in understanding what constitutes PC practices (Douglas et al., 2020; Romano & Schnurr, 2022). Therefore, adherence to a framework with clearly defined practices and procedures may empower EI practitioners to enhance their coaching skills in working with caregivers.

The three papers in this dissertation present a detailed PD model for learning a PC framework, the RSB coaching approach and a pilot study of its effectiveness, acceptability, and feasibility.

Chapter two reviews the PD of the RSB coaching approach by first describing the foundational elements and activities of RSB Coaching. Building on the seminal work describing effective PC in EI (e.g., Friedman et al., 2012; Kemp & Turnbull, 2014; Lorio et al., 2020), RSB Coaching extends the notion that a collaborative relationship is essential for effective PC (e.g., Kemp & Turnbull, 2014; Lorio et al., 2020) by operationalizing how one can establish a therapeutic relationship with parents. Carl Rogers' person-centred therapy (1957) and the necessary and sufficient conditions to develop a therapeutic relationship (Prochaska & Norcross, 2018) were integrated into the RSB Coaching framework. Accordingly, the coach must "sensitively capture the essence of the client's emotions and expressions… the [parent coach] is free to listen actively and reflect accurately" (Prochaska & Norcross, 2018, p.110). When the parent coach is genuine, emotionally present, and engages fully with the parent, they create a safe space so the parent can act genuinely and be fully present with the coach. These behaviours are subtle yet powerful. They show the parent that the coach is on their 'side' and will not take offence if unpleasant or unpopular feelings or impressions are shared. As outlined by Carl Rogers (1957) and those who have explored the development of a therapeutic relationship (e.g., Crom et al., 2020; Prochaska & Norcross, 2018), a parent coach must be genuine in their alignment with parents and desire to understand their perspectives, not just act as a 'polite expert.' This sincerity requires intentionality on the part of the coach to foster a solid therapeutic relationship with the parent.

The RSB Coaching PD utilizes the four levels of Miller's pyramid of clinical competence (Miller, 1990). The initial two levels (Knows and Knows How) emphasize learner knowledge, while the subsequent levels (Shows How and Does) focus on behaviours leading to clinical competence. The training program draws on research showcasing the efficacy of professional

development (PD) incorporating individualized coaching support from trainers (Desimone, 2009; Hsieh et al., 2009; Wasik & Hindman, 2011). This evidence suggests the superiority of PD involving one-to-one coaching, tailoring guidance on the adoption of new or evidence-based skills within the learner's current context, content knowledge, and available resources, as opposed to group-based PD methods relying solely on brief workshops or coursework (Powell & Diamond, 2013; Romano & Schnurr, 2022).

Decisions about which dimensions of coaching to measure to determine the effectiveness of the PD were identified by examining the essential elements of knowledge, application of knowledge and demonstration of PC skills covered in the PD program. During levels one and two, knowledge reviewed early in the PD program was measured by objective (i.e., multiple-choice, true-false) and subjective (i.e., short answer, long answer) assessments, which were provided to participants at regular intervals throughout levels one and two of the PD. Application of knowledge and demonstration of PC skills were measured using the competency rating tool, the PCCRS. The rating tool is first introduced in early levels of the training (i.e., level two) and then used to guide participant practice of PC skills (i.e., levels three and four) as a demonstration of knowledge gained through the PD program of RSB coaching.

While coaching manuals (e.g., Rush & Shelden, 2020) provide fidelity checklists of PC activities, few research reports measure the quality of coaching in training or PD implementation. Three known studies (i.e., Meadan et al., 2020; Mirenda et al., 2021; Wainer et al., 2017) describe ratings of the coaching process for coaches implementing the parent-mediated intervention program. Meadan et al. (2020) review the effects of their Coaching Caregivers Professional Development Program (CoCARE). The single case design revealed that four EIs improved their use of coaching practices. This was determined by video analysis using the global

Coaching Fidelity Scale (CFS), a researcher-developed measure with ten items to determine whether the providers followed the steps specified by the coaching model. While the authors report that, on average, after the PD, most trainees reached 80% fidelity on the CFS, the items and the scoring methods are unclear in the published paper. A subsequent publication (i.e., Meaden et al., 2023) details the development and evaluation of the CFS, indicating it is an observational checklist with yes/no questions. However, it is unclear the CFS is interwoven into training EI providers in PC. Mirenda et al. (2021) utilized the Coaching Skills Checklist (CSC) adapted by researchers and trainers. It consists of 40 items to rate the skills of the coaches who were learning to coach caregivers in the parent-mediated intervention. The CSC items are not detailed. Details of the trainers' scoring of PC session videos are outlined. However, it is unclear if participants were taught to use the CSC in their learning of coaching practices.

Similarly, Wainer et al. (2017) measured coaching fidelity using the ImPACT parent coaching fidelity form involving 20 items. The authors note that the participants uploaded videos and met with the trainer for feedback. They specify that by the end of the training phase of the study, providers were implementing the PC strategies 'with fidelity' after the training. It is unclear if participants were taught to use the ImPACT parent coaching fidelity form to learn coaching practices.

According to the guidance provided by Miller (1990) and subsequent authors (e.g., van der Vleuten et al., 2017; Thampy et al., 2019), training programs with the best outcomes integrate the learning objectives and clinical competencies assessments across all components of the training to support learner understanding of when to draw on what skill, competency, or concept during a clinical demonstration. The Parent Coaching Competency Rating Scale (PCCRS) was developed to capture the competencies for RSB Coaching and was introduced

early in the PD program (i.e., Level Two). Miller (1990) and others (van der Vleuten et al., 2017) provide a unique perspective on how PD programs that teach complex clinical competencies involve not just the application of specific skills but also effective communication, understanding and contextual application of content knowledge, the demonstration of clinical reasoning, to solve problems that do not have one immediate solution to them (i.e., clinical competence). Global rating scales are more suited to capturing the nuanced and complex interactions during observational measurement than behaviour checklists (Solomon et al., 2000; Thampy et al., 2019; van der Vleuten et al., 2017). Thus, a global rating scale was utilized when conceptualizing the development of the PCCRS. The competencies outlined in this rating system are drawn directly from the content, structure, and process dimensions of RSB coaching. Twelve competencies are described and defined (Appendix A). Each is rated on a five-point Likert scale. A rating of one or two indicates that the coach is not yet demonstrating competency. A rating of three suggests that the coach has emerging competency, and a rating of four or five indicates the coach effectively demonstrates PC competency.

The case example of the RSB coaching approach in chapter three illustrates what RSB coaching looks like in practice. An EI provider, Penny, works with Hugh to support him in working towards his goals for his young son, Winston. The activities of the RSB coaching approach (i.e., Chapter 3; Table 3.1) are reviewed. The foundational elements (i.e., FCP, adult learning principles, and therapeutic relationship) are exemplified as they are woven into the PC activities.

Finally, this research program conducted a pilot evaluation of the effectiveness, feasibility, and acceptability study of the RSB coaching approach (i.e., Chapter Four). This study explored how the RSB coaching PD program, structured in Miller's Pyramid, relates to the

demonstration of clinically competent PC. The study leveraged implementation science to conceptualize factors contributing to implementation success (i.e., acceptability and feasibility) by systematically collecting data on the participant experience of the PD.

The trainer implemented the RSB coaching PD program with nine EI providers employed at Island Health in Victoria, British Columbia. They support families with children aged zero to five with developmental delays. Participants from several EI disciplines were represented. All nine participants improved their PC clinical competency from baseline to the end of the project. Factors that appeared to impact increased PC clinical competency included motivation, time, and commitment to the PC training; practice PC opportunities; competency coding practice using the PCCRS; meetings with the PC trainer and one-on-one feedback; previous experience or knowledge about PC; and engagement with level one and two training content as indicated by participant's assessment scores and reflective journals.

Participants increased their knowledge of PC activities and foundational information about RSB coaching. Participants' average baseline knowledge scores were 54% (range 23% to 61%) before the PD and 81% (range 71% to 95%) after levels one and two. Clinical competency was rated on the PCCRS. On the five-point Likert scale, participants averaged 2.0 (range 1.0 to 4.1) at baseline, 3.2 (range 1.7 to 4.9) after level three practice, and 4.1 (range 1.9 to 5.0) at the end of the PD. All trainees significantly changed, yet there was variability in their competencies. Eight of nine participants achieved clinical competence or were close to clinical competence after the PD. Their case stories revealed nuanced responses to the PD; some were slower to find RSB Coaching acceptable, others experienced temporary personal stresses that impeded their progress, and others described impediments to maintaining the engagement of families. For most

of the participants, these circumstances were temporary. Thus, all progressed in their PC competencies, albeit at individual rates.

Participants completed reflective journals across all levels of training and a follow-up interview. The researcher explored this data to draw insights into the feasibility and acceptability of the PD program. Participant responses on the reflective journals and follow-up interviews indicated that all nine participants found the RSB coaching PD program impacted their work positively, indicating high acceptability. Further, all participants reported that they intended to use PC in their future EI work. All participants reported that the activities in level three, including practicing with parents, competency coding themselves using the PCCRS, and one-on-one feedback meetings with the trainer, were the most valuable components of the PD. Five of nine participants reported that they found the knowledge learned in levels one and two beneficial to their learning.

Participants' themes drawn from reflections and interviews indicated that RSB Coaching presented a relative advantage when contrasted with other ways to support families. They found that it positively impacted their relationship with parents and empowered parents; they appreciated the attainable goals and the emphasis on parent-derived goals; and finally, they appreciated the session structure and ability to include parents in decisions regarding the frequency of the sessions.

Regarding feasibility, participants had several recommendations for improvements to the RSB coaching PD, including more time for level three practice, more time for the PD, condensing the materials in levels one and two, fewer assessments and reflective journals, and more opportunities to practice coaching and using the PCCRS. Regarding the feasibility of a ten-month RSB program in a community-based EI setting (i.e., Island Health), while participants

indicated they felt the training would be valuable to their colleagues, they consistently indicated that the program took up more time than allotted.

Research Contributions

To the author's awareness, the work captured in this dissertation is the first documented PD program in PC that was structured around an established clinical competency model (i.e., Miller's pyramid, Miller 1990). This is the first known PD program in PC that expressly and intentionally utilizes the competency rating system to teach PC and rate the participants' skills as evidence of their skill attainment. Evidence from the feasibility and acceptability study (i.e., chapter four) suggests that using Miller's Pyramid supported participants in learning about and demonstrating clinically competent PC. The participants in this study reported that they found the PD valuable and intend to use PC in their future EI work.

This work directly addressed recommendations made in the literature to structure and deliver PC training within a framework that emphasizes competency in PC (Romano & Schnurr, 2022; Stewart & Applequist, 2019; Ward et al., 2020). Romano & Schnurr (2022) emphasize the need to deliver PD in PC that is not solely focused on one type of diagnosis or developmental domain (i.e., Akamoglu & Meadan, 2019; Ferjan Ramírez et al., 2020) but instead, coaching models that can be utilized more broadly in interdisciplinary community-based settings. Similarly, in their interviews with EI professionals about coaching, Douglas et al. (2020) and Stewart & Applequist (2019) found that respondents identified the need for adequate training involving direct supervision and mentorship to learn how to use PC practices. Recommendations from these interviews included the need for explicit PD in broad PC practices (i.e., operationalization of FCP) and explicit training in strategies that have become synonymous with most PC programs (i.e., joint planning, feedback, reflection).

Romano & Schnurr (2022) note that most PC research with families "tests packages of strategies or curricula, and fewer studies allow for responsiveness to family priorities… because the primary focus is to evaluate whether the identified strategies are linked to caregiver and child change" (p. 69). The authors also point out that there is a need for flexible measurement systems to adapt to family priorities that can easily be used in community-based settings. One of the intentions behind developing and using the PCCRS was to support EI providers in learning, strengthening, and measuring their clinical competency in PC. The tool is intended to be flexible, adaptable, and valuable across domains, families and EI service provision settings.

In the present work, data gathered from participant reflections and follow-up interviews indicate that all nine EI providers found the practice activities in level three (i.e., practice coaching, self-competency coding, and one-on-one feedback with the trainer) the most helpful to their learning. This finding is supported by literature on PD activities for adult learners (i.e., Epstein & Hundert, 2002; van der Vleuten, 2017; Wisniewski et al., 2020). In their meta-analysis on feedback in education, Wisniewski et al. (2020) found that 'high-information feedback' is the most impactful for learning. Furthermore, the timing of the feedback is vital in the student's learning process, meaning immediate and specific feedback directly related to the learning activity is most effective. This aligns with the participant's reflections about the usefulness of the one-on-one meetings with the trainer, which are specific to their own and the trainer's PCCRS codes for practice videos. Participants consistently found that coding their PC videos and discussing their codes with respect to trainer codes was helpful in their learning about PC competencies.

Limitations

Limitations must be acknowledged. As this research marks the inaugural implementation of the RSB Coaching program, it functioned as a pilot for the PD initiative. Therefore, there was no fidelity or competency rating on the training itself. Other than participant reflective journals throughout the training and the interviews conducted by the dissertation supervisor following the RSB coaching PD program, no other critical feedback or fidelity rating was sought about the PD. Nonetheless, the participants provided rich data about their experiences with the RSB Coaching program, which will contribute to planned modifications for improvement.

Far-reaching interpretations about the effectiveness of RSB Coaching are not possible, as the sample of participants from the pilot study (i.e., Chapter Four) was small, resulting in a lack of statistical power in the exploration of qualitative data. The mixed-method case-study methodology provides rich information about individual participants' experiences of PD. Further work exploring the impact and implementation of PD programs in PC emphasizing clinical competency throughout, such as the RSB coaching program, is recommended.

Finally, no parent and child outcome data are provided because the research emphasized the PD of EI providers in a community-based setting. While the nine participants indicated that they felt the families they worked with found PC useful, the parents involved did not share perspectives. Furthermore, there is no data on child outcomes related to the goals the trainee PCs worked on with the parents. A direction for future research is to explore parent experiences receiving RSB coaching from their EI provider.

Conclusions

The present research addresses the literature gap on effective PD in PC in real-world settings (Romano & Schnurr, 2022). A PD program in the newly developed RSB coaching

approach utilized an established health science educational framework (i.e., Miller's Pyramid) is outlined, and outcomes related to its effectiveness and implementation are reviewed. The feasibility and acceptability of the RSB Coaching PD with EI providers working full-time is promising. Participant experiences indicate its potential to expand the understanding and use of PC practices with EI providers. This work supports the well-established notion that the relationship between a coach and parent is critical for creating a safe space for learning wherein adult learning principles can be used to guide the FCP principles. Finally, the research emphasizes the importance of customized PD to enhance PC practices for EI providers working in community-based settings.

References

Akamoglu, Y., & Meadan, H. (2019). Parent-implemented communication strategies during storybook reading. *Journal of Early Intervention, 41(*4), 300–320. https://doi.org/10.1177/1053815119855007

Douglas, S. N., Meadan, H., & Kammes, R. (2020). Early interventionists' caregiver coaching: A mixed methods approach exploring experiences and practices. *Topics in Early Childhood Special Education, 40(*2), 84–96.

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38(*3), 181–199.

Epstein, R.M., & Hundert, E.M. (2002). Defining and assessing professional competence. *JAMA, 287(*2), p. 226-234.

Crom, A., Paap, D., Wijma, A., Dijkstra, P. U., & Pool, G. (2020). Between the lines: A qualitative phenomenological analysis of the therapeutic alliance in pediatric physical therapy. *Physical & Occupational Therapy in Pediatrics*, *40*(1), 1-14.

Ferjan Ramírez, N., Lytle, S. R., & Kuhl, P. K. (2020). Parent coaching increases conversational turns and advances infant language development. *Proceedings of the National Academy of Sciences, 117*, 3484–3491. doi:10.1073/pnas.1921653117

Friedman, M., Woods, J., & Salisbury, C. (2012). Caregiver coaching strategies for early intervention providers: moving toward operational definitions. *Infants & Young Children, 25(*1), pp. 62-82.

Hsieh, W. Y., Hemmeter, M. L., McCollum, J. A., & Ostrosky, M. M. (2009). Using coaching to increase preschool teachers' use of emergent literacy teaching strategies. Early Childhood Research Quarterly, 24, 229–247.

Kemp, P. & Turnbull, A. (2014). Coaching with parents in early intervention: an interdisciplinary research synthesis. *Infants & Young Children, 27(*4), 305–324.

Lorio, C.M., Romano, M., Woods, J.J., & Brown, J. (2020). A review of problem solving and reflection as caregiver coaching strategies in early intervention. *Infants & Young Children, 33(*1), 35-70.

Lorio, C.M., Woods, J.J., & Snyder, P. (2021). An exploration of reflective conversations in early intervention caregiver coaching sessions. *Journal of Early Intervention, 45(*4), 1-25.

Meadan, H., Chung, M. Y., Sands, M. M., & Snodgrass, M. R. (2020). The cascading coaching model for supporting service providers, caregivers, and children. *The Journal of Special Education*, 54(2), 113–125.

Meadan, H., Douglas, S., Kammes, R., & Schraml, K. (2018). "I'm a different coach with every family": Early interventionists' beliefs and practices. *Infants and Young Children, 31(*3), 200–214.

Meadan, H., Lee, J.D., Sands, M.M., Chung, Y. & Garcia-Grau, P. (2023). The coaching fidelity scale (CFS): Development and evaluation of an observational measure of coaching fidelity. *Infants & Young Children, 36(*1), pp. 37-52.

Miller, G. (1990). The Assessment of clinical skills/competence/performance. *Academic Medicine (September Supplement), 65(*9), S63-S67.

Mirenda, P., Smith, V., Colozzo, P., Vismara, L.A., Ungar, W.J. & Kalynchuk, K. (2021). Training coaches in community agencies to support parents of children with suspected autism: outcomes, facilitators and barriers. *Journal of Autism and Developmental Disorders, DOI:* https://doi.org/10.1007/s10803-021-05363-4

Powell, D. R., & Diamond, K. E. (2013). Studying the implementation of coaching-based professional development. In T. Halle, A. Metz, & I. Martinez-Beck (Eds.), *Applying Implementation Science in Early Childhood Programs and Systems* (pp.97-116). Baltimore: Paul H. Brookes Publishing Co.

Prochaska, J.O. & Norcross, J.C., (2018). *Systems of Psychotherapy: A Transtheoretical Analysis*. Oxford University Press.

Romano, M., & Schnurr, M. (2022). Mind the gap: Strategies to bridge the research-to-practice divide in early intervention caregiver coaching practices. *Topics in Early Childhood Special Education*, 42(1), 64–76.

Rogers, C. & Farson, R.E., (1957). *Active Listening*. Industrial Relations Center: the University of Chicago, Illinois.

Rogers, C. (1965). The therapeutic relationship: recent theory and research. *Australian Journal of Psychology, 17(*2), 95 -108.

Rush, D., & Shelden, M. (2020). The Early Childhood Coaching Handbook, second edition. Paul H. Brooks Publishing: Baltimore, MD.

Solomon, D., Szauter, K., Rosebraugh, C.J., & Callaway, M.R. (2000). Global ratings of student performance in a standardized patient examination: is the whole more than the sum of the parts? *Advances in Health Sciences Education, 5,* p. 131-140.

Stewart, S. L., & Applequist, K. (2019). Diverse families in early intervention: Professionals' views of coaching. *Journal of Research in Childhood Education, 33(*2), 242–256.

Thampy, H., Willert, E. & Raman, S. (2019). Assessing clinical reasoning: targeting the higher levels of the pyramid. *Journal of General Internal Medicine, 34(*8), p.1631-6. DOI: 10.1007/s11606-019-04953-4

van der Vleuten C., Sluijsmans D., Joosten-ten Brinke D. (2017) Competence Assessment as Learner Support in Education. In: Mulder M. (eds) Competence-based Vocational and Professional Education. Technical and Vocational Education and Training: Issues, Concerns and Prospects, vol 23. Springer, Cham. https://doi.org/10.1007/978-3-319-41713-4_28.

Ward, R., Reynolds, J.E., Pieterse, B., Elliot, C., Boyd, R., & Miller, L. (2020). Utilisation of coaching practices in early intervention in children at risk of developmental disability/delay: a systematic review. *Disability and Rehabilitation, 42(*20), 2846-2867. https://doi.org/10.1080/09638288.2019.1581846

Wainer, A.L., Pickard, K. & Ingersoll, B.R. (2017). Using web-based instruction, brief workshops, and remote consultation to teach community-based providers a parent-mediated intervention. *Journal of Child Family Studies, 26,* 1592-1602.

Williams, C.S. & Sawyer, G.E. (2023). Going beyond "I'm a coach": Adopting a caregiver coaching framework in EI. *Young Exceptional Children, 27(*1), pp. 3-15. https://doi.org/10.1177/10962506231153

Wasik, B. A., & Hindman, A. H. (2011). Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development. Journal of Educational Psychology, 103, 455–469.

Wisniewski, B., Zierer, K. & Hattie, J. (2020). The power of feedback revisited: a meta-analysis of educational feedback research. Frontiers *in Psychology, 10(3087), 1-14. DOI*: 10.3389/fpsyg.2019.03087

Bibliography

Akamoglu, Y., & Meadan, H. (2019). Parent-implemented communication strategies during storybook reading. *Journal of Early Intervention, 41(*4), 300–320. https://doi.org/10.1177/1053815119855007

Brewer, E.J., McPherson, M., Magrab, P.R. & Hutchins, V.L. (1989) Family-Centered, Community-based: coordinated care for children with special health care needs, *Pediatrics, 83*(6), 1055-1060.

Brian, J., Solish, A., Dowds, E. et al. (2022). "Going Mobile"-increasing the reach of parent-mediated intervention for toddlers with ASD via group-based and virtual delivery. *Journal of Autism and Developmental Disorders, 52*, 5207-5220. https://doi.org/10.1007/s10803-022-05554-7

Carter A.S., Messinger D.S., Stone W.L., Celimli S., Nahmias A.S., Yoder P. (2011). A randomized controlled trial of Hanen's "More Than Words" in toddlers with early autism symptoms. *Journal of Child Psychology and Psychiatry: 52*(7); pp. 741–752.

Charlin, B. & van der Vleuten, C. (2004). Standardized assessment of reasoning in contexts of uncertainty: the script concordance approach. *Evaluation & the Health Professions, 27(*3), pp. 304-319.

Childress, D.C. (2021). *Pause & Reflect: Your guide to a deeper understanding of early intervention practice.* Baltimore, MA: Paul H. Brookes Publishing.

Creswell, J. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th Edition ed.). SAGE Publications, Inc.

Creswell, J.W., & Plano Clark, V.L. (2018). *Designing and Conducting Mixed Methods Research, third edition.* Sage Publications Inc.

Crom, A., Paap, D., Wijma, A., Dijkstra, P. U., & Pool, G. (2020). Between the lines: a qualitative phenomenological analysis of the therapeutic alliance in pediatric physical therapy. *Physical & Occupational Therapy in Pediatrics*, *40*(1), 1-14.

Cruess, R.L., Cruess, S.L., Steinhert, Y. (2016). Amending Miller's Pyramid to include professional identity formation. *Academic Medicine, 91(2)*, p. 180-185.

Dane, A. V., & Schneider, B. H. (1998). Program integrity in primary and early secondary prevention: Are implementation effects out of control? Clinical Psychology Review, 18, 23-45.

Davis, F. (1993). User acceptance of information technology: System characteristics, user perceptions and behavioural impacts. *International Journal of Man-Machine Studies, 38*, 475–487.

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38(*3), 181–199.

Douglas, S. N., Meadan, H., & Kammes, R. (2020). Early interventionists' caregiver coaching: A mixed methods approach exploring experiences and practices. *Topics in Early Childhood Special Education, 40(*2), 84–96.

Dunst, C.J. & Dempsey, I. (2007). Family-Professional Partnerships and Parenting Competence, Confidence, and Enjoyment. *International Journal of Disability, Development and Education, 54*(3), 305–318.

Dunst, C.J. & Trivette, C. (2009). Let's be PALS: an evidence-based approach to professional development. *Infants & Young Children, 22(*3), 164-176.

Dunst, C.J., Trivette, C.M., & Deal, A. (1988). *Enabling and empowering families: Principles and guidelines for practices.* Cambridge, MA: Brookline Books.

Elenko, B. (2019). Preparing occupational therapists for effective family-centered best practice in early intervention. *Infants & Young Children, 23(*4), 270-279.

Epstein, R.M., & Hundert, E.M. (2002). Defining and assessing professional competence. *JAMA, 287(*2), p. 226-234.

Ferjan Ramírez, N., Lytle, S. R., & Kuhl, P. K. (2020). Parent coaching increases conversational turns and advances infant language development. *Proceedings of the National Academy of Sciences, 117*, 3484–3491. doi:10.1073/pnas.1921653117

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation research: A synthesis of the literature.* University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Francois, J.R., Coufal, K.L., & Subramanian, A. (2015). Student preparation for professional practice in early intervention. *Communication Disorders Quarterly, 36(*3), 177-186.

Friedman, M., Woods, J., & Salisbury, C. (2012). Caregiver coaching strategies for early intervention providers: moving toward operational definitions. *Infants & Young Children, 25(*1), pp. 62-82.

Harbin, S.G., Fettig, A., & Kelly, E.M (2023). Virtual practitioner training and coaching of a triadic approach in early intervention: a mixed methods investigation. *Journal of Early Intervention,* 1-21. https://doi.org/10.1177/10538151231200777

Hanft, B. Rush, D. & Shelden, M. (2011). *The Early Childhood Coaching Handbook.* Baltimore, MD: Brookes Publishing.

Heeneman S., De Jong L., Dawson L., et al. (2021). Ottawa 2020 consensus statement for programmatic assessment – 1. Agreement on the principles. *Medical Teacher 43(*10), p. 1139-1148. DOI:10.1080/0142159X. 2021.1957088.

Hsieh, W. Y., Hemmeter, M. L., McCollum, J. A., & Ostrosky, M. M. (2009). Using coaching to increase preschool teachers' use of emergent literacy teaching strategies. Early Childhood Research Quarterly, 24, 229–247.

Ingersoll, B. & Dvortcsak, A. (2019). *Teaching social communication to children with autism & other developmental delays: the project ImPACT guide to coaching parents*. The Guilford Press: New York, NY.

Island Health (2020). Early intervention program family handbook. Retrieved on June 9, 2022:https://www.islandhealth.ca/sites/default/files/children-youth-family/cyf-rehab/documents/early-intervention-program-family-handbook.pdf.

Jelen, M., Harder, J. & Smith,V. (under review). Relationship Strength-based Coaching: A Professional Development Framework. Topics in Early Childhood Special Education.

Karsh, B. T. (2004). Beyond usability: Designing effective technology implementation systems to promote patient safety. *Quality and Safety in Health Care, 13*, 388–394.

Kasari, C., Gulsrud, A.C., Shire, S.Y. & Strawbridge, C. (2021). *The jasper model for children with autism: promoting joint attention, symbolic play, engagement, and regulation*. The Guilford Press.

Kemp, P. & Turnbull, A. (2014). Coaching with parents in early intervention: an interdisciplinary research synthesis. *Infants & young children, 27(*4), 305-324.

Knowles, M.S., Holton, E.F., and Swanson, R.A., (2012). *The adult learner: the definitive classic in adult education and human resource development*. New York, NY: Routledge.

Lorio, C.M., Romano, M., Woods, J.J., & Brown, J. (2020). A review of problem solving and reflection as caregiver coaching strategies in early intervention. *Infants & Young Children, 33(*1), 35-70.

Lorio, C.M., Woods, J.J., & Snyder, P. (2021). An exploration of reflective conversations in early intervention caregiver coaching sessions. *Journal of Early Intervention, 45(*4), 1-25.

Meadan, H., Chung, M. Y., Sands, M. M., & Snodgrass, M. R. (2020). The cascading coaching model for supporting service providers, caregivers, and children. *The Journal of Special Education*, 54(2), 113–125.

Meadan, H. & Daczewitz, M.E. (2014). Internet-based intervention training for parents of young children with disabilities: a promising service-delivery model. *Early Child Development and Care, 185(*1), pp. 155-169.

Meadan, H., Douglas, S., Kammes, R., & Schraml-Block, K. (2018). "I'm a different coach with every single family": Early Interventionists' beliefs and practices. *Infants & Young Children, 31(*3), pp. 200-214.

Martin, J.G., Rivard, M., Patel, S., Lanovaz, M.J., & Lefebvre, C. (2022). Randomized controlled trial on an online training to support caregivers of young children with intellectual and developmental disability managing problem behaviours at home. *Journal of Child and Family Studies, (*31), pp. 3485-3497.

Merriam, S.B., & Baumgartner, L.M., 2020. *Learning in Adulthood: a Comprehensive Guide, 4th Edition*. Joseey-Bass: Hoboken, NJ.

Messick S. (1994). The interplay of evidence and consequences in the validation of performance assessments. *Educ Res,* 23, p. 13–23.

McCollum, J. A., & Yates, T. J. (1994). Dyad as focus, triad as means: A family centered approach to supporting parent-child interactions. *Infants & Young Children, 6(*4), 54–63.

Miller, G. (1990). The Assessment of clinical skills/competence/performance. *Academic Medicine (September Supplement), 65(*9), pp. S63-S67.

Mirenda, P., Colozzo, P., Smith, V., Kroc, E., Kalynchuk, K., Rogers, S.J. & Ungar, W.J. (2022). A randomized, community-based feasibility trial of modified ESDM for toddlers with suspected autism. *Journal of Autism and Developmental Disorders, DOI:* https://doi.org/10.1007/s10803-021-05390-1

Mirenda, P., Smith, V., Colozzo, P., Vismara, L.A., Ungar, W.J. & Kalynchuk, K. (2021). Training coaches in community agencies to support parents of children with suspected autism: outcomes, facilitators and barriers. *Journal of Autism and Developmental Disorders, DOI:* https://doi.org/10.1007/s10803-021-05363-4

Norman, G.R., van der Vleuten, C., De Graaff, E. (1991). Pitfalls in the pursuit of objectivity: issues of validity, efficiency and acceptability. *Medical Education,* 25, p. 119-126.

Odom, S. L. (2013). Foreword. In T. Halle, A. Metz, & I. Martinez-Beck Applying Implementation Science in Early Childhood Programs and Systems (p. xii – xiv). Paul H. Brookes: Baltimore, MD.

Oono, I. P., Honey, E. J., & McConachie, H. (2013). Parent-mediated early intervention for young children with autism spectrum disorders (ASD). Cochrane Database of Systematic Reviews, Issue 4. Art. No.: CD009774. DOI: 10.1002/14651858.CD009774.pub2.

Powell, D. R., & Diamond, K. E. (2013). Studying the implementation of coaching-based professional development. In T. Halle, A. Metz, & I. Martinez-Beck (Eds.), *Applying Implementation Science in Early Childhood Programs and Systems* (pp.97-116). Baltimore: Paul H. Brookes Publishing Co.

Prochaska, J.O. & Norcross, J.C., (2018). *Systems of Psychotherapy: A Transtheoretical Analysis*. Oxford University Press.

Proctor, E., Silmere, H., Raghaven, R., et al. (2011). Outcomes for Implementation Research: Conceptual Distinctions, Measurement Challenges, and Research Agenda. Administration and Policy in Mental Health, 38, 65-76.

Rogers, C. (1965). The therapeutic relationship: recent theory and research. *Australian Journal of Psychology, 17(*2), 95 -108.

Rogers, S.J., Dawson, G., & Vismara, L. (2012). *An Early Start for Your Child with Autism: Using Everyday Activities to Help Kids Connect, Communicate, and Learn*. New York: The Guilford Press.

Rogers, S.J., Dawson, G., & Vismara, L.A. (2021). *Coaching parents of young children with autism: promoting connection, communication, and learning.* The Guildford Press: New York, NY.

Rogers, C. & Farson, R.E., (1957). *Active Listening*. Industrial Relations Center: the University of Chicago, Illinois.

Rogers, S.J. & Stahmer, A. (2024). Help is in your hands. https://www.helpisinyourhands.org

Romano, M., & Schnurr, M. (2022). Mind the gap: Strategies to bridge the research-to-practice divide in early intervention caregiver coaching practices. *Topics in Early Childhood Special Education*, 42(1), 64–76.

Rouse, E. (2012). Family-centered practice: empowerment, self-efficacy, and challenges for practitioners in early childhood education and care. *Contemporary Issues in Early Childhood, 13(1)*, 17-26.

Rush, D. (2018). From Couching to coaching: how do we get families engaged in early intervention? It starts with us communicating their enormous influence on their children's development. *ASHA Leader*, Vol *23(*10), 46-52.

Rush, D., & Shelden, M. (2020). The Early Childhood Coaching Handbook, second edition. Paul H. Brooks Publishing: Baltimore, MD.

Saldaña, J. (2009). *The Coding Manual for Qualitative Researchers.* Sage Publication Ltd.

Schuwirth, L.W., & van der Vleuten, C.P.M (2011). Programmatic assessment: from assessment of learning to assessment for learning. *Medical Teacher, 33,* pp. 478-485.

Smith, V., Colozzo, P., Mirenda, P., Kalynchuk, K., Ungar, W., Denomy, N., Trafford, L., & Altani, A. (2021). Parent and Child Early (PACE) Coaching for children at risk for autism: Understanding implementation. Abstracts of the International Society for Autism Research Virtual Meeting 616-617.

Solomon, D., Szauter, K., Rosebraugh, C.J., & Callaway, M.R. (2000). Global ratings of student performance in a standardized patient examination: is the whole more than the sum of the parts? *Advances in Health Sciences Education, 5,* p. 131-140.

Sone, B.J, Lee, J., & Roberts, M.Y. (2021). Comparing instructional approaches in caregiver-implemented intervention: an interdisciplinary systematic review and meta-analysis. *Journal of Early Intervention,* 1-22, DOI: 10.1177/1053815121989807

Stewart, S. L., & Applequist, K. (2019). Diverse families in early intervention: Professionals' views of coaching. *Journal of Research in Childhood Education, 33(*2), 242–256.

Stevens, J. (1996). *Applied multivariate statistics for the social sciences* (3rdedn).Mahway, JR: Lawrence Erlbaum.

Torre et al., Rice, N.E., Ryan, A., et al. (2021). Ottawa 2020 consensus statements for programmatic assessment - 2. Implementation and practice. *Medical Teacher 43(*10), p. 1149-1160.

Thampy, H., Willert, E. & Raman, S. (2019). Assessing clinical reasoning: targeting the higher levels of the pyramid. *Journal of General Internal Medicine, 34(*8), p.1631-6. DOI: 10.1007/s11606-019-04953-4

The Hanen Centre (2016). More Than Words® — The Hanen Program® for Parents of Autistic Children or Children Who May Benefit from Social Communication Support. https://www.hanen.org/Programs/For-Parents/More-Than-Words.aspx

Tobii Dynavox (2024). Boardmaker. https://www.myboardmaker.com/Login.aspx

Torre et al., Rice, N.E., Ryan, A., et al. (2021). Ottawa 2020 consensus statements for programmatic assessment - 2. Implementation and practice. *Medical Teacher 43(*10), p. 1149-1160.

Vismara, L.A., McCormick, C.E.B., Wagner, A.L. et al. (2018). Telehealth parent training in the Early Start Denver Model: results from a randomized controlled study. *Focus on Autism and Other Developmental Disabilities, Vol 33(*2), pp. 67-79.

van der Vleuten C., Sluijsmans D., Joosten-ten Brinke D. (2017) Competence Assessment as Learner Support in Education. In: Mulder M. (eds) Competence-based Vocational and Professional Education. Technical and Vocational Education and Training: Issues,

Concerns and Prospects, vol 23. Springer, Cham. https://doi.org/10.1007/978-3-319-41713-4_28

van der Vleuten, C., Sluijsmans, D., & Joosten-ten Brinke, D. (2016). Competence assessment as learner support in education. *Technical and Vocational Education and Training: Issues, Concerns and Prospects*, 607–630. https://doi.org/10.1007/978-3-319-41713-4_28

van der Vleuten. C., Norman, G., & De Graaff, E. (1991). Pitfalls in the pursuit of objectivity: issues of reliability. *Medical Education,* 25(2), 110-118.

van der Vleuten C., & Schuwirth L. (2005). Assessing professional competence: from methods to programmes. *Med Educ*. *39(*3): 309–317.

van der Vleuten, C. P., Schuwirth, L. W., Driessen, E. W., Dijkstra, J., Tigelaar, D., Baartman, L. K., & van Tartwijk, J. (2012). A model for programmatic assessment fit for purpose. *Medical Teacher*, *34*(3), 205–214.

van der Vleuten, C. P. M., Schuwirth, L. W. T., Scheele, F., Driessen, E. W., & Hodges, B. (2010). The assessment of Professional Competence: Building Blocks for theory development. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *24*(6), 703–719.

Wainer, A.L., Pickard, K. & Ingersoll, B.R. (2017). Using web-based instruction, brief workshops, and remote consultation to teach community-based providers a parent-mediated intervention. *Journal of Child Family Studies, 26,* 1592-1602.

Ward, R., Reynolds, J.E., Pieterse, B., Elliot, C., Boyd, R., & Miller, L. (2020). Utilisation of coaching practices in early intervention in children at risk of developmental disability/delay: a systematic review. *Disability and Rehabilitation, 42(*20), 2846-2867. https://doi.org/10.1080/09638288.2019.1581846

Wasik, B. A., & Hindman, A. H. (2011). Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development. Journal of Educational Psychology, 103, 455–469.

Williams, C.S. & Sawyer, G.E. (2023). Going beyond "I'm a coach": Adopting a caregiver coaching framework in EI. *Young Exceptional Children, 27(*1), pp. 3-15. https://doi.org/10.1177/10962506231153

Wisniewski, B., Zierer, K. & Hattie, J. (2020). The power of feedback revisited: a meta-analysis of educational feedback research. Frontiers *in Psychology, 10(3087), 1-14. DOI*: 10.3389/fpsyg.2019.03087

Woods, J. (2021). *FGRBI key indicators manual (6th ed.)* [Unpublished manual]. FGRBI Partners.

Yin, R. K. (2018). Case Study Research and Applications: Design and Methods (6th ed.). Thousand Oaks, CA: Sage.

Ziegler, S. A., Dirks, T., & Hadders-Algra, M. (2018). Coaching in early physical therapy intervention: the COPCA program as an example of translation of theory into practice. *Disability and Rehabilitation, 41(*15), pp. 1846-1854. https://doi.org/10.1080/09638288.2018.1448468

Instructions for Use:

- Select the number that most accurately reflects the entire coaching session.
- Select the code that most closely aligns with the majority of statements corresponding with 1, 2, 3, 4, or 5.
- Select the code that is closest to the overall quality of the observed interaction or documentation.
- Make note of examples specific to competency items so that final codes can be substantiated.

Laying the Foundation (items A-C)

- Items A-C may be used during parent coach session planning and/or when new goals need to be formed to guide an ongoing parent coaching relationship.
- Item A is to be coded after watching and/or listening to a recording of a conversation between a coach and parent when planning parent coaching sessions.
- Watch and/or listen to the entire conversation between coach and parent prior to coding item A.
- Following review of the coaching conversation (i.e., item A), review all corresponding documentation around content selection and written goals for coding of items B and C.

Parent Coaching Session (Items D-I)

- Items D-I are to be coded after each parent coaching session.
- Watch the entire parent coaching session before assigning final codes.
- It is highly recommended that notes are taken during observation so that final codes can be substantiated with examples.

Global Competencies (Items J-L)

- Items J-K are to be coded after each parent coaching session.
- Watch the entire parent coaching session before assigning final codes.
- It is highly recommended that notes are taken during observation so that final codes can be substantiated with examples.

Overall Rating Alignment

5) Strong demonstration of clinical competency.
3) Emerging demonstration of clinical competency, room for improvement.
1) Not yet demonstrating clinical competency

Laying the Foundation					
Clinical Competency Item	**1**	**2**	**3**	**4**	**5**
A. Laying the Foundation *Captured via digital or audio recording of a conversation between parent and coach*	The coach does not review the specifics of parent coaching. No parent, child, or family goals are identified OR goals identified are unrelated to what the coach can offer. Coach misses opportunities to address questions, comments, or concerns the parent shares. It is unclear what the parent hopes to get out of coaching sessions. The coach offers little or no information about what they are able to offer in parent coaching. There is not a clear focus in the conversation. It is not clear what the parent hopes to learn. The coach's communication is not clear. It is	This code is used when the coach demonstrates all but 1 or 2 aspects of level 3.	The coach provides some explanation about parent coaching. There is a conversation about parent goals for themselves, their child, and/or their family however they are not clearly reviewed OR the coach misses opportunities for clarification. The coach offers some information about what they are able to offer in parent coaching. The coach addresses some comments, questions, or concerns the parent identifies however there are missed opportunities in addressing parent comments or questions. The coach supports conversation to gain some understanding of what the parent hopes to learn. There are some plans for the next steps.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 5.	The coach clearly explains the nature of parent coaching and supports the parent to identify goals for the coaching relationship OR the coach and parent have a clear conversation around the goals of their work together. The coach clearly shares what they are able to offer in parent coaching. Goals for the parent, child, and/or family are discussed. There is a clear focus on the purpose of the conversation. The coach supports conversation to gain a clear understanding of what the caregiver hopes to learn. The coach addresses any comments, questions, or concerns the parent identifies. There is a clear plan for the next step.

	not clear what the focus of future sessions will be OR it is not clear what the next steps are.				
B. Written Goals *Captured via physical (i.e., written, digital, or other) documentation demonstrating a coaching plan and goals for sessions*	There are no written goals to guide the parent coaching session OR goals that are written are not clearly described. It is unclear how goals will be achieved or addressed in parent coaching. Goals are not clearly related to parent priorities for themselves, their child, and/or their family. Goals are unrelated to the conversation that occurred during Laying the Foundation (item A).	This code is used when the coach demonstrates all but 1 or 2 aspects of level 3.	The coach has written goals to guide the parent coaching session however they are not clearly described. Goals are generally related to parent priorities for themselves, their child, and/or their family. The conversation that occurred during Laying the Foundation (item A). Goals are related. There are some indications that describe how goals will be achieved.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 5.	The coach has written goals intended to guide the parent coaching session. Goals are linked to parent priorities for themselves, their child, and/or their family. Goals are written in a manner that is easy to understand. Goals match the conversation that occurred during Laying the Foundation (item A). There are clear descriptions within the goals that describe how they will be achieved in the short and/or long term.
C. Content Selection *Captured via physical (i.e., written, digital, or other) documentation demonstratin*	The coach has not produced any physical (i.e., written, digital, or other) content that will guide the coaching sessions. The coach has not written a plan		The coach has produced some (i.e., written, digital, or other) content to guide the coaching sessions however not all goals can be addressed with the content. Emerging		The coach has produced physical (i.e., written, digital, or other) content that will guide the coaching sessions. Clear demonstration of consideration around supporting parent learning.

g a coaching plan	around how specific content will be used. There is little or no demonstration of consideration around supporting parent learning.		demonstration of consideration around supporting parent learning.		

PARENT COACHING SESSION					
Clinical Competency Item	**1**	**2**	**3**	**4**	**5**
D. Joint Planning *Captured via digital recording of a parent coaching session*	The coach misses one or more opportunities for a conversation and/or opportunity for the parent to show the coach how their practice went since the last session OR the coach did not seek parent input on the topic OR the coach did not provide input about the topic the parent wants to focus on. The conversation about the topic was one-sided (i.e., coach-directed or parent-directed). The joint plan is not clearly linked to parent goals.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 3.	There is a conversation and/or opportunity for the parent to show the coach how their practice went since the last session to guide the joint planning, however the coach misses' opportunities to seek parent input and/or clarification. The topic was collaboratively decided. The coach misses one or more opportunities to seek clarification on the topic or parent input. One or more missed opportunities to seek parent collaboration and/or link the joint plan to parent goals.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 5.	A conversation and/or opportunity for the parent to show the coach how their practice went since the last session. Conversation and/or parent demonstration guide the session joint planning. The topic was collaboratively decided. The coach and parent both contribute to deciding the topic OR the coach seeks confirmation from the parent about the topic. The coach links the joint plan to parent goals.
E. Topic Instruction *Captured via digital recording*	The coach does not teach the parent about the topic OR the coach does not ensure that the	This code is used when the coach demonstrates all	The coach teaches the parent about the topic but the instruction was not clear. The coach does not ensure	This code is used when the coach demonstrates all	The coach teaches the parent about the topic. The coach engages the parent in dialogue to ensure that the

of a parent coaching session	parent clearly understands the topic OR there is no clear topic.	but 1 or 2 aspects of level 3.	that the parent clearly understands the topic or related rationale for why the topic works towards the parent's goal(s). The topic can be written down but it is very long OR the session topic is not clear.	but 1 or 2 aspects of level 5.	parent understands the topic and related rationale for why the topic works towards the parent's goal(s). The topic can be written down in a short sentence, phrase, or word (i.e., 1-5 words).
F. Practice and Observation *Captured via digital recording of a parent coaching session*	There are little or no opportunities for caregiver practice or conversation around new knowledge and/or session topic. The coach does not provide opportunities for the caregiver to identify how they will use the new knowledge, skills, and/or strategies. There are few or no opportunities for caregiver comments and/or questions. There is limited or no in-the-moment support to help the caregiver integrate new information. There is little or no opportunity for the parent to	This code is used when the coach demonstrates all but 1 or 2 aspects of level 3.	There are some opportunities for caregiver practice or conversation around new knowledge and/or session topic. There are some missed opportunities for the caregiver to identify how they will use the new knowledge, skills, and/or strategies. There are some opportunities for caregiver comments and/or questions. There is some in-the-moment support to help the caregiver integrate new information. The coach tries to support the parent to experience success and/or talk through what is, or, is not working but there are some missed opportunities OR there is poor integration of new	This code is used when the coach demonstrates all but 1 or 2 aspects of level 5.	The coach provides several opportunities for the caregiver to practice and/or talk through new knowledge and/or session topic. The coach provides opportunities for the parent to identify how they will use the new knowledge, skills, and/or strategies. There are opportunities and invitations for caregiver comments and/or questions. The emphasis of the practice and observation is on caregiver integration of new knowledge and/or topic. The coach provides in-the-moment support to help the caregiver experience success and/or talk through what is, or, is not working.

	experience success and/or talk through what is, or, is not working.		information to the parent's context.		
G. Defining Mastery *Captured via digital recording of a parent coaching session*	The coach does not leave enough time at the end of the session to support the parent to think through new information outside of the coaching session OR the coach does not support the parent to plan practice opportunities for new skills or information before the next coaching session. The coach suggests or decides on the plan OR the coach guides the parent to think about their plan in a way that does not meet the family context. There is not a clear plan for the coach to check in on at the start of the next session. Action and practice opportunities are not linked to home routines	This code is used when the coach demonstrates all but 1 or 2 aspects of level 3.	The coach tries to leave enough time at the end of the session to support the parent to think through new information outside of the coaching session but runs out of time OR the coach does not support the parent to think through a clear plan. The coach creates space for the parent to plan practice opportunities for new skills or information before the next coaching session but there are missed opportunities. The coach suggests a plan and seeks parent input. There is a plan for the coach to check in on at the start of the next session. Action and practice opportunities are poorly linked to home routines and/or materials (through conversation, check in, etc.)	This code is used when the coach demonstrates all but 1 or 2 aspects of level 5.	The coach leaves enough time at the end of the session to support the parent to think through new information outside of the coaching session (i.e., either make a plan or confirm the plan if it was made during the session). The coach supports the parent to plan practice opportunities for new skills or information before the next coaching session. The coach supports the parent to decide on the plan. There is a clear plan for the coach to check in on at the start of the next session. Action and practice opportunities are linked to home routines and/or materials (through conversation, check in, etc.)

	and/or materials (through conversation, check in, etc.)				
H. Reflection *Captured via digital recording of a parent coaching session*	Coach asks few or no open-ended questions. Coach consistently misses opportunities to encourage parent reflections. Coach reflections rarely include objective descriptions (i.e., linking parent/child actions to session examples or conversation). The coach rarely uses comments and/or questions to try to support understanding of parent perspectives. The coach does not summarize parent responses. Coach reflections do not contribute to the session plan, practice, or observations.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 3.	Coach asks some open-ended questions and encourages some parent reflections. Coach reflections sometimes include objective descriptions (i.e., linking parent/child actions to session examples or conversation) but there are some missed opportunities. Coach uses comments and/or questions to try to support understanding of parent perspectives. The coach summarizes some parent responses. Coach reflections contribute to the session plan, practice, or observations.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 5.	Coach consistently asks open-ended questions, encourages parent reflections, and supports parent problem-solving. Coach reflections consistently include objective descriptions (i.e., linking parent/child actions to session examples or conversation). Coach uses comments and/or questions to ensure understanding of parent perspectives. Coach summarizes parent responses consistently and effectively. Coach reflections contribute to the session plan, practice, or observations.
I. Feedback	Coach provides little or no	This code is	Coach feedback is sometimes specific	This code is	Coach feedback is consistently

Captured via digital recording of a parent coaching session	feedback OR Coach feedback is unrelated to session practice and/or conversation. The coach rarely provides supportive feedback. Coach feedback rarely includes links to parent and/or child behaviour. Little or no informative feedback is given to help support parent learning. Little or no feedback is focused on what the caregiver is doing well OR feedback is focused on what the parent is doing wrong. Coach uses corrective feedback consistently or in a manner that detracts from parent learning. Parent does not demonstrate understanding (through action or reflection) of feedback or intent of feedback.	used when the coach demonstrates all but 1 or 2 aspects of level 3.	to session practice and/or conversation. The coach provides some supportive feedback that is linked to parent and/or child behaviour. Informative feedback is sometimes used to help support parent learning. Some feedback is focused on what the caregiver is doing well. Coach uses no or very limited corrective feedback that has a purpose to ameliorate something that occurred in the session.	used when the coach demonstrates all but 1 or 2 aspects of level 5.	specific to session practice and/or conversation. Coach consistently provides supportive feedback that is linked to parent and/or behaviour. Informative feedback is given to help support parent learning. Much feedback is focused on what the caregiver is doing well. Coach uses no or very limited corrective feedback that has a clear purpose to ameliorate something that occurred in the session. Parent clearly understands feedback (through reflection and/or demonstration).
J. Relationshi	There are few or no examples of	This code is used	There are some examples of the	This code is used	There are consistent

p *Captured via digital recording of a parent coaching session*	the coach working to build the relationship with the parent. Coach reflections, comments, and feedback were insincere. Coach led the parent conversation and tried to coax the parent on one or more occasions. Coach asked one or more 'testing' questions. Coach did not address verbal or nonverbal signs of negative feelings/concerns OR the coach was not direct and honest. The conversation between coach and parent was not balanced and reciprocal. The coach missed opportunities to use collaborative language (e.g., "we"; "let's", etc.). Coach consistently missed opportunities to obtain parent agreement. Little or no	when the coach demonstrates all but 1 or 2 aspects of level 3.	coach working to build the relationship with the parent. Coach reflections, comments, and feedback were mostly genuine. Coach asked one 'testing' question. Coach answered off-topic questions or comments respectfully. The coach addressed verbal or nonverbal signs of negative feelings/concerns but missed some opportunities or was not completely direct or honest. The conversation between coach and parent was mostly balanced and reciprocal. The coach used some collaborative language (e.g., "we"; "let's", etc.). Coach obtained parent agreement but missed one or more opportunities. Some examples of active listening when coach is working to understand parent perspectives but missed one or more opportunities.	when the coach demonstrates all but 1 or 2 aspects of level 5.	examples of the coach working to build the relationship with the parent. Coach reflections, comments, and feedback were genuine. Coach did not try to lead the parent conversation to go in any direction. Coach answered off-topic questions or comments respectfully. Coach did not ask 'testing' questions. Coach addressed any verbal or nonverbal signs of negative feelings/concerns directly and honestly. The conversation between coach and parent was balanced and reciprocal. The coach used collaborative language (e.g., "we"; "let's", etc.). Coach consistently obtained parent agreement. Many examples of active listening when coach is working to understand parent perspectives.

	examples of active listening when coach is working to understand parent perspectives				
K. Modeling *Captured via digital recording of a parent coaching session*	Coach demonstrated or modelled interactions OR played with the child on more than one occasion OR when coach demonstrated or modelled, it was not linked to the session plan/topic and/or it was not appropriately narrated. Parent practice was not immediately supported after the coach model or demonstration. The model or demonstration was long and showcased coach skills.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 3.	The coach demonstrated or modelled interactions with the child on one occasion. The model was mostly linked to the session plan/topic, appropriately narrated, and followed by an opportunity for the parent to try with support. Coach models' 1-3 times without narration/explanation of what is being modeled. Models are brief and intended to help the parent, however there is missed opportunities for reflection.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 5.	Coach did not demonstrate or model interactions with the child for the parent OR if the coach demonstrated actions with the child any model was brief, clearly linked to the session plan/topic, appropriately narrated, and immediately followed by an opportunity for the parent to try with support. If a model occurred, it clearly supported the session flow and structure.
L. Session Structure *Captured via digital recording of a parent coaching session*	Session structure was disjointed. There were missed opportunities for key session activities (i.e., joint planning, action/practice, observation, defining	This code is used when the coach demonstrates all but 1 or 2 aspects of level 3.	The Session structure was logical. Joint planning occurred at the start of the session. Conversation unrelated to the session focus was brief and mostly at the start and/or end of the session.	This code is used when the coach demonstrates all but 1 or 2 aspects of level 5.	Session structure was natural and logical. Joint planning occurred at the start of the session. Conversation unrelated to the session focus was brief and primarily at the start and/or end of the session.

	mastery). The coach followed the parent into conversations that detracted from the coaching session focus. The coach started conversations that detracted from the coaching session focus.		Parent conversation that was unrelated to the session topic was mostly placed in a parking lot but occasionally interrupted session flow. Action and practice occurred after the joint planning. Action and practice involved generally appropriate activities related to the session topic (i.e., conversation or activities with the child).		Parent conversation that is unrelated to the session topic was placed in a parking lot. Action and practice naturally flowed from the joint planning. Action and practice involved appropriate activities related to the session topic (i.e., conversation or activities with the child).

CONSENT TO PARTICIPATE IN RESEARCH
The Impact of Parent Coach Training on the Clinical Practice of Early Interventionists

University of Alberta, Edmonton, Alberta

Dear Early Intervention Clinician:

We invite you to participate in a research study conducted by Michaela Jelen from the Faculty of Education at the University of Alberta. You have been selected because you are a clinician who works in the Early Intervention Program at Vancouver Island Health Authority (VIHA) in Victoria, BC. Participation in this research study is voluntary. If you choose not to participate, your employment will not be negatively affected.

PURPOSE OF THE STUDY

The research aims 1) to develop a practical parent coach training program for Early Intervention (EI) clinicians; 2) implement the training program with clinicians who regularly work with young children and families; and 3) to evaluate the impact and effectiveness of the training program.

PROCEDURES

It is anticipated that participation in this study will take up to one year. The EIP Management Team at VIHA has approved that participation in this project will occur during regular work hours. The twelve EI clinicians who participate will be asked to do the following:

1) Complete a demographic questionnaire describing experience and background as an EI clinician (< 1 hour)
2) Participate in synchronous online small group training. Training will occur across eight consecutive weeks (2 hrs per week) at a regularly scheduled time. It will include foundational information about parent coaching, session structure, process, and content; provide opportunities to observe examples of parent coaching; small group discussion, and reflection on parent coaching skill development (16 hours of training + 8 hours out of class activities = 24 hours); training sessions will be video-recorded;
3) Complete online assessments (i.e., multiple-choice, true/false, etc.) of training content; and assess parent coaching skill proficiency by rating videos. Assessment outcomes will be used to provide individualized feedback to augment participant learning (6 hours);

4) Practice newly learned coaching skills with two-three families on their caseload (variable hours);
5) Receive mentorship and trainer support during coaching practice (8 hours).
6) Capture and confidentially share digital recordings of themselves engaging in family-centered early intervention with a parent and child prior to, during, and after the training (to be seen by researchers only) (variable hours);
7) Participate in a follow-up interview to discuss their experiences with the parent coach training process (1 hour).

POTENTIAL RISKS AND DISCOMFORTS

Participating in this project involves minimal risk. Some participating EI clinicians may feel uncomfortable learning new information, capturing digital recordings of themselves, or practicing new skills with trainer support. We will make every effort to ensure that all participants feel safe to learn, practice, reflect, and coach parents. We want to emphasize that we will aim to be responsive to the unique context and needs of all those involved and will openly seek ongoing feedback during each aspect of study.

Additionally, some of the participant's learning will occur in small groups. There is a risk that private information may be shared among the participants during group discussions. To mitigate this risk, the participant's responsibility to maintain the privacy and confidentiality of discussions will be reviewed to ensure a safe space for learning. Online training will be video-recorded. The purpose of the video recording is to utilize the transcripts as data during the analysis following the completion of the study. All transcripts will be de-identified of all private and confidential information.

POTENTIAL BENEFITS TO SUBJECTS AND/OR SOCIETY

Participating in this project may contribute to the development of new training programs in parent coaching. This research aims to shift clinician practice when working with parents using a parent coaching process. By participating in this project, EI clinicians may deepen their understanding of parent coaching knowledge and practices.

ANONYMITY and CONFIDENTIALITY

Data that will be collected will include demographic information, education and professional background, as well as information about where you work. Digital recordings of parent coaching practice sessions will be captured during the training. Only researchers associated with the project will access your recordings, video ratings, interview, questionnaire responses, and assessment results throughout the training. All data will be de-identified and given a unique study identifier. All data and digital recordings (i.e., of parent coaching practice and of online training sessions) will be stored in a password-protected secure online google platform at the University of Alberta. Data analysis and subsequent communication of the findings will ensure that participants remain de-identified both during and after the study.

All data will be securely stored for five years from when captured (i.e., June 2022 – June 2027) as required by University of Alberta guidelines. The principal investigator, Michaela Jelen or her supervisor, Veronica Smith, will destroy all study data after 5 years.

Results of this study may be presented at scholarly conferences, university class lectures, or published in professional journals. No participant will be identified by name in any presentation of the findings.

PARTICIPATION AND WITHDRAWAL

Participation in this study is voluntary; if you choose to participate, you may withdraw your participation at any time. Participants can contact the researchers and withdraw their data one week before the last data collection point.
In addition, the researchers may withdraw you and your data from this research at their discretion if circumstances arise that warrant doing so.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact the primary investigators:

Veronica Smith, Ph.D.,
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Tel: 780.993.1322
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If you have concerns about your rights as a participant and/or your experiences while participating in this study, or if you wish to verify the ethical review of the study, you may contact the University of Alberta Research Ethics Office at 250-519-6726 or VIHA Research Ethics Office researchethics@islandhealth.ca.

FUTURE CONTACT

☐I would like to receive a copy of the completed study (please give email address or full address)

STATEMENT OF INFORMED CONSENT

I HAVE READ AND UNDERSTOOD THIS CONSENT FORM AND I AGREE TO PARTICIPATE IN THE STUDY.

_____
Name (Print)

_____ _____
Signed Name *Date*

CONSENT TO ALLOW DIGITAL RECORDING
The Impact of Parent Coach Training on the Clinical Practice of Early Interventionists

University of Alberta, Edmonton, Alberta

Dear Parent:

We want to inform you that your early intervention provider is participating in a research study conducted by Michaela Jelen from the University of Alberta, in partnership with Vancouver Island Health Authority (VIHA). Your early intervention provider is learning about parent coaching. They have identified you and your child as being good candidates to receive parent coaching and are requesting to practice their newly learned skills during sessions with you and your child. If you choose to be involved, it is not anticipated that your involvement will negatively impact your sessions in any way. Your participation in this study is voluntary. If you choose not to be involved, there will be no interruption to your current services with your early intervention provider.

If you choose to participate, your Early Intervention provider will be asked to document any developmental or diagnostic information related to the reason you are seeking or receiving services for your child. Your Early Intervention provider will work with you to determine achievable goals during 4-12 parent coaching sessions. You will then work to achieve these goals in collaboration with your Early Interventionist during parent coaching sessions. Potential benefits to participation include learning tools to support your child during daily routines related to the specific goals you have for their development. It is possible that you may not benefit from participating in this study.

If you choose to participate, the 4-12 sessions parent coaching sessions with your Early Interventionist will be digitally recorded (i.e., approximately 45-75 minutes per session). As you and your child will appear in the video, we would like to ask for your consent. The video will help the coach trainer provide feedback to your early intervention provider as they learn parent coaching skills. The digital recordings will not be used for any other purpose.

All confidential information will be de-identified, meaning, you and your child will each receive a unique study number that will be associated with any information to be used for data analysis, no names or identifying information about you or your child will be collected.

Digital recordings will be coded by Michaela Jelen, her supervisor Veronica Smith, and/or a trained research assistant. The intent of the coding is to examine the early intervention provider's ability to use their parent coaching skills not to rate the parent skills. As with any digital recordings, there is a risk that the digital recordings will result in loss of confidentiality. However, every effort will be made to protect the confidentiality of you and your child. The videos and related study data will only ever be stored in password protected secure online google server at the University of Alberta, and only accessed by your provider, Michaela Jelen, her supervisor Veronica Smith, and/or a trained research assistant.

POTENTIAL BENEFITS TO SUBJECTS AND/OR SOCIETY

Participating in this project may contribute to the development of new training programs in parent coaching for Early Interventionists.

ANONYMITY and CONFIDENTIALITY

Only your early intervention provider and researchers associated with the project will access the parent coaching recordings. All precautions will be made to protect the identity of all participants both during and after the study. All identifying information will be removed, and each child and parent will be given a unique study identifier that will be used to label all digital recordings and corresponding diagnostic information. Following the completion of the project, all digital recordings and corresponding data will be stored in for five years, in a secure password-protected secure online google platform at the University of Alberta.

The results of this study may be presented at scholarly conferences, university class lectures, or published in professional journals.

PARTICIPATION AND WITHDRAWAL

Participation in this study is voluntary; if you choose to participate, you may withdraw your participation at any time. Participants can contact the researchers and withdraw their data one week before the last data collection point.

In addition, the researchers may withdraw you and your data from this research at their discretion if circumstances arise that warrant doing so.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact the supervisor or primary investigator.

Supervisor
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If you have concerns about your rights as a participant and/or your experiences while participating in this study, or if you wish to verify the ethical review of the study, you may contact the University of Alberta Research Ethics Office at 250-519-6726 or the VIHA Ethics Office: researchethics@islandhealth.ca.

STATEMENT OF INFORMED CONSENT

I HAVE READ AND UNDERSTAND THIS CONSENT FORM AND AGREE TO ALLOW MY EARLY INTERVENTION PROVIDER TO DIGITALLY RECORD OUR PARENT COACHING SESSIONS. I AM PROVIDING CONSENT FOR MYSELF AND MY CHILD.

_____

Name (Print)

_____ _____

Signed Name *Date*

1. Who is this interview for and when did it occur? (name of coach, date).

2. **Has your understanding of parent coaching changed since the start of this project?** [*Probe: Can you tell me about some of your experiences? Positive, negative or neutral]*

3. **Can you tell me a little bit more about** *[probe aspects of coaching that the interviewee may not have addressed]*
   a. Family-centred practice
   b. Adult learning principles
   c. Therapeutic relationship

4. **Was the level 2 training (refining coaching content and skills) helpful in your work with families?** [*Probe: Can you tell me about some of your experiences? Positive, negative or neutral]*

5. **Can you tell me a little bit more about** *[probe aspects of coaching that the interviewee may not have addressed]*
   a. Structure, Content, Process
   b. Coaching characteristics
   c. Coaching session activities
   d. Coaching content
   e. Laying the Foundation
   f. Joint Planning
   g. Topic setting
   h. Practice
   i. Observation, reflection, feedback
   j. Defining mastery

6. **Can you tell me about your experience thinking through your content expertise?** [*Probe: Do you think about your content differently following the parent coach training project? Is the information you share with parents different from before*

the parent coach training project? Can you tell us about some of your experiences? Positive, negative or neutral]

7. **During the level 1 and 2 training, you had an online assessment after each lesson. Tell us about your experience with the assessment for learning.** [*Probe: Was it helpful to your understanding concepts? Were the assessments hard? Easy? Can you give some examples of how the assessments were or were not helpful.]*

8. **What were your experiences with the competency coding measures?** [*Probe: Are sections more helpful than others? Can you tell us about some of your experiences? Positive, negative or neutral Probe: how did the behaviour skills checklist impact your coaching practice? Probe: how did the competency coding measure impact your coaching practice?]*

9. **What was it like reflecting on your parent coaching sessions on your own?** [*Probe: Did the competency coding measures impact your self-reflection? Can you tell us about some of your experiences? Positive, negative or neutral]*

10. **What was it like reflecting on your video sessions with your coach trainer?** [*Probe: Can you tell us about some of your experiences? Positive, negative or neutral]*

11. **Can you describe how the parent coach training project has impacted you as an early intervention professional?** [*Probe: Can you tell us about some of your experiences? Positive, negative or neutral]*

12. **Can you describe an experience where you felt coaching made a difference within your practices as an early intervention professional?** [*Probe: Can you provide some examples?]*

13. **How much impact do you believe the parent coach training project has had on your skills and confidence in supporting families in early intervention?** [*Probe: Can you provide some examples?]*

14. **Has the way you provide early intervention support to families changed based on what you have learned during the parent coach training project?** [*Probe: Can you provide some examples?]*

15. **Is there anything else you want to share about your experiences with the parent coach training project?**

Thank you very much for your participation in this interview.

Appendix D

Demographic Questionnaire

Thank you for completing this online demographic questionnaire. We are interested in understanding your education, background in Early Intervention (EI), family-centred practice, and parent coaching before beginning the parent coach training project. We are also interested in understanding more about the place where you work.

We anticipate that the survey completion should take 15-30 minutes.

* Indicates required question

1. Email *

Section 1

Demographic Information

2. 1. What is your full Name? *

3. 2. What is your date of birth? *

Example: January 7, 2019

4. 3. Pronouns: *

Appendix D

5. 4. What cultural or ethnic group do you most identify with? *

Mark only one oval.

- First Nations
- Metis
- Inuit
- Other North American (e.g., Acadian, Quebecois, Newfoundlander, Canadian, American)
- European (e.g., English, Scottish, Irish, French, Dutch, German, Finnish, Swedish, Hungarian, Russian, Croatian, Czech, Greek, Italian, Portuguese)
- Caribbean (e.g., Cuban, Haitian, Jamaican)
- Central or South American (e.g., Brazilian, Colombian, Mexican)
- African (e.g., Ethiopian, Kenyan, Ghanaian, Congolese, Nigerian, Egyptian, Moroccan, Afrikaner)
- West Central Asian or Middle Eastern (e.g., Afgan, Iranian, Lebanese, Syrian, Turk)
- South Asian (e.g., Punjabi, Pakistani, Sri Lankan)
- East or Southeast Asian (e.g., Chinese, Filipino, Japanese, Korean, Vietnamese, Thai)
- Oceanian (e.g., Australian, New Zealander, Fijian, Hawaiian)
- Other: _____

6. 5. Do you speak any language other than English at home? If yes, please specify below, otherwise type n/a

_____

Section 2

Education and professional background

Appendix D

7. 6. Tell us about your education: *

Mark only one oval.

- ◯ None
- ◯ College Diploma
- ◯ Bachelor's Degree
- ◯ Master's Degree
- ◯ Doctoral Degree
- ◯ Other: _____

8. 7. What is your professional designation or title? *

Mark only one oval.

- ◯ Speech-Language Pathologist
- ◯ Physical Therapist
- ◯ Occupational Therapist
- ◯ Behaviour Analyst
- ◯ Infant Development Consultant
- ◯ Social Worker
- ◯ Other: _____

9. 8. Please note any other education that you have had that you think might contribute to your participation in the project.

10. 9. I have taken coursework or workshops in the following (check all that apply) *

Check all that apply.

- [ ] Early childhood education
- [ ] Early intervention
- [ ] Parent coaching
- [ ] Parent training
- [ ] Parent education
- [ ] Family-centred practice
- [ ] Adult learning principles
- [ ] Therapeutic relationship

11. 10. How many years have you been working in EI with children and families? *

Mark only one oval.

- ◯ 0-5
- ◯ 6-10
- ◯ 11-15
- ◯ 16-20
- ◯ 20+

12. 11. Is there a specific disability label or developmental delay you most commonly support? If yes, please describe below, otherwise answer n/a

_____

13. 12. What age range of children do you most commonly work with? *

Mark only one oval.

- ◯ 0-3
- ◯ 4-5
- ◯ 0-5
- ◯ Other: _____

14. 13. Which early intervention programs do you have experience with (check all that apply) *

Check all that apply.

- ☐ Hanen – it takes two to talk
- ☐ Hanen – more than words
- ☐ Parent-child mother goose
- ☐ Triple P parenting
- ☐ Early intensive behavioural intervention
- ☐ Other: _____

Tell us a bit about your experiences with family-centred practice and parent coaching.

Appendix D

15. 14. Family-Centred Practice is: *

Mark only one oval.

- a. Culturally sensitive
- b. Individualized and responsive
- c. Goal-oriented
- d. Emphasizes teaching parents new skills
- e. a & b
- f. a, b, & c
- g. a, b, & d
- h. All of the above

16. 15. What words, thoughts, or examples come to mind when you think about parent coaching?

17. 16. What is your current experience with parent coaching? *

Mark only one oval.

- I know nothing about it
- I have read about it
- I have taken some workshops about it
- I am clinically competent in parent coaching
- None of the above

18. 17. Is there any other information you would like to share about your background in Early Intervention, family-centred practice, and/or parent coaching? Type n/a if not.

19. 18. Please describe your understanding of family-centred practice and how you understand it relates to parent coaching.

Section 4

The remainder of the survey will inquire about the place where you work

Questions 19-24. Culture is the way that “we do things” in our workplaces. Please indicate your lev of agreement with the following statements about the place where you work.
(all questions will be rated on a 5pt Likert scale: “strongly disagree; disagree; neither agree nor disagree; agree; strongly agree”)

20. 19. I receive recognition from others about my work. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

21. 20. I have control over how I do my work. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

22. 21. My organization effectively balances best practice and productivity. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

23. 22. I am supported to undertake professional development. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

24. 23. We work to provide what children and families need. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

25. 24. I am a member of a supportive workgroup. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

Questions 25-28. Think about the group of people who you work with most of the time. Please sele
the appropriate option for each question.
All questions will be rated on a 5pt Likert scale: **"never; once; twice or three times; weekly; more than weekly"**

26. 25. Team Meetings *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

27. 26. Client rounds or case file sharing related to client/family care. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

28. 27. Family conferences. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

29. 28. Staff meetings. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

Questions 29-30. In the past year, how often have you attended the following? Please select the appropriate option?
All questions will be rated on a 5pt Likert scale: **“never; rarely; sometimes; often; always”**

30. 29. Professional development activities (e.g., conferences, courses, workshops) held outside your agency.

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	always

31. 30. Online professional development activities (e.g., webinars, online coaching live telehealt workshops) available at your agency or within your community.

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	always

Questions 31-38. In the last typical month, how often did you have a client/family programming related discussion with individuals or groups of people in the following roles or situations?
All questions will be rated on a 5pt Likert scale: **"never; once; twice or three times; weekly; more than weekly"**

32. 31. Other child development specialists at your agency. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

33. 32. Physicians (at your agency or not). *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

34. 33. Other health care providers at your agency. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

35. 34. Research or data management co-ordinator. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

36. 35. Quality improvement representative/specialist. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

37. 36. Someone who champions research in practice. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

38. 37. “hallway talk” (e.g., informal discussions about client/families in the hallway, in the coffee room).

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

39. 38. Informal observation or teaching sessions. *

Mark only one oval.

	1	2	3	4	5	
neve	◯	◯	◯	◯	◯	more than weekly

Questions 39-44. Please answer the following questions as they relate to the agency where you wo most of the time. Consider the group/team of early intervention providers that work at your agency that you interact with on a regular basis and indicate your level of agreement with the following statements by selecting the appropriate option for each question.
All questions will be rated on a 5pt Likert scale: **“strongly disagree; disagree; neither agree nor disagree; agree; strongly agree”**

Appendix D

40. 39. People in my group share information with others in the group *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

41. 40. My observations about client/family conditions are routinely taken seriously by those in positions of authority at my agency.

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

42. 41. People in other groups (i.e., other teams in your agency) share information with people ir my group.

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

43. 42. I am comfortable talking about child/family service issues with those in positions of authority at my agency.

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

44. 43. The aim of group exchanges is to help others do their job. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

45. 44. Individuals who participate in group activities are valued by others in the group. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

Questions 45-50. In responding to these statements, please focus on the leadership behaviour of th person you primarily report to. If this leadership involves a variety of individuals at various times, select the one person who is most representative of the group. Please indicate your level of agreement with the following statements by selecting the appropriate option for each question. All questions will be rated on a 5pt Likert scale: **"strongly disagree; disagree; neither agree nor disagree; agree; strongly agree"**

Appendix D

46. 45. The leader looks for feedback even when it is difficult to hear. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

47. 46. The leader focuses on successes rather than failures. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

48. 47. The leader calmly handles stressful situations. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

49. 48. The leader actively listens, acknowledges, and then responds to requests and concerns. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

50. 49. The leader actively mentors or coaches performance of others. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

51. 50. The leader effectively resolves conflicts that arise. *

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

Questions 51-55. One step that has been identified in achieving best practices in the workplace is t analyze and assess group or team performance to achieve desired outcomes by using specific productivity related information, and feedback. Examples of information and feedback used in decision making includes: caseload size, time taken to achieve client/family goals, frequency of appointments/visits, and client or family satisfaction, etc.
All questions will be rated on a 5pt Likert scale: **"strongly disagree; disagree; neither agree nor disagree; agree; strongly agree"**

52. 51. I routinely receive information on my or my team's performance specific to caseload size time taken to achieve client/family goals, frequency of appointments/visits, and client or famil satisfaction.

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

Appendix D

53. 52. My colleagues and I routinely discuss information such as caseload size, time taken to achieve client/family goals, frequency of appointments/visits, and client or family satisfaction.

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

54. 53. My colleagues and I have a scheduled formal process for discussing information such as caseload size, time taken to achieve client/family goals, frequency of appointments/visits, and client or family satisfaction.

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

55. 54. My colleagues and I routinely formulate action plans based on caseload size, time taken to achieve client/family goals, frequency of appointments/visits, and client or family satisfaction.

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

56. 55. My colleagues and I routinely compare our performance (i.e., caseload size, time taken t achieve client/family goals, frequency of appointments/visits, and client or family satisfaction) with others

Mark only one oval.

	1	2	3	4	5	
stro	◯	◯	◯	◯	◯	strongly agree

Questions 56-60. Please answer the following questions as they related to the agency where you work most of the time.Please indicate your use of the following at work in the last typical month. All questions will be rated on a 5pt Likert scale: **"Not available; never; rarely; occasionally; frequently"**

57. 56. Laptop computers. *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

58. 57. Desktop computers. *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

59. 58. Ipads or similar android devices (i.e., that have camera or digital recording functions) *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

60. 59. WiFi or internet access *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

61. 60. Mobile/cellular WiFi *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

Questions 61-75. In the last typical month, how often did you use the following while at work? Pleas
select the appropriate option for each question.
All questions will be rated on a 5pt Likert scale: **“Not available; never; rarely; occasionally; frequently”**

62. 61. The agency library or reference room. *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

63. 62. Toy library. *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

64. 63. Journals (print/online). *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

65. 64. Notice boards at your agency. *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

66. 65. Policies and procedures (print/online). *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

67. 66. Professional or educator practice guidelines. *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

68. 67. In-service/workshops/courses at your agency. *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

69. 68. Websites found through google searches. *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

70. 69. Online resources emailed to you through participation on specific listservs or professiona organizations.

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

71. 70. YouTube or other online digital resources (e.g., instructional or models of practice). *

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

72. 71. Digital recordings that families have emailed or made available to you electronically to share issues or progress.

Mark only one oval.

	1	2	3	4	5	
Not	◯	◯	◯	◯	◯	Frequently

Date: February 3, 2022 11:14:20 AM Print Close

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1.1 Study Identification

*All questions marked by a red asterisk * are required fields. However, because the mandatory fields have been kept to a minimum, answering only the required fields may not be sufficient for the REB to review your application.*

Please answer all relevant questions that will reasonably help to describe your study or proposed research.

1.0 * **Short Study Title** *(restricted to 250 characters)*:
The impact of parent coach training on the clinical practice of early interventionists

2.0 * **Complete Study Title** *(can be exactly the same as short title)*:
The impact of parent coach training on the clinical practice of early interventionists

3.0 * **Select the appropriate Research Ethics Board (***Detailed descriptions are available at here***):**
Research Ethics Board 2

4.0 * **Is the proposed research:**
Funded (Grant, subgrant, contract, internal funds, donation or some other source of funding)

5.0 * **Name of local Principal Investigator:**
Michaela Jelen

6.0 * **Type of research/study:**
Graduate Student

7.0 **Investigator's Supervisor***(required for applications from undergraduate students, graduate students, post-doctoral fellows and medical residents to REBs 1 & 2. HREB does not accept applications from student PIs)*:
Veronica Smith

8.0 **Study Coordinators or Research Assistants:** People listed here can edit this application and will receive all email notifications for the study:

Name	Employer

There are no items to display

9.0 **Co-Investigators:** People listed here can edit this application and will receive email notifications *(Co-investigators who do not wish to receive email, should be added to the study team below instead of here).*
If your searched name does not come up when you type it in the box, the user does not have the Principal Investigator role in the online system. Click

the following link for instructions on how to Request an Additional Role.

Name	Employer
There are no items to display	

10.0 **Primary Admin Contact** *(a member of study team)*:

11.0 **Study Team:** *(co-investigators, supervising team, and other study team members) - People listed here cannot view or edit this application and do not receive email notifications.*

Last Name	First Name	Organization	Role/Area of Responsibility	Phone	Email
Harder	Janet		Anonymous fidelity coding		

ID: Pro00115869 **Pro00115869** 1.3 Funding Information
Status: Approved

1.3 Study Funding Information

1.0 * **Type of Funding:**
Grant (external)

2.0 * **Indicate which office administers your award.** *(It is the PI's responsibility to provide ethics approval notification to any office other than the ones listed below)*
University of Alberta - Research Services Office (RSO)

To connect your ethics application with your funding: provide all identifying information about the study funding – multiple rows allowed. For Project ID, enter a Funding ID provided by RSO/PeopleSoft Project ID*(for example, RES0005638, G018903401, C19900137, etc).***Enter the corresponding title for each Project ID.**

	Project ID	Title	Grant Status	Sponsor	Project Start Date	Project End Date	Purpose	Other Information
View	RES0057082	Impact Parent Coach Training on the Clinical Practice of Early Interventionists	Submitted	MITACS Accelerate	2021-11-01	2023-03-31	Grant	

3.0 * **Funding Source**

3.1 Select all sources of funding from the list below:
There are no items to display

3.2 If your source of funding is not available in the list above, click "Add" below and write the Sponsor/Agency name(s) in the free text box that pops up. *(Nore: You may reflect multiple sources of funding by continuing to click "Add" to add each additional source of funding).*
Mitacs

4.0 * **Indicate if this research sponsored or monitored by any of the following:**
Not applicable

The researcher is responsible for ensuring that the study complies with the applicable US regulations. The REB must also comply with US Regulations.

ID: Pro00115869 **Pro00115869** 1.4 Conflict of Interest
Status: Approved

1.4 Conflict of Interest

1.0 * **Are any of the investigators or their immediate family receiving any personal remuneration (including investigator payments and recruitment incentives but excluding trainee remuneration or graduate student stipends) from the funding of this study that is not accounted for in the study budget?**
○ Yes ● **No**

2.0 * **Do any of investigators or their immediate family have any proprietary interests in the product under study or the outcome of the research including patents, trademarks, copyrights, and licensing agreements?**
○ Yes ● **No**

3.0 * **Is there any compensation for this study that is affected by the study**

outcome?
◯ Yes ● **No**

4.0 * **Do any of the investigators or their immediate family have equity interest in the sponsoring company? (This does not include Mutual Funds)**
◯ Yes ● **No**

5.0 * **Do any of the investigators or their immediate family receive payments of other sorts, from this sponsor (i.e. grants, compensation in the form of equipment or supplies, retainers for ongoing consultation and honoraria)?**
◯ Yes ● **No**

6.0 * **Are any of the investigators or their immediate family, members of the sponsor's Board of Directors, Scientific Advisory Panel or comparable body?**
◯ Yes ● **No**

7.0 * **Do you have any other relationship, financial or non-financial, that, if not disclosed, could be construed as a conflict of interest?**
◯ Yes ● **No**

Please explain if the answer to any of the above questions is Yes:

Important
If you answered YES to any of the questions above, you may be asked for more information.

ID: Pro00115869 **Pro00115869**
Status: Approved 1.5 Research Locations and Other Approvals

1.5 Research Locations and Other Approvals

1.0 * **List the locations of the proposed research, including recruitment activities. Provide name of institution, facility or organization, town, or province as applicable**
The location of this research is in Victoria, BC, Canada. All participant interaction will occur remotely (i.e., online, phone). The secure and privacy protected online platform for training and support will be provided by the Island Health Early Intervention Program (and obtain their ethic approval).

2.0 * **Indicate if the study will use or access facilities, programmes, resources, staff, students, specimens, patients or their records, at any of the sites affiliated with the following** *(select all that apply):*
Not applicable

List all health care research sites/locations:

3.0

Multi-Institution Review

*** 3.1 Has this study already received approval from another REB?**

◯ **Yes** ● **No**

4.0 **If this application is closely linked to research previously approved by one of the University of Alberta REBs or has already received ethics approval from an external ethics review board*(s)*, provide the study number, REB name or other identifying information. Attach any external REB application and approval letter in the Documentation Section – Other Documents.**

ID: Pro00115869 **Pro00115869** 2.1 Study Objectives and Design
Status: Approved

2.1 Study Objectives and Design

1.0 *** Provide a lay summary of your proposed research which would be understandable to general public**

The proposed research project aims to develop, implement, and evaluate the impact of a parent coach training program for a group of 12 Early Intervention (EI) professionals. The training will be grounded in evidence-informed practice and structured using an established framework for clinical competency education. The EI professionals will learn about the underpinnings of parent coaching, the processes involved in parent coaching, and learn how to engage in parent coaching practices with families on their caseloads. The EI professionals will have the opportunity to practice their parent coaching skills with trainer support. The trainees will self-reflect on their progress with video feedback, a fidelity rating checklist, and trainer support. Finally, following the completion of the training, trainees will be interviewed to explore their perceptions of the training procedures and on the impact the parent coach training had on their clinical practice in working with families.

2.0 *** Provide a full description of your research proposal outlining the following:**

- **Purpose**
- **Hypothesis**
- **Justification**
- **Objectives**
- **Research Method/Procedures**
- **Plan for Data Analysis**

Purpose:

The following research questions guide the work:

> Research Question 1: To what extent does family-centred parent coach training impact early intervention providers' clinical practice?
>
> Research Question 2: What is the experience of parent coach training for participating early intervention providers?
>
> Research Question 3: How is the experience of parent coach training related to the change in the clinical skills of early intervention providers?

Hypothesis: It is hypothesized that early intervention (EI) providers will improve their understanding of parent coaching and demonstrate parent coaching skills with fidelity as measured by a pre-determined observational tool.

Justification: Among EI providers, parent coaching to support families with children with developmental delays is an approach that has broad appeal (e.g., Dunst et al., 2009); however, the uptake has been inconsistent to date (Hedda et al., 2017). Parent coaching skills are multi-layered and challenging to learn (Hedda et al., 2017; Mirenda et al., 2022), especially for EI practitioners' who strive to become clinically competent in the skills. Beyond post-secondary education, few training programs provide training to a level of demonstrated clinical competency.

Objectives:

Objective 1: To develop a practical parent coaching training for Early Intervention (EI) practitioners. The training program will be created from a comprehensive review of the coaching literature, including peer-reviewed publications (e.g., Friedman et al., 2021; Lorio et al., 2020; Lorio et al., 2021; Wainer et al., 2017; Stahmer & Pellecchia, 2015) and parent coaching program manuals (e.g., Childress et al., 2021; Rush & Shelden, 2020; Rogers et al., 2021). Further, the applicant will draw on her clinical training and experience in parent coaching and training others in coaching. A synthesis of this review will guide the training content, organized within all four components represented in Miller's Pyramid of Clinical Competence (Miller, 1990). The first two levels (Knows and Knows How) focus on learner cognition, and the following two levels (Shows How and Does) focus on learner behaviour. Training will involve didactic learning, observational learning, self-reflection, supported hands-on learning, and independent practice. Assessment at each level will offer guidance to ensure clinical competence.

Objective 2: To implement the parent coach training program with up to 12 EI providers who regularly work with young children and families. Training will be delivered online, and trainees will practice newly learned skills in their clinical settings. Implementation of the parent coaching will be monitored with video sampling of sessions and used to reflect on practices with trainees.

Objective 3: To evaluate the impact and effectiveness of the parent coach training. Measurement of clinical knowledge and skills will occur before, during, and after the parent coach training. Miller's framework will guide assessment (Miller, 1990) at four levels, including online short answer

questionnaires, multiple-choice questionnaires, and video-mediated fidelity measurement. Satisfactory performance at Level 4 will indicate independent practice in parent coaching. Trainees will be interviewed following the training to contribute to the understanding of the training's impact.

Research Method/Procedures:

Procedures: Guided by Community-based research practices (Glenwich & Jason, 2012) and a synthesis of research/literature described above in Objective 1, the training will be co-constructed with an advisory group from the Island Health Early Intervention Program to ensure it meets their goal of training their Early Intervention (EI) clinicians within their organization. The parent coach training will be conducted over one year (approximately) in a levelled manner following Miller's Pyramid of Clinical Competence (Objective 2). A mixed-method research design will be utilized to assess the training program impact. Quantitative assessments of participant clinical competence will be conducted at each of the four levels. Participants will be interviewed after the completion of the training. Transcripts will be coded to understand further the impact of the parent coach training program (Objective 3).

Participants: Forty-five EI professionals employed in the Island Health Early Intervention Program (EIP) will be offered the opportunity to apply to participate in the parent coach training. Up to 12 participants will be selected to represent all EI disciplines, including speech and language pathology, physical therapy, occupational therapy, the infant development program, and all four geographic regions that the EIP serves. Three participants will be selected from each geographic team. Decisions about who the participants are will be made in collaboration with the advisory committee. Consent will be sought from each participant, and information regarding anonymity and confidentiality of the data and right to withdraw provided.

Training: The parent coach training will be conducted over one year (approximately). Levels 1 and 2 (i.e., Knows and Knows How) will be implemented over eight two-hour online synchronous training sessions where content and examples of parent coaching are shared, discussed, and reflected upon as a group. Levels 1 and 2 will each involve an online assessment of trainee knowledge which will inform movement into the next level of training. The trainer will engage in reflective practice sessions to discuss the outcomes of these assessments to ensure adequate preparation before moving into level 3. Level 3 will involve trainees practicing their newly learned parent coaching skills with parent-child dyads with trainer support. Level 3 support will involve small group reflective meetings, self and trainer fidelity rating of videoed coaching sessions, and opportunities for in-session guidance by the trainer. Trainees will each practice coaching with a minimum of two or a maximum of three parent-child dyads with trainer support. Assessment at level 3 will be evaluated with the fidelity rating tool completed by the trainer on two full parent coaching sessions demonstrating strong skills as self-selected by the trainee. The trainer will engage in reflective practice sessions to discuss the outcomes of level 3 fidelity scores to ensure adequate preparation before moving into level 4. Mobile devices will be used to capture video. The Island Health in-house secure file sharing system (i.e., Kiteworks) will be used to share and store secure parent coaching video files for level 3 and 4 assessment.

Measures:

Quantitative: Before starting the parent coach training, the participants will complete an online demographic questionnaire addressing education, experience and their knowledge of family-centred practice and parent coaching. Participants will also share a self-selected video of themselves engaging in parent coaching. The multiple-choice questionnaire completed at the end of levels 1 and 2 will assess knowledge of and hypothetical application of parent coaching. Level 3 assessments will include a self-selected video engaging in parent coaching coded by the trainer. Level 4 assessments will consist of participant and trainer-rated fidelity videos to enhance reflective practice skills and coaching fidelity.

Qualitative: Finally, trainees will be interviewed following the completion of levels 1-4 to understand their impressions, reflections, and experiences during and after the parent coach training. Trainees will be asked to reflect on the impact the parent coach training had on their clinical practice in working with families

Data Analysis: Descriptive statistics will summarize questionnaire and video data across all levels to observe participant changes over time. Correlational and linear regression will be applied to determine whether pre-training knowledge or skills predict trainee clinical competency in parent coaching. Interview data will be thematically coded using basic qualitative analysis (Corbin & Strauss, 2008) to explore the experience of parent coach training. Qualitative summaries will be used to draw inferences regarding participant training outcomes.

3.0 Describe procedures, treatment, or activities that are above or in addition to standard practices in this study area *(eg. extra medical or health-related procedures, curriculum enhancements, extra follow-up, etc)***:**

4.0 If the proposed research is above minimal risk and is not funded via a competitive peer review grant or industry-sponsored clinical trial, the REB will require evidence of scientific review. Provide information about the review process and its results if appropriate.

5.0 For clinical trials, describe any sub-studies associated with this Protocol.

ID: Pro00115869 **Pro00115869** 2.2 Research Methods and Procedures
Status: Approved

2.2 Research Methods and Procedures

Some research methods prompt specific ethical issues. The methods listed below have additional questions associated with them in this application. If your research does not involve any of the methods listed below, ensure that your proposed research is adequately described in Section 2.1: Study Objectives and Design or attach documents in the Documentation Section if necessary.

1.0 * **This study will involve the following***(select all that apply)*
Internet-based Interaction with Participants (excluding internet surveys or data collection over internet without human interaction)
Interviews and/or Focus Groups

Participant Observation
Surveys and Questionnaires (including internet surveys)

NOTE 1: Select this ONLY if your application SOLELY involves a review of paper charts/electronic health records/administrative health data to answer the research question. If you are enrolling people into a study and need to collect data from their health records in addition to other interventions, then you SHOULD NOT select this box.

NOTE 2: Select this option if this research ONLY involves analysis of blood/tissue/specimens originally collected for another purpose but now being used to answer your research question. If you are enrolling people into the study to prospectively collect specimens to analyze you SHOULD NOT select this box.

ID: Pro00115869 **Pro00115869**
Status: Approved 2.4 Internet-based Interaction with Human Participants

2.4 Internet-based Interaction with Human Participants

1.0 Internet-based Research

1.1 Will your interaction with participants occur in private internet spaces (eg. members only chat rooms, social networking sites, email discussions, etc)?

● **Yes** ○ No

1.2 Will these interactions occur in public space(s) where you will post questions initiating and/or maintaining interaction with participants?

○ Yes ● **No**

2.0 Describe how permission to use the site(s) will be obtained, if applicable:
Support throughout all levels of the clinical competency training will be provided by the researcher via video conferencing online. Collaboration with the site organization (Island Health) will occur consistently throughout the parent coach training development, implementation, and follow-up. Island Health will provide the online platform that will be used (as per their internal ethics process) and ensure that the trainees have the technology to participate in all levels of training, including video capture of parent coaching sessions.

3.0 If you do not plan to identify yourself and your position as a

researcher to the participants, from the onset of the research study, explain why you are not doing so, at what point you will disclose that you are a researcher, provide details of debriefing procedures, if any, and if participants will be given a way to opt out, if applicable:

4.0 * **How will you protect the privacy and confidentiality of participants who may be identified by email addresses, IP addresses, and other identifying information that may be captured by the system during your interactions with these participants?**
The online platform for training and support will be provided by Island Health (i.e., Zoom) as it has already received ethical approval through its procedures. Required permission and consent of coaches and parents participants will be sought through regular protocols of the early intervention program once approved by Island Health's ethical approval for participation in research. Mobile devices will be used to capture video, and the Island Health in-house secure file sharing system (i.e., Kiteworks) will be used to share and store secure parent coaching video files.

Any sensitive information captured by the research team will be stored in a secured, password-protected google drive hosted by the University of Alberta.

ID: Pro00115869 **Pro00115869** 2.5 Interview and/or Focus Groups
Status: Approved

2.5 Interview and/or Focus Groups

1.0 **Will you conduct interviews, focus groups, or both? Provide detail.**
Before starting parent training, the participants will complete an online demographic questionnaire addressing education, experience and their knowledge of family-centred practice and parent coaching. Participants will also be interviewed after the completion of the training. Transcripts will be coded to understand the impact of the parent coach training program

2.0 **How will participation take place (e.g. in-person, via phone, email, Skype)?**
Participation will take place via online conferencing (i.e., zoom) on a platform that is approved for use by the ethics process of Island Health.

3.0 **How will the data be collected (e.g. audio recording, video recording, field notes)?**
The online demographic questionnaire will be captured using Google Forms (developed on the University of Alberta secure online platform). Post training interviews will be recored on zoom (Island Heath's secure online zoom platform). Interview transcribing will occur in the University of Alberta's secure google platform and be stored in the same password protected online location.

ID: Pro00115869 **Pro00115869** 2.7 Participant Observation
Status: Approved

2.7 Participant Observation

1.0 Who will the observer be?
The principal investigator and coach trainer (Michaela Jelen) is the observer. Additionally, for data collection, a research assistant (Janet Harder) blinded to all study conditions will review videos for fidelity coding. She will not have any identifying information of participants in the videos.

2.0 Who is being observed?
Island heath parent coach training recipients (12 early intervention providers). Parents and their child receiving coaching will be secondary to the observation as they will be in the video captured; however, fidelity coding will not focus on them.

3.0 Why are they being observed?
For fidelity coding of coach skills.

4.0 When and where will participants be observed (i.e. during class, during their workday)?
While all training and supervision will be provided online, the trainees will be working with families in the EIP and/or in family homes as they do in their current positions. Coaching of parents/children will occur during scheduled early intervention appointments between the coach and the parent either at the parent's home or at Island Health early intervention clinic locations. Coach support throughout all levels of the clinical competency training will be provided online.

5.0 Will others be present who are not being observed (i.e. non-participants)?
● **Yes** ○ No

Provide details:
The recipients of parent coaching (parents and children) are not the focus of the observation. Parents receiving coaching will be required to consent to observation for study purposes and be made aware of why the observation (video recording) occurs.

Coaches and parents will set goals together. These goals will be written down and stored in a password-protected secure online platform. If applicable, child diagnoses associated with these goals will also be captured. All parent/child identifying information will be removed. The purpose of this information is to ensure the parent coach is coaching in a family-centred manner as per the parent coach training.

6.0 What data will be collected?
Video and/or audio recordings
Field notes

2.9 Surveys and Questionnaires (including Online)

1.0 How will the survey/questionnaire data be collected (i.e. collected in person, or if collected online, what survey program/software will be used etc.)?
The online demographic questionnaire will be captured using Google Forms (developed on the University of Alberta secure online platform). Post-training interviews will be video recorded on zoom (Island Heath's secure online zoom platform). Interview transcribing will occur in the University of Alberta's secure google platform and be stored in the same password-protected online location.

2.0 Where will the data be stored once it's collected (i.e. will it be stored on the survey software provider servers, will it be downloaded to the PI's computer, other)?
All data will be stored in the University of Alberta's secure google platform in a designated password protected location.

3.0 Who will have access to the data?
The principal investigator/graduate student (Michaela Jelen) and the graduate student supervisor (Veronica Smith).

4.0 If you are using a third party research tool, website survey software, transaction log tools, screen capturing software, or masked survey sites, how will you ensure the security of data gathered at that site?

ID: Pro00115869 **Pro00115869** 3.1 Risk Assessment
Status: Approved

3.1 Risk Assessment

1.0 * Provide your assessment of the risks that may be associated with this research:
Greater than Minimal Risk

2.0 * Select all that might apply:

Description of Possible Physical Risks and Discomforts

No Participants might feel physical fatigue, e.g. sleep deprivation

No Participants might feel physical stress, e.g. cardiovascular stress tests

No Participants might sustain injury, infection, and intervention side-effects or complications

No The physical risks will be greater than those encountered by the participants in everyday life

Possible Psychological, Emotional, Social and Other Risks and Discomforts

No	Participants might feel psychologically or emotionally stressed, demeaned, embarrassed, worried, anxious, scared or distressed, e.g. description of painful or traumatic events
Possibly	Participants might feel psychological or mental fatigue, e.g intense concentration required
No	Participants might experience cultural or social risk, e.g. loss of privacy or status or damage to reputation
No	Participants might be exposed to economic or legal risk, for instance non-anonymized workplace surveys
No	The risks will be greater than those encountered by the participants in everyday life

3.0 * **Provide details of all the risks and discomforts associated with the research for which you indicated YES or POSSIBLY above.**

It is anticipated that participants (coach trainees) may go through the stages of change as identified in the transtheoretical model (i.e., precontemplation, contemplation, preparation, action, maintenance) during this multi-stage training. This can involve mental fatigue due to self-reflection on clinical practice skills. This might lead to feelings associated with anxiety during the learning process.

Additionally, some of the participant's learning will occur in small groups. There is a risk that private information may be shared among the participants. To mitigate this risk, we will discuss the participant's responsibility to maintain privacy and confidentiality of discussions to ensure a safe space for learning.

Further, watching a video recording of ourselves as we learn new information can be uncomfortable and cause psychological or mental fatigue and feelings associated with anxiety. This is also the case when others observe our skills.

There are no known risks to the secondary participants, children and their parents receiving early intervention services from their coach. They will receive the same amount of service as they would ordinarily receive, and the service will be aimed at meeting the same goals and objectives.

4.0 * **Describe how you will manage and minimize risks and discomforts, as well as mitigate harm:**

The principal investigator (i.e., trainer) will establish a strong mentorship-style relationship and rapport with all participants. There will be opportunities for self-reflection, guided mentorship and coaching, to ensure participants have a safe space to process emotions related to their learning during all phases of this multi-component training. Participants will also be encouraged to process with their work colleagues formally through team meetings and informally as they practice their newly learned skills. Participants will access 1-1 support with their trainer to debrief any feelings of worry or anxiety as they go through the training process.

To mitigate the risk of participant disclosure of private information shared in the group learning activities, we will discuss the participant's responsibility to maintain privacy and confidentiality of discussions to ensure a safe space for learning.

5.0 **Is there a possibility that your research procedures will lead to unexpected findings, adverse reactions, or similar results that may require follow-up** *(i.e. individuals disclose that they are upset or distressed during an interview/questionnaire, unanticipated findings on MRI, etc.)***?**

◯ Yes ● **No**

6.0 **If you are using any tests in this study diagnostically, indicate the member(s) of the study team who will administer the measures/instruments:**

Test Name	Test Administrator	Organization	Administrator's Qualification

There are no items to display

7.0 **If any research related procedures/tests could be interpreted diagnostically, will these be reported back to the participants and if so, how and by whom?**

ID: Pro00115869 **Pro00115869** 3.2 Benefits Analysis
Status: Approved

3.2 Benefits Analysis

1.0 * **Describe any potential benefits of the proposed research to the participants. If there are no benefits, state this explicitly:**
It is anticipated that participants who receive parent coach training will improve their clinical skills in parent coaching. It is expected that these benefits will translate into their daily work circumstances both during and after the completion of the study through their ability to use parent coaching skills with the parents and children they support on their caseloads.

2.0 * **Describe the scientific and/or scholarly benefits of the proposed research:**
This study will lead to scholarly conclusions about the effectiveness and impact of developing and implementing the parent coach training program on community-based Early Intervention (EI) clinicians. Through professional development workshops and seminars, these conclusions will be summarized and shared with relevant community stakeholders (i.e., other child development centers in Canada). This information will be developed into a plain language presentation to be delivered to EI clinicians and agencies across Canada. In addition to these practice-based deliverables, findings related to the impact and effectiveness of the training will be submitted for publication in peer-reviewed journals (e.g. Infants & Young Children) and scholarly conferences (e.g. International Society in Early Intervention World Congress). Finally, the data from this mixed-method study will be used as the doctoral dissertation in accordance with University of Alberta academic requirements for the intern's PhD.

3.0 **If this research involves risk to participants explain how the benefits outweigh the risks.**
While learning new skills can be psychologically and mentally challenging, it is anticipated that the new skills clinicians will learn will ultimately improve the work that they do with families.

ID: Pro00115869 **Pro00115869** 4.1 Participant Information
Status: Approved

4.1 Participant Information

1.0 * **Will you be recruiting human participants** *(i.e. enrolling people into the study, sending people online surveys to complete)***?**
● **Yes** ○ No

1.1 Will participants be recruited or their data be collected from Alberta Health Services or Covenant Health or data custodian as defined in the Alberta Health Information Act?
○ Yes ● **No**

ID: Pro00115869 **Pro00115869** 4.2 Additional Participant Information
Status: Approved

4.2 Additional Participant Information

1.0 **Describe the participants that will be included in this study. Outline ALL participants** *(i.e. if you are enrolling healthy controls as well):*

Coaches: Forty-five EI professionals employed in the Island Health Early Intervention Program (EIP), will be offered the opportunity to apply to participate in the parent coach training. Up to 12 participants will be selected to represent all EI disciplines including, speech and language pathology, physical therapy, occupational therapy and the infant development program and all four geographic regions that the EIP serves. 3 participants will be selected from each geographic team. Decisions about who the participants are will be made in collaboration with the advisory committee. Consent will be sought from each participant, and information regarding anonymity and confidentiality of the data and right to withdraw provided.

Trainer: The principal investigator will be the trainer who delivers all online training and follow-up support to coaches receiving training.

Advisory Group: An advisory group of 3-5 members as selected by Island Health will be involved to guide the implementation of this study. It is anticipated that these members will be made up of professionals working in the Early Intervention Program who are not participating in the parent coach

training.

Parents and children: parents and children receiving parent coaching will be captured on video for the purpose of monitoring coach fidelity. Parents and children will be the recipients of parent coaching. Coaches and parents will set goals together. These goals will be written down and stored in a password protected secure online platform. If applicable, child diagnoses associated with these goals will also be captured. All parent/child identifying information will be removed. The purpose of this information is to ensure the parent coach is coaching in family-centred manner.

2.0 * **Describe and justify the inclusion criteria for participants** *(e.g. age range, health status, gender, etc.):*

Coaches: Early Intervention (EI) professionals who are employed in the Island Health Early Intervention Program (EIP), will be offered the opportunity to apply to participate in the parent coach training. Up to 12 participants will be selected to represent all EI disciplines including, speech and language pathology, physical therapy, occupational therapy and the infant development program and all four geographic regions that the EIP serves. Up to 3 participants will be selected from each geographic team. Decisions about who the participants are will be made in collaboration with the advisory committee and guided by the EIP at Island Heath. Consent will be sought from each participant, and information regarding anonymity and confidentiality of the data and right to withdraw provided.

Parents and children: parents and their children who regularly access early intervention services will be recipients of parent coaching. Coaches will identify families on their existing caseloads that they would like to work with using a parent coaching model. Coaches will be encouraged to select families that have goals for early intervention that coaches anticipate can be addressed in 4-8 sessions with coach support.

3.0 Describe and justify the exclusion criteria for participants:

Coaches: Participants who are not EI professionals within the Island Health EIP. The parent coach training is specifically developed for EI professionals.

Parent and children: parents who have identified that they are not interesting in learning new skills will not be selected to participate.

4.0 Participants

4.1 How many participants do you hope to recruit *(including controls, if applicable?)*
12
4.2 Of these, how many are controls, if applicable?
0
4.3 If this is a multi-site study, how many participants do you anticipate will be enrolled in the entire study?

5.0 Justification for sample size:
Due to the intense nature of this training and focus on clinical competence, small groups will ensure that the principal investigator and trainer can provide individualized support to each coach participant as required.

ID: Pro00115869 **Pro00115869**
Status: Approved 4.4 Recruitment of Participants (non-Health)

4.4 Recruitment of Participants (non-Health)

1.0 Recruitment

1.1 How will you identify potential participants? Outline all of the means you will use to identify who may be eligible to be in the study*(i.e. response to advertising such as flyers, posters, ads in newspapers, websites, email, list serves, community organization referrals, etc.)*
The team of forty-five EI professionals employed in the Island Health Early Intervention Program (EIP) will be given the opportunity to apply. This group has already been identified.

1.2 Once you have identified a list of potentially eligible participants, indicate how the potential participants' names will be passed on to the researchers AND how will the potential participants be approached about the research.
An advisory committee at island health will be selected by the Early Intervention Program coordinator at Island Health. Decisions about who will participate in the coach training be made in collaboration with the advisory committee. Up to 12 participants will be selected to represent all EI disciplines including, speech and language pathology, physical therapy, occupational therapy and the infant development program and all four geographic regions that the EIP serves. 3 participants will be selected from each geographic team.

2.0 Pre-Existing Relationships

2.1 Will potential participants be recruited through pre-existing relationships with researchers*(e.g. Will an instructor recruit students from his classes, or a physician recruit patients from her practice? Other examples may be employees, acquaintances, own children or family members, etc.)*?
◯ Yes ● **No**

3.0 **Will your study involve any of the following?***(select all that apply)*
None of the above

ID: Pro00115869 **Pro00115869** 4.5 Informed Consent Determination
Status: Approved

4.5 Informed Consent Determination

1.0 **Describe who will provide informed consent for this study***(i.e. the participant, parent of child participant, substitute decision maker, no one will give consent – requesting a waiver)*
1) The coach trainees will provide informed consent to participate in the training.
2) The parents will provide consent on behalf of themselves and their child.

1.1 Waiver of Consent Requested
If you are asking for a waiver of participant consent, please justify the waiver or alteration and explain how the study meets all of the criteria for the waiver. Refer to Article 3.7 of TCPS2 **and provide justification for requesting a Waiver of Consent for ALL criteria (a-e)**

1.2 Waiver of Consent in Individual Medical Emergency
If you are asking for a waiver or alteration of participant consent in individual medical emergencies, please justify the waiver or alteration and explain how the study meets ALL of the criteria outlined in Article 3.8 of TCPS2 (a-f)**.**

2.0 **How will consent be obtained/documented? Select all that apply**
Signed consent form
Implied by overt action (i.e. completion of questionnaire)

If you are not using a signed consent form, explain how the study information will be provided to the participant and how consent will be obtained/documented. Provide details for EACH of the options selected above:
1) A signed consent form for all coach trainee participants, implied consent will occur for the 12 coach trainee participants as they will apply to be part of this study as described in sections 4.2 and 4.4.

2) Parent consent (on behalf of themselves and their children) will be obtained through a signed consent form. This will be developed in collaboration with Island Health to ensure it meets ethical requirements at Island Health. The consent form will identify that all identifying information about child diagnosis and parent coaching goals will be removed from data.

3.0 Will every participant have the capacity to give fully informed consent on his/her own behalf?

◯ Yes ● **No**

3.1 Explain why participants lack capacity to give informed consent *(e.g. age, mental or physical condition, etc.).*
Children of parents who will receive coaching will not give informed consent, but their parents will on their behalf.

3.2 Will participants who lack capacity to give full informed consent be asked to give assent?

◯ Yes ● **No**

3.3 In cases where participants (re)gain capacity to give informed consent during the study, how will they be asked to provide consent on their own behalf?

4.0 What assistance will be provided to participants or those consenting on their behalf, who may require additional assistance? *(e.g. non-English speakers, visually impaired, etc.)*

5.0 * **If at any time a PARTICIPANT wishes to withdraw from the study or from certain parts of the study, describe when and how this can be done.**
If a coach wishes to withdraw from the study, they can communicate (verbally or via email) to the trainer (principal investigator). No details around the reason for withdrawal are required to withdraw.

6.0 Describe the circumstances and limitations of DATA withdrawal from the study, including the last point at which participant DATA can be withdrawn *(i.e. 2 weeks after transcription of interview notes)*
All data (coach and child) will be anonymized. Should a participant request to withdraw data, this must occur up to 1 week before data analysis, or their data will be anonymously included in the analysis.

7.0 **Will this study involve any group(s) where non-participants are present? For example, classroom research might involve groups which include participants and non-participants.**

● **Yes** ◯ No

ID: Pro00115869 **Pro00115869** 4.7 Group Research Documentation
Status: Approved

4.7 Group Research Documentation

1.0 * **How will you ensure that non-participants and/or their data are excluded in from the study?**
As described in section 4.2, parents and children receiving parent coaching will be captured on video for the purpose of monitoring coach fidelity. Parents and children will be the recipients of parent coaching. Coaches and parents will set goals together. These goals will be written down and stored in a password protected secure online platform. If applicable, child diagnoses associated with these goals will also be captured. All parent/child identifying information will be removed. The purpose of this information is to ensure the parent coach is coaching in an appropriate manner not to observe the parent or child.

2.0 **During the recruitment process, how will you guard against peer pressure influencing an individual's decision to participate or not?**
Team members of the Early Intervention Program at Island Health will be invited to apply.

3.0 **Outline alternate activities for non-participants, if applicable**

4.0 **How will you address discomfort or disadvantage, if any, for non-participants?**

ID: Pro00115869 **Pro00115869** 5.1 Data Collection
Status: Approved

5.1 Data Collection

1.0 * **Will the researcher or study team be able to identify any of the participants at <u>any stage</u> of the study?**
● **Yes** ○ No

2.0 **Primary/raw data collected will be** *(check all that apply)***:**
Directly identifying information - the information identifies a specific individual through direct identifiers (e.g. name, social insurance number, personal health number, etc.)
Indirectly identifying information - the information can reasonably be expected to identify an individual through a combination of indirect identifers (eg date of birth, place of residence, photo or unique personal characteristics, etc)
All personal identifying information removed (anonymized)

3.0 **If this study involves secondary use of data, list all original sources:**

4.0 **In research where total anonymity and confidentiality is sought but cannot be guaranteed** *(eg. where participants talk in a group)* **how will confidentiality be achieved?**
The researcher/trainer will ensure that all participants know that a safe space is paramount to training and peer support. The opportunity to meet 1-1 with the trainer will be offered if a participant does not feel safe in their learner or requests support without peers. The reiteration that confidentiality

during the learning process is essential will be explicitly stated throughout all levels of training.

ID: Pro00115869 **Pro00115869** 5.2 Data Identifiers
Status: Approved

5.2 Data Identifiers

1.0 * **Personal Identifiers:** will you be collecting - at any time during the study, including recruitment - any of the following *(check all that apply)*:
Surname and First Name
Email Address
Full Date of Birth
Year of Birth
Age at time of data collection
Professional Certificate/License Number

2.0 **Will you be collecting - at any time of the study, including recruitment of participants - any of the following** *(check all that apply)*:
There are no items to display

3.0 * **If you are collecting any of the above, provide a comprehensive rationale to explain why it is necessary to collect this information:**
The researcher/trainer will be developing a coaching relationship with all 12 participants. There will be online and face-to-face work with each participant. Names and emails are necessary to communicate with each participant during all levels of training. Demographic information (i.e., birthday and profession) will be collected to report on the results specific to those who participated. No names or email addresses will be shared publicly or during reporting out of results.

4.0 **If identifying information will be removed at some point, when and how will this be done?**
This will occur during data analysis.

5.0 * **Specify what identifiable information will be RETAINED once data collection is complete, and explain why retention is necessary. Include the retention of master lists that link participant identifiers with de-identified data:**
Demographic information (i.e., age and profession of coach participants) will be collected to report the results specific to those who participated. This is to share the age and type of early intervention professional who went through the coach training.

6.0 **If applicable, describe your plans to link the data in this study with data associated with other studies (e.g within a data repository) or with data belonging to another organization:**

ID: Pro00115869 **Pro00115869** 5.3 Data Confidentiality and Privacy

Status: Approved

5.3 Data Confidentiality and Privacy

1.0 * **How will confidentiality of the data be maintained? Describe how the identity of participants will be protected both during and after research.**
Any written identifying information will be stored in a password-protected secure online platform hosted by the University of Alberta or, in the case of emails, on the principal investigator and trainer's secure, password-protected private computer. The identity of the participants will not be disclosed in any written documents or verbal presentations describing the study before, during, or after the research.

2.0 **How will the principal investigator ensure that all study personnel are aware of their responsibilities concerning participants' privacy and the confidentiality of their information?**
This will be outlined in the application for training when shared with those eligible to participate in the study as parent coach training recipients. This will also be verbally discussed with all coach trainee participants during the online, face-to-face small group training.

3.0 **External Data Access**

* **3.1 Will identifiable data be transferred or made available to persons or agencies outside the research team?**

○ **Yes** ● **No**

ID: Pro00115869 **Pro00115869**
Status: Approved 5.4 Data Storage, Retention, and Disposal

5.4 Data Storage, Retention, and Disposal

1.0 * **Describe how research data will be stored, e.g. digital files, hard copies, audio recordings, other. Specify the physical location and how it will be secured to protect confidentiality and privacy.** *(For example, study documents must be kept in a locked filing cabinet and computer files are encrypted, etc. Write N/A if not applicable to your research)*
All digital files (i.e., questionnaires, interview recordings and transcripts, video recordings) will be stored in an online, encrypted, password-protected Google site hosted by the University of Alberta. No hard copies will be made or kept. Should an unexpected situation occur where hard copies are required for any documentation, these will be stored in a secured, locked file

cabinet at the PIs home.

2.0 * **University policy requires that you keep your data for a minimum of 5 years following completion of the study but there is no limit on data retention. Specify any plans for future use of the data. If the data will become part of a data repository or if this study involves the creation of a research database or registry for future research use, please provide details.** *(Write N/A if not applicable to your research)*
N/A

3.0
If you plan to destroy your data, describe when and how this will be done? Indicate your plans for the destruction of the identifiers at the earliest opportunity consistent with the conduct of the research and/or clinical needs:
Five years following the data analysis, all data will be deleted and wiped off the secure online platform on which it is kept. Should any hard copies of paperwork be stored as described in 5.4.1.0, these will be shredded and disposed of.

ID: Pro00115869 **Pro00115869** Documentation
Status: Approved

Documentation

Add documents in this section according to the headers. Use Item 11.0 "Other Documents" for any material not specifically mentioned below.

Sample templates are available by clicking HERE.

1.0 Recruitment Materials:

Document Name	Version	Date	Description
There are no items to display			

2.0 Letter of Initial Contact:

Document Name	Version	Date	Description
Coach Consent_CoachTraining.docx(0.01)	0.01	2021-12-28 9:17 PM	
Coach Consent_CoachTraining_Jan27.docx(0.01)	0.01	2022-01-27 11:40 AM	

3.0 Informed Consent / Information Document(s):

3.1 What is the reading level of the Informed Consent Form(s):

3.2 Informed Consent Form(s)/Information Document(s):

Document Name	Version	Date	Description
Parent Consent_CoachTraining.docx(0.01)	0.01	2021-12-28 9:18 PM	
Revised Parent Consent(0.01)	0.01	2022-01-20 10:21 AM	
Parent Consent_CoachTraining_Jan27.docx(0.01)	0.01	2022-01-27 11:40 AM	
Parent Consent_CoachTraining_Jan28.docx(0.01)	0.01	2022-01-29 9:33 AM	
Poster for Parents.pdf(0.01)	0.01	2022-01-29 9:34 AM	

4.0 Assent Forms:

Document Name	Version	Date	Description

There are no items to display

5.0 Questionnaires, Cover Letters, Surveys, Tests, Interview Scripts, etc.:

Document Name	Version	Date	Description
Appendix A_pre-training questionnaire.docx(0.01)	0.01	2021-12-28 9:19 PM	
Appendix B_level1_2 assessment content.docx(0.01)	0.01	2021-12-28 9:19 PM	
Appendix C_Fidelity Checklist.docx(0.01)	0.01	2021-12-28 9:19 PM	
Appendix D_follow-upquestionnaire.docx(0.01)	0.01	2021-12-28 9:19	

		PM
Appendix A_pre-training Questionnaire_Jan27.docx(0.01)	0.01	2022-01-27 11:43 AM

6.0 Protocol/Research Proposal:

Document Name	Version	Date	Description
Overview of Parent Coach Training.docx(0.01)	0.01	2021-12-28 9:18 PM	

7.0 Investigator Brochures/Product Monographs:

Document Name	Version	Date	Description
There are no items to display			

8.0 Health Canada No Objection Letter *(NOL)*:

Document Name	Version	Date	Description
There are no items to display			

9.0 Confidentiality Agreement:

Document Name	Version	Date	Description
There are no items to display			

10.0 Conflict of Interest:

Document Name	Version	Date	Description
There are no items to display			

11.0 Other Documents:
For example, Study Budget, Course Outline, or other documents not mentioned above

Document Name	Version	Date	Description
There are no items to display			

Final Page

You have reached the end of the ethics application.
Click ‘Continue’ or ‘Exit’ below.

To submit for ethics review, click “SUBMIT for REVIEW” on the left side of the screen.

NOTE: Only the Principal Investigator can submit an application in Pre-submission (ie: the first time it is submitted).

ID: Pro00115869 **Pro00115869**
Status: Approved Add/Edit Funding Info without Manual Entry

If you are trying to add a RES number in the ARISE application and you cannot find it on the drop down menu, please check the following:

1. *Check that the named investigators on your application match the people named on the RES account. RES numbers associated with anyone named as PI or Co-I on an ethics application will show up in the drop down box in Section 1.3 or in 6.0 of the Change Funding Activity. Please note that unless someone is named on the ethics application in either the PI or Co-I fields, their RES number(s) will NOT display in the drop down box of that application.*
2. *Check that the RES number you are trying to add has been activated by RSO (check unit name with RSO) and that 24 hours have elapsed since it was activated to allow time for system updates.*

If neither of the above items are the source of the issue, please contact reoffice@ualberta.ca.

Enter your Peoplesoft Project ID (aka RES#) to link this ethics application to the project record in PeopleSoft.

PeopleSoft Project ID:
RES0057082

Other Relevant Information:

Appendix E

Certificate of Ethical Approval

Vancouver Island Health Authority
Health Research Ethics Board (HREB)
Queen Alexandra Centre, Main Building
Room 205 - 2400 Arbutus Road, Victoria, BC V8N 1V7

island health

Delegated Minimal Risk

Study Number: H2022-024

Event Number: 102553 - 126277

Study Title: The impact of parent coach training on the clinical practice of early interventionists

Approval Date: 22 June 2022

Expiry Date: 22 June 2023

Principal Investigator: Veronica Smith
Island Health Position: Child, Youth and Family Rehabilitation

Supervisor: Jennifer Tupper, , Dean of the Faculty of Education
Department: University of Alberta

Island Health Collaborator: Denise Watson
Project Team Members: Program Coordinator, Queen Alexandra Hospital

Sponsoring Agencies: Mitacs Accelerate Grant 50% / Internal Island Health Grant 50%
Funding Title: N/A

Document(s) included in this approval:

- Ethics Revisions_May30_2022.docx, Version 1, Dated 31 May 2022
-
- 8. tcps2_core_certificarte_2_Feb3_2022_MJ.pdf, Version 1, Dated 11 March 2022
- 6. VERSION 3_ Poster for Parents_revised May 30.pdf, Version 3, Dated 31 May 2022
- 5. Data Flow Diagram.pdf, Version 1, Dated 11 March 2022
- 2 Assessment Question.docx, Version 1, Dated 11 March 2022
- 4c. VERSION 3_Appendix C_Competency Coding.docx, Version 3, Dated 31 May 2022
- 2 assessment content.docx, Version 1, Dated 11 March 2022
- 4a. Appendix A_pre-trainingQuestionnaire_JREVISED_April26.docx, Version 2, Dated 27 April 2022
- 3. University of Alberta Ethics.pdf, Version 1, Dated 11 March 2022
- 2b. VERSION 3_ParentConsent_CoachTraining_REVISED_April26.docx, Version 3, Dated 31 May 2022
- 2a. VERSION 3_CoachConsent_CoachTraining_REVISED_May 30.docx, Version 3, Dated 31 May 2022

- 1. VERSION 3_Research Protocol_REVISED_May 30.docx, Version 3, Dated 31 May 2022

Once issued a final Certificate of Institutional Approval from Research and Capacity Building you may proceed with your study. Annual re-approval is required. Any changes in the study should be submitted to the Health Research Ethics Board for approval in advance of implementation of such changes.

This ethics approval applies to research ethics issues only and does not include provision for any administrative approvals required from individual institutions before research activities can commence. The Principal Investigator for the study is responsible for identifying and ensuring that resource impacts from this study on any institution are negotiated properly and other institutional policies are followed.

The Health Research Ethics Board has reviewed and approved this study in accordance with the requirements of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, TCPS 2 (2018).

The above approval has been provided by the Full REB or by an authorized delegated reviewer.