

Research Article

Involving Caregivers of Autistic Toddlers in Early Intervention: Common Practice or Exception to the Norm?

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ABSTRACT

Purpose: Family-centered practice (FCP) is a core component of early intervention (EI) associated with improved child and family outcomes, but little is known about community-based speech-language pathologists' (SLPs') inclusion of families in EI. Many caregivers of autistic children experience caregiving-related stress, making these intervention principles especially critical to the provision of optimal services. This study aimed to characterize EI SLPs' use of FCP coaching strategies and the quality of caregiver–SLP relationships.

Method: Participants included 25 families with an autistic toddler and their El SLP. One intervention session for each SLP-family dyad was recorded and coded for the SLP's use of FCP coaching strategies. Caregivers and SLPs completed surveys about their working alliance, caregiver perceptions of family-centered care, and SLPs' approach to FCP.

Results: SLPs primarily use child-directed strategies without caregiver involvement. When involving caregivers, SLPs infrequently use coaching strategies that are important for caregiver learning and collaboration (e.g., joint planning and guided practice with feedback). However, caregivers perceived their child's services to be highly family-centered, and caregivers and SLPs rated their working alliance to be of high quality.

Conclusions: The presence of strong caregiver–SLP working alliances alongside infrequent usage of effective coaching strategies indicates that SLPs may engage caregivers in ways that are perceived to be highly collaborative but are not optimal for caregiver involvement in all aspects of their child's services (goal setting and implementation of intervention). Consideration of family preferences and SLP beliefs about FCP will inform ways to disseminate FCPs needed to optimize families' capacities to support their child's development. **Supplemental Material:** https://doi.org/10.23641/asha.20113550

Autistic toddlers often experience differences in their development and use of social communication skills, leading to difficulties expressing ideas, learning from others, and participating in daily activities with their families. As such, there is great need for effective speech-language services to facilitate child social communication development and caregiver understanding of their child's communication needs early in life (Zwaigenbaum et al., 2015). Furthermore, because children learn language through interactions with their caregivers and family well-being is associated with positive child outcomes (Trivette et al., 2010), familycentered practices (FCPs) in which caregivers are involved in planning and implementing intervention are a key tenet of early intervention (EI; Dunst & Espe-Sherwindt, 2016; Individuals with Disabilities Education Improvement Act, 2004). Caregivers of autistic children often experience parenting-related stress (Baker-Ericzén et al., 2005), making FCP especially crucial for this population. Improvements in social communication outcomes have been observed in

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clinical trials using elements of FCP (Dunst et al., 2014; Hampton & Kaiser, 2016), but outcomes for autistic toddlers and their families in community settings are more variable (Nahmias et al., 2019), leaving questions about the extent to which community-based clinicians follow the principles of FCP. Understanding the ways in which community-based EI speech-language pathologists (SLPs) utilize FCP will elucidate ways to improve clinician training and outcomes for autistic children and their families.

FCP is a set of intervention principles emphasizing the importance of individualizing intervention procedures to families' preferences and actively involving caregivers in their child's services. There are several core components of FCP: (a) Clinicians should implement relational practices in which they establish trusting, respectful relationships with caregivers; (b) EI should be participation based, occurring in natural contexts and addressing goals to increase the child's participation in their daily routines; (c) caregivers and clinicians should jointly collaborate to determine goals and intervention contexts; (d) sessions should build upon caregiver strengths and increase their capacity to support their child; and (e) clinicians should use effective coaching strategies, including guided practice, to support caregiver learning (Dunst, 2007; Schertz et al., 2011; Tomeny et al., 2020). Practices that are responsive to caregivers' needs and encourage child participation in contexts relevant to their daily lives have positive impacts on caregivers and children (Guralnick, 2011; Trivette et al., 2010). For example, intervention utilizing materials natural to the home environment ("bagless approach") and embedding strategies into family routines ("routines-based intervention") have demonstrated greater effects on child outcomes than traditional models of care that do not integrate FCPs (Hwang et al., 2013). Additionally, intervention models that prioritize building caregiver use of intervention techniques through the use of guided practice coaching strategies ("caregiver-implemented interventions") allow the caregiver to embed learning opportunities throughout their daily interactions with their child. Such interventions have been found to improve developmental outcomes for autistic children when implemented by caregivers alone and through a combined caregiver-clinician implemented approach (Hampton & Kaiser, 2016; Hume et al., 2021).

These components of FCP play complementary roles in EI, but they may not be consistently used together in research or clinical contexts. The specific strategies used by clinicians to implement components of FCP go by a diverse range of terms (Kemp & Turnbull, 2014; Lorio et al., 2020), but the term "coaching" will be used to refer to the wide range of strategies used by clinicians to teach, collaborate, and partner with caregivers during EI (Akhbari Ziegler & Hadders-Algra, 2020). Coaching strategies reflecting all components of FCP are critical for improving child and family outcomes in EI, but previous evidence suggests that EI clinicians use a limited range of coaching strategies in practice. EI clinicians have reported that they rarely use guided practice or other coaching strategies to teach caregivers but highly value collaborative practices (Meadan et al., 2018; Sawyer & Campbell, 2012). Caregiver-clinician collaboration and problem solving without effective caregiver instruction may limit caregivers' capacities to support their child's needs. On the other hand, many clinical trials have focused on building caregiver capacities through guided practice but have failed to include collaborative planning or decision making with caregivers (Tomeny et al., 2020). Caregiver instruction without collaboration about intervention procedures may minimize the effect of EI on the child's participation in their daily routines or may result in EI care that is misaligned with the family's values. This is particularly concerning for families from culturally and linguistically diverse backgrounds whose values, caregiving practices, and access to resources have rarely been considered in the EI and autism literature (Norbury & Sparks, 2013). Thus, understanding how EI clinicians use coaching strategies to support various components of FCP is crucial to providing equitable services for all families served by EI.

Critical to understanding the use and integration of FCP components is the exploration of caregiver-clinician working alliances (Trute & Hiebert-Murphy, 2007). The working alliance represents the process through which clinicians and clients build collaborative, trusting relationships in pursuit of agreed-upon goals (Horvath & Greenberg, 1989). There is robust evidence for the role of the working alliance in mediating or predicting outcomes in psychotherapy for adults and children (Accurso et al., 2013; Baier et al., 2020), but the working alliance has rarely been studied in the context of EI FCP. In clinical trials of caregiver-implemented interventions, caregiverclinician working alliances have positively predicted outcomes for children with behavioral disorders (Kazdin & Whitley, 2006). Additionally, caregivers of autistic children trained in the Early Start Denver Model rated their working alliance with their research clinician to be of higher quality than caregivers in the control group with their community-based provider (Rogers et al., 2012), suggesting that working alliances may be associated with caregiver capacity-building components of FCP. Furthermore, Trute and Hiebert-Murphy (2007) found that working alliances independently predicted caregiver satisfaction with their child's community-based EI services even after accounting for caregiver perceptions of family-centered care. Further exploration of working alliances alongside FCP will elucidate the role of this construct in facilitating caregiver learning and collaboration in EI settings.

Synthesis of research about adult learning principles and EI has revealed benefits of specific coaching strategies

in achieving the goals of FCP, but the extent to which EI SLPs utilize these individual strategies in community settings is unclear. Coaching strategies that involve opportunities for practice and performance feedback optimize learning (Brown & Woods, 2016; Sone et al., 2021), but EI providers rarely report using these strategies (Meadan et al., 2018; Sawyer & Campbell, 2012). Additionally, coaching strategies that support caregiver problem solving and reflection about intervention procedures may support caregiver independence and competence in supporting their child's development and may facilitate caregiver-clinician relationships (Lorio et al., 2020; Salisbury et al., 2017). Given that SLPs have perceived their use of FCPs to be more frequent than caregivers report (Aranbarri et al., 2021) and that there is a lack of consensus about definitions of coaching strategies supporting FCP, observational methods using operationally defined strategies are critical to understanding the ways in which EI SLPs integrate components of FCP into their clinical practice.

High-quality usage of evidence-based FCP is essential for providing effective, equitable, and appropriate EI for autistic children and their families. This study aims to characterize EI SLPs' perceptions and use of FCPs, caregiver and SLP perceptions of their working alliance, and caregiver satisfaction and beliefs about the familycenteredness of their child's services. The following questions guided this study.

- 1. How frequently do SLPs use FCP coaching strategies during their EI sessions?
- 2. How do SLPs characterize ideal caregiver instruction and participation-based practices, and what factors do they perceive to be barriers toward ideal practice?
- 3. To what extent do families perceive their child's SLP services to be family-centered?
- 4. To what extent are SLP and caregiver perceptions of their working alliance aligned?
- 5. To what extent are SLPs' perceptions of their working alliance associated with their use of coaching strategies?

Method

Procedure

Family participants were recruited from two studies of caregiver-implemented interventions for autistic toddlers (NCT02632773 and NCT02595697) in which caregivers received instruction in implementing intervention strategies with their child from research clinicians. Eligible children for this study were less than 36 months of age, had a diagnosis of autism spectrum disorder, and were enrolled in Illinois EI speech-language therapy services. Families from the primary studies who agreed to participate in this study provided contact information for their community-based EI SLP, who was then approached by a member of the research team about participation. EI SLPs participating in this study were not involved in the primary studies from which family participants were recruited. Informed consent for family and SLP participants was obtained online or over the phone and verified in writing. One home-based speech therapy session was recorded for each SLP–family dyad and filmed from the SLP's arrival to their departure (mean session length = $60.0 \min$, SD = 7.6).

Following the session, caregivers and SLPs completed surveys via Research Electronic Data Capture (Harris et al., 2019). SLPs and caregivers were told that their survey responses would not be shared in order to support the integrity of responses regarding the SLP– caregiver relationship. Caregivers were compensated with a \$10 gift card for the recorded session and \$50 for survey completion, and SLPs were compensated with a \$50 gift card for the recorded session and \$150 for survey completion. All procedures were approved by the Northwestern University Institutional Review Board.

Participants

A total of 23 SLPs and 26 families enrolled in the study (three SLPs worked with two participating families). One family withdrew from the primary study following study completion, and all data relating to the family were deleted, leaving 25 video-recorded sessions. Mothers were present in 22 sessions, fathers were present in five sessions, and other caregivers were present in two sessions (sessions with multiple caregivers = 4, 16%). There was another cotreating provider present during three sessions (two with an occupational therapist and one with a developmental therapist). All families and 21 SLPs (91.3%) completed surveys.

The majority of SLPs worked primarily in the EI setting (18 SLPs, 85.7%) and served an average of 4.8 autistic children (SD = 2.7) on their EI caseload at the time of the study. SLPs identified as White (17; 81.0%), Asian (2; 9.5%), Black/African American (1; 4.8%), and multiracial (1; 4.8%), and most SLPs identified as female (19; 90.5%). SLPs had worked with participants for an average of 6.6 months (SD = 4.2) prior to participation in this study. Child participants were a mean age of 31.6 months (SD = 4.0) and included 18 boys and seven girls. Children in the sample were White (16, 64%), Asian (3, 12%), Black/African American (2, 8%), or multiracial (2, 8%). Additionally, 32% (8) of child participants were Hispanic or Latino, and many families spoke a language other than English in the home (11, 52.4%). Mothers were

an average of 35.2 years old (SD = 4.8), and fathers were an average of 37.9 years old (SD = 5.6). Most caregivers had a college or graduate degree (mothers: 15, 60%; fathers: 11, 44%). See Table 1 for complete demographic information about SLP and family participants (demographic information for caregivers other than the mother and the father who were present in the recorded sessions was not collected).

Observational Measures

Recorded sessions were coded using two observational measures: the Natural Environments Rating Scale (NERS; Campbell & Sawyer, 2004) and the Routines and Instructional Strategies Coding Protocol (RICP; Friedman et al., 2012). Two SLPs with experience working in EI and observational coding in clinical trials adapted these measures for this study, created coding manuals, and trained coders. Training for both measures involved reviewing coding manuals, reaching at least 80% agreement in ratings with their training coder on three consecutive videos, and discussing discrepancies with their training coder after each attempt. Reliability was also measured for six sessions (24% of videos).

NERS. The NERS is an observational measure intended to categorize EI sessions as either participation based or setting provided (Campbell & Sawyer, 2004; see Table 2 for definitions). Raters watched the entire session and answered questions about the primary leader of

Family characteristics (N = 25)						
Characteristic	Child	Mother	Father			
Age, M (SD)	31.6 months (4.0)	35.2 years (4.8)	37.9 years (5.6)			
Gender, <i>n</i> (%)						
Female	7 (28)					
Male	18 (72)					
Race, <i>n</i> (%)						
Asian	3 (12)	3 (12)	3 (12)			
Black	2 (8)	1 (4)	2 (8)			
Native Hawaiian/Pacific Islander	0 (0)	1 (4)	0 (0)			
White	16 (64)	17 (68)	18 (72)			
More than one race	2 (8)	1 (4)	0 (0)			
Prefer not to answer	2 (8)	2 (8)	2 (8)			
Ethnicity, n (%)						
Hispanic or Latino	8 (32)	5 (20)	7 (28)			
Not Hispanic or Latino	16 (64)	19 (76)	16 (64)			
Prefer not to answer/unknown	1 (4)	1 (4)	2 (8)			
Education, n (%)						
College graduate or above		15 (60)	11 (44)			
Some post high school training/college		9 (36)	11 (44)			
High school graduate		0 (0)	2 (8)			
Some high school or below		1 (4)	1 (4)			
Household income, n (%)		1 (1 0)				
Less than \$15,000		4 (16)				
\$15,000-\$49,999		2 (8)				
\$50,000-\$99,999		6 (24)				
\$100,000-\$149,999		6 (24)				
\$150,000 and greater		5 (20)				
Prefer hot to answer		2 (8)				
Speech-languag	e pathologist character	ristics (N = 21)				
Characteristic	n (%)					
Gender						
Female	19 (90.5)					
Male	2 (9.5)					
Race						
Asian	2 (9.5)					
Black	1 (4.8)					
White	17 (81.0)					
More than one race	1 (4.8)					
Years employed in early intervention						
< 2 years	5 (23.8)					
3–5 years	5 (23.8)					
6–10 years	6 (28.6)					
More than 10 years	5 (23.8)					

 Table 1. Participant demographics.

Table 2. Natural Environments Rating Scale scores.

Variable	Definition	n (%)
Overall characterization		
Participation based	SLP facilitates interactions between the caregiver and the child during activities chosen by the caregiver or the child.	5 (20)
Setting provided	SLP directly interacts with the child with minimal caregiver involvement during activities they have designed or chosen.	20 (80)
Who initiated the activities?		
Caregiver or child SLP	Caregiver or child chooses the activities. SLP chooses or designs activities.	7 (28) 18 (72)
What is the role of the SLP?	ŭ	()
Active observer	SLP observes the caregiver and the child interacting, offering limited feedback or comments about caregiver/child performance.	1 (4)
Facilitating activity	SLP guides the caregiver as they interact with their child during activities.	4 (16)
Passive observer	SLP observes the caregiver and the child interacting without offering any guidance or commentary about the caregiver's or the child's actions.	1 (4)
Directing activity	SLP works directly with the child.	19 (76)
What is the role of the caregiver?		· · · ·
Directly interacting with the child	The caregiver interacts with the child during activities for the majority of the session.	10 (40)
Not present or observer	The caregiver is either passively observing the SLP and the child work together or not present in the therapy area.	15 (60)
Can the materials be found naturally?	.	
Yes	Materials used during the session can be reasonably found in the environment.	25 (100)
No	Materials used during the session are not natural to the environment (e.g., specialized equipment).	0 (0)

Note. N = 25 total sessions. Natural Environments Rating Scale (Campbell & Sawyer, 2004). SLP = speech-language pathologist.

activities, materials used, and roles of the caregiver and the SLP. The session's total score was used to categorize the session as participation based or setting provided. Coders were 100% reliable on individual items and total scores on the NERS for all six sessions that were coded for reliability.

RICP. The RICP is an observational code measuring EI providers' use of coaching strategies supporting FCP (Friedman et al., 2012). The RICP originally consisted of 10 strategies used to establish relationships with caregivers, actively instruct the caregiver to use intervention techniques, and facilitate mastery of learned strategies. A few codes were adapted to reflect the specific research questions of this study (see Table 3 for a complete list of RICP codes and definitions). "Problem solving and reflection" was separated into three distinct codes: reflection, joint problem solving/planning, and directive planning. Reflection was deemed conceptually important to distinguish from problem solving and planning due to the distinct role that reflection may have in caregiver capacity-building components of FCP (Rush & Shelden, 2011), and problem solving and planning were further separated to distinguish between collaborative problem solving/planning (joint problem solving/planning) and planning that is clinician led (directive planning). Additionally, the code "conversation/information sharing" was split into two separate codes to differentiate conversations about EI processes (EI conversation) from information sharing generally related to the child's development (information sharing). Finally, "commentary" was added to explain an SLP behavior that was observed during sessions but not easily captured by the existing definitions (i.e., SLPs commenting on general child actions during child-focused activities).

Sessions were coded in 30-s intervals via Mangold INTERACT (Mangold, 2020), with most codes applied based on the strategy used for the majority of that interval, following the procedure outlined in Friedman et al. (2012). Single-instance coding was used for coaching strategies that typically take place briefly (see Table 3) to prevent these strategies from being obscured by codes for the broader interactional contexts in which they may be embedded (e.g., the SLP's provision of brief caregiver practice with feedback during a joint interaction between the caregiver, the SLP, and the child). Individual strategies were grouped into two categories for analysis (coaching strategies supporting FCP and non-FCP; see Table 3), and the median proportion of sessions spent using each type of strategy was calculated for analyses. Coaching strategies supporting FCP included strategies used to integrate family-centered principles into intervention sessions, and non-FCPs included those in which the caregiver was absent or not actively involved in the session. Cohen's kappa was used to calculate overall reliability between coders for each video, with coders Table 3. Adapted Routines and Instructional Strategies Coding Protocol.

Strategy	Definition	Example
Coaching strategies supporting family-	centered practice	
Guided practice with feedback ^a	SLP tells the caregiver how to use strategies while the caregiver practices.	Caregiver interacts with child. SLP: Use a say prompt after he reaches.
Caregiver practice with feedback ^a	SLP provides performance feedback about caregiver strategy usage.	Caregiver interacts with child. SLP: Great job expanding her play!
Demonstration ^a	SLP narrates their actions for the caregiver while modeling strategies with the child.	SLP interacts with child. SLP: I'm going to hold up two choices to get her to request.
Reflection ^a	SLP elicits caregiver reflection about their strategy usage, child behavior, or intervention procedures.	SLP and caregiver discuss: SLP: How did those prompts feel today?
Information sharing	SLP and caregiver discuss information related to child and family outcomes.	SLP and caregiver discuss: Caregiver: He wasn't feeling well this weekend, so he hasn't been talking a lot.
El conversation	SLP and caregiver discuss information related to the El program, such as transition planning or other services.	SLP and caregiver discuss: SLP: What size classroom did they suggest for her preschool classroom?
Joint problem solving/planning	SLP and caregiver discuss activities for intervention and home practice, including solutions to problems caregiver reports.	SLP and caregiver discuss: Caregiver: It'd be great if he could tell me what he wants to eat. SLP: Maybe we can try some time delays during breakfast.
Direct teaching	SLP provides caregiver with didactic information about strategies.	SLP presents information about how to use strategies without modeling or caregiver practice.
Observation	SLP observes the caregiver working with the child without SLP instruction.	Caregiver interacts with child while SLP observes.
Joint interaction	SLP and caregiver both interact with the child without SLP instruction.	Caregiver and SLP interact with the child, taking turns or working together.
Non-family-centered practices		3 1 1 1 1 1 1 1 1 1 1
Commentary	SLP comments on general child actions during child-focused interaction.	SLP interacts with the child. SLP: She looks really happy right now!
Directive planning	SLP tells the caregiver activities to try for home practice without caregiver input.	SLP tells caregiver: SLP: He really enjoyed matching the puzzle pieces, you can try that this week
Child focused	SLP works directly with the child without involving caregiver.	SLP interacts with child while caregiver observes or is not present.
Other	The SLP and caregiver discuss topics unrelated to the child or El.	SLP and caregiver discuss: SLP: There was so much traffic today!

Note. Codes were adapted from the Routines and Instructional Strategies Coding Protocol (Friedman et al., 2012). SLP = speech-language pathologist; El = early intervention.

^aSingle-instance code.

reaching moderate-to-strong agreement for each video (Cohen's kappa = .71-.88). Intraclass correlations (ICCs) were also used to determine the interrater reliability for each code on the RICP. Coders reached good-to-excellent agreement on most individual codes (range: .71-1.00); however, two codes were never used in any reliability video (EI conversation and reflection), and one code, demonstration (which was rarely coded: max 3.7% of session intervals, completely unused in three of the six reliability videos), exhibited poor reliability (ICC = .32). Infrequent usage of demonstration may explain the low ICC value.

Survey Measures

Working Alliance Inventory. The Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) was completed by SLPs and caregivers to examine the alignment between SLP and caregiver perceptions of their working alliance. The WAI is composed of three subscales measuring collaboration in planning within-session activities ("Tasks"), agreement about intervention targets ("Goals"), and feelings of trust and connection between the SLP and caregiver ("Bonds"). The WAI was originally created to be used within the context of traditional psychotherapy; thus, three items unrelated to EI service provision were omitted, and items were rephrased to reflect the triadic nature of EI. For example, "[Client] and I agree about the steps to be taken to improve his/her situation" was adapted to "[Caregiver] and I agree about the steps to be taken to improve [child]'s situation." A total of 33 items rated on a 7-point Likert scale were ultimately included, with the total score used for analyses. Internal

consistency was high for the adapted WAI (SLP version: Cronbach's alpha = .86, caregiver version: Cronbach's alpha = .89).

Measures of Processes of Care. Caregivers also completed the Measures of Processes of Care (MPOC), a measure of caregiver perceptions of family-centered care for their child with a disability (King et al., 1996). The MPOC consists of five scales: (a) Enabling and Partnership (e.g., including the caregiver in decision making), (b) Providing Specific Information About the Child (e.g., providing explanations of strategies), (c) Coordinated and Comprehensive Care (e.g., providing care in line with other professionals on the child's treatment team), and (d) Respectful and Supportive Care (e.g., treating the caregiver in a nonjudgmental manner); the fifth scale contains questions relating to center-based care and was omitted due to this study's focus on home-based EI sessions. Cronbach's alpha for the subscales ranged from .81 to .95, indicating high internal consistency. Caregivers rated their agreement with each of the 45 items on a 7-point Likert scale, and the median scores for each scale were used for analysis.

Satisfaction and Control. A questionnaire derived from Broggi and Sabatelli (2010) was used to measure caregivers' satisfaction with and perceived control over their child's SLP services. The satisfaction scale contains 11 items pertaining to the caregiver's satisfaction with their SLP, overall SLP services, and their child's outcomes. The control scale has 12 items capturing information about the caregiver's active participation in various aspects of their child's intervention. Individual items were reworded to replace "physical therapist" with "speech therapist" and were rated on a 5-point Likert scale. The Satisfaction subscale had a Cronbach's alpha of .94 and the Control subscale has a Cronbach's alpha of .82, indicating high internal consistency. Median scores for the satisfaction and control scales were calculated for analysis.

Beliefs About Participation-Based Practices in Early Intervention. "Beliefs About Participation-Based Practices in Early Intervention" surveys providers' beliefs about various components of FCP and traditional practices (Sawyer & Campbell, 2009). Initially administered using Q-sort methodology, this survey was adapted to a 5-point Likert scale in which SLPs rated their agreement with each statement. Cronbach's alpha was .71, indicating acceptable internal consistency. Descriptive statistics for each item were calculated across participants.

Therapeutic approach. An additional survey was created by the research staff to measure SLPs' approaches to using FCP components during intervention for autistic children. Questions related to current and ideal usage of coaching strategies supporting caregiver learning, as well as barriers toward these practices, were adapted from Fleming et al. (2011) but administered with single- and multiple-choice response options instead of interviews. SLPs were asked to characterize their recorded session as participation based or setting provided and also answered questions about their use of bagless and routines-based therapy approaches. See Supplemental Material S1 for a full list of questions.

Data Analysis

SLP and caregiver ratings on survey measures were reported using descriptive statistics including range, median, and interquartile range (IQR). Frequency counts were also used to summarize responses to single- and multiple-choice questions about SLPs' current and ideal usage of FCPs. A linear model was used to analyze the association between SLP perceptions of the caregiver-SLP working alliance (WAI) and their use of coaching strategies on the RICP. Krippendorff's alpha and percent agreement were used to investigate alignment between caregiver and SLP scores on the WAI within dyads. Due to the small sample and nonnormal distribution of scores, nonparametric tests (Mann-Whitney U test and Kruskal-Wallis test) were used to investigate overall differences between caregiver and SLP scores on the WAI and between scores on subscales of the MPOC. RStudio (RStudio Team, 2020) was used for all data analyses.

Results

SLPs' Use of FCP Coaching Strategies

Observed and Self-Reported Use of FCP in the Recorded Session

Coaching strategies supporting FCP were infrequently used by SLPs (Mdn = 38.69% of session intervals, IQR = 31.94%). SLPs primarily used non-FCPs (Mdn =61.3%, IQR = 31.95%), with the majority of intervals consisting of "child-focused" activities (Mdn = 51.20%, IQR = 48.17%). Of the coaching strategies supporting FCP, SLPs primarily used joint interaction (Mdn =16.80%, IQR = 26.32%) and information sharing (Mdn =11.11%, IQR = 8.47%). Coaching strategies used least frequently included caregiver practice with feedback (Mdn = 0.00%, IQR = 0.73%, range: 0%–3.05%) and reflection (Mdn = 0.00%, IQR = 0.00%, range: 0%– 3.13%). See Table 4 for observed use of each strategy on the RICP.

According to the NERS, only five sessions met criteria for participation based (20%), with 20 sessions considered setting provided (80%; see Table 2 for full NERS characterization of sessions). SLPs primarily initiated (18 sessions, 72%) and directed (19 sessions, 76%) activities, and caregivers were primarily absent or passively
 Table 4. Observed use of coaching strategies and non-familycentered practices.

Strategy	Median percentage of intervals (IQR)	Range (%)				
Coaching strategies support	ting family-centered prac	ctice				
Guided practice with feedback ^a	0.00 (0.00)	0–9.53				
Caregiver practice with feedback ^a	0.00 (0.73)	0–3.05				
Demonstration ^a	0.00 (0.73)	0-6.96				
Reflection ^a	0.00 (0.00)	0-3.13				
Information sharing	11.11 (8.47)	0-42.19				
El conversation	0.00 (0.84)	0-5.22				
Joint problem solving/ planning	0.00 (0.76)	0–6.25				
Direct teaching	0.00 (0.00)	0-3.48				
Observation	0.00 (1.46)	0-27.48				
Joint interaction	16.80 (26.32)	0-49.64				
Total	38.69 (31.94)	0-87.79				
Non-family-centered practic	es					
Commentary	1.16 (5.60)	0-13.91				
Directive planning	0.00 (0.81)	0-3.48				
Child focused	51.20 (48.17)	1.53-97.65				
Other	9.92 (6.20)	2.33-21.88				
Total	61.31 (31.95)	12.21-100				
Note. $N = 25$ recorded se early intervention.	<i>Note.</i> $N = 25$ recorded sessions. IQR = interquartile range; EI = early intervention.					

^aSingle-instance coding used.

observing activities (15 sessions, 60%). SLPs in all 25 sessions used materials that could be found naturally in the environment (e.g., toys and books as opposed to specialized equipment).

When asked to characterize their own session, 14 SLPs (60.87%) considered their session to be setting provided, and nine (39.13%) characterized it as participation based. All 14 sessions SLPs characterized as setting provided were in agreement with coder ratings, whereas only five of the nine sessions SLPs self-rated as participation based were characterized as such by coders.

Self-Reported Use of FCP in Current Practice

The majority of SLPs (18 SLPs, 85.71%) reported that they instructed caregivers through demonstration (i.e., pointing out strategies while working directly with the child) in their current practice. The combined use of demonstration and coaching (i.e., providing guidance while the caregiver interacts with the child) was reported as the current type of caregiver instruction by two SLPs (9.52%). Child-focused sessions without caregiver involvement were reported by one SLP (4.76%). Only one SLP (4.76%) reported using a bagless approach in which they conducted sessions during play and routines. The majority of SLPs reported bringing a full toy bag to their sessions (11 SLPs, 52.38%), with some bringing only a few toys (five SLPs, 23.81%) or being mostly bagless but occasionally bringing toys for a few clients (five SLPs, 23.81%).

SLPs' Ideal FCP Practices and Barriers Toward Ideal Usage

Coaching Strategies Used to Teach Caregivers

The combined use of demonstration and coaching was reported to be ideal caregiver instruction for 13 SLPs (61.90%). Exclusive coaching of caregivers was reported to be ideal for four SLPs (19.05%), and exclusive demonstration was ideal for three SLPs (14.29%). Ideal caregiver instruction provided through tips and homework given at the end of a child-directed session was reported to be ideal by one SLP (4.76%). SLPs most commonly identified family-level factors as barriers toward ideal caregiver instruction, such as caregiver preference for SLP-led sessions (17 SLPs, 80.95%), caregiver discomfort being coached (14 SLPs, 66.67%), and caregiver availability during sessions (13 SLPs, 61.90%). See Table 5 for a full list of SLP-reported barriers.

Routines-Based and Bagless Therapy Approaches

A "mostly bagless" approach was reported to be ideal for nearly half of the SLPs, with seven SLPs (33.33%) reporting they would ideally bring a few toys and three SLPs (14.29%) reporting that they would occasionally bring toys for a few clients. Many SLPs reported that they would ideally be completely bagless and conduct sessions during play and routines (eight SLPs, 38.1%), and one SLP (4.76%) reported they would ideally be completely bagless and conduct sessions exclusively during routines. Two SLPs (9.52%) reported their ideal sessions would consist of bringing a full toy bag.

Family-level factors were commonly cited as barriers toward bagless, routines-based therapy for most providers. Caregiver expectations that SLPs bring toys was reported to be a barrier toward bagless therapy for 15 SLPs (71.43%), and 12 SLPs (57.14%) reported that caregivers expected sessions to be conducted during play. Family discomfort doing daily routines with the SLP present was also reported to be a barrier toward routines-based therapy for 10 SLPs (47.62%). Logistic concerns were also commonly reported to be barriers toward this therapeutic approach. For example, 11 SLPs (52.38%) reported that families did not have appropriate toys for therapy, and 12 SLPs (57.14%) reported difficulty scheduling sessions to take place during routines. Additional barriers toward bagless and routines-based therapy are listed in Table 5.

Beliefs About Participation-Based Practices in Early Intervention

Items about family participation with which SLPs demonstrated the most consensus (i.e., smallest IQR and range) included the following:

Table 5. Barriers toward caregiver instruction, bagless therapy, and routines-based therapy.

Barrier	<i>n</i> ª (%)
Barriers toward ideal caregiver instruction	
The parent prefers that I, as the specialist, work directly with the child.	17 (80.95)
The parent is not comfortable being coached.	14 (66.67)
The parent is not available during sessions.	13 (61.9)
The child's other providers are not using the approach.	9 (42.86)
The child works better with me.	7 (33.33)
The parent wants to use the session time to discuss other concerns about their child.	6 (28.57)
The parent has said they prefer to use the therapy time as a break.	6 (28.57)
I feel the parent needs to use the therapy time as a break.	3 (14.29)
I'm not comfortable coaching parents.	2 (9.52)
I'm not confident in what strategies to teach parents.	1 (4.76)
It's too challenging to add in parent training to the sessions of children on my caseload.	1 (4.76)
The child needs specialized instruction that the parent can't provide.	1 (4.76)
This therapy model is not supported or encouraged by my workplace.	1 (4.76)
None	0 (0)
Other	2 (9.52)
Barriers toward bagless therapy	
Parents expect/prefer me to bring toys with me.	15 (71.43)
Families do not have appropriate toys or materials.	11 (52.38)
I do not feel adequately trained to implement a bagless model.	6 (28.57)
like to plan which toys we will play with in advance of my session.	6 (28.57)
The child makes more progress if I bring novel toys.	6 (28.57)
None	1 (4.76)
Other	3 (14.29)
Barriers toward routines-based therapy	
It's too difficult to schedule sessions around the families daily routines.	12 (57.14)
Families expect/want me to work on skills within play.	12 (57.14)
Families are not comfortable doing daily activities with me.	10 (47.62)
I do not feel adequately trained to implement therapy during family routines.	4 (19.05)
I ne child makes more progress if we do therapy during play.	3 (14.29)
Families do not do age-appropriate activities with their children.	3 (14.29)
The to plan which activities we will do in advance of my session.	2 (9.52)
n reels uncomortable conducting therapy during daily activities.	2 (9.52)
	2 (9.52)
	2 (9.02)

Note. Participants could choose multiple responses.

^aTwenty-one out of 23 speech-language pathologists completed the surveys.

"When families do not participate in a session, it is the EI providers' responsibility to find a way to engage the parent" (Mdn = 4.0, IQR = 0.0, range: 2–5).

"It is acceptable for providers to do hands-on intervention when families want the provider to work directly with the child" (Mdn = 4.0, IQR = 1.0, range: 3–5).

Items about family participation with which SLPs demonstrated the least consensus (i.e., largest IQR and range) included the following:

"The role of EI providers should be to train, teach, or coach the parents- not work directly with the child" (Mdn = 3.0, IQR = 2.0, range: 1–5).

"All families have the knowledge to select strategies to help their children learn" (Mdn = 2.0, IQR = 2.0, range: 1–5).

See Table 6 for SLP scores on individual items of the survey.

Caregiver Satisfaction and Perceptions of Family-Centered Care

On the MPOC, items on the "Respectful and Supportive Care" scale were rated the highest (Mdn = 6.88 out of 7 points, IQR = 1.00), followed by "Enabling and Partnership" (Mdn = 6.38, IQR = 1.69) and "Coordinated and Comprehensive Care" (Mdn = 6.36, IQR = 1.38). Scores on "Providing Specific Information About the Child" were the lowest (Mdn = 5.50, IQR = 2.5), but the difference between scales was not statistically significant, Kruskall–Wallis $\chi^2(2) = 6.97$, p = .073. These moderate-to-very-high scores on the MPOC suggest that caregivers perceive their child's SLP services to be highly family centered. Caregiver scores on the satisfaction and control survey also suggest that caregivers are highly satisfied

Table	6. Speech-language	pathologist	scores	on	Beliefs	About	Participation-Based	Practices	in	Early
Interve	ntion.									

Variable	Mdn (IQR)	Range
Participation-based practices		
When families do not participate in a session, it is the El provider's responsibility to find a way to engage the parent.	4.0 (0.0)	2–5
Families who do not do follow-up activities are less invested in their children.	2.0 (2.0)	1–4
The role of El providers should be to train, teach, or coach the parents, not to work directly with the child.	3.0 (2.0)	1–5
The parent's role should be to act as their child's parent, not as their teacher.	2.0 (2.0)	1–4
When El providers teach parents skills to use with their children, parents feel they are not being viewed as capable of meeting their child's needs.	2.0 (1.0)	1–5
The child's participation in family activities/routines is more important than learning developmental skills.	3.0 (1.0)	2–4
It is acceptable for providers to do hands-on intervention when families want the provider to work directly with the child.	4.0 (1.0)	3–5
All families have the knowledge to select strategies to help their children learn.	2.0 (2.0)	1–5
El services should be targeted to the developmental concerns which the family, not the provider, feels are the most important.	4.0 (1.0)	1–5
El services should always be provided in the home.	2.0 (1.0)	1–4
There are no circumstances where it is acceptable for El providers to bring in their own materials.	2.0 (1.0)	1–4
El providers should include other children who are present during a session.	4.0 (1.0)	2–5
General El practices		
Service coordinators should be the team members who collect all the information about the family's activities/routines.	2.0 (0.0)	1–4
In order for families to successfully access resources, service coordinators need to provide more assistance than written information or contact names.	4.0 (1.0)	1–5
The child's engagement (e.g., interest/happiness) should be of primary importance in a session	4.0 (1.0)	2–5
Sessions should be oriented to what the child needs to learn how to do.	3.0 (1.0)	2–5
Keeping records of their work with children helps providers make informed decisions about what they are teaching families to do	4.0 (0.0)	4–5
There are no opportunities for teamwork or collaboration among providers	2.0 (1.0)	1–4
All El providers, regardless of the discipline, have the skills and abilities to work effectively with all infants and toddlers	2.0 (1.0)	1–5
An El provider's competence is related more to their formal training (e.g., undergraduate/graduate) than to their on-the-job experiences.	2.0 (0.0)	1–4
Note Policife About Derticipation in Early Intervention (Sourcer & Comphell 2000		ortilo rongo

Note. Beliefs About Participation in Early Intervention (Sawyer & Campbell, 2009). IQR = interquartile range; EI = early intervention.

with their child's services (satisfaction: Mdn = 4.82 out of 5 points, IQR = 0.82) and have a high degree of control over their child's services (control: Mdn = 4.33, IQR = 0.67).

SLP–Caregiver Working Alliances

SLPs perceived their working alliance with the caregiver to be of moderately high quality across the Tasks, Bonds, and Goals subscales of the WAI (see Table 7), with a median total score of 192.5 out of a possible 231 points (IQR = 14.3). Caregivers also perceived their working alliance with their SLP to be of high quality across scales, with median total scores summing to 216.5 out of 231 possible points (IQR = 25.3). SLP and caregiver total scores were significantly different (Mann–Whitney U =405.5, p < .0001) with a cliff's delta of 0.68, indicating a large effect. Interrater reliability between caregivers and their SLP was low (median Krippendorff's alpha = .59, IQR = .18, range: .33–.79), although six dyads reached thresholds of acceptable levels of reliability (defined as alpha greater than .67; Krippendorff, 2004). Percent agreement was also calculated to further explore agreement within dyads. Absolute item agreement between caregivers and SLPs ranged from 3.03% to 69.7% (M = 30.2%, SD = 18.5%), and percent agreement within 1 point ranged from 42.4% to 97.0% (M = 74.2%, SD = 14.8%).

Relationship Between Observed FCPs and the Working Alliance

A linear regression was used to explore the association between the caregiver–SLP working alliance and the SLP's use of coaching strategies during the recorded sessions. The association between SLP scores on the WAI

Table 7. Caregiver and speech-language pathologist (SLP) scores on the Working Alliance Inventory (WAI).

Subscale		Caregiver	SLP	Mann-Whitney U	Cliff's delta	Spearman's $ ho$
WAI Tasks ^a	Mdn	79.5	68	416.5**	0.72	.21
WAI Bonds ^b	Mdn	57	52.5	349	0.44	.01
WAI Goals ^a	Ndn	6.00 79.5	8.00 68.5	388.5**	0.61	.17
WAI Total ^c	IQR <i>Mdn</i>	10.75 216.5	8.50 192.5	405.5**	0.68	.19
	IQR	25.3	14.3			

Note. N = 22. Three SLPs did not complete this survey, and their corresponding caregivers' score was omitted from the analysis. Working Alliance Inventory (Horvath & Greenberg, 1989). IQR = interquartile range.

^aMaximum score: 84. ^bMaximum score: 63. ^cMaximum score: 231.

*p < .05. **p < .001.

and their use of FCPs on the RICP was not significant, $R^2 = .027$, F(1, 20) = 0.56, p = .46, suggesting that factors other than the SLP-caregiver relationship may be impacting SLP's use of FCPs.

Discussion

Contrary to policy guidelines and research standards for ideal EI, coaching strategies supporting FCP were rarely used by SLPs in this study, with most SLPs using clinician-led activities. SLPs' ideal coaching strategies were more aligned with evidence-based standards, and SLPs' most frequently reported caregiver characteristics, such as their preferences for traditional models of care, were cited as barriers toward ideal practice. Despite infrequent use of FCPs to collaboratively plan intervention procedures and build caregiver capacity in the observed sessions, caregivers reported that their child's SLP services were highly family centered, and both SLPs and caregivers perceived their working alliance to be of high quality, although caregiver scores were significantly higher than SLP scores.

Coaching Strategies Supporting FCP

Although the majority of sessions were spent using non-FCPs, the pattern of coaching strategies used by SLPs reveals that they may use strategies to create the context for some FCP components without using those that optimize caregiver capacity-building, participationbased practices and collaboration. The most commonly used coaching strategy was joint interaction, in which clinicians and caregivers both interact with the child. Ideally, clinicians may use guided practice strategies and observation to optimally support caregiver use of intervention techniques with the child during these joint interactions (Brown & Woods, 2016; Sone et al., 2021). However, the infrequent use of these strategies suggests that clinicians may miss opportunities to teach caregivers during their EI sessions. Similarly, information sharing was used for a median of 11% of session time, during which clinicians and caregivers discuss topics related to the child's development and progress. The discussion of these outcome-related topics without the use of problem solving, planning, and reflection strategies suggests that SLPs in the current sample provided caregivers with a space to discuss the child and their concerns but may not involve them in decision making to address these needs through intervention activities.

The reported and observed patterns of coaching strategies and session structures in this study were consistent with those found in previous studies. Joint interaction and information sharing were also the most commonly used strategies by EI providers trained to use FCP in prior research by Salisbury et al. (2012), highlighting the perceived value of these strategies in supporting FCP for providers with a range of experience in familycentered models of care. Additionally, SLPs in this study reported that they commonly instruct caregivers through demonstration, which is similar to the results of previous findings that EI providers most commonly endorse the use of coaching strategies involving caregiver observation of clinician modeling (Meadan et al., 2018). Although demonstration was not frequently observed in the current sample, this discrepancy between observed and reported strategy usage may be attributed to varying definitions of this strategy (i.e., modeling while the caregiver passively observes vs. modeling with narration, as it was defined on the RICP). Finally, the relative proportion of participationbased sessions in the current sample (based on NERS characterization) is similar to previous findings (Campbell & Sawyer, 2007), as was SLPs' report of bringing toys to sessions (Nwokah et al., 2013). Taken together, these results suggest that EI clinicians may use some strategies to minimally engage caregivers in intervention but do not use optimal strategies to achieve all components of FCP.

Examination of clinician beliefs about FCP reveals potential explanations for the infrequent coaching strategy usage observed in this study. Notably, caregiver characteristics (e.g., expectations, comfort, and availability) were cited as the most frequent barriers toward ideal caregiver instruction by clinicians in this study and in previous studies (Douglas et al., 2019; Fleming et al., 2011; Meadan et al., 2018). In contrast, EI providers in a study by Sawyer and Campbell (2012) reported that caregivers were interested in being taught strategies, and many caregivers have reported high satisfaction and lower levels of stress when taught to use intervention strategies with their child in community and research settings (Abouzeid et al., 2020; Cycyk & Huerta, 2020). Thus, it remains unclear whether some caregivers truly prefer not to be taught intervention strategies through guided practice, or if this is a commonly held misperception of providers. Additionally, one third of SLPs in the sample reported that the child works better with them than with their caregiver, and many disagreed with the statement "all families have the knowledge to select strategies to help their child learn." This suggests that clinicians may not believe that caregivers are equipped to appropriately implement therapeutic strategies and make decisions about intervention strategies.

Caregivers perceived their child's intervention to be highly family centered, suggesting that even the limited amount or type of coaching may have been sufficient for families to feel involved in their child's services. Caregivers highly value professionals who demonstrate compassion, get to know them as an individual, and support the entire family unit (Galpin et al., 2018; Hodgetts et al., 2013). Thus, coaching strategies that meet these needs may contribute to relationship-building components of FCP even if they do not specifically target the child's developmental or participatory goals. For example, conversations unrelated to the child or intervention are considered "other" on the RICP, but they may actually contribute to caregiver-SLP rapport. Furthermore, the frequent use of information sharing even without problem solving or reflection may make caregivers feel sufficiently engaged in their child's intervention by giving them a space to share information with a trusted adult. Caregivers in this study received coaching from research clinicians in the clinical trials from which they were recruited and thus had experience with coaching targeting their learning of intervention strategies; it is possible that this did not greatly impact their ratings on the MPOC because they felt supported by their SLPs' use of relationship-building coaching strategies. Therefore, it may be important to measure the ways in which EI providers implement relational practices and support caregiver and family needs beyond child-specific goals.

Working Alliance and Caregiver–SLP Relationships

Caregivers and SLPs perceived their working alliances to be of high quality, in alignment with previous literature. Both clinicians and caregivers have reported highquality working alliances during caregiver-implemented interventions (Chirico et al., 2020; Kazdin & Whitley, 2006), with caregivers rating their working alliance to be of higher quality than clinicians (Chirico et al., 2020). Although positive associations between caregiver and SLP scores were not observed in this study, as has been noted previously (Kazdin & Whitley, 2006), high degrees of agreement in item ratings within dyads when allowing for a 1-point difference suggest that caregivers and SLPs in this study rated items about their working alliance similarly, but SLPs did not rate items with the same strength as caregivers.

Discrepancies in caregiver and SLP scores on the WAI may be explained by differences in their knowledge of intervention procedures. When investigating the alignment between clinician and caregiver perceptions of FCPs during diagnostic evaluations, Crais et al. (2006) found that caregivers agreed with some items with which clinicians disagreed due to clinicians' lack of transparency (i.e., caregivers agreeing they were involved in all meetings about the child, whereas clinicians knew about meetings in which they did not involve the caregiver). In the context of intervention, SLPs may independently make decisions about intervention procedures that caregivers do not know about, leading caregivers to rate related WAI items higher than clinicians. In family-centered intervention, clinicians empower caregivers to make choices with increasing independence as the caregivers' capacities and skills for reflection develop (Akhbari Ziegler & Hadders-Algra, 2020); given that EI clinicians have reported making a priori decisions about which families are the "right fit" for coaching (Tomczuk et al., 2022), it is likely that some clinicians may not collaborate with some caregivers from the beginning of the EI process, and thus, caregivers may not know that they could be more involved in decision making or feel uncomfortable asserting their opinion in clinician-driven EI.

Additionally, caregivers may perceive the current extent of collaboration to be sufficient or comparatively higher than other forms of care, whereas clinicians are aware of ways they could be more collaborative by integrating family-centered principles into their intervention approach. For example, caregivers rated the WAI item "I am clear as to what [SLP] wants me to do in [child]'s sessions" an average of 1.8 points higher than SLPs (with the analogous item, "I am clear as to what I expect [caregiver] to do in these sessions"), perhaps indicating that caregivers understand their role, whereas SLPs believe they could be clearer in explaining caregivers' expected role or reasons for the chosen session structure. Furthermore, whereas SLPs may compare the extent of collaboration against other families with whom they have worked in EI, caregivers may compare to their experiences with other health care providers, thus giving them different thresholds against which they rated items. For example, Dick et al. (2021) found that caregivers of autistic children and other developmental disabilities perceived their EI care to be significantly more family centered than their pediatrician's services; such differences may also exist within working alliances.

Limitations

There are several components of this study that limit the generalizability of these findings. First, participants included a small convenience sample of caregivers engaged in a clinical trial who asked their SLP to participate in this study. It is possible that in situations where the caregiver has a poor-quality relationship with their SLP, the caregiver did not ask their SLP to participate or the SLP declined to enroll, thus positively skewing findings about the working alliance found in this study. The small sample size may also limit the generalizability of these findings to the larger population of autistic families and their SLPs in EI. Furthermore, although the participants in the current and previous studies report high levels of family-centered care (Williams et al., 2021), bias in sampling may exclude the perspectives of those who are often excluded from the EI process (e.g., due to cultural barriers [Blanche et al., 2015] and due to institutionalized racism or disparities in health care [Zuckerman et al., 2017]). Demographic information for the samples on which the surveys used in this study were normed was not available; however, considerations of systemic racism and both implicit and explicit biases should be taken into account when measuring caregiver-clinician relationships for families from minoritized backgrounds, especially given an SLP workforce that is primarily White (American Speech-Language-Hearing Association, 2021).

Additionally, the infrequent use of coaching strategies supporting FCP limited the investigation of the associations between working alliances and FCP components. The whole-interval coding procedure utilized on the RICP precluded observation of coaching strategies that may have occurred but did not take up the majority of the 30-s interval, although the addition of some single-instance codes likely minimized this limitation. Finally, observation of additional sessions for each SLP–caregiver dyad may have allowed for a more nuanced examination of FCPs and working alliances as they unfold over time. SLPs in seven sessions (28%) reported that the recorded session was not typical of the majority of their sessions with the child due to irregular child behavior (e.g., child was more dysregulated or tired than usual); because this study focused on caregiver–clinician interactions, it is unlikely that this impacted the current results, but consideration of additional sessions could account for any potential effects of irregular child behavior on session structure and caregiver–clinician interactions.

Clinical Implications and Future Directions

The results of this study suggest that SLPs may benefit from support to increase their use of coaching strategies and more actively partner with caregivers in EI. SLPs in this study reported that caregiver expectations for traditional models of care were barriers toward their use of FCPs, suggesting that it may be beneficial for clinicians to provide caregivers with information about FCP in EI. Efforts to disseminate information about FCP should also be interdisciplinary; 42.9% of SLPs in this study reported that the use of traditional models of care by other providers served as a barrier toward their use of ideal FCP. Thus, EI providers across disciplines should collaborate in empowering families to make choices about their child's intervention services. Furthermore, given the positive effects of combined clinician- and caregiverimplemented approaches on child outcomes (Hampton & Kaiser, 2016), more flexible concepts of caregiver participation may allow clinicians to individualize intervention to family preferences. Professional development programs have been perceived as feasible and have demonstrated effectiveness in increasing EI providers' use of coaching strategies (Kyzar et al., 2014; Marturana & Woods, 2012). The dissemination of these programs will allow EI SLPs to enhance their already-strong working alliances and improve their ability to target goals that are meaningful for each individual family.

Professional development opportunities about FCP should target the implementation of not only specific coaching strategies but also provider beliefs about the value of FCP components. Some SLP beliefs reported in this study suggest that they may believe there to be an ideal "norm" of session structures to which intervention should be designed for all families. For example, a substantial portion of providers believed that the child works better with them than with the caregiver and that families lack appropriate materials to use during sessions, both of which limited their use of participation-based sessions. However, instead of encouraging the child to perform "ideal" behaviors to facilitate their learning according to normative developmental milestones, clinicians utilizing FCPs should focus on building existing caregiver capacities and enhancing caregiver-child communication within activities natural to the child's environment. Such a shift in perspective could have a particularly great impact on

families from low-resource and minoritized cultural backgrounds, as EI providers have reported that they do not engage in coaching with families who have competing needs, cultural differences, and varying levels of ability in implementing common intervention strategies (Sawyer & Campbell, 2012; Tomczuk et al., 2022). Choosing not to integrate FCP into EI for these families may exacerbate gaps in child and family outcomes and have a cascading impact on future therapeutic relationships for these families. Therefore, professional development about FCP that challenges the beliefs underlying traditional models of care, facilitates the integration of therapeutic support into more intervention contexts, and encourages providers to reflect on their personal biases will facilitate the equitable use of FCP components for a wider range of families.

Conclusions

The results of this study suggest that SLPs do not implement FCP to the extent recommended by research and policy guidelines, but EI providers may collaborate with families in other ways that caregivers find satisfactory. Examination of relationship-level variables (i.e., working alliance and MPOC scores) alongside withinsession coaching strategies suggests that factors outside of those typically studied in EI research may influence the ways in which EI SLPs and caregivers work together to improve child outcomes. Further investigation of the ways in which SLPs collaborate with families outside of sessions and establish relationships overtime may elucidate the full extent of FCPs used during EI, and SLPs will benefit from continued training and education around the integration of FCP in EI.

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