



## Research Snapshot No.20

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### **Caregiver-Implemented Intervention for Young Children with Autism Spectrum Disorder: A Systematic Review of Coaching Components**

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#### ***What you need to know***

Caregiver-implemented intervention, commonly facilitated via coaching, is an increasingly common approach to early childhood intervention for infants and toddlers with or at risk of autism spectrum disorder (ASD).

ASD is being diagnosed earlier, which leads to a corresponding need to research and understand what earlier interventions support children identified at a young age.

Although the National Research Council (US) recommends at least 25 hours per week of “active engagement in intensive instructional programming for a minimum of the equivalent of a full school day, 5 days per week, with full year programming varied according to the child’s chronological age and developmental level”, the authors note that this is targeted at those in an educational setting, and that appropriate instructional programming for one to two year olds is different.

Interventions for infants and toddlers should take place in the context of their natural environments and routines, making learning more contextual and functional and naturally providing repeated, meaningful and frequent learning opportunities, supporting generalisation of skills. When services are provided within everyday settings, caregivers are more likely to report positive outcomes such as increased caregiver wellbeing and greater child progress across domains.

In this study, caregiver-implemented intervention refers to professionals using coaching to support caregivers in fostering their child's learning through natural everyday activities. It is a method of building on the family's strengths rather than suggesting they need training in how to teach their child, identifying caregivers as active change agents. It is not encouraging caregivers to use structured interventions such as discrete trial training.

By supporting families in this way, it may be possible for them to achieve the recommended 25 hours of engaged time per week with their children with ASD.

However, the literature provides little information on the use of specific coaching characteristics that impact the development of caregivers' capability.

### ***What is this research about?***

This paper examines coaching characteristics utilised when using caregiver-implemented intervention with young children aged 36 months or younger with or at risk of ASD.

The review focused on four essential components of effective coaching:

1. collaborative planning, in which professionals and caregivers jointly decide what to focus on during sessions;
2. building on caregivers' competence, which involves supporting caregivers to enhance their confidence, skills, and knowledge;
3. guided practice, where professionals provide feedback as caregivers actively practise strategies with their child; and
4. collaborative reflection and decision making, in which professionals and caregivers reflect together on what worked, what did not work, and what to try next.

While many caregiver-implemented intervention models report positive outcomes for children and parents, far less attention has been paid to how coaching itself is operationalised within these interventions. By systematically analysing how coaching characteristics are used and described, this review addresses a vital gap in understanding what makes caregiver-implemented interventions most effective and how coaching can help bridge the gap between research and everyday early childhood intervention practice.

### ***What did the researchers do?***

The researchers conducted a systematic review of peer-reviewed studies published between January 2010 and July 2017. They used major databases, including Academic Search Premier, ERIC, and PsycINFO, and identified 160 articles initially.

Studies were included if they focused on children aged 36 months or younger who had an ASD diagnosis or were considered at risk for ASD, and if caregivers, not professionals, implemented the primary intervention. Only experimental designs, quasi-experimental designs or case series were considered, such as randomised controlled trials (RCTs), single-case experimental designs, and pre–post or mixed designs and case series. 26 studies were retained for detailed review. The authors then coded each study for the presence or absence of the four coaching components: collaborative planning, building on caregivers' competence, guided practice, and collaborative reflection and decision making.

They documented key study features, including participant characteristics, type of intervention model, intervention setting (e.g., home, clinic, telepractice) and whether fidelity of implementation was measured for both professionals and caregivers.

Interobserver agreement on coding reached 92.3%, indicating strong reliability in the identification and classification of coaching components across studies.

### ***What did the researchers find?***

This review revealed a clear imbalance in how coaching components are represented in existing caregiver-implemented intervention studies.

- All 26 studies included the component of building on caregivers' competence, suggesting that supporting caregivers to develop skills and confidence is widely accepted as central to early childhood intervention practice.
- Nearly all studies (n=23) incorporated guided practice, where caregivers had opportunities to practise strategies with their children while receiving feedback.
- In contrast, fewer than half of the studies (n=11) described collaborative reflection and decision making, and
- fewer than one-third (n=8) explicitly emphasised collaborative planning, in which caregivers and professionals jointly determine session focus and goals.
- Only six studies included all four coaching components.

Most interventions took place at least partly in the child's home, aligning with best practice for early childhood intervention.

Fidelity of implementation was measured in most studies, but methods varied (e.g. fidelity checklists, rating scales), and not all assessed both professional coaching fidelity (n=19) and caregiver use of strategies (n=18).

Overall, the findings suggest that while caregiver competence and practice are consistently targeted, the more collaborative elements of coaching (shared planning,

reflection, and joint decision making) are less well integrated and less frequently reported in the caregiver-implemented intervention literature.

### ***How can you use this research?***

For early childhood intervention professionals, this research highlights the importance of moving beyond a purely instructional or directive model of working with families to a genuinely collaborative coaching relationship. Rather than seeing caregivers as passive recipients of expert knowledge, professionals are encouraged to view them as partners and co-decision-makers who bring valuable experience and insight into their child's needs, strengths, and family routines. In practice, this means intentionally incorporating collaborative planning into sessions, using reflective questions to help caregivers analyse what is working, and making decisions together about next steps and priorities.

Academics and those providing professional development for early childhood intervention professionals can use these findings to strengthen their focus on adult-learning principles, such as modelling, guided practice, feedback and reflective dialogue.

Policy makers and managers can draw on this review to justify and support caregiver-implemented models that embed learning opportunities within daily routines rather than relying solely on clinic-based sessions.

For researchers, the review provides a framework for clearly defining and documenting coaching processes in future studies, including the need to measure both professional and caregiver fidelity.

Ultimately, this research can support reflection and consideration of how to improve the quality and outcomes of early childhood intervention by working in partnership with caregivers, ensuring they feel empowered, respected, and supported in their role.

### ***Where to from here***

The review points to important next steps for research, practice, and policy.

- Future studies should define coaching components more precisely and describe them explicitly in published reports so that interventions can be more easily understood and replicated.
- There is a clear need to investigate how different coaching components contribute to outcomes. For example, whether including collaborative

reflection and joint decision making leads to better caregiver engagement, higher fidelity, or stronger child gains.

- Researchers should routinely measure fidelity of both professional coaching and caregiver implementation to understand how well interventions are delivered and maintained over time.
- More studies should be conducted in children's everyday settings, such as homes and communities, to maximise ecological validity and support translation into real-world contexts.
- Developing accessible, well-documented intervention manuals and coaching guides will be critical for training practitioners and scaling up effective models.
- Finally, integrating robust, collaborative coaching practices into early childhood intervention services can help bridge the research-to-practice gap, ensuring that families of young children with ASD receive support that is not only evidence-based but also family-centred, practical, and sustainable.

### ***About the researchers***

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### ***Citation***

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**This Research Snapshot was prepared by Denise Luscombe, PRECI committee member, Paediatric Physiotherapist and ECI Consultant.**

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***In the spirit of reconciliation PRECI acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.***