EVIDENCE REVIEW



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Child Care Coaching

Evidence Review Findings: Needs Further Study

To date, no strong causal evidence has connected child care coaching with positive outcomes in the prenatal-to-3 period. Coaching for teachers of infants and toddlers has not yet been studied extensively, and the current evidence tends to examine treatment effects on small sample sizes with high attrition, meriting further study to draw a strong conclusion. Additionally, current evidence evaluates coaching as a programmatic strategy, rather than a statewide policy, providing no clear guidance for state action. Further study, particularly of children under the age of 3, is needed to better understand the connection between child care coaching and outcomes in the prenatal-to-3 period.

Child care coaching is a type of professional development or technical assistance provided to the early care and education workforce. Coaching is typically an ongoing, relationship-based, collaborative process between an expert and an early childhood educator that focuses on improving caregiver knowledge, skills, and behaviors, typically related to classroom instruction, caregiver interactions with children, or overall quality of a child care environment. Successful child care coaching can improve teacher competencies, skills, and classroom behaviors. These outcomes may lead to improvements in overall quality of the child care environment and caregiver-child interactions, which can subsequently improve child outcomes during the prenatal-to-3 period. However, limited strong causal evidence currently exists to support these theoretical connections.

What Is Child Care Coaching?

Child care coaching is a type of professional development or technical assistance provided to the early care and education (ECE) workforce to build professional capacity. ^{1,2,3} Coaching is also sometimes referred to as mentoring or consultation. Coaching is typically an ongoing, relationship-based, collaborative process between an expert coach and an ECE caregiver. ^{1,2,3} Coaches are typically recommended or required to have a bachelor's degree in early childhood education or a related field. ^{4,5} The purpose of child care coaching varies, "including supporting core competencies; introducing skills, concepts, and instructional strategies that were not mastered or introduced in educator preparation programs; and training educators in new science related to child development and early learning and new instructional tools and strategies." Regardless of the subject of the coaching, this type of professional development aims to improve overall program and classroom quality (including teacher-child interactions) and, subsequently, child outcomes. ^{6,1,7}

Although a variety of coaching models exist, coaching typically starts with joint planning and goal setting between a coach and an ECE caregiver, followed by observations of caregiver behavior and practice in the classroom. Some coaching models use formal observational tools, such as the Classroom Assessment Scoring System (CLASS) or Environment Rating Scales (ERS), but other models observe classrooms using less formal methods. Feedback is then provided by the coach, followed by reflection and discussion between the coach and ECE caregiver, and the cycle typically repeats. Coaching can be provided as a single professional development tool or may be used in connection with other professional development, such as coursework.

Child care coaching is typically provided at the local or program level but is supported through a variety of state and federal systems. States may provide coaching services as professional development through Child Care Resource and Referral (CCR&R) agencies, state licensing requirements, or quality rating and improvement systems (QRIS), and some states have guidelines for coach competencies and coach credentialing systems.^{7,8} Child care coaching is also a required part of the federal Early Head Start program.⁵

Who Is Affected by Child Care Coaching?

The child care workforce includes approximately 535,000 teachers and caregivers in listed center- and home-based settings serving children ages 0 to 3.94 Although coaching as a professional development tool may not be available to all providers, ECE caregivers are the main group of individuals that can directly benefit from child care coaching. To the extent that coaching can improve classroom quality and teacher-child interactions, the children in the care of these providers will benefit from successful child care coaching programs and policies as well.

What Are the Funding Options for Child Care Coaching?

Child care coaching is frequently supported at the state level through QRIS and CCR&R agencies, ^{1,7,10} which are typically funded through the federal Child Care Development Fund (CCDF). ¹¹ Beyond CCDF funds, coaching provided as technical assistance through QRIS may also be supported by local and state funding or by philanthropic foundations. ¹⁰ Local programs may also support coaching through a combination of funding sources, including public (federal and state), philanthropic, and private funds. ³ Child care coaching is also supported within specific child care programs, such as Early Head Start. ¹² Previously, child care coaching has also been funded in some states using federal funding through Race to the Top-Early Learning Challenge and Preschool Development Grant programs. ³ Child care coaching is also typically supported in publicly-funded programs for older children (e.g., pre-K). ¹³

Why Should Child Care Coaching Be Expected to Impact the Prenatal-to-3 Period?

Child care coaching can support families during the prenatal-to-3 period by supporting caregivers within the child care settings that families use. By providing individualized, ongoing support to caregivers targeting the specific goals of child care programs and caregivers themselves, child care coaching aims to improve staff knowledge, skills, strategies, and

¹ Author's calculation based on those serving children ages O to 3 only and those serving children ages O to 5 in center-based and listed home-based settings. Due to the way data are presented, this number includes a small share of unpaid listed home-based teachers and caregivers (2,900 of 117,900 total listed home-based teachers and caregivers serving children O to 5). Does not include paid or unpaid unlisted home-based providers.

behavior in the care setting and when interacting with children. These advances should lead to overall improvements in the quality of the caregiving setting, which can subsequently lead to improved child and family outcomes. The effectiveness of coaching may vary depending on caregiver openness to improvement, the level of engagement between the coach and caregiver, and how well coaching is executed (e.g., meeting specific needs, fidelity to coaching models).

Decades of research in the field of child development have made clear the conditions necessary for young children and their families to thrive.¹⁴ These conditions are represented by our eight policy goals, shown in Table 1. The goals with which child care coaching are theoretically aligned are indicated below.

Table 1: Policy Goals Theoretically Aligned With Child Care Coaching

Aligned	Policy Goal
	Access to Needed Services
	Parents' Ability to Work
	Sufficient Household Resources
	Healthy and Equitable Births
	Parental Health and Emotional Wellbeing
	Nurturing and Responsive Child-Parent Relationships
	Nurturing and Responsive Child Care in Safe Settings
	Optimal Child Health and Development

What Impact Does Child Care Coaching Have, and for Whom?

Limited strong causal evidence exists on coaching for early care and education caregivers of infants and toddlers; most existing research is focused on older children (e.g., preschool/pre-K ages and older). The research that exists on child care coaching in infant and toddler child care settings typically has very small sample sizes, high sample attrition, and other study design concerns. This body of work tends to focus on indicators of nurturing and responsive care and child developmental outcomes.

The research discussed here meets our standards of evidence for being methodologically strong and allowing for causal inference, unless otherwise noted. Each strong causal study reviewed has been assigned a letter, and a complete list of causal studies can be found at the end of this review, along with more details about our standards of evidence and review method. The findings from each strong causal study reviewed align with one of our eight policy goals from Table 1. The Evidence of Effectiveness table displays the findings associated with child care coaching (beneficial, null, iii or detrimental) for each of the strong studies (A through D) in the causal studies reference list, as well as our conclusions about the overall impact on each studied policy goal. The assessment of the overall impact for each studied policy goal weighs the timing of publication and relative strength of each study, as well as the size and direction of all measured indicators.

[&]quot;"Quality" is often conceptualized into components of "structural" and "process" quality. Structural features of quality are the aspects of the child care environment that can be legislated or mandated, such as child-to-staff ratios or caregiver education requirements. Process quality refers to the richness of interactions between children and caregivers, or children and their peers, and of the learning experiences and instruction. Source: Slot, P. (2011). Structural characteristics and process quality in early childhood education and care: A literature review (OECD Education Working Paper No. 176). Organisation for Economic Co-operation and Development. http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2018)12&docLanguage=En An impact is considered statistically significant if p<0.05.

Table 2: Evidence of Effectiveness for Child Care Coaching by Policy Goal

Policy Goal	Indicator	Beneficial Impacts	Null Impacts	Detrimental Impacts	Overall Impact on Goal
Nurturing and Responsive Child Care in Safe Settings	Caregiver-Child Interactions		A, C, D		
	Global Observed Quality		A, D		
	Teacher Knowledge: Language/Literacy		В		Mostly Null
	Teacher Language/Literacy Classroom Practice	В			
	Teacher Knowledge: General Infant/Toddler Development		С		
	Teacher Self-Efficacy		С		
Optimal Child Health and Development	Child Social-Emotional Skills Composite		D		Trending^ Null
	Child Cognitive and Language Skills Composite		D		

[^]Trending indicates that the evidence is from fewer than two strong causal studies or multiple studies that include only one location, author, or data set.

Nurturing and Responsive Child Care in Safe Settings

Each of the four studies included in this review evaluated some aspect of nurturing and caring environments, including caregiver-child interactions, global quality, teacher knowledge (specific or general), teacher classroom practice, and teacher beliefs. Three studies examined indicators of caregiver-child interactions, and each found null impacts. A,C,D A large randomized control trial (RCT) of a training and coaching intervention did not find any statistically significant evidence of an impact on a composite measure of caregiver-child interactions. A quasi-experimental study of the impact of on-site consultation in addition to a training program also found no evidence of an impact on caregiver-child interactions.

Another study assessed the impact of coaching in the context of a larger intervention – study participants were either assigned to a comparison group with no intervention, a community college comparison group enrolled in an infanttoddler theory and practice course, or one of three randomly assigned intervention groups that received standardized coursework plus different levels of coaching (0, 5, or 15 hours of coaching, randomly determined).^C This study assessed caregiver-child interactions using the CLASS subscales of emotional-behavioral support, as well as support for language and learning, and found mixed overall effects with mostly null within-group effects. No evidence of a long-term effect of coaching interventions on teacher emotional-behavioral support was found. The study did find evidence of some withingroup improvements among caregivers who received the highest dosage of coaching on emotional-behavioral support metrics (effect size 0.58 pretest to follow-up, reflecting a change from mid-range CLASS scores to the low end of highrange scores). The study also found evidence of a significant time and group interaction for teacher support for language and learning. Within-group differences suggested this impact was driven by positive changes in the group that had no coaching (effect size 0.60 pretest to follow-up) and the group that had the highest dosage of coaching (effect size 0.95, pretest to follow-up). All other within-group differences on the CLASS measures for the groups receiving coaching were null. Overall, the study did not find consistent evidence that the coaching intervention improved caregiver-child interactions. These findings should be interpreted with some caution due to small sample sizes within groups, lack of sufficient statistical power for some analyses, and lack of random assignment to comparison groups.

In this study, the composite measure of staff-child interactions included items from the ITERS-R/FCCERS-R and the Program for Infant/Toddler Care Program Assessment Rating System.

^v Caregiver-child interaction was measured by the Arnett Caregiver Interaction Scale (positive interactions, permissiveness, punitiveness, and detachment).

Two studies examined the effects of coaching on measures of global observed classroom quality. A quasi-experimental study of the impact of on-site consultation in addition to a training program did not find clear evidence that the consultation intervention increased program quality over time, as measured by the Infant/Toddler Environment Rating Scale (ITERS). Similarly, the large RCT of a training and coaching intervention found no evidence that the intervention, the Program for Infant/Toddler Care, had a significant impact on quality, as measured by the ITERS-R or the Family Child Care Environment Rating Scale (FCCERS-R).

Beyond broad quality measures, child care coaching may also aim to impact teacher knowledge, classroom practices, and teacher beliefs. One study of family child care providers examined changes in teacher language, literacy knowledge, and practice as a result of coursework in language and literacy plus weekly on-site coaching for 32 weeks, as compared to providers who received coursework only or did not receive any professional development training through this intervention.^B Although the intervention was targeted at family child care providers who provided care to at least one child ages 3 to 5, these providers served children ranging in age from under 1 year old to 5 years old. The study found no impact of the intervention on teacher knowledge of language or literacy but did find that the group receiving coaching in addition to coursework had statistically significant improvements in quality of teacher language and literacy classroom practices, of as compared to the coursework only and control groups (effect sizes *d*=0.71 and 0.74, respectively). A study assessing the impact of coaching dosage in the context of a larger professional development intervention also examined impacts of coaching on teachers' general infant/toddler developmental knowledge and self-efficacy but found no evidence of impacts on either indicator. C,viii

Optimal Child Health and Development

Only one study, a large RCT evaluation of a training and on-site coaching intervention, examined indicators of optimal child health and development. This evaluation found no impact on a composite measure of children's social-emotional skills or a composite measure of child cognitive and language skills^{ix} measured six months after the program ended.^D Although it had a rigorous study design, the RCT had high attrition among the child study sample and was unable to isolate the impacts of coaching separately from the impacts of the training also included in the intervention.

Is There Evidence That Child Care Coaching Reduces Disparities?*

None of the studies in this review explored reductions in disparities or identified differential impacts by race, ethnicity, or socioeconomic status. Further study is needed to explore the impacts of child care coaching on different racial and ethnic groups, both in terms of the child care providers and the children they serve.

Has the Return on Investment for Child Care Coaching Been Studied?

To date, no strong causal evidence has evaluated the cost effectiveness of child care coaching. One study has suggested that simplifying quality standards can reduce costs and improve the sustainability of child care models over time; though the role of coaching was not explicitly addressed, it provides context for how child care coaching may provide a return on investment over time. ¹⁵ A more comprehensive analysis of the return on investment is forthcoming.

vi In this study, language and literacy classroom practices were assessed using the Child/Home Early Language and Literacy Observation (CHELLO), a tool for assessing these practices in a family child care setting.

vii Teacher knowledge was assessed using an author-created assessment of content knowledge on core language/literacy competencies. Positive impact on language/literacy classroom behavior is based on overall CHELLO scores, subscale impacts were mixed.

viii Study authors note that any changes in knowledge seen over time in all groups were very small (approximately one question or less on an 18-item scale). Similarly, only small (nonsignificant) changes were seen in teacher self-efficacy, likely due to the fact that teachers had very high self-efficacy at the start of the study.

^{ix} The composite measure of child social emotional skills was based on scores from the Child Behavior Checklist and the Positive Behavior Scale. The composite measure of child cognitive and language skills was based on scores from the Bracken School Readiness Assessment 3rd Edition and the Preschool Language Scale 4th edition.

^{*} Disparities are defined here as differential outcomes by race, ethnicity, or socioeconomic status (SES).

What Do We Know, and What Do We Not Know?

Child care coaching does not have any consistent significant impacts on outcomes in the prenatal-to-3 period. Research to date has focused on assessments of outcomes in the areas of nurturing and responsive care and child health and development, but null effects do not suggest any clear evidence of impact for either specific coaching models or coaching practices more generally. The studies included in this review were limited by small sample sizes, high attrition, and other study design challenges that warrant consideration when drawing strong conclusions. Future research is needed to assess the potential impacts of coaching interventions at scale, particularly in relation to state support of coaching in child care settings. Additionally, more research is needed in the infant and toddler space (particularly with larger study samples), as the bulk of existing evidence on coaching focuses on preschool and pre-K settings.

Finally, child care coaching can be used both as a quality improvement tool, helping to assess child care practitioners and offer guidance to support their growth, and as a quality evaluation tool. Where coaching is tied to ratings, subsidies, and other support, it may have significant effects on providers. Further study should investigate the impact of coaching through these two mechanisms (as a quality improvement and quality assessment tool) to better understand its effect on the child care field.

Is Child Care Coaching an Effective Policy for Improving Prenatal-to-3 Outcomes?

To date, few rigorous evaluations have examined the impact of child care coaching on outcomes in the prenatal-to-3 period. Further research, particularly focusing on children under the age of 3, is needed to draw a conclusion of the impact of coaching on quality of care and outcomes for children and families in the earliest years. Additionally, the evidence to date has evaluated coaching as a programmatic strategy, rather than a statewide policy. To provide guidance to states on how best to implement coaching at scale, research examining the statewide implementation of such a policy is needed.

How Does Child Care Coaching Vary Across the States?

In the context of state QRIS, states do not vary widely in the inclusion of coaching as a means of technical assistance. Of the 42 states^{xi} with a fully implemented QRIS, 41 states^{xii} included coaching as a type of technical assistance in their QRIS. Alaska, which does not yet have a fully implemented QRIS, also provides coaching as a type of technical assistance (see Table 3 below for details).¹⁰ Child care coaching may vary across states in how states provide coaching through existing child care structures and systems, how coaching is funded, which coaching models are used, who provides coaching, and the types of coach competency guidelines or credentialing systems used.

xi State counts include the District of Columbia.

xii Alabama and Utah fully implemented a statewide QRIS in the fall of 2019. State data were not available for Alabama in the source used for this count. Utah reported that technical assistance was in development.

Table 3: State Variation in Child Care Coaching

	Vari	iation	
State	QRIS Includes Coaching as Technical Assistance	Coaching Technical Assistance Funding Sources	
Alabama	NR	NR	
Alaska	Yes	CCDF	
Arizona	Yes	State, Other	
Arkansas	Yes	CCDF, State	
California	Yes	CCDF, State	
Colorado	Yes	CCDF, State	
Connecticut	NR	NR	
Delaware	Yes	CCDF, State	
District of Columbia	Yes	CCDF, Other	
Florida	Yes	Local	
Georgia	Yes	CCDF	
Hawaii	No QRIS	No QRIS	
Idaho	Yes	CCDF	
Illinois	Yes	CCDF, State	
Indiana	Yes	CCDF	
lowa	Yes	CCDF	
Kansas	NR	NR	
Kentucky	Yes	NR	
Louisiana	Yes	NR	
Maine	Yes	CCDF	
Maryland	Yes	CCDF	
Massachusetts	Yes	State	
Michigan	Yes	ELC	
Minnesota	Yes	CCDF, State	
Mississippi	No QRIS	No QRIS	
Missouri	No QRIS	No QRIS	
Montana	Yes	CCDF	
Nebraska	Yes	State	
Nevada	Yes	CCDF, State, Other	
New Hampshire	Yes	CCDF, Other	
New Jersey	Yes	CCDF, Other	
New Mexico	Yes	Other	
New York	Yes	State, Foundation, Other	
North Carolina	Yes	CCDF	
North Dakota	Yes	CCDF	
Ohio	Yes	NR	
Oklahoma	Yes	NR	
Oregon	Yes	CCDF, State	
Pennsylvania	Yes	CCDF	
Rhode Island	Yes	NR	
South Carolina	Yes	CCDF	

Table 3: State Variation in Child Care Coaching (continued)

	Variation			
State	QRIS Includes Coaching as Technical Assistance	Coaching Technical Assistance Funding Sources		
South Dakota	NR	NR		
Tennessee	Yes	CCDF		
Texas	Yes	CCDF		
Utah	No	CCDF		
Vermont	Yes	CCDF, Foundation		
Virginia	Yes	CCDF		
Washington	Yes	CCDF, State		
West Virginia	NR	NR		
Wisconsin	Yes	CCDF		
Wyoming	No QRIS	No QRIS		
State Count	41	N/A		

Data as of December 31, 2019. The Build Initiative & Child Trends' Quality Compendium data system.

For additional source and calculation information, please refer to the Methods and Sources section of pn3policy.org.

How Did We Reach Our Conclusions?

Method of Review

This evidence review began with a broad search of all literature related to the policy and its impacts on child and family wellbeing during the prenatal-to-3 period. First, we identified and collected relevant peer-reviewed academic studies as well as research briefs, government reports, and working papers, using predefined search parameters, keywords, and trusted search engines. From this large body of work, we then singled out for more careful review those studies that endeavored to identify causal links between the policy and our outcomes of interest, taking into consideration characteristics such as the research designs put in place, the analytic methods used, and the relevance of the populations and outcomes studied. We then subjected this literature to an in-depth critique and chose only the most methodologically rigorous research to inform our conclusions about policy effectiveness. All studies considered to date for this review were released on or before March 31, 2020.

Standards of Strong Causal Evidence

When conducting a policy review, we consider only the strongest studies to be part of the evidence base for accurately assessing policy effectiveness. A strong study has a sufficiently large, representative sample, has been subjected to methodologically rigorous analyses, and has a well-executed research design allowing for causal inference – in other words, it demonstrates that changes in the outcome of interest were likely caused by the policy being studied.

The study design considered most reliable for establishing causality is a randomized control trial (RCT), an approach in which an intervention is applied to a randomly assigned subset of people. This approach is rare in policy evaluation because policies typically affect entire populations; application of a policy only to a subset of people is ethically and logistically prohibitive under most circumstances. However, when available, randomized control trials are an integral part of a policy's evidence base and an invaluable resource for understanding policy effectiveness.

The strongest designs typically used for studying policy impacts are quasi-experimental designs (QEDs) and longitudinal studies with adequate controls for internal validity (for example, using statistical methods to ensure that the policy, rather than some other variable, is the most likely cause of any changes in the outcomes of interest). Our conclusions are informed largely by these types of studies, which employ sophisticated techniques to identify causal relationships between policies and outcomes. Rigorous meta-analyses with sufficient numbers of studies, when available, also inform our conclusions.

[&]quot;NR" indicates that the state did not report these data about in the 2019 QRIS Compendium.

Studies That Meet Standards of Strong Causal Evidence

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