

Child Care Coaching Evidence

Title	Author(s)	Year	Publication Source	Sample Size (N)	Sample Composition	Data Source	Independent Variable(s)	Dependent Variable(s)	Summary of Findings	Limitations to Causal Inference	Exclusion Criteria
Emotional availability, attachment, and intervention in center-based child care for infants and toddlers	Biringen, Z., Altenhofen, S., Aberle, J., Baker, M., Brosal, A., Bennett, S., Coker, E., Lee, C., Meyer, B., Moorlag, A., & Swaim, R.	2012	Development and Psychopathology	57	33 professional caregiver-child pairs in the intervention group and 24 professional caregiver-child pairs in the comparison group	Three assessment measures were collected at pre and post- 1) the Emotional Availability Scale (EA) version 3 ; 2) The Attachment Q-Sort (AQS) version 3, and 3) The Classroom interaction scale (CIS)	<ul style="list-style-type: none"> Receipt of two 1-hour informational sessions in a group format and three to four visits by an Emotional Availability coach during a 2-3 month period. 	<ul style="list-style-type: none"> Emotional Availability-Caregiver sensitivity, structuring, nonintrusiveness, nonhostility Child responsiveness and involvement AQS- Child security CIS- Caregiver supportiveness, detachment, hostility 	<ul style="list-style-type: none"> In group x time interactions, significant differences for EA caregiver measure of structuring, EA child responsiveness, AQS security, and all three CIS caregiver measures of supportiveness and detachment No significant differences for EA measures of caregiver sensitivity, nonintrusiveness, and nonhostility, or EA measure of child involvement 	Small sample size, not double blind	
The seeds to success modified field test: Findings from the impact and implementation studies	Boller, K., Grosso, P. D., Blair, R., Jolly, Y., Fortson, K., Paulsell, D., Lundquist, E., Hallgren, K., & Kovac, M.	2010	Mathematica/OPRE	43	14 child care centers (7 T, 7 C), 43 family child care providers (23 T, 20 C)	Classroom observations conducted by Mathematica at baseline and follow-up using the ERS and CIS, self-administered questionnaires of center directors and educators (lead and assistant teachers), interviews with family care providers.	<ul style="list-style-type: none"> Coaching and quality improvement grants 	<ul style="list-style-type: none"> Child care quality (ERS, CIS, staff-child ratio, and aggregate "Seed" measure) Staff qualifications Receipt of education and professional development services outside of coaching Teacher turnover 	<ul style="list-style-type: none"> For both child care providers and centers, the ERS total score and most subscale scores at follow-up were significantly higher for treatment group There were no significant differences for the CIS total score, observed child/adult ratio, observed group size, or final Seeds score (index measure of all quality components) Lead teachers in the treatment group were less likely to leave during the study period No significant difference in turnover for assistant teachers, but turnover was higher among assistant teachers in the treatment group than the control group Caregiver-child interaction was null, but positive direction 	Small sample size, high attrition particularly in treatment group	

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Effects of professional development training on joint attention engagement in low-quality childcare centers	Cain, D. W., Rudd, L. C., & Saxon, T. F.	2007	Early Child Development and Care	35	48 child care providers selected from 27 "low-quality child care centers" (based on ITERS) randomized into Tx and control groups; the final sample was 35 (n Tx = 16, n C = 19)	authors collected data: standardized measure of quality of childcare (ITERS), a standardized measure of communication development (pre and post-test, six months between), demographic surveys and coding of videotaped child-care provider-child interactions (30 minute observation)	• Provider training on joint attention	• Joint attention engagement	<ul style="list-style-type: none"> • Trained providers exhibited more joint attention engagement during the observation • Trained providers also showed more total bids for joint attention engagement than did the teachers who had not received training • Statistically significant positive impact on verbal events • Significant differences between the two groups for F-F-T events, JAE support, and teacher-directed events • No difference for questions 	Small sample size, very high attrition	
Improving the quality of infant-Toddler care through professional development	Campbell, P. H., & Milbourne, S. A.	2005	Topics in Early Childhood Special Education	160	160 caregivers in 96 infant-toddler rooms in 48 childcare programs (convenience sample). 123 caregivers received PD course plus onsite consultation, 37 caregivers received PD course only	two observations to collect ITERS, CIS data in the month prior to training and the month following training	• First Beginnings PD program vs. First Beginnings PD program + onsite consultation	Quality: • ITERS • Arnett Caregiver Interaction Scale	<ul style="list-style-type: none"> • There were no main effects found for time or group, but there were for the interaction between time and group • The authors show the differences in pre-post scores for ITERS subscales for each group, but do not statistically analyze the difference. • No significant main effects or interactions for any caregiver interaction factor for participants 		

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Impact of in-service professional development programs for early childhood teachers on quality ratings and child outcomes: A meta-analysis	Egert, F., Fukkink, R. G., & Eckhardt, A. G.	2018	Review of Educational Research	36	studies (RCTs, QEDs, including one group pre-posttest design) of in-service professional development for ECE workers targeted to quality improvements or child development in center-based settings (serving children 0-7) published between 1970-2011 with enough information to calculate effect sizes; n = 36 studies for quality rating improvements, n = 9 studies for quality rating improvements and child outcomes; Among the 36 studies, 19 were RCTs, 9 were QEDs, and 8 were one-group pre-post	varies by individual study; overall data from 2,891 teachers included in study for quality outcomes (n by study ranged from 6-553); in meta-analysis including child outcomes, data from 486 teachers and 4,504 children were included (9 studies, 10 interventions)	<ul style="list-style-type: none"> Teacher in-service programs 	<ul style="list-style-type: none"> Standardized quality ratings Child outcomes 	<ul style="list-style-type: none"> Roughly one quarter (73) of effect sizes showed no or a negative impact, 68 were small effect sizes, 62 were medium, and about 30 percent (86) were large effects 		Age group focus; focus on short-term effects; small number of studies looking at child outcomes
Improving child care quality through an infant caregiver mentoring project	Fiene, R.	2002	Child and Youth Care Forum	38	38 caregivers (52 caregivers in 27 sites originally enrolled, 14 dropped out, half from each group)	pre-post test data on scales from 38 caregivers participating in the study	<ul style="list-style-type: none"> Receipt of 4-month-long mentoring program 	<ul style="list-style-type: none"> Change in scores (pre-to-posttest) on ITERS Arnett Caregiver Observation Scale The Knowledge of Infant Development (KIDI) The Bloom Scales of Organizational Climate 	<ul style="list-style-type: none"> The authors assert that the two groups were tested at pre-test for equivalence, with no differences detected between the groups, it is not clear if these tests were on demographics or on pre-test scores The mentoring group saw an increase in ITERS scores, while the control group saw a decrease; these were not significant changes for either group. Some ITERS subscale changes were statistically significant (p <= .05) Overall changes pre- to post-test were not significant for either the mentoring group or the control group for Arnett scores, although both saw gains The mentoring group saw statistically significant increases in subscale scores for sensitivity and appropriate discipline, while the control group did not see significant changes for either of these subscales Mentoring group saw no change on KIDI, control group saw a slight increase; both insignificant The mentoring group saw only a non-significant increase in Bloom scores and the control group saw a nonsignificant increase 	Some lack of clarity around methodology, small sample size, difficulty assessing size of changes, lack of comparison between groups, high attrition	

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Does training matter? A meta-analysis and review of caregiver training studies	Fukkink, R. G., & Lont, A.	2007	Early Childhood Research Quarterly	15	(quasi-)experimental studies published between 1980 and 2005 (including two-group and one-group designs with pre- and post-test were included)	78 effect sizes at the caregiver level from 17 treatments in 15 studies; 15 effect sizes at the child level from 4 treatments in 4 studies.	<ul style="list-style-type: none"> Fixed curriculum content Alignment of measures 	<ul style="list-style-type: none"> Effect size Study outcome size 	<ul style="list-style-type: none"> Overall effect on general caregiver competency a medium effect size, there was significant variation in effect sizes, but this was unrelated to publication type The aggregated effect size for the child data is also positive, although not statistically significant 		No focus on coaching, no focus on a specific age group
Evaluating the implementation of the Pyramid Model for promoting social-emotional competence in early childhood classrooms	Hemmeter, M. L., Snyder, P. A., Fox, L., & Algina, J.	2016	Topics in Early Childhood Special Education	40	40 preschool teachers (20 treatment, 20 control) and 494 children in their classrooms (252 treatment, 242 control); subgroup analysis focused on children at risk of behavior disorders (56 treatment, 48 control) based on clinical or borderline scores on internalizing and externalizing scales on the Caregiver-Teacher Report Form (C-TRF) of the Child Behavior Checklist	TPOT and CLASS data collection	<ul style="list-style-type: none"> Professional development support for implementing Pyramid Model 	<ul style="list-style-type: none"> Teaching Pyramid Observation Tool Classroom Assessment Scoring System Caregiver-Teacher Report Form (C-TRF) of the Child Behavior Checklist Social Skills Improvement System Focal Child Observation System 	<ul style="list-style-type: none"> CLASS (classroom quality): The authors examined the 10 dimensions separately and found significant results SSIS (social skills, problem behavior, all children): significant positive effect C-TRF externalizing scores included in SSIS models were not significant as a covariate or as a moderator FCOS: null effects Children rated better on social skills and problem behaviors in intervention vs. control group Generally small-to-moderate effect sizes 		Focus on preschoolers, teacher reported measure of social skills and problem behaviors, sample of highly-qualified teachers (not necessarily generalizable)
The Descriptive Study of Head Start's Early Learning Mentor Coach Grant Initiative: Volume 1: Final Report	Howard, E. C., Rankin, V. E., Hawkinson, L. E., McGroder, S. M., Helsel, F. K., Farber, J., Tuchman, A., Fishman, M., & Wille, J.	2014	OPRE	54	Recipients of 17-month Early Learning Mentor Coach (ELMC) grants to 131 Head Start grantees; sample size varies based on data source	Grantee census survey (121 grantees), coach census survey (384 coaches), coach telephone interview (54 coaches), staff telephone interview (80 staff members who received coaching)	<ul style="list-style-type: none"> Implementation factors 	<ul style="list-style-type: none"> Perceptions of successful coaching 	<ul style="list-style-type: none"> Grantees goals included improving classroom quality and staff practices, and addressing practices important for the CLASS Coaches were highly educated and had many years of ECE experience, though most coaches lacked extensive experience in coaching. Grantees and coaches both rated interpersonal skills as a critical qualification of coaches related to success Staff (coaches) felt that the most important qualification of a coach was background in ECE work Staff usually identified their own needs, but coaches also identified needs by observation (formal and informal observation methods/tools) Overall, staff and coaches felt positively about the program Challenges: scheduling, staff openness to improvement, staff level of engagement 	Implementation focus, not an impact evaluation, correlational	

Bold studies indicate strong causal evidence.

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Coaching in early care and education programs and Quality Rating and Improvement Systems (QRIS): Identifying promising features	Isner, T., Tout, K., Zaslow, M., Soli, M., Quinn, K., Rothenberg, L., & Burkhauser, M.	2011	Child Trends/OPRE	48	48 studies (literature review); 4 QRIS sites (multi-case study) with 19 interviews of QRIS leads, supervisors of coaches and coaches	literature review of studies, interviews with QRIS leads, coaching supervisors, and coaches	• Coaching intervention	• Measurable outcome for early childhood practitioners • Quality • Children served	<ul style="list-style-type: none"> Limited existing evidence that coaching significant impacts practitioners' knowledge, attitudes, and beliefs Evidence suggests coaching may be related to improved observed quality and practices with children Literature also suggests coaching may have a positive effect on children's language and literacy outcomes 	Literature review and case study, not impact evaluation	
The impact of professional development in family child care: A practice-based approach	Koh, S., & Neuman, S. B	2009	Part of a Special Issue: Professional Development in Early Childhood Programs	107	family child care providers working in low-income communities (providers needed to be willing to enroll in courses to pursue an AA degree in ECE, work 20+ hours/week in licensed family care setting, care for at least one child age 3-5); 33 providers in PD course group, 40 providers in PD course plus coaching group, 55 in control = 128 total at start, final sample was 107 providers	Project Great Start Professional Development Initiative; Teacher Knowledge of Early Language and Literacy Assessment taken prior to the study start and at the conclusion of the course; observations at start of intervention and late-spring for CHELLO data collection (study began in September)	<ul style="list-style-type: none"> Language and literacy coursework Language and literacy coursework plus coaching 	<ul style="list-style-type: none"> Teacher knowledge of language and literacy Teacher practice related to language and literacy 	<ul style="list-style-type: none"> No significant impact on teacher knowledge Statistically significant differences on teacher practice, medium (approaching large) effect sizes No significant differences between groups 1 and 3 on instructional practices, the course alone had no effect on quality practices in language and literacy For CHELLO subcomponents, statistically significant differences on the overall score of the Literacy Environment Checklist (structural quality) between groups 1 and 2, but not between groups 1 and 3 Providers receiving coaching and coursework improved structural and process quality of language and literacy environments Coaches supported providers in physical supports for language and literacy Coaches supported caregivers in improving adult-child language interaction and responsivity toward children Coaches helped providers identify and set literacy-specific goals and helped providers develop new teaching strategies 		

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Enhancing early child care quality and learning for toddlers at risk: The Responsive Early Childhood program	Landry, S. H., Zucker, T. A., Taylor, H. B., Swank, P. R., Williams, J. M., Assel, M., Crawford, A., Huang, W., Clancy-Menchetti, J., Lonigan, C. J., Phillips, B. M., Eisenberg, N., Spinrad, T. L., de Villiers, J., de Villiers, P., Barnes, M., Starkey, P., & Klein, A. .	2014	Developmental Psychology	65	65 teachers/classrooms in child care centers offering full-day, 2- and/or 3-year old classroom with at least 50% of children receiving subsidies; 542 children in these classrooms (approximately 8/classroom) (see notes on attrition)	teacher observation (conducted 4 times), teacher questionnaires, child assessments (conducted 3 times)	<ul style="list-style-type: none"> • Responsive Early Childhood Curriculum (RECC) intervention • RECC plus "an explicit set of activities to build social-emotional skills (RECC+) vs. control 	<ul style="list-style-type: none"> • Teacher behavior • Child's emotional understanding • Teacher rated child social-emotional functioning • Child relationship with teacher 	<ul style="list-style-type: none"> • No teacher level results were significant, but they were in the right direction • Child emotional understanding - no difference between intervention groups on expressive and receptive emotional understanding, but there were significant differences between the average of the two intervention groups as compared to the control • Child academic performance - no statistically significant differences between groups for growth in vocabulary (EOQPVT), early literacy (Pre-CTOPP), complex language (PLS-4), or math knowledge (CMA-DE) • Teacher-child relationship quality - average closeness of both intervention groups was greater than controls and average teacher conflict was lower in intervention groups than controls • Child social-emotional functioning - anxiety in BIS showed a significant difference in the slopes between intervention and control groups and between the intervention groups 	High attrition, lack of true pre- and post-tests (due to necessary timing) for children, lack of true baseline for replacement teachers	Does not focus explicitly on coaching (unable to isolate effects of caching from the larger intervention), study includes 3-year-olds in addition to toddlers
The effectiveness of coursework and onsite coaching at improving the quality of care in infant-toddler settings	Moreno, A. J., Green, S., Koehn, J., & Sadd, S.	2015	Early Education & Development	136	183 infant/toddler caregivers at pretest, 161 at posttest, 136 at follow up; providers were in a variety of settings (center-, home-, faith-based), but most were in center-based settings; sample size by group: non-intervention n = 22, community college comparison n = 23, EQ0 n = 28, EQ5 n = 26, EQ15 n = 21	Data came from observations (quality of interactions with children) and surveys of caregivers practice-based knowledge, attitudes toward children and the profession), assessed at three time points - pretest, posttest, and follow-up	<ul style="list-style-type: none"> • Hours of coaching (EQ0, EQ5, and EQ15) • The comparison group (CC, community college convenience sample) • The no-intervention comparison group (convenience sample) 	<ul style="list-style-type: none"> • Teacher-child interactions: emotional-behavioral support, support for language and learning (infant/toddler CLASS) • Knowledge (18-item scenario-based test designed for the study) • Attitudes and beliefs: self-efficacy (modification of Bandura [1993] tool), modernity 	<ul style="list-style-type: none"> • Null effect on caregiver-child interactions • Null effect for teacher knowledge • Null effect for teacher self-efficacy 		

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Training and mentoring: Family child care providers' use of linguistic inputs in conversations with children	Ota, C. L., & Austin, A. M. B.	2013	Early Childhood Research Quarterly	48	48 licensed family child care programs serving more than 4 full-time children between the ages of 2- and 4-years old (23 licensed as family home child care, 25 licensed as family group child care), n = 16 per group; 96 children, n = 32 per group	Observations and data collected at baseline (2 weeks prior to intervention), six weeks later, after the completion of training courses, and 12 weeks after baseline (posttest) at the completion of the mentoring program	<ul style="list-style-type: none"> • 10 hours in-service training on language development and verbal interactions • 10 hours in-service training and 12 weeks of on-site mentoring support (both vs. control group) 	Linguistic inputs with children: <ul style="list-style-type: none"> • Frequency of child turns • Frequency of provider linguistic inputs • Conversational cohesiveness for the provider 	<ul style="list-style-type: none"> • Control group saw no change in frequency of linguistic inputs except for questions (increased), both intervention groups saw increases in linguistic inputs over time (except directives) • Training only group had significant lower increases than training plus mentoring for information talk and teaching utterances • Null effects between training only and training plus on questions, expressive utterance, and directives 	Sample size	
Does improving joint attention in low-quality child-care enhance language development?	Rudd, L. C., Cain, D. W., & Saxon, T. F.	2008	Early Child Development and Care	121	121 children at 22 low-quality child care centers (n = 64 at treatment centers, n = 57 at control centers); 30 child care providers in 22 low-quality licensed centers (n = 14 at treatment, n = 16 control)	Standardized measure of quality of childcare, a standardized measure of communication development (pre and post-test, six months between), demographic surveys and coding of videotaped child-care provider-child interactions (30 minute observation)	<ul style="list-style-type: none"> • Provider training on joint attention 	<ul style="list-style-type: none"> • Vocabulary 	<ul style="list-style-type: none"> • Teachers in training engaged in significant more joint attention episodes • Null effects on language development 	Randomization of centers, not children (where outcomes were assessed); study attrition (differences between provider leavers and stayers); small sample of providers; lack of details on implementation	

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A development evaluation study of a professional development initiative to strengthen organizational conditions in early education settings	Whalen, S., Horsley, H., Parkinson, K., & Pacchiano, D.	2017	Journal of Applied Research on Children: Informing Policy for Children at Risk	10	Intervention group: 4 publicly funded, community-based birth to 5 early learning centers (Head Start sites) including 15 administrators and 60 infant, toddler, and preschool teachers in 21 classrooms serving >500 low-income children Comparison group: 40 early learning centers CLASS PreK data sample: 10 centers for Emotional Supports and Classroom Organization (3 Tx, 7 C), 14 centers for Instructional Supports (4 Tx, 10 C) Child sample: n =208 Tx, n = 924 C	CLASS PreK scores at center level at two time points (pre, post intervention) from the city Department of Family and Support Services (DFSS); GOLD data from DFPSS collected quarterly	• Early Childhood Education Professional Development Initiative (ECE PDI)	• Classroom instructional practice outcomes/teacher-child interaction (CLASS PreK, center level) • Teacher report of student learning outcomes (social-emotional, language, cognitive, literacy, mathematics)	<ul style="list-style-type: none"> • More than 75% of centers implemented each component of the treatment with fidelity, implementation indicators specific to coaching were high in all years • The impact of the intervention was null for all three CLASS subscales (emotional support, organizational support, instructional support) • No intervention effect difference of children receiving 1 vs. 2 years of the program • The authors used comparative time series analyses to examine 2 years of intervention vs. 2 years of control (n = 358 total) and found that the ECE PDI model intervention reduced the gap in child social emotional development between the intervention and comparison center children 	Small sample; center-level data for classroom outcomes	Intervention targeted 0 to 5 teachers, but outcomes in impact study are only for the preschool (3 to 5) population
Evaluation of Program for Infant/Toddler Care (PITC): An on-site training of caregivers	Weinstock, P., Ortiz, L., Bos, J., Dowsett, C., Tseng, F., Huston, A., Rosenthal, E., & Bentley, A.	2012	National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education	251	251 child care programs (92 centers, 159 licensed family homes); 936 children (1009 initially enrolled). Note sample sizes smaller at follow-up periods.	Baseline child and program characteristics, program assessments collected at baseline, 15 months after random assignment, and 22 months after random assignment. Child assessments collected 15 months after randomization and 23 months after randomization.	• Program for Infant/Toddler Care (PITC)	<ul style="list-style-type: none"> • Child cognitive and language skills • Child social-emotional skills • Global quality 	<ul style="list-style-type: none"> • No significant effect on child cognitive and language skills • No significant effect on child social-emotional skills • No significant effect on global quality • No significant effect on staff-child interactions 		