

Evaluation of Child Care Subsidy Strategies

Findings from the
Massachusetts Family Child Care Study

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From Insight to Impact – Worldwide



Massachusetts Family Child Care Study

- One of four experiments in the Evaluation of Child Care Subsidy Strategies
- A two-year experimental test of *LearningGames* in family child care, conducted in Massachusetts from 2006 – 2008.

Why *LearningGames* in family child care?

- **Known effectiveness**
 - Precursor was used in the landmark Abecedarian study, which made substantial and lasting impacts on children's developmental outcomes
- **Appropriate for family child care**
 - Program provides different activities targeted to children in age range birth to 5 years—suitable for mixed age settings
 - Focus is on individualized interactions with children using age-appropriate activities--suitable for settings with a small number of children
 - Goal of weaving learning opportunities throughout the day, including during routine caregiving—suitable for home-based settings with infants/toddlers who require lots of physical care

Research Questions on Impacts

- Did *LearningGames* have significant positive impacts on the level of support for development and learning that was provided to the children in care?
- Did *LearningGames* have significant positive impacts on developmental outcomes for the children in care?

Research Questions on Implementation

- Was the study's professional development model effective at training providers to use *LearningGames* with fidelity?
- What were the barriers and facilitators to effective professional development?

Massachusetts Context

- Licensed family child care represents majority of family child care in Massachusetts
- 2/3 of licensed family child care is individual providers; 1/3 is part of 55 child care networks
- Majority of children receiving subsidies are in family child care affiliated with networks
- Providers in networks receive TA and training from network home visitors; networks also manage subsidies for member providers

Recruitment and Randomization

- 15 family child care networks in Massachusetts participated in the study.
- Individual providers in these networks were eligible if they had been operating for at least two years
- 353 family child care homes agreed to participate across the 15 networks
- Within-agency random assignment meant: about $\frac{1}{2}$ of the homes from each network were assigned to *LearningGames* and $\frac{1}{2}$ to control (“*business-as-usual*”)

Findings on Implementation of Professional Development Model

- Study used a “train-the-trainer” model
 - Developer trained network home visiting staff on *LearningGames*
 - Home visitors worked with providers twice a month on implementation of the program
- Fidelity of implementation assessed by home visitors and through observations by independent observers
- Substantial variability in fidelity of implementation
- *LearningGames* providers were implementing more activities and interactions that aligned with the program

Reasons for Uneven Implementation: Problems with the Train-the-Trainer Approach

- More time was needed for home visitors to become skilled in supporting *LearningGames* before they started working with providers.
- Project coordinators, who supported the *LearningGames* home visitors, were trained at the same time and were not prepared initially to provide support.
- High level of turnover among home visiting staff and steep learning curve for less experienced home visitors.
- Some home visitors had large caseloads overall, which was reported to result in problems completing the recommended 2 visits/month to study providers.

Reasons for Uneven Implementation: Developer at a Distance

- Study under-estimated overall amount of training and technical assistance needed from developer.
- Developer did not have sufficient on-site infrastructure to support the implementation and mostly could only be in the state on a quarterly basis.

Provider Outcomes

Three over-arching constructs of provider behavior aligned with objectives of *LearningGames*

1. Provider's availability to children, *positive interactions with and responsiveness to children*, across activity contexts.
2. Provider *support for children's oral language development*, across activity contexts.
3. Provider *involvement in extended language interactions* with cognitively-rich content, with individual/pairs of children.

High Level of Sample Attrition among Providers and Children

- Provider attrition by end of study -- 56%
 - Started immediately after RA
 - Two sources: agency-level attrition (108 providers or 30%) and provider-level attrition (90 providers or 26%)
 - Agency-level attrition reduces power; provider-level attrition may also introduce bias
 - Differential provider-level attrition by group: 31% of treatment group; 23% of control group
- Child attrition by end of study – 91%
 - Related to provider attrition and to turnover among children in care

Impacts on Providers at Two Years

- Statistically significant differences between *LearningGames* and control providers on all three constructs representing changes in caregiving practices:
 - Rich oral language interactions,
 - Support for children’s oral language development,
 - Responsiveness to children.
- Effect sizes between .35 and .47 standard deviations.

Conclusions

- *LearningGames* in family child care merits further study
 - Modest provider-level effect sizes could be strengthened with stronger implementation of professional development model based on lessons learned.
 - Study could not provide findings on child-level impacts.
- Challenges of implementing to fidelity highlight need for strong infrastructure to support these types of intensive interventions:
 - Sufficient resources and time for training and supporting local TA providers.
 - Sufficient time to pilot approach before evaluating it.
- At some point, *LearningGames* could be scaled up, but not yet.

Conclusions

- All quality-improvement efforts in family child care will be hampered by high turnover among providers suggesting need for targeted PD and supports to reduce turnover.
 - Cost effectiveness issue
 - Study can provide incentives for providers to remain in business
 - Other supports need to be explored