Evaluation of Child Care Subsidy Strategies

Findings from the Massachusetts Family Child Care Study

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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 ½ of the homes from each network were assigned to LearningGames and ½ 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