

How On-Site Mentoring Improves the Quality of Infant and Toddler Child Care Providers

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The Capital Area Early Childhood Training Institute conducted the first randomized trial evaluation of a mentoring training program for infant and toddler center-based child care providers. The results are exciting – this intensive, one-on-one approach produces measurable change in caregiver behavior and the quality of care that these caregivers provide. This article will summarize the program and its evaluation, and will discuss the implications of these findings for the field of early care and education.

Introduction

In the Commonwealth of Pennsylvania, the Department of Public Welfare requires that child care providers in licensed programs complete six hours of training annually. This training has generally been accomplished through workshops that caregivers attend in the evening or on weekends. There has been concern that this model may be an ineffective intervention for improving quality because it is not targeted to specific childcare program needs. While there are a variety of topics offered in workshop training, many caregivers select trainings based on location and timing rather than on specific goals or training needs. In addition, there is often very little application of knowledge gained in workshop training to the day-to-day challenges childcare providers face in their classrooms.

Recognizing both the level of quality in infant and toddler programs and the constraints of a workshop training model, the Capital Area Early Childhood Training Institute designed a mentoring program in which seasoned professionals are paired with infant and toddler caregivers to provide on-site training using a mentoring approach. The training provided by the mentors focuses on each caregiver's goals and needs, and so varies from classroom to classroom and caregiver to caregiver. In addition, the Institute built in a program evaluation that employs a randomized design that includes both a treatment and control group.

Background

The majority of research completed on early childhood quality has focused on preschool programs, that is, programs serving children in the 3 to 5 year age range. Infant and toddler programs, for the most part, have been treated as an add-on rather than the focus of research¹. The research that has addressed quality in infant and toddler care has alarmingly documented the mediocrity of care that most programs provide.

Mentoring in childcare has been documented in the literature for the past 10-15 years². While it has been described as an effective mode of training/technical assistance, there are few, if any, demonstrations that utilize a randomized evaluation design. In addition, most of the evidence supporting the success of a mentoring intervention has been reported through anecdotal evidence rather than in quantitative, empirical results. This article will describe the tools used to evaluate the caregivers as well as the pre-test and post-test findings for the control and treatment groups.



Implementing the Mentoring Program

The mentoring program began by inviting the directors of all the licensed childcare centers that provided infant and/or toddler care in South Central Pennsylvania to a series of informational lunchtime meetings. At these meetings, we described the mentoring program, explained what would be asked of the program participants, and recruited interested center directors. The directors then coordinated with institute staff to select the caregivers to participate in the program.

Initially, the program involved 40 infant and toddler caregivers from 24 childcare programs in a three county area surrounding Harrisburg. The caregivers were randomly assigned to a treatment group and a delayed treatment group. The delayed treatment group served as a control group for the first two rounds of data collection.

During the summer of 2000, staff from the Institute collected pre-test data from all 40 caregivers, as well as from an additional 12 caregivers who participated in another mentoring program sponsored by the Institute, the Hanen Program for Early Childhood Educators/Teachers. This pre-test data included demographical information as well as the following measures:

- ❑ The Infant Toddler Environment Rating Scale (ITERS), measuring the overall quality of the environment
- ❑ The Arnett Caregiver Interaction Scale, measuring the quality of caregiver/child interactions
- ❑ The Knowledge of Infant Development Inventory (KIDI), measuring the caregiver's knowledge of child development
- ❑ The Bloom Work Environment Survey, measuring the organizational climate of the center.

The data were collected in such a manner that the individual collecting the data did not know

which caregivers were included in the treatment or control group.



Once the pre-test data were collected, the 20 caregivers in the treatment group received the mentoring intervention over a four-month time period, with the mentors visiting each caregiver at least once each week. The 12 caregivers participating in the Hanen Program for Early Childhood Educators/Teachers received a combination of group sessions focusing on facilitating language development and individual mentoring sessions. The delayed treatment group received no intervention during the four month period.

During January and February of 2001, the first round of post-test data were collected, utilizing the same data collection personnel and the same four measures described. Once again, the data collector had no knowledge of which caregivers had received the intervention and which caregivers served as the control group.

From March through June of 2001, the control group received the mentoring intervention, while the initial treatment group received no intervention. Again in July and August 2001 post-test data were collected from all caregivers.

During the initial year of the mentoring program (Summer 2000 – Summer 2001), fourteen caregivers, or 27%, dropped out of the mentoring program. These caregivers left the mentoring program, in the most part, because they either left their positions or were reassigned to another age level classroom. Because these caregivers dropped out of the study during the intervention period, there were no post-test data collected on these individuals.

Demographics

The following results were found when the demographic survey and workplace benefit summary were analyzed.

The average age of the directors in the program is 31 with a range from 24-53 years of age. They are predominantly Caucasian (81%) with 19% of other ethnic backgrounds. Eight percent of the directors involved in the study have associate degrees, 78% have bachelor's degrees, and 14% have master's degrees. They have been employed as directors in their program for an average of 31 months with a range from 1 month to 120 months. Their average pay is between \$20,000-\$25,000 per year. 60% have health insurance, 45% have some form of dental or life insurance, and 45% are in a retirement system.

The average age of the caregivers in the program is 36 with a range from 18-68 years of age. They are predominantly Caucasian (77%) with 23% of other ethnic backgrounds. 57% have high school diplomas, 16% have some college credits, 5% have CDA's, 16% have associate degrees, 5% have bachelor's degrees, and 2% have master's degrees. They have been employed as caregivers in their program for an average of 34 months with a range from 1 month to 153 months. They have worked in the early childhood field as caregivers for an average of 71 months with a range from 1 month to 312 months. Their average pay is between \$10,000-\$15,000 per year. 50% have health insurance, 33% have some form of dental or life insurance, and 33% are in a retirement system.

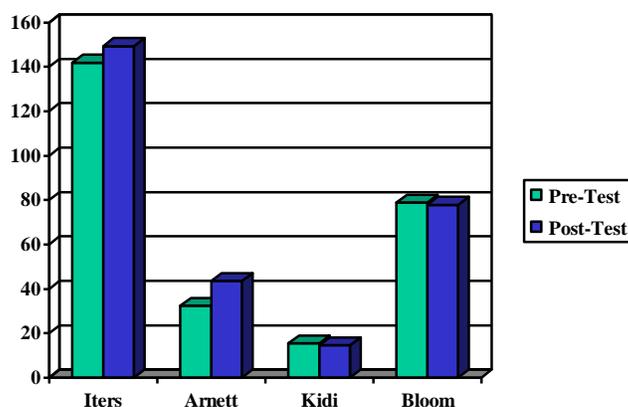
There was an interesting correlation between staff salary and turnover. There was a lower rate of staff turnover in the programs where the staff salary was higher.

Outcomes

The pre- and post-test data collected by the measures described earlier in this paper were compiled into a statistical database and then were analyzed. The outcomes after the initial study were very positive. The empirical data proved that mentoring, unlike many other forms of training, was extremely effective. The scores on the Infant/Toddler Environment Rating Scale, a tool that assesses the quality of the environment, improved by an average of 7 points. The Arnett, the tool that measures the quality of interaction between the caregiver and the children, rose by an average of 11 points. It is important to remember that prior to this study the majority of research on the effectiveness of mentoring utilized anecdotal evidence rather than empirical evidence.

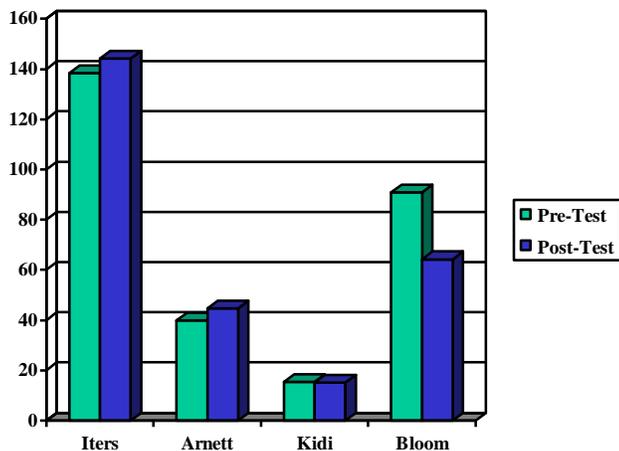
The following bar graph represents the amount of change that occurred in the fall intervention group immediately after the intervention (mentoring) took place.

Fall 2000 Group



The following bar graph represents the amount of change that occurred in the spring intervention group immediately after the intervention (mentoring) took place.

Spring 2001 Group



The intense one-on-one intervention that participants received helped them to improve the overall quality in their rooms. Because the mentor was on site and in the classroom they were able to tailor the information to fit the needs of each protégé and each classroom. The mentor helped the protégé construct new knowledge and skills and then was able to help them apply their learning in their classroom. Unlike workshop training, the traditional form of training in Pennsylvania, mentoring is individualized and different for each participant, based on their knowledge, skill, and commitment to the program.

Mentoring not only helped caregivers improve the quality of the care they were giving young children, but it also promoted a feeling of professionalism among the people who participated in the study. After the mentoring program many participants felt that they were more likely to stay in the field. One protégé shared, “Because of the mentoring program I realized I was a professional, and I was able to develop an understanding about the importance of trusting relationships with not only children but also with their parents.”

Six months after the mentoring intervention concluded, participants still were performing at a higher level than they were prior to beginning the program. Therefore, the effects of mentoring do not disappear after the mentoring stops. The effects, using the research we have now, seem to be long lasting.

Conclusion

It is clear from the data that training/technical assistance interventions are needed in infant and toddler programs because of the low scores on various program quality measures. In fact, based upon this study it would appear that if nothing is done the programs may actually get worse—the ITERS going from 137 (pre-test) to 132 (post-test). This could be an aberration in the data; however this does seem to be a trend when these data are compared to other studies³.

An interesting result was the strong relationship between organizational climate scores on the Bloom scale and the overall program quality scales—the ITERS and the Arnett. Previous research⁴ has shown the importance of commitment to professional development and the overall quality of the child care program. The results in this study also help to build upon those results by demonstrating that an organizational climate created by the director that supports openness in decision making and that encourages self-sufficiency in making decisions helps to promote a high quality child care program.

The public policy implications are significant in that this is a clear demonstration that a mentoring intervention will produce positive changes in the overall quality of child care programs both globally and with caregiver interactions. Previous research⁵ has indicated that increasing the number of training hours produces more developmentally appropriate behaviors in child care staff. Mentoring fits this model because it is an intensive one on one intervention in which the mentor and protégé are engaged in problem solving activities to improve the overall quality

of the interactions and environment of the child care program.

The other public policy implication is that even with the best training being provided to child care staff, it will not impact turnover in the long run. The only thing that has an impact on turnover from the results of this study is the salary of the staff. The higher the salary of staff, the lower the turnover rate. The compensation issue should be addressed or we will continue to train more and more staff but the children will never see the benefits because the staff will leave the early childhood field due to the low salaries.

The most important items in improving the overall quality of child care centers appear to be the following based upon this research study: training that is targeted through a mentoring approach (60-70 hours at a minimum); a highly educated director (bachelor's degree in early childhood) and teachers who have substantial experience (5 years or more in the early childhood/child care field), making a salary of \$20,000-\$25,000 for teachers and \$30,000-\$35,000 for directors; and a program director who has an open-minded decision making process.



¹ Breunig & Bellm (1996). *Early childhood mentoring programs: A survey of community initiatives*. Washington, D.C.: Center for the Child Care Workforce. Fenichel (1992). *Learning through supervision and mentorship*. Washington, D.C.: Zero to Three: National Center for Infants, Toddlers and Families.

² Clarke-Stewart (1987). In search of consistencies in child care research. In D. Phillips (Ed.), *Quality in childcare: What does research tell us?* Washington, DC: National Association for the Education of Young Children; Goelman & Pence (1987). Effects of childcare, family, and individual characteristics on children's language development: The Victoria day care research project. In D. Phillips (Ed.), *Quality in childcare: What does research tell us?* Washington, DC: National Association for the Education of Young Children; Howes (1987). Quality indicators in infant and toddler childcare: The Los Angeles study. In D. Phillips (Ed.), *Quality in childcare: What does research tell us?* Washington, DC: National Association for the Education of Young Children; Kontos & Fiene (1987). Childcare quality, compliance with regulations, and children's development: The Pennsylvania study. In D. Phillips (Ed.), *Quality in childcare: What does research tell us?* Washington, DC: National Association for the Education of Young Children; Galinsky, Howes, Kontos, & Shinn (1994). *The study of children in family childcare and relative care: Highlights of findings*. New York, NY: Families and Work Institute; Scarr, Eisenberg & Deater-Deckard (1994). Measurement of quality in child care centers. *Early Childhood Research Quarterly*, 9: 131-151; Iutcovich, Fiene, Johnson, Koppel, & Langan (1997). *Investing in our children's future*. Erie, PA: Keystone University Research Corporation; Helburn (1995). *Cost, quality and child outcomes in child care centers*. Denver, CO: Center for Research in Economics and Social Policy, Department of Economics, University of Colorado; Fiene (1995). Utilizing a statewide training system to improve childcare quality. *Child Welfare*, 74(6): 1189-1201; Fiene (1996). Using a statistical-indicator methodology for accreditation. In S. Bredekamp (Ed.), *A Decade of Accreditation*. Washington, DC: National Association for the Education of Young Children; Jorde-Bloom (1988). Assess the climate of your center: Use the early childhood work environment survey. *Day Care and Early Education*, summer 1988: 9-11; Love, Schochet & Meckstroth (1986). *Are they in any real danger: What research does--and doesn't--tell us about childcare quality and children's well being*. Princeton, NJ: Mathematica Policy Research, Inc.

³ Iutcovich, Fiene, Johnson, Koppel, & Langan, 1997.

⁴ Iutcovich, Fiene, Johnson, Koppel, & Langan, 1997.

⁵ Johnson (1994). Child care training and developmentally appropriate beliefs and practices of child care employees in Pennsylvania, Harrisburg, PA: Center for Schools and Communities.

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