The QUINCE Study: Quality Interventions for Early Care and Education

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Office of the Assistant Secretary for Planning and Evaluation (ASPE)
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Partners and Participants

QUINCE-PFI Research Teams
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Local CCR&R Agency Staff – 24 agencies in 5 states

Office of Planning, Research and Evaluation
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QUINCE Research Questions

- Does on-site consultation improve quality?
- Is PFI consultation better than existing QE?
- Can improvements be sustained?
- Do some providers benefit more than others?
- Does fidelity matter?
- Do children benefit?
Description of PFI On-Site Consultation

- A collaborative process focused on quality improvement, both environment and interactions
- 12-17 visits over a period of 6-10 months
- Joint needs assessment using ECERS or FDCRS and ECERS-E
- Consultee plays active role in the process, including goal-setting and evaluation
Goals and Content

- Goals
  - Enhance the material & teaching environment
  - Enhance childrens’ learning and development
  - Provide problem solving skills to the consultee

- Main Content Areas
  - Furnishings, space, and organization
  - Health, basic care, and routines
  - Language, literacy, and reasoning
  - Adult child interactions & learning activities
Previous Work & PFI Training

- Two studies showed significant pre to post-intervention quality gains using university consultants (Wesley, 1994) and community consultants (Palsha & Wesley, 1998).
- Consultants are trained in the PFI 6-stage process through 5 days of initial training, implementing with a pilot site, and 5 content seminars during piloting.
Design of the PFI Study

- 5 states/5 research teams: California, Iowa, Minnesota, NC, Nebraska
- 27 agencies with quality enhancement programs, typically consultation
- Directors agreed to random assignment of consultants to PFI or Business As Usual
- Directors agreed to provide adequate time for the PFI intervention
- Consultants from 24 agencies consented
27 agencies agreed to participate in the study, consultants from only 24 of these agreed to participate.

101 consultants signed a consent and were randomly assigned to Control or PFI in year 1 or year 2. The Controls assigned in year 1 had the option of receiving PFI training in year 2 and 20 did so—these are our “crossovers” – the group in the middle that were both Control and PFI. (Our statistician really doesn’t like this group!)

From the time of consent to the time of enrolling sites (remember there was an 8-10 month wait for the PFI folks to get trained and conduct a pilot), we lost 12 Control consultants and 20 PFI consultants.

The 43 Control consultants and 46 PFI consultants who actually got assigned a classroom or FCC home comprise our base sample. These folks served 189 teachers and FCC providers with Control services and 188 teachers and FCC providers with PFI services.
Criteria for Consultant Participation in QUINCE Study

- 1 year commitment to be in the study

- Commitment to implement the intervention as closely as possible to the model or the existing agency intervention

- No educational criteria – we wanted all the diversity that is typically seen
These are the responsibilities of PFI consultants in the QUINCE Study

- Train providers on rating scale and administer scale accurately
- Develop and implement an action plan with providers based on the rating scale results
- Make regular visits with providers (minimum of 1 per month for 6–10 months)
- Document visits and contacts using web-based forms and communicate regularly with the liaison
Criteria for Participation: Teachers and FCC Providers

- At least 18 and speaks either English or Spanish
- Planned to serve children for at least 1 year
- Served at least 2 children (not their own)
- Served at least 1 child $\geq$ 20 months at beginning of the intervention and not older than 50 months
- Served children for at least 20 hours per week for some morning hours
- Did not have a BA in early childhood, child development or closely related field
The data to be presented today came from interviews that were conducted at the beginning of the study. Consultants and providers (teachers and FCCs) told us about themselves, their attitudes, and their work. The Agency directors told us about their agency’s services, which were extensive in many cases; their funding sources; and we asked specific questions about their typical on-site services model.

Only 1 of the 24 agencies did not have a type of program that involved visits to providers.
Timing of Assessments

- Timing: T1 baseline
  T2 end of intervention
  T3 6 months later
- Independent, trained, reliable data collector
- ECERS or FDCRS and factor scores; professional motivation
This table includes only those folks who had ALL pieces of data.

<table>
<thead>
<tr>
<th>Characteristics of FCC Providers &amp; Teachers</th>
<th>Family Providers $M (SD)$</th>
<th>Center Teachers $M (SD)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience, yrs.</td>
<td>6.3 (7.2)</td>
<td>11.3 (7.3)</td>
</tr>
<tr>
<td>AA degree or more</td>
<td>35%</td>
<td>28%</td>
</tr>
<tr>
<td>CDA</td>
<td>10%</td>
<td>28%</td>
</tr>
<tr>
<td>Training Hours (2 yrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 11</td>
<td>18%</td>
<td>39%</td>
</tr>
<tr>
<td>11 – 20</td>
<td>21%</td>
<td>29%</td>
</tr>
<tr>
<td>21 – 30</td>
<td>30%</td>
<td>13%</td>
</tr>
<tr>
<td>More than 30</td>
<td>31%</td>
<td>18%</td>
</tr>
<tr>
<td>Adult/Child Ratio</td>
<td>.3 (.2)</td>
<td>.16 (.2)</td>
</tr>
<tr>
<td>% Children on subsidy</td>
<td>20% (.3)</td>
<td>40% (.3)</td>
</tr>
</tbody>
</table>
Summary of Quality Outcomes

- Classrooms – both PFI and Controls signif. improve over time on both ECERS factors
- FCC Homes - greater gains for PFI than controls on all 3 FDCRS factors (sign. for 2)
- Classrooms and homes - PFI significantly greater than Control on ECERS-E Literacy
- No changes in Caregiver Interaction Scale nor in beliefs, motivation, or stress
Consultant Variability in Implementing Aspects of PFI (mean item score, 1-4 scale)
We totaled the indicators to give each consultant a global score. Of our 37 consultants, 25% scored in the 1 and 2 range.....really didn't implement the PFI model. We have about 50% who scored around a 3 (so-so implementation), and we have about 25% who implemented the model closely.
Turnover has turned out to be a much bigger issue than we expected, among all categories of participants. We planned for 15% among Ts and FCCs, but expected little among consultants—they knew we needed at least a 1-year commitment.

However, we experienced significant loss of consultants, Ts, and FCCs over time. Anyone who signed a consent and agreed to be in the study is considered a participant. Our loss of consultants was 39%, that is 39% of those who consented did not complete a single site.

Teachers turnover, calculated in the worst case way—not making it to time 3—was 58%

Family child care provider turnover—also calculated as % of those who signed up who left before time 3 visit—was 37%
QUINCE Summary

- On-site consultation is effective for improving care in multiple domains; although changes are modest, they endure and grow.
- PFI seems more effective for FCC homes than typical consultation; in classrooms a wide variety of consultation models resulted in quality gains.
- QUINCE cannot predict who is most amenable to change.
- Evidence that programs must adapt to turnover at every level.
- Consultants vary widely in skills, knowledge and fidelity to a particular model of consultation.
Implications/Further Questions

- On-site consultation results in significant quality improvements; what amount constitutes “success”? How to build in accountability?
- How important is it to adhere to a particular model? If adherence is desired, training and supervision cannot be short-changed.
- Should QE programs be tiered to skills of consultants and interests of providers, different intensities, different goals?
- Programs to reduce turnover are needed.