Improving Early Social-Emotional Relationships: The St. Petersburg (Russian Federation) Orphanage Intervention Project

Chair: John W. Hagen
Presenters: Christina J. Groark, Robert B. McCall

Groark: The St. Petersburg Orphanage Intervention Project has been conducted for more than 10 years. Initially it was set up, and then funded, by a National Institutes of Health grant for 5 years. Private funding took it into the actual implementation phase in years 6 and 7. It is a unique collaboration and partnership because it is two countries working together, the Russian Federation and the United States. The teams in both countries are inter-disciplinary and include colleges and medical doctors, therapists, physical therapists, as well as educators and others.

Social-emotional development is the root of long-term mental health. Positive social-emotional development requires early experience with warm, sensitive, responsive relationships. The outcome of any intervention is to improve all aspects of the children’s development including cognition and language, physical growth and other domains.

There were two interventions: training and structural change. The training intervention included setting up a warm, sensitive environment and responsive, appropriate care giving behaviors. The structural changes intervention included changing the staff pattern so the infants see the same woman, occasionally at least, and also having times when strangers and other visitors do not walk through their wards, and other similar issues.

In St. Petersburg the project term for orphanages is “baby homes.” They are relatively safe and clean, and the food and nutrition were good. There were toys and clothing for the children, but not many of the toys were used. Since there seemed to be not a lot going on, the absence of interactive behavior was targeted by the study.

Routine care-taking duties were conducted in a mechanical, business-like manner, based on the medical model. Pediatricians and neurologists, who are the experts in the orphanages, run them. Some of these professionals still wear masks over their mouths and there is minimal interaction. It was found that in 3 hours of care-giver-initiated interaction with infants from birth to 10 months of age, there were only 18 minutes of interaction. There was minimal responsiveness, 1 to 2 minutes in 3 hours. The infants were allowed to cry continually until they stopped on their own. There was minimum play or talking with children, 12 minutes in 3 hours, and it was adult directed.

There was limited opportunity for relationship building. There were 9 or more caregivers per week, per group of 11 to 13 children. The shifts were 24 hours on and then off for 1 or 2 days, and then 24 hours back on, and then off for another 1 or 2 days. The reason for this schedule was that it was expensive for the staff to bring their lunch and to take transportation into the orphanage area. Therefore, it was easier just to stay the 24 hours. Also conforming to the medical model, they could follow the child all through day and night shifts, and could see
progress or decline in health status, if a child was sick. They believed that this schedule was
better for the children, as well as for the staff.

The children also graduated to new caregivers every 6 to 9 month depending on their
developmental progress, i.e., when they start crawling, when they start walking. They were
moved at least two to four times to new groups in their first 2 years of life. There was 15% to
30% staff turnover. In a period of 2 years, children would have 50 to 100 different caregivers.

The intervention encouraged the women to love the children the way that they loved their own
children. Most of them were kind and caring women, but they felt that it was difficult to get
close to a child who they knew would either be adopted, moved to another orphanage, or get
sick and be moved to a hospital or an isolation ward, or die. Therefore, it is difficult for the
women to love the children unless they were led to understand why it was important.
Although there was training, the summary of it was just to love the children and to build a
relationship with them. The other parts of the intervention were the structural changes of
staffing patterns and having the caregivers available to the children.

The purpose of the training was to improve the staff’s socially responsive and appropriate
care giving behaviors resulting in good outcomes for children’s development. Characteristics
of the training included the train the trainer model, where experts were first trained in each of
the orphanages and those experts did the training of the caregivers themselves. As new
caregivers were hired, there was orientation provided by the experts. They used many
supervision techniques that fostered constant follow-up and reinforcement of the training,
including reflective supervision, as well as some other more traditional ways of supervising.

Training was based on Promising Practices of the National Association for the Education of
Young Children, as well as the Council for Exceptional Children, the Division of Early
Childhood. There were twelve 3-hour sessions, plus constant supervision afterwards, with
discussion and demonstration.

Structural changes were implemented after the caregivers were trained. Rooms were
rearranged to make smaller quarters and smaller groups so the women could practice what
they learned in training. They now understood how important it was to build relationships.
Group sizes were reduced from 11 to 14 children, to 5 to 7 children. Whenever there was a
problem, the staff was encouraged to go back into the family-like environment that they were
trying to create and find a solution based on what would be done in their own families.

The caregivers remained in the program and the child stayed with them for at least the first 2
years of life. Sub-groups were then integrated by age and disabilities in order to create a
family-like environment. Each sub-group would have a family hour. One hour in the morning
and one hour in the afternoon, the doors would be closed and the caregivers would sit quietly
and work or play with the children that were in their group.

The post-intervention staffing patterns worked. There were two primary caregivers per sub­
group, with overlapping schedules, so they were able to talk about what happened on the
previous shift. The shifts were 5 days a week and one of the staff was there for 7 days a week.
The children could recognize one of them at all times so that it was more like a family environment. The children had six caregivers per week where they used to have nine plus. The number of hours that that children had care given was the same as before the intervention.

**McCall:** The idea was to have two interventions: one with primarily an emphasis on social-, emotional-, and relationship-building, and the other supportive, in orphanages that were primarily deficient only in that way, but the medical care, sanitation, and nutrition were fine. The children in these orphanages were exceedingly delayed. Approximately 60% were below the 10th percentile in physical growth and behavioral development and 90% to 95% were below the median of parent-reared children.

The design was deceptively simple. There was training and responsive care giving plus structural changes, which provided a relationship-building environment, implemented in one orphanage. A second orphanage was given training only. And at approximately the same time, in a third orphanage, there was no intervention.

The children were measured at intake, every 3 months until a year, every 6 months until 2 years, and then every year until departure. Children did not come at birth and did not stay until age 4. They were coming and going at every age for indeterminate amounts of time. They got adopted, returned to their parents, or eventually, they graduated to another orphanage.

Medical circumstances, physical growth, mental development, motor and functional abilities, and social-emotional development were measured. The interventions were successfully implemented. There were an increased number of consecutive days worked by the primary caregivers. And there were a reduced number of caregivers per child in the baby home that got the structural changes.

Caregivers improved their care giving behavior. They worked 3 to 4 consecutive days and overlapped their schedules so that one of them was there all the time. The double intervention was understaffed at the beginning, but then the structural changes were implemented. Then they had 6 caregivers per sub-group, whereas the other homes had more than 9, which was the scheduled amount.

The double intervention did well. In the social sense, the caregivers increased in their social behavior over the years because it was more fun, and the children were more social. And so the two rewarded each other.

The effects were stronger in the double intervention than in the training—only one. In some cases, the effects only occurred in the double intervention. But in most cases, for general development, both the training and the training plus structural changes were better than the orphanages with no intervention at all. For many of the variables, the longer children were in the intervention, the better they did. That is, they continued to gain ground relative to the other groups.
Training programs, personnel preparation programs for early childhood care and education people in the United States tend to emphasize skill building, not social, emotional or personal relationships. The kind of structural changes that were implemented are not common. There are data that show that children develop better in integrated groups. The results provide impetus to early care and education programs in the United States to pay more attention to social emotional relationships.