

ed

early developments Frank Porter Graham Child Development Center

Winter 2002 | Volume 6, Issue 1

Social Processes and Outcomes

Relationships critical to healthy development

Challenging behavior in preschool classrooms:

Linking research to practice

Effects of quality care and mother's depression

Continuity of care

FPG Recent Publications

Friendship formation

NCEDL News

Effects

of quality care and mother's depression

RESEARCH INVOLVING SCIENTISTS AT FPG is adding to the growing body of evidence that shows how early education affects children's behavior, language and cognitive skills. A study sponsored by the National Institute of Child Health and Development found that three aspects of care were most predictive of children's language skills: how much caregivers talked to children, how much they responded to a child's question and whether the caregivers asked children engaging questions.

Interestingly, this study also found two factors that could hinder a child's cognitive development: too much TV and a poorly organized physical setting.

Earlier data from the same study showed that children of depressed mothers performed more poorly on measures of school readiness, verbal comprehension and expressive language skills at 36 months of age than children of mothers who never reported depression.

Children of depressed mothers were also reported to be less cooperative and to have more problem behaviors at 36 months. But these effects only occurred when depression resulted in less sensitive behavior on the part of the mother. Depressed mothers who were also poor were more likely to show low sensitivity to their children than mothers with more financial resources.

Collectively these findings show the value of caregiver sensitivity, the power of simple conversation and interaction, and the benefits of having stimulating materials in children's settings.

"In summary, these data underscore, again, the fact that high-quality child care can have many benefits for children," said Martha Cox, former senior scientist at FPG, now Director of the Center for Developmental Science at UNC-CH and one of the lead researchers nationally on the project. Working with her is Peg Burchinal, who directs FPG's design and statistical unit and serves as methodologist for the entire study, which is the largest long-term investigation of its kind ever undertaken. NICHD is following about 1,100 children from infancy, assessing the effects of child care.

The most recent data show that at age 4, children in better quality child care score higher on tests of thinking and language skills than others who stay home or who receive lower-quality care. Those findings mirror results reported two years ago for the same children at age 3.

"This is an important study because at age 4 children make the transition into school, and there are a number of expectations that we haven't imposed on them in quite the same way before," Cox said. "They go to school and are expected to have or attain skills related to reading and also cooperate in routines that are much more formal than what they were used to."

High-quality care

Both high-quality care, regardless of type, and center care, independent of quality, appeared to boost intellectual growth, memory and language skills. Differences were small but statistically significant. Those in lower quality care, for example, fell into the 42nd percentile, on average, in pre-academic skills, while those in higher quality care averaged the 57th percentile, Burchinal said.

Children with fewer than 10 hours a week of center care averaged the 44th percentile in language skills, while those with 30 or more hours a week fell into the 57th percentile, on average.

“This work documents more strongly than ever before that better educated and trained teachers are providing more language stimulation so that that the children they take care of show enhanced intellectual growth regardless of family background,” Cox said. “Quality indeed makes a difference.”

Unfortunately, one negative finding in the study caught the attention of some media, which lost sight of the many positive findings. The study found that youngsters spending more time in child care in general and center-based care in particular were somewhat more aggressive than other children who spent less time there or who remained at home.

Cox said, “Whether that heightened aggression is a problem that will continue remains to be seen.”

Researchers found that children who spent more time in care outside the home were somewhat more aggressive toward other children and disobedient or defiant toward adults at 54 months and later when they were in kindergarten. They also were more likely to bully, fight with or act mean to others.

“We saw that three times as many kids with extensive child care – 30 or more hours per week on average between birth and 54 months – had behavioral problems compared

with children with little child care – less than 10 hours per week on average,” Burchinal said. “That was 16% of subjects in the former group versus 5% in the latter.

‘Behaviors not extreme’

“At the same time, though, we want to emphasize that these were not extreme behaviors, were well within the normal range and might or might not disappear entirely later on,” she said. “By the time the children were in kindergarten, differences had narrowed to 17% versus 9%.”

Cox pointed out that the 17% figure is comparable to the number of kids in the normal population who would also be active in such ways occasionally. “Instead of citing this figure in an attempt to cast child care in a negative light, we should be using it to ask how to make child care better.”

Burchinal noted that while 17% such children exhibited some modest behavioral problems, 83% are doing just fine. Higher quality care corresponded with fewer problem behaviors, the study showed. Center care during infancy was not linked to either positive or negative trends among participating children.

The study found that children who watched more television scored lower on tests of mathematical reasoning and vocabulary and displayed more behavior problems. >

This work documents more strongly than ever before that better educated and trained teachers are providing more language stimulation so that the children they take care of show enhanced intellectual growth regardless of family background.





Women who were despondent most of the time not only were least sensitive but also were the only group to show a decline in sensitivity between the 15-month and 24-month assessments.

Depressed mothers

The earlier data about depressed mothers showed that maternal sensitivity played an important role in the well-being of children. Even when mothers were depressed, if they were also sensitive, their children fared better. Mothers who were respectful of their children, who were supportive of their children's activities and did not interfere unnecessarily, and who responded appropriately to their children's emotions were rated as sensitive.

"Even if mothers continue to be depressed, they can still provide the kind of experience their children need," Burchinal said. Also, women with higher incomes and other advantages were more responsive and played better with their children despite their depression possibly because they were less stressed. "Income made no difference in sensitivity and responsiveness among mothers who were not depressed, but was significant for the depressed mothers," said Cox.

Research has shown that mothers' interactions with their offspring play a crucial role in children's mental development, of which language skills are an important part.

Investigators consider their sample moderately representative of US mothers and their children. Overall, about 55% of the participants were never depressed and 8% were chronically depressed.

Women who were despondent most of the time not only were least sensitive but also were the only group to show a decline in sensitivity between the 15-month and 24-month assessments. As toddlers emerged from the period that some call the "terrible twos" and became less willful, interactions with mothers grew more positive.

In addition, at 36 months, the children were tested for cognitive and language development and observed following requests to clean up toys. Mothers also reported on their children's social behavior.

"Among other things, our findings suggest that women who are depressed shouldn't just

tough it out but instead should seek help from health-care professionals and support from family and friends,” said Cox.

“We tend in our society to expect people to deal with their problems by themselves unless those problems are just very extreme,” she said. “Our group of mothers were not chosen because they had come to clinics for help but were just a community sample of women having children. Other studies have shown that women with young children are particularly vulnerable to depression, and our new findings indicate strongly that the depression can have important consequences for children.”

SUMMARY OF KEY FINDINGS

- Both high-quality care, regardless of type, and center care, independent of quality, appeared to boost intellectual growth, memory and language skills
- Higher quality care corresponded with fewer problem behaviors
- Three aspects of care were most predictive of enhancing a child’s language skills: how much caregivers talked to children, responded to a child’s question and asked children questions to prompt discussion.
- Two factors may hurt a child’s cognitive development: too much TV and a poorly organized physical setting.
- Children of depressed mothers performed more poorly on measures of school readiness, verbal comprehension and expressive language skills at 36 months of age than children of mothers who did not report being depressed.
- Children of mothers who had more prolonged depression were seen as less cooperative, and their mothers reported the children had more problem behaviors than children whose mothers were never depressed. These children also scored lower on tests of school readiness, expressive language and verbal comprehension.



AviGoldscheider

Other findings

- Children of mothers who had more prolonged depression were seen as less cooperative, and their mothers reported the children had more problem behaviors than children whose mothers were never depressed. These children also scored lower on tests of school readiness, expressive language, and verbal comprehension. Children of mothers who were depressed some of the time fell in between these two groups.
- Children whose mothers were more sensitive did better on cognitive and language tests, were more helpful in the clean-up task, and their mothers reported them to be more cooperative and to have fewer problem behaviors, regardless of their mothers’ level of depression.
- Lower levels of maternal sensitivity in depressed mothers partly explained their children’s poorer school readiness, verbal comprehension, and expressive language and higher rates of problem behavior. This suggests that depression can lead to less sensitive maternal behavior which, in turn, leads to poorer child development.

|ed|