

## Preschool day care: Which type is best?

Quality of day care for young children is the focus of a “second wave” of research on child care by non-family members. The “first wave” of research concluded that there is nothing inherently harmful about the day care experience: Children receiving good care outside their homes are not at a measurable disadvantage when compared with children who stay home with a parent. Now researchers are comparing children in various situations to ask what is the best day care environment.

Children attending nursery school programs score consistently high on measures of “developmental competencies,” especially cognitive ability, social knowledge and sociability with an adult stranger, reports Alison Clarke-Stewart of the University of California at Irvine. Children home with babysitters score the lowest on these measures.

Clarke-Stewart’s “Chicago Study of Childcare and Development” compared 80 children aged 2 and 3, mostly of middle-class and professional-class families, in four popular types of day care. Children going to another family’s home for small-group care were most sociable, but least independent from their mothers. Children in full-time day care were most independent and highest in social reciprocity—for example, how cooperative the child was with the mother.

The investigators also examined how the children’s skills related to characteristics differing among day care situations of the same general type. Among the findings were that children in a home setting do best when they interact frequently with a few other children; when there are no infants and younger toddlers present; and when the home is orderly, with few “adult-oriented decorative items.”

In nursery schools and day care centers, children do best in small (less than 18-member) groups of same-age or older children. The most effective teachers are those with a high level of overall education. “What was important, it seems, for children’s all-around competence, was that the teacher not be too strict and demanding, nor too fond and physical,” Clarke-Stewart says. “In short, there were clear and sensible links between children’s experiences in their day care settings and how they performed in standard situations that reflected their abilities. . . .”

However, Clarke-Stewart points out one “critical constraint” on her findings: Children were not randomly assigned to the day care programs. The parents who put their children in nursery school and day care centers were themselves the most highly educated. Clarke-Stewart concludes, “Day care is simply part of the child’s total milieu.”

A narrower focus on day care centers in another study also indicates that a child’s intellectual, language and social skills, as well as emotional adjustment, relate to the “total quality” of the day care environment. Quality of child care was described on the basis of language, reasoning and motor, creative and social activities, as well as furnishings, personal care and staff facilities. “Not surprisingly, good things tend to co-occur in day care centers,” Kathleen McCartney of Harvard University says.

“The study is of social policy interest because it clearly documents the impact of individual differences among day care environments,” says McCartney. Children of 166 families in nine day care centers in Bermuda were included in the study. In Bermuda, McCartney says, family characteristics play a minimal role in determining which day care center a child attends. The analysis took into consideration the age of each child, family characteristics, age at which the child began group day care and the amount of time the child spends at the center.

Neither of the last two characteristics affected children’s measured skills or emotional adjustment. The investigators separately assessed the children’s verbal interactions and found that the amount of conversation with caregivers correlated positively with the children’s intellectual development, language development and social skills.

## Born smart: Imitation of life

Most traditional theories of infant development, including those of Piaget, posit that infants first become able to imitate facial gestures at about 1 year of age, and that they are able to perform “deferred imitation”—to imitate something they can no longer see—at 18 to 24 months of age. Such assumptions are among the cornerstones of infant cognitive and social development theories, says Andrew N. Meltzoff of the department of psychology at the University of Washington in Seattle.

“If these traditional assumptions are in error,” Meltzoff says, “then predictions about cognitive and social skills in later infancy that derive from these foundations may also be mistaken.” On the basis of their findings with very young infants, Meltzoff and his colleagues have concluded just that.

In one study, the researchers exposed 40 infants under 72 hours old (one as young as 42 minutes) to various “facial displays,” primarily consisting of someone’s mouth opening and tongue protruding. “The results clearly showed that even these newborn infants could imitate,” Meltzoff reports.

In a second study, 14- and 24-month-olds observed a demonstrator pulling apart a small, dumbbell-shaped toy, which the infants had never before seen. After a 24-hour delay, the infants were again presented with the same toy; a control group of infants was given the toy to play with without having seen the adult demonstration.

Meltzoff and his colleagues found that “infants, even those as young as 14 months old, can perform deferred imitation.” On a broader scale, the results, he says, “show that young infants—even newborn babies—are interested in, even fascinated by, the human beings in the world around them. It is this idea of young infants as actively working to make sense of their world that has some important implications for our theories of perceptual, cognitive and social development.”

## I think, therefore I can

On the surface, it sounds logical. If people *think* they can quit smoking or overcome a “simple” phobia, like fear of spiders, then they are more likely to do so than people who don’t think they can do it. In the world of behavioral research, they call this kind of confidence “perceived self-efficacy,” and the roads leading to it have many twists and turns, even dead ends.

But once it is achieved, perceived self-efficacy—the belief that one can exercise influence over one’s motivation and behavior—seems to be the key to overcoming such long-standing roadblocks. “We’ve been able to eliminate snake phobias in two hours in people who have had them for 10 or 15 years,” says Albert Bandura of Stanford University, who presented findings on the technique along with other researchers from Stanford and several other institutions.

One of the techniques employed by Bandura and others is “guided mastery,” which the researchers reported to be superior to the standard behavior modification technique of simply increasing the time spent in the feared situation. In the “mastery experience,” Bandura says, situations are created in which people come to believe they can succeed. While this may involve graduated exposure, it also involves more “activeness on the part of the therapist,” says S. Lloyd Williams of Lehigh University in Bethlehem, Pa.

Williams, Bandura and others reported promising success using such techniques with phobics, smokers who want to quit and heart attack victims trying to return to normal levels of activity. “Efficacy is different from general self-confidence,” says Carlo C. DiClemente of the Texas Research Institute of Mental Sciences in Houston. A confident person can be nonconfident about giving up smoking or touching a spider, he notes. “Any treatment will change efficacy,” he says. “The question is what treatments are better?”