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What is "High Quality" Day Care?

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Children develop better in a high quality day care setting than in one of low quality. This fact surprises no one.

What may surprise you is that scientists have only recently completed the research to support this belief. You may be interested to know what they found, and how they defined "high quality" in day care.

Past Research on Preschool Enrichment Programs.

Past research has seldom been able to describe quality in child care. First, it has mostly looked at preschool enrichment programs, rather than all-day child care. Second, most of the research contrasted daycare children with no-daycare children. This meant that high and low-quality daycare were lumped together, so we couldn't really see if quality mattered.

This past research was important nonetheless. It showed that low-income children who received a preschool enrichment program such as Head Start had immediate gains in intellectual achievement, and in later school years were less likely to be retained in grade or need special education (Lazar et al., 1982).

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If these children had been in a program that emphasized child-centered learning, in which the teacher and child both planned and initiated activities together (as opposed to a rote-learning approach directed by the teacher only), then evidence suggests a variety of positive indirect effects in early adulthood. These include lower levels of juvenile delinquency, less teenage pregnancy, greater educational attainment, and greater likelihood of being self-supporting (Schwinhart et al., 1986).

These long-term benefits of high quality preschool education for low-income children translate into economic savings for the community. They reduced the need for special educational services, juvenile law enforcement, welfare for unwed mothers, and so forth.

A cost-benefit analysis of one of these programs estimated a return (in savings) of \$7 for every \$1 spent on these programs, after adjustment for inflation and investment opportunity costs (Berrueta-Clement, et al., 1984). A U.S. House of Representatives committee reviewed the evaluations of several programs like this one. Their estimate was more conservative: one dollar invested in a high quality preschool program for low-income children returns \$4.75 in savings to the community (House Select Committee, 1986).

Daycare Quality: The Bermuda Project.

Recently research has been extended to include children from all socio-economic levels in daycare of varying quality. One research investigation in particular will be described.

The study was conducted by American scientists with support from the government of Bermuda. Bermuda is a good place to study daycare: 84% of Bermudan two-year olds spend most of the work week in daycare. The kind of daycare centers studied reflect the real child care choices available to most families, both in Bermuda and the U.S.

The children were three years of age or older at the time of the study, and their average age of entry into daycare was 19 months. The researchers observed and measured the quality of each daycare setting, and the level of social, intellectual and language development of 166 children.

The most general question the scientists wanted to answer was this: Does the quality of the daycare center matter for child development? Do children develop better in some daycare settings than in others, and can we describe how the better settings are better?

They found that the quality of daycare does matter. The children in the high quality centers scored higher in language and intellectual development. These children were more task-oriented: they were more likely to stick to a task until it was finished. Their daycare teachers also rated them as more considerate of others and more sociable (Phillips et al., 1987).

Other Research Agrees.

Other research projects have found results similar to the Bermuda study (Belsky et al., 1982; Howes & Olenick, 1986; Ruopp et al., 1979). When the child care program had:

- fewer children per adult,
- smaller group sizes,

- more teacher training,
- less staff turnover, and
- active involvement of parents in the program,

then the children were likely to be:

- more compliant and cooperative,
- less impulsive,
- more persistent on assigned tasks,
- and they scored better on reading readiness tests.

In sum, we now have solid evidence for what many parents and daycare providers have long suspected: that good daycare can be a lot more than just custodial care or babysitting; good daycare really helps children grow and learn.

Do Benefits Last?

Do these benefits last, so that children from high and low quality child care continue to look different in later years? Yes, they do appear to last. A study released last year (Vandell, Henderson, & Wilson, 1987) observed four-year olds in day care, and then observed them again when they were eight-year olds. Compared to those in low quality care, the eight-year olds who had experienced high quality day care were:

- more socially competent with peers,
- more compliant with adults, and
- less easily frustrated.

The researchers asked the children's schoolmates what they thought of them. The children who had been in high quality care four years earlier were likely to be described by other children as "cooperative" and as a "leader". The children who had experienced low quality child care were more likely to be called "shy" or "disruptive".

To be cautious, we should note that these differences at age eight could be caused, not just by differences in quality of care, but also by differences between parents who choose high vs. low quality care for their children.

Defining and Measuring Quality.

How did they define "high quality" child care? The Vandell research group studied children from six day care centers. They found that the good centers were good in many ways:

"Some children attended well-equipped spacious centers with good adult-child ratios, well-trained teachers, and small classes, while other children attended large centers which were crowded, poorly equipped and had poor adult-child ratios, un-trained teachers, and large classes." (pg. 5)

Table 1

Characteristics of the Day Care Centers
Used by Four-Year Olds
In the Research Study by Vandell et al. (1987)

	Centers					
	1	2	3	4	5	6
Class size	13	24	26	32	38	90
Center size	42	50	58	132	160	215
Sq. Ft. per child	60	60	49	31	54	23
Adult-child ratio	1:6	1:4	1:13	1:15	1:23	1:25
Toys/materials	E	E	E	G	P	G
Staff training	H	H	H	M	L	L

Key: Toys/Materials: E = Excellent
G = Good, adequate
P = Poor

Staff training: H = College degree in child development or ECE
M = Some college
L = No college training

Table 1 (above) shows exactly what the six centers were like. They are ranked from highest quality (center number 1, the first column) to lowest (number 6). The differences between the centers are striking! Note the adult-child ratios. The lowest quality center had four times as many children per adult as the highest quality center (25 per adult vs. 6 per adult). The lower quality programs, in fact, had far more children per adult than is legally allowed in our own state of Wisconsin.

The researchers found that children in the better quality programs had more positive interactions with their teachers, while children in poorer quality programs spent more time in unoccupied behaviors and in solitary play. This is why staff training, etc., are important. In "well-equipped spacious centers with good adult-child ratios" you are more likely to find the kind of adult-child interaction and constructive peer interactions that lead to child development.

The research of the Bermuda group also helps us begin to define "quality" in daycare. They defined quality by using a 37-item scale called the Early Childhood Environment Rating Scale, or the ECERS (Harms & Clifford, 1980).

A research observer using the ECERS would visit a daycare center all day and score it, from 1 to 7, on each of the 37 items. The items can be clustered into seven general areas: personal care routines, creative activities, language and reasoning, fine and gross motor, social development, furnishings, and adult facilities and opportunities.

While the ECERS measures a variety of things about each daycare center, the findings showed that when a center was rated high in one area it was likely to be high in the others as well. Good centers were good in many ways.

Exactly What Were the Researchers Looking At?

Let's look at an example. Item number 14 of the ECERS is used to measure the amount of informal language interaction of the caregiver with the children. It is reproduced below.

Rating	Informal use of language	OR	Informal use of language (Infants/toddlers)
1 Inadequate	Language outside of group times primarily used by staff to control children's behavior and manage routines.		Little or no talking to infants and toddlers.
2	Staff sometimes talks with children in conversation, but children are asked primarily "yes/no" or short answer questions. Children's talk not encouraged.		Language used primarily to control child's behavior (Ex. No,no!).
3 Minimal	Staff-child conversations are frequent. Language is primarily used by staff to exchange information with children and for social interaction. Children are asked "why, how, what if" questions, requiring longer and more complex answers.		Caregiver responds to sounds infants make, engages in verbal play (Ex. sings to child, imitates child's sounds). Staff repeats what toddlers say, expanding and elaborating when appropriate.
4			
5 High Quality			
6			
7 Excellent	Staff makes conscious effort to have an informal conversation with each child every day. Staff verbally expands on ideas presented by children (ex. adds information, asks questions to encourage child to talk more).		Everything in 5 plus staff talks to child during routines describing activity child is engaged in. Encourages toddlers to use words. Maintains eye contact while talking to child.

The first column is for use in centers with preschool-aged children, while the second column is for infant/toddler groups. The top paragraph describes inadequate language stimulation. Each paragraph down the list describes increasingly better language stimulation. As used by the researchers, a center was given a score of 7 (exceptional quality) only if it met the criteria under number 7 plus all the criteria in the previous paragraphs.

In centers that scored higher on this language interaction item, parents and caregivers alike rated the children as more considerate. The caregivers also rated these children as more sociable, intelligent, and able to concentrate on specific tasks.

Here is another item, this one from the section on personal care routines. It measures the quality of the greeting and departing routines, including contact with the parent:

Rating	Greeting/departing
1 Inadequate	No plans made. Greeting children is often neglected; departure not prepared for
2	
3 Minimal	Informally understood that someone will greet and acknowledge departure.
4	
5 High Quality	Plans made to insure warm greeting and organized departure. Staff member(s) assigned responsibility for greeting and departure of children. (Ex. Conversation on arrival; art work and clothes ready for departure).
6	
7 Excellent	Everything in 5 (Good) plus parents greeted as well as children. Staff use greeting and departure as information sharing time to relate warmly to parents.

The "language use" and "greeting/departure" items can also be found on a newly developed scale, the Family Day Care Rating Scale, or FDCRS (Harms & Clifford, 1984). This new scale is a version of the ECERS especially adapted for use in family day care.

Because each item in the ECERS and FDCRS has 4 descriptive paragraphs, outlining progress from low to high quality in each area, child care providers can see for themselves where they stand in each area, and exactly what they need to do next to improve their quality. Some people have used them for self-evaluation and self-study, and have found them very instructive (Kon-

tos & Stevens, 1985). Some Extension Home Economists in Wisconsin have used the ECERS and FDCRS this way with support groups of child care providers.

One complaint is that the ECERS and FDCRS focus largely on aspects of the daycare physical environment, like availability of play materials, while placing less emphasis on the provider's behavior. Only about one-third of the scale items deal with the quality of adult-child interaction, like the "language use" item. Nonetheless, the research results show that scores on the ECERS really do predict better child development. It is hard to argue with that!

Why are Some Daycare Centers Better?

Like other researchers, the Bermuda project documented that higher quality adult-child interaction and better child development were more likely when the center had fewer children per adult, and when the staff had specific training in child care or child development. As a result of their research, the Bermudan government now requires day care staff to complete a 40-hour course at a community college.

These findings demonstrate the wisdom of day care regulations here in Wisconsin. There is good reason for the state to enforce a limit on the number of children per provider. It makes high quality adult-child interaction more likely. The course work required for licensing, and the continuing education requirement, can also be seen as part of the state's commitment not just to children's safety and health, but also to children's intellectual and social development.

If we combine the evidence of the Bermuda study with earlier findings (see Belsky et al., 1982), what seem to be the key indicators of high quality day care? We can say with some confidence that young children's social and intellectual development are generally enhanced by:

- smaller groupings of children;
- fewer children per adult;
- specialized caregiver training or education;
- greater adult-child verbal interaction;
- caregiver stability (few changes in caregiver and low staff turnover);
- active involvement of parents in the program.

For providers who want to develop the quality of their day care settings, taking courses and attending inservices are excellent ideas. The annual conferences of the Wisconsin Early Childhood Association and the Wisconsin Family Day Care Association are great places to gain insights from others. The VTAE college system in Wisconsin

offers courses in child development and early childhood education. Both the VTAE system and University Outreach in Madison offer self-study (correspondence) courses. The state's Child Care Information Center is a resource library serving child care providers across the state. And for those day care providers who seek the latest research-based advice, the ECERS and FDCRS are extremely helpful self-study tools.

RESOURCES

The ECERS and FDCRS are copyrighted. The ECERS can be purchased from Teachers College Press for \$7.95, and the FDCRS will soon be available at a similar price.

The Wisconsin Early Childhood Association and the Wisconsin Family Day Care Association share the same address: 1245 East Washington, Suite 260, Madison, WI, 53703. Telephone: 608-257-0909.

The VTAE system has campuses across the state. For information on their correspondence courses, write to the Home Economics Dept., at their Madison campus: 3550 Anderson, Madison, WI, 53704. (608-246-6300)

For information on correspondence courses offered by Madison Education Extension Programs write to 160 Education Building, 1000 Bascom Mall, Madison, WI, 53706. (608-263-5140)

Wisconsin's Child Care Information Center has books, articles, video tapes, etc., on just about any child care topic you can imagine. They loan materials through the mail. Their address is 317 Knutson Drive, Madison, WI, 53704. They have a toll-free number: 800-362-7353. (Local calls: 266-1164.)

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