News & Comment

Head Start Enters Adulthood

After 25 years we don't know much about how early childhood intervention programs work, but current research suggests they should be extended beyond early childhood

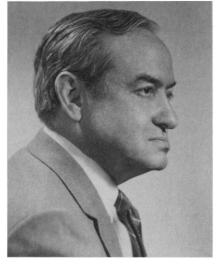
IN HIS RECENTLY PROPOSED BUDGET President Bush requested a \$500-million increase for Head Start. That would be a 28% jump—the largest in its 25-year history—for the preschool program, raising its total allocation to \$1.9 billion. Bush's proposal was a first step in making good on what was probably the politically safest promise he made during his presidential campaign: to increase Head Start funding by \$1 billion.

There seems to be little question that Congress will go along with the President's request. Indeed, Head Start-and other programs like it that aim to boost the life chances of disadvantaged children-are almost universally popular. Reflecting that Oregon Governor enthusiasm, Neil Goldschmidt recently called for an expansion of his state's Head Start program, saying that such expansion would be the "most significant-the most effective-anti-drug, anti-crime, pro-education strategy" in America. Many educators take that assumption as an article of faith, assuming quality preschool programs trigger a process that creates a lasting positive effect on young lives. But is the evidence there to support these grand claims?

Examination of the research that has been done on early intervention programs since Head Start began in Lyndon Johnson's Great Society suggests it is not. There seems little question that Head Start and other programs do prepare children better to start kindergarten and first grade. But on the tougher question—Do preschool programs keep kids in school longer and launch them into more productive lives?—most researchers say the jury is still out.

Despite 25 years of research little is known about what, specifically, makes early intervention programs effective. Many scientists believe most of the research to date has been based on simplistic assumptions and that we are only now on the threshold of the sophisticated kind of research needed to make early-intervention policy.

This lack does not mean that Head Start should be thrown out. On the contrary, the latest research on educational intervention suggests that such programs ought to be extended—to the third grade, say—in order to have maximum impact. But what is clear



Head first. Edward Zigler of Yale University, first director of Head Start.

is that many of the inflated claims made for Head Start and similar programs need a critical reexamination.

One reason for the confusion over Head Start and similar programs is that their goals have changed over the last two-and-a-half decades. Those changes reflect new research findings and also modifications in the strategies of the programs' defenders.

The original concept underlying Head Start-which was launched in absence of any research base-was that a brief intervention in the early formative years could "inoculate" children against the ravages of their environments. Says Edward Zigler of Yale University, Head Start's first director: "In the 1960s we believed early childhood was a magic period during which minimal intervention efforts would have maximal, indelible effects on the child." Zigler himself has always had modest expectations for Head Start, but most educators believed that raising childrens' IQs was the key-because IQ tends to correlate to a significant degree with other desirable behaviors, such as school achievement, persistence, motivation, social skills, and self-confidence.

The first blow to this view was delivered in 1969. In that year a report on Head Start performed by the Westinghouse Learning Corporation revealed that IQ gains by children in preschool programs dissipated by

the time they reached third grade. The Westinghouse report was heavily criticized at the time, but since then dozens of studies have confirmed its finding that the intellectual effects of Head Start and similar efforts are short-lived.

The most comprehensive review done so far of experimental programs begun in the 1960s—carried out by a group called the Consortium for Longitudinal Studies shows preschool intervention can bring about significant improvement in childrens' verbal abilities, emotional maturity, and motivation—but that improvements last only 3 or 4 years into public school. There is also tentative evidence from studies of both Head Start and experimental programs that preschool graduates are less likely to be assigned to compensatory education while in elementary school and may be less likely to be held back a grade.

Confronted with this body of evidence, defenders of the Head Start faith have tended to abandon the "raising IQ" defense and have fallen back on two alternative lines of argument. The first is that Head Start was never intended to produce long-term results. Instead, the goal was to get disadvantaged kids ready to benefit from school by teaching them rudimentary social skills and social behavior, including such things as following rules and cooperating with others.

This line of defense, which takes its cue from the kind of short-term results that showed up in the Consortium of Longitudinal Studies work, gets the approval of most social science researchers, who agree that preschool programs do help children from risky environments make the transition to school. Education researcher Robert Slavin of Johns Hopkins explains that the typical "at risk" 4-year-old lacks qualities taken for granted in "middle class culture." Many have never seen a book, give one-word answers to questions, and have limited vocabularies. "They have no sense of time if you tell them there will be recess in an hour," Slavin says. Head Start can change some of these things.

But though research seems to bear out this first line of defense, the second is more controversial. That defense—accepted by people like Oregon Governor Goldschmidt—is that preschool can indeed produce long-term results. Those results don't have to do with IQ, however, but with motivation and self-esteem—and, along with those qualities, the chance of leading a more productive life.

Unfortunately, the data needed to assess these claims are murky. In 1985 the Department of Health and Human Services published an analysis of Head Start research concluding that the most successful aspect of the program was not schooling but the health and nutrition services provided to all participants. "In the long run," the report said, "cognitive and socioemotional test scores of former Head Start students do not remain superior to those of disadvantaged children who did not attend Head Start."

How, then, did Head Start get a reputation as a long-term life-builder and crimestopper? These assumptions seem to have been fed largely by the results of a single study from Ypsilanti, Michigan, called the Perry Preschool Project. This program-an experiment that is often mistakenly billed as a Head Start project-was begun in 1965. The results were published in 1984 in a monograph called "Changed Lives." Because its long-term findings were so striking, the project, run by Lawrence J. Schweinhart and David Weikart of the High/Scope Foundation, has gotten far more publicity and uncritical acclaim than any other research in the area.

The study, based on 121 black children, all very much at risk, may be unique for at least two reasons: there was very low attrition, enabling investigators to conduct a follow-up of 113 of the group 15 years later; and data were collected on an unprecedented array of variables including delinquency, employment, crime, and teen pregnancy. What Weikart and Schweinhart claimed to find was that by age 19 the experimental subjects were significantly better off than the controls. 67% of them-versus 49% of the controls-were high school graduates; 50% (versus 32%) reported themselves as being employed; and 31% (versus 51%) had ever been arrested. The rate of teen pregnancy was 67:100 for the subjects as opposed to 117:100 for the controls.

A lot of people have jumped on this study as proof that Head Start "works" in the long run—at least in terms of social consequences, if not in its capacity to raise IQ. But many researchers think caution is in order. For one thing, the Perry program and others like it—tend to be more rigorously designed and monitored than Head Start programs. And they are more intensive and more expensive. What is more, some critics think the Perry findings have been overblown. The teen pregnancy findings,

Can There Be "Success for All"?

In an interesting social-policy paradox, some researchers believe the only way early childhood intervention is going to make a real difference is to extend it considerably beyond early childhood.

Among those who want to put that idea to the test is a group from Johns Hopkins University whose experimental program, "Success for All," is in its third year of operation at Abbottstown Elementary School in downtown Baltimore.

According to program designers Robert E. Slavin and Nancy A. Madden of the Center for Research on Elementary and Middle Schools, the program's primary focus is on getting reading up to snuff: "Success in first grade, particularly in reading, is the foundation for later success in school."

Abbottstown, which carries students through the fifth grade, has 600 students. The entire school is participating in the program, although special emphasis is being put on preschool through third grade. The children are a typical "disadvantaged" population—almost all are black, most from single-parent families, most on welfare. During a reporter's visit last fall, the kids, most of whom were attired in the (optional) new uniforms, looked clean, bright-eyed, and reasonably attentive—particularly the younger ones.

Great efforts have been made to win the support of both teachers and families. Before the program began, school staff members visited every mother; every preschooler's mother gets another visit at the beginning of each school year. The school has set up a five-member "family support team" which sponsors workshops for parents on everything from drugs to careers to "management of sons," as well as an 8week "parenting course." Teachers—who had to vote unanimously for the program to be adopted—are given special training in math and various areas of language skills teaching and all have attended a "behavioral management workshop" at Johns Hopkins.

Throughout Success for All, the emphasis is on prevention rather than cure. Behavioral problems are reported not to the principal but to the family support team. Health services are provided by professionals who visit weekly, and there are plans to set up a school-based health clinic.

The educational part of the program is eclectic in approach but basic in content. Its goal is simple but—in its setting—radical: that every student should acquire reading, language, and arithmetic skills appropriate for his or her grade level. To get there, class sizes have been reduced, and every child has been given an individual learning plan. There are six tutors to step in promptly to work with any child who is falling behind. Flunking kids or pulling them out for remedial classes doesn't work, say Slavin and Madden. But "one-to-one tutoring is the most effective form of instruction known."

The special focus on reading has led to a plan called "regrouping" in which children at the same reading level, often from different grades, are put together during the 90minute daily reading period. This is said to reduce the need for workbooks and other follow-up activities.

It's too early to say whether Success for All can possibly live up to its name or to its fairly radical goal. But evidence from the first year of operation suggests that the program is making a difference—at least while the kids are in it. Attendance has improved and behavioral problems have been reduced. Reading and language skills are significantly better than a comparison group from similar schools. The most striking gains last year were shown by the third graders, the lowest quarter of whom did better than the average of the controls.

An important reason for extending the program through third grade is that this grade represents a discontinuity. Says one school official: "Some time between third and fourth grade many children 'die'—particularly black males." Many educators have noted that if kids are behind in third grade, they are likely to stay behind for good. That is when abstract reasoning skills start to become important; it is also when early adolescence starts to set in.

Success for All is expensive—about \$400,000 a year for the school, or about \$1000 per child. But, the investigators say, this is less than the cost of an intensive preschool program, and less than the \$1300 per child cost difference between Baltimore schools and suburban ones. **C.H.**

for example, while striking, were not statistically significant. And while the crime rates differed, there was only a marginal difference for "serious" crimes.

Even more damaging to the hopes of the Perry enthusiasts has been the inability of other longitudinal studies to replicate the Perry findings, and most researchers in the field regard the Perry data as hopeful but hardly conclusive. Many would agree with Johns Hopkins researcher Gary Gottfredson's conclusion: "The short-term benefits are the real ones."

Why don't we know more about the effects of preschool after 25 years of research? Researchers have several different answers. Wade Horn, a child psychologist who is the new head of the HHS's Administration of Children, Families and Youth, says the field is immature. "Everything in life is developmental.... The simple precedes the complex," Horn says. He compares preschool research now with psychotherapy research 25 years ago-when the focus was on types of therapy. Much recent research has shown that the relationship between therapist and patient is more important than the type of therapy; in the same way, educators are beginning to see that the variables they have been trying to measure may not be the right ones.

Developmental psychologist Jerome Kagan of Harvard carries the therapy analogy a step further. He explains that intervention programs have traditionally been spelled out like recipes: administer the treatment, measure the outcome. But, he says, the crucial aspect may be the relationship between the person doing the intervening and the child. And, unfortunately, "we don't know how to measure relationships."

Not only is the field relatively young, it may have been distorted by outside pressures, according to Craig Ramey of the University of North Carolina's Frank Porter Graham Child Development Center. Ramey believes that as a result of pressures to produce hard evidence on something everybody thought was a good idea, early intervention research "got pushed prematurely into looking at long-term consequences."

Russell Gersten of the University of Oregon adds that, in general, early intervention research "is not a very intellectually rigorous field." He thinks the field is highly politicized and, partly as a result, has produced a great many mushy findings—including, in his opinion, those of the Perry Preschool Project.

These conditions have produced a situation in which assumptions have gone unquestioned and central questions unanswered. One rarely questioned assumption, says developmental psychologist Sandra Scarr of the University of Virginia, is that "earlier is better" for getting children on the right track. "There is quite a mystique in our culture about the importance of early intervention," Scarr says, yet "there is no evidence [for it] whatever."

Perhaps the key unanswered question is why the well-documented "fadeout" takes place once a child has entered school. Many investigators have said the fadeout occurs because kids go on to poor schools. To prove that proposition one would have to have data comparing the performance of preschool graduates with that of non-preschool graduates when both are in compe-



Bowing to Pressure. Head Start research "got pushed . . . into looking at long-term consequences," says Craig Ramey.

tent schools. But virtually no such data exists. One exception is the Abecedarian project run by the University of North Carolina's Ramey, who finds that in a program where intensive intervention is continued to age 8, the preschool graduates are significantly less likely to be retained in grade.

This question—How is it possible to sustain the effects of Head Start and similar programs and overcome the fadeout?—is likely to be a focus of future research. And already, despite vast areas of ignorance, there has been some progress. Virginia's Scarr points out that the last two decades have seen the development of more sophisticated assessment and diagnostic techniques and great strides in data analysis. HHS's Horn notes that social scientists are moving away from simplistic dichotomics—such as simply comparing center-based and homebased programs.

Many believe, in fact, that the stage has been set for what Ramey calls "a new generation of research." Horn agrees. He thinks the next order of business is to figure out how to sustain Head Start's positive effects. But, he says, "the fact is [that] we don't know what the active ingredient in Head Start is."

To answer that question, he is launching two initiatives. He has assembled a group of experts to formulate a new plan for evaluating Head Start and is launching a huge new study called the Comprehensive Child Development Program. That project will involve 22 centers, funded at \$1 million apiece for 5 years. The centers will provide services ranging from infant day care to literacy training for parents—and will be accompanied by intensive evaluation.

The theoretical underpinnings of this work are very much in flux: old assumptions about "inoculation" and the virtue of very early intervention are being tossed out. In their place, says Sandra Scarr, is a recognition that "a child's functioning is a result of his concurrent environment perhaps more, than his history." If so, early intervention is merely a part of the picture. Ramey thinks that ultimately "we are going to need a variety of interventions timed differently for different subgroups of the population."

That conclusion is hopeful, because it means interventions much later on—at adolescence, say—may be just as effective as those in early childhood. But at this point the evidence remains shaky enough that few researchers are willing to offer overall policy conclusions. Some are content to say the obvious next step is to extend intervention for those at risk at least through the third grade (see box, p. 1401).

When the current generation of research yields results, however, it may be possible to make more sweeping generalizations. Horn, for example, believes that once more is known about the "maintenance" of Head Start's effects, it may be possible to make significant improvements in elementary and high school education, short of a total overhaul.

In the meantime, despite the absence of solid research, it seems unlikely that the public love affair with Head Start will end soon. At the very least, Head Start enhances school readiness, improves health services for young children, educates parents about community services, and gets some parents involved in their children's education.

In addition, there may be significant side effects. As developmental psychologist Ron Haskins, formerly at the University of North Carolina and now on the staff of the House Ways and Means Committee, notes, Head Start provides employment for many low-income people and "more than perhaps any other social program, Head Start has been run by the poor." Even more important, says Harvard's Kagan, it gives poor minority families a "sign that the U.S. government cares about your children."

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