

# LINE ON LIFE

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## Improving IQ

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Although IQ tests give an imperfect estimate of a person's intelligence, they are still used to predict success in education. Researchers know that nutrition, child-rearing patterns and environmental stimulation can influence IQ scores. Can we deliberately increase IQ scores and the success they represent?

**Coaching** is one way to increase IQ scores. Coaching may include specific instructions and practice in taking IQ tests. This may include practice on the type of items that may appear on the test or getting tutoring in a specific area covered in the test. Even though intensive, short-term coaching may increase the IQ score, this increase is rarely a large one. Even if IQ scores show a large increase, the underlying achievement — indicated by school or college grades — do not show similar increases.



However, other interventions increase both IQ scores and the underlying abilities. In 1961, the **Milwaukee Project** was launched to see if changing a child's family life could counteract the negative effects of cultural and socioeconomic deprivation. Forty poor, mostly black families — whose mothers had an average IQ on the Wechsler test of less than 75 — were used in the study.

While pregnant, these mothers were split into two groups. The experimental group was sent to school, given job training and placed into jobs. They were also given training in childcare, home economics and personal relationships. The other group, a control, was given no special education or training. In addition, from 3 months to 6 years of age, the children in the first group spent the better part of each weekday in an educational center. Besides training involving a wide range of educational toys, they were given nourishing meals. Paraprofessionals in this program cared for the children in ways similar to non-working mothers in affluent families.

Periodically, all of the children were given IQ tests. In the final testing, the children in the experimental group had an average IQ of 126 — 51 points higher than their mothers' scores and higher than 90% of the American population. In contrast, the average IQ of the control group children was only 94, but it was still significantly higher than their mothers' scores. This small increase might have been due to their becoming accustomed to taking tests. This was an experience that their mothers rarely had.

A 1976 psychological study went one step further than the Milwaukee Project. Black children — who had been adopted by well-educated, middle-class, white families — were studied. Adopted early in life and living in warm, intellectually stimulating environments, these children scored higher than the national average for blacks. They also did better in school.

Of course, the largest intervention program designed to improve school achievement of disadvantaged children began over 20 years ago — **Head Start**. Head Start focused on children from low-income families between the ages of 3-5. Before they went to school, these children were given some educational and social skills. They and their families were given information about health and nutrition. During the whole program, parental involvement was strongly stressed. Rather than emphasizing their deficiencies in comparison to middle-class children, Head Start accepted the cultural differences between these children.

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**Parental involvement is critical for any enrichment program.**

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In summarizing the studies evaluating Head Start, researchers have concluded that there have been long-lasting improvements in the cognitive abilities of the children. It is very likely that the involvement of the parents in the program was critical to its success.

Another preschool program in Ypsilanti, Michigan, was evaluated. It dealt with 123 black preschoolers from poor families. Fifty-eight were in the program, while 65 others served as the control. In contrast to the control children, those in the program scored higher on tests of academic abilities. Likewise, more program participants finished high school and went to college, were gainfully employed — and they had a lower arrest rate.

Studies of these programs have clearly shown that thinking abilities can be enhanced by training children in academic skills. Although these programs focused on preschoolers, researchers believe that similar — but possibly more limited — improvement can be obtained with older children, adolescents or even adults.

In these intervention programs, besides the obvious training that these children receive in educational and social skills, another factor contributed greatly to their success — **parental involvement**. Even if your children are not in an intervention program, their performance is likely to improve if you, as parents, become more involved in their schooling. One of the best ways is to join the **Parent-Teacher Association (PTA)** in their schools. If you become active in the PTA, not only will your children benefit, but you and your schools will also profit. Try it; you'll like it!

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\* Adapted from Charles Morris' *Psychology: An Introduction*, Prentice Hall Publishers, 1988, pages 331-332.