

The Washington Post

SUNDAY, APRIL 2, 1967

What's in a Child's Mind?

By Joshua Lederberg

PERFECTING the species is among the strongest activities in contention to be the purpose of human existence. But research on human improvement is most difficult to attune to the standards of established scientific disciplines. The difficulties are too numerous and painful to detail. We need objective measures of performance, elusive data on the prior history of the subjects and unattainable supervision of their present and future experience.

Above all, simple conscience and social outrage put sharp limits on how far any experiment can go in deviating a child's experience from the traditions of the group. Thus, the normal child is the most elusive of experimental objects.

A leading journal on research in child development found that it had published almost no studies on normal children between one and three years old, compared to almost 200 on newborns and children over three.

Yet these are the years of critical transition to communicative humanity. Most of our insight on how to rear children is based almost entirely on old wives' tales and hardly at all on controlled scientific observation.

Outcasts like orphans and prisoners have long furnished much of the material volunteered for experimental study. An orphanage in Iowa provided the material for an experiment 30 years ago on early childhood experience that makes up in human interest for some of its overt

and unavoidable limitations as rigorous science.

THIS HAS BEEN brought up to date in a recent monograph of the Society for Research in Child Development, "Adult Status of Children With Contrasting Life Experiences" by Dr. Harold M. Skeels, now of the National Institute of Mental Health.

The experimental and contrast groups consisted of ten girls and three boys each, inmates of the orphanage at various times. The minimal physical needs of the children were met, but owing to limitations of funds and staff, the orphanage could better be described as a warehouse.

The subjects were among a residue of unadopted children generally classified as "trainable, mentally retarded" and having a recorded IQ of about 65.

By chance, the experimental group was transferred to another state school designed primarily for mentally retarded adolescents.

There, they received a great deal of individual attention and encouragement from inmates and staff and showed a surprising degree of intellectual improvement over a period of about two years. Eleven of the 13 were then successfully placed for adoption.

The contrast group, which was at least roughly equivalent in expected performance, remained at the orphanage. Most continued to deteriorate in IQ scores. None were adopted and several were institutionalized more or less permanently.

As adults, the experimental group did surprisingly well by the standards of schooling they had received (12 years) and income earned (\$5000): essentially indistinguishable

from the regional norms. Nine of the 13 had families: their 28 children showed a mean IQ of 104.

Members of the contrast group were pathetic examples of social failure. And the average per annum for cost of institutionalization for each was \$10,000. Only one had climbed out of the morass, by standards of ordinary family life.

SUCH POIGNANT data need little elaboration for human and social significance.

Judged as an experiment, the Skeels study has many shortcomings, as he has pointed out.

My main criticism is that the children who were moved out of the orphanage were called "experimentals," as if they received some treatment that compensated for an expected inherent deficit. On the contrary, the contrast group of children should have been called experimental. They were exposed to unusual deprivation—the enervating effect of being kept like things rather than people.

The 30 points difference in IQ eventually shown by the two groups may indicate that these children were more than usually sensitive to their depressing environment — compared to those who thrived well enough to be adoptable right away.

There could be no more dramatic presentation to translate test-scores into human lives, and especially to show the crucial advantages of bringing the child over the threshold to the socializing and educating influences of the intact family and the open community.

© 1967, The Washington Post Co.

Science
and
Man