

## CHILDREN WITHOUT BROTHERS AND SISTERS FOUND TO BE BRAINIER

Do not pity the only child. He has more brains than children with many brothers and sisters, according to conclusions reached by Dr. Hornell Hart as a result of a study of 600 families in a typical Iowa city. The results have just been reported to the Iowa Child Welfare Research Station at Iowa City.

Children from large families are handicapped mentally, morally, and socially, Dr. Hart declares.

In a representative sample of children from practically completed families in Davenport, Iowa, the ability of the children as determined by mental tests was found generally to run higher the fewer the number of surviving children. Children with no living brothers or sisters tend to have mental test quotients about fifteen points higher than children with eleven living brothers and sisters, and the average mental test ability decreases fairly steadily as the size of the families increases.

"School progress, in excess or defect of the amount to be expected from mental test ability, is at a maximum in families of four or five living children, and at a minimum in families of ten children or over," Dr. Hart says. "The difference between the progress inschool of these two groups is such that the average child in the very large family loses about one-third of a year through conditions other than mental test ability associated with large families.

"The larger the family the greater the tendency is for the children to leave school at the earliest possible age.

"Of families with seven or more living children, fourteen per cent. are chronically dependent, as compared with three per cent. among families with six children or less.

"As far as can be ascertained from teachers ratings, children in large families are less energetic, less kind, less sincere, and less honest than children from small families. This conclusion is fairly certain for energy, but not so decisive for the other characteristics.

"Contrary to general impression, children without brothers, and sisters compare very favorably with children having brothers or sisters. Birth order, as far as it was studied in this inquiry, appears to have very little significance."

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## FRENCH USE WIND TO CUT COAL BILL

French engineers are planning extensive plants of windmills to relieve the country of its heavy burden of payment for imported coal. The Eiffel tower in Paris has been employed for experiments on the best means for the utilization of wind power and from these results a form of windmill has been devised which is very different from those in use elsewhere, and, according to the calculations of Lapresle, much more efficient and economical than the American and Dutch types. Our windmills are from 8 to 16 feet across and have 18 or more blades. The new French type has only two blades but these are made much longer. The plans contemplate windmills with two blades revolving in a circle 100 or 130 feet in diameter

In the last number of the French scientific journal, *La Nature*, Constantin,