

PSYCHOLOGY

# How Old is America Mentally?

## Education Expert Challenges Idea That We are Nation of 12-Year-Olds But Psychologists Find Figure Not Far Wrong

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**I**S AMERICA mentally a nation of twelve-year-olds?

Much heated argument has arisen on this question, most of it due to an unfortunate misunderstanding of what psychologists have discovered with regard to the intelligence of the children and grown-ups of the nation.

Latest to challenge the assertion officially is an expert in the U. S. Office of Education at Washington, Dr. David Segel. The mental age of adults in the United States is 17.7 years, Dr. Segel contends, and he deplors the fact that the 12-year figure has been used as an argument for lowering the education or cultural level of newspapers, magazines, movies and radio presentations.

The pronouncement that the national intelligence is greater than has been stated by psychologists and educators will be welcome to many who are loath to consider themselves part of a mentally 12-year-old population. They may, however, wonder whether it is so much better to be 17 than 12 in mental age.

Looked at from another point of view, however, a 12-year mental level is not so alarming. The parents of the modern young adolescent are usually quite willing to admit that Miss 12-years and her brother are entirely capable of outwitting their elders. They surpass many older persons in ability to learn.

### Mental Age Is New

All this talk about mental age is comparatively new.

The giving of examinations to measure what children have learned in school is a very ancient custom, but the idea of applying some sort of yardstick to measure the child's innate capacity for mental penetration and organization is a fairly new one. Even today, despite the fact that psychological examinations, or mental tests, are routine in a great many of the more modern schools, and practically any parent who wishes the information can find out whether his or her child has a high or low mental age or "I.Q.," still many are

puzzled to know just what the psychologists are driving at when they talk of a mental age of 12 years, or 6 years, or 8 years.

To many it is confusing if not actually absurd to say that some graybearded old patriarch has a mental age of 8 or 10, although they are ready to use this term "childish" about many who are very old.

Most people picture mentality as continuing to develop and grow throughout the entire span of human life. How then, they ask, can the average mentality of all the adults of the United States be the same as that of school children in the seventh or eighth grade of public school?

### Not Experience

The answer becomes clear, however, when it is understood what psychologists mean by intelligence and mental age. Intelligence, as the term is used precisely by scientists, does not include education, or skills, or the "wisdom" gained as a result of experience in the world. It is rather the innate capacity to understand, the ability to profit from experience, that distinguishes the bright person from the stupid one.

A dull adult may know a great deal more (have more factual information) than a bright child, yet he may be less intelligent.

Intelligence does grow during childhood. Mental growth parallels somewhat physical growth. Both are most rapid during infancy. The baby who doubles his birth weight during his first six months of life is adding in equally amazing proportions to his mental stature. As the child grows older, his rate of growth slows. Never again will he double his weight in any such short time, and soon comes the time when he will never again increase his size 100 per cent.

So it is also with mental growth. The rate is constantly slower and slower until it is barely perceptible. Finally, just as physically men reach a down-hill side of life when the body is no longer developing but is instead deteriorating,

so men reach the point when their mental faculties are not so quick, not so keen as they were in early youth.

Certain mental tasks have been found by psychologists to be indicative of the extent of mental growth, and these have been arranged in a scale of typical performances at consecutive ages. When a seven-year-old boy is found to be able to do the mental tasks mastered ordinarily by the average nine-year-old, he is said to have a mental age of nine years.

You have often heard a teacher say of a pupil that he is "bright for his age." This is just what is meant by the psychologist who tells you that your boy "has a high I.Q." The letters I.Q. stand for "intelligence quotient," and represent a comparison of the child's mental age with his chronological age. Thus the seven-year-old who can do the mental tasks of a nine-year-old has an I.Q. of 9 divided by 7, or 129.

On the mental age scale, the tasks for the nine-year level represent the average performance of nine-year-olds, and the tasks for the ten-year level the average performance of ten-year-olds, and so on. The steps between these levels are not, however, equal. The difference in difficulty between the nine- and ten-year tasks is not nearly so great as that between the six- and seven-year levels.

### Adult I. Q.s

By the later teens, too, the intelligence quotient can no longer be figured by dividing the mental age by the chronological age. If this is done, the resulting I.Q. is much too low; making it appear that the intelligence of boys and girls at this age had taken a sudden slump. For this reason, it is important to psychologists and educators giving psychological tests to know what is the average mental age of adults—what is the point beyond which the average person's mind does not grow further.

The first time that mental tests were given to adults in great numbers was during the World War. In order to make some assortment of the many men with many abilities from every walk of life that were drawn into the military service by the indiscriminating draft law, tests were devised by a group

of the most able psychologists in the country and administered to thousands of drafted men.

The "Army Alpha," one of the examinations so administered, when given to 51,620 men, showed that the average score of adults in the army was 59. When this same test was given to school children, it was discovered that this score of 59 was attained by children of 13 years, 12 years and even 11 years.

When the "Stanford Binet" test, a standard "mental age scale" was given to a group of 653 English speaking soldiers of average ability, it was found that they averaged in mental age between the 13-year level and the 14-year level.

For these reasons, psychologists are mostly agreed on using 14 as a basis for calculating the I.Q.'s of all children above that age, assuming for this purpose that 14 is the average mental age of adults.

Of course that does not mean that everyone ceases mental growth at 14. The normal person keeps on growing mentally until about the age of 18. Then there is a sort of plateau, a period during which he does not grow or grows so slowly that it is not perceptible. This is followed by a long period of slow decline in intellectual ability.

### Peter Pans

Other persons, however, reach their full mental stature at an earlier age and at a lower level than the average normal person. Some there are who by the time they are eight years old have a mental growth less than that of the average two-year-old baby. These unfortunate persons may continue to develop until they are about 14 years old and grow to about a 3-year mental age. By that time their development is complete; they never grow up mentally; they are intellectual Peter Pans and are called idiots.

Imbeciles, too, cease growing by the age of about 14, but by that time they may have reached nearly a five-year level mentally. Those known technically as "morons" and "borderline" in intelligence may continue growth for a year or two longer and reach something more than eight and ten years of mental age, respectively.

Superior children, on the other hand, may reach the mental age of 14 before they are 12. By the time they are 14, they may be 17 in mental age and still developing.

America is made up of all classes in

## America's Mental Age

Chronological Age	Mental Age	Per Cent. of Population in this age group	Weighted Average
Under 10	5	20	100
10 to 19	17 3/12	19	328
20 to 29	17 3/12	17	293
30 to 39	16 8/12	15	250
40 to 49	16 7/12	12	199
50 to 59	15 8/12	9	141
60 to 69	14 8/12	5	73
70 to 79	13 11/12	2	28
Over 80	11 7/12	1	12
		100%	1424

1,424 divided by 100 equals 14.24,  
the average age for U. S.

intelligence. Geniuses and idiots and all the levels in between are found among the 122 million people living in the United States.

If all the men in the United States were measured for their height, it would be found that a few would be extremely tall like the circus giants and a few would be extremely short like the midgets of vaudeville. A great many more would be more than ordinarily tall or short. But a far greater number, the majority, would be just about average height.

So it would be also if all the people in the United States were measured for their mental stature. It would be found that far less than one per cent. could be called geniuses. About 7 per cent. could be called very superior, and these would be balanced at the other end of the line by about one per cent. of feeble-minded (morons, imbeciles, and idiots) and six per cent. border-line. About 13 per cent. would rate as superior, and an equal percentage as dull in intelligence. But fully 60 per cent. would rate as just normal, everyday folks.

Probably the most comprehensive study yet made is the one known as the Later Maturity Study conducted at Stanford University by Dr. W. R. Miles (now at Yale) and his associates. In this research, tests were given to large numbers of persons aged all the way from 7 years to 94.

In this group, which included only persons who could read and write thus eliminating the lower grades of intelligence, it was found that the average mental age of youngsters in their teens is 17 years, 3 months, and the average for the twenties is just the same. In

the thirties it has dropped to 16 years, 8 months; for the forties 16 years, 7 months; for the fifties 15 years, 8 months; for the sixties, 14 years, 8 months; for the seventies, 13 years, 11 months; and for the eighties, 11 years, 7 months.

Wide individual differences were observed. A large number of the aged have ability that tests above the average for young persons. And, of course, many a youngster is handicapped with ability very low in comparison with his fellows.

What is America's mental age?

If we assume that those tested in the Later Maturity Study were typical of all the people in the United States, it is possible to use the census figures showing the number in each age group to determine an average mental age for the population. This assumption is a generous one, because the persons tested were all able to read and write and they were the general run of the city population. A higher percentage of the people in institutions and those in isolated districts might be expected to be lower in mentality than the "sample."

### 47,000,000 Youngsters

A large proportion of Uncle Sam's nephews and nieces—some 47 millions—are youngsters who have not yet attained their mental growth. Another large group includes those who have passed the time of maximum ability and are on a long gradual down slope where experience is used to counter-balance decreasing natural power. Only a comparatively small number are at the peak.

When allowance is made for the age composition of the population in finding the average mental age, it is found that America has an average mental age of fourteen years.

Dr. Segel arrived at his more optimistic figure by ignoring all those below the age of 16 or above the age of 50. Thus he fails to consider the very young and the very old in addition to ignoring illiterates, feeble-minded in and out of institutions, and the senile. His tabulation includes about 62 millions, or just a little over half—presumably the upper half—of the population of the nation. From this section of the population, he estimates a mental age for young adults of 17.7.

This is a high estimate even for those of this age group, because the tests showed the peak of mental ability is reached at the age of 18.