

PSYCHOLOGY

Adolescence Is Period of Confidence and Optimism

➤ TODAY'S ADOLESCENTS, popularly characterized as anxious and tense, look to the future with confidence and high optimism, a recent study indicates.

Modern youths seem to be facing the same religious, social and physical problems their fathers and mothers faced, according to Dr. Warren R. Baller, University of Nebraska psychologist serving on the summer faculty of the University of California at Los Angeles.

Dr. Baller was consultant to a recent nationwide HI-Y (youth groups of the YMCA) study in which several thousand teenagers were interviewed. The responses revealed little evidence that world conditions were adding any additional stresses to the "growing up" period.

"Instead," Dr. Baller said, "early results show adolescence to be a period of confidence and high optimism. You might say today's young people are keyed up but not afraid."

The Nebraska scientist said youth today is preoccupied with much the same problems young people have always faced. Their goals can be summarized as:

1. Satisfactory dependence-independence relationship with parents and other adults.
2. Satisfactory concept of civic responsibility.
3. Satisfactory religious philosophy.
4. Satisfactory adjustment to persons of the opposite sex, including preparation for marriage.
5. Better understanding of physical growth.
6. Winning and holding of friends.

"A lot of what we used to label as tension and anxiety in teenagers is just plain noise," he added.

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TECHNOLOGY

1956 Cars Will Have Safety Door Latches

➤ INTERLOCKING DOOR LATCHES, which have held car doors closed when the car crashed head-on at 40 miles per hour, will be featured on 1956 Studebakers.

The company has experimented with the door latches for four years. Many serious traffic injuries and fatalities, scientists have reported, could have been avoided if the door latches had held and thus kept occupants from being thrown from their cars.

In the recent public tests, four 150-pound "dummies", two wearing safety belts and two rigged to throw their entire weight on the doors, rode in a four-door sedan that crashed at 40 miles per hour into a concrete barrier. The front end of the car was badly demolished, but the dummies were still in the car, and the car's doors could be easily opened and closed.

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The Ragweeds

➤ THE BOTANIST who gave the ragweeds their scientific name must not have suspected the villainous role they play in causing hay fever, or else he must have had an unusual sense of humor.

For he lumped the ragweeds into a group which he called "Ambrosia," a Greek word for "food of the gods," which bestows immortality on the eater. Perhaps he was thinking of the seeming immortality of sneezing and aches that grip hay fever sufferers in August and September when ragweeds are in full flower.

Growing in masses of hundreds or thousands together, ragweeds develop greenish-yellow flower spikes about the middle of August. Each of these spikes produce tremendous quantities of pollen—the male element which fertilizes the seed.

The pollen grains are tiny, light and buoyant, and the wind can scatter them for great distances. This is fine for the ragweeds, as it insures fertilization over a wide area. But for the millions of people who are allergic to ragweed pollen—a primary cause of hay fever in late summer—it seems like a diabolic invention.

Nearly 60 species of ragweeds are known to scientists, and about 15 of them are found in the United States. Happily, only five of these are important in hay fever, although these cause trouble enough.

Over most of the eastern section of the country, the common, or dwarf, ragweed *Ambrosia elatior*, and the giant ragweed, *A. trifida*, hold sway. As these become scarcer in the West, they are replaced by two similar plants, the western ragweed, *A. psilostachya* and the giant western ragweed *A. aptera*. The lance-leaved ragweed causes trouble in the central states.

As if these are not enough, there are about 25 species of "false ragweeds," *Franseria*, that compete with ragweeds in spreading pollen in the United States. These can be distinguished from true ragweeds only by such technical details as their more spiny seed pods.

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VETERINARY MEDICINE

Race Horses' Hearts Provide Clue to Winners

➤ TIP SHEETS may feature an electrocardiogram of the long-shot horse's heart before long.

J. D. Steel, veterinary scientist at Sydney University, Sydney, Australia, has found a scientific way to estimate a race horse's potential performance, based on studies of hearts. He uses an electrocardiogram to determine the race horse's heart capacity and to check for normal or abnormal function.

If the horse has a certain heart capacity along with other observable qualities, you can bet he will win a certain amount of money, according to Mr. Steel's findings.

For his experiments, Mr. Steel tested about 200 racing horses, including 50 trotters, at the Randwick racing stables of five top trainers.

He classified the horses into five grades on the basis of electrocardiograph results. Those in the first four grades had normal hearts. Horses with the largest heart capacities rated grade one, and decreasing capacities fell in grades from two to five.

He found that outstanding race horses generally ranked in the first two grades.

Grade five animals have difficulty winning because of their heart defects. Grade four horses would have a hard time, but they might win in weak company. Grade three horses could win occasional races on metropolitan tracks.

Mr. Steel said that some good performers in grade two developed heart abnormalities after racing for some time and dropped to the lowest level. A surprising number of racing horses have slight cardiac abnormalities, he said.

Science News Letter, August 20, 1955

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