

PSYCHOLOGY

Race Prejudice Lowered

► AN ENFORCED program of on-the-job integration reduces race prejudice among workers.

This is shown in a recent study of racial attitudes among factory and department store employees. The study throws new light on possible approaches to the problems of integration.

The investigation, subsidized in part by the Commission on Community Interrelations of the American Jewish Congress, is reported in *Psychological Reports* (March) by Dr. Ralph H. Gundlach, New York psychologist.

The firms studied, two department stores and two factories in New York City, have integration programs. At each firm, Negroes and whites are required to work together. All the workers at each firm are women.

The programs of integration are operated jointly by the firms and unions involved. Management enforces integration and the unions conduct a sort of information and education program concerning it.

So the workers would not think the poll was being sponsored by management, the survey was disguised as a city-wide opinion poll and was conducted in the workers' own homes. Even the interviewers were not told the nature of the investigation.

One hundred eighteen whites and 28 Negroes were questioned.

When the results were compared with

those of an earlier survey at non-integrated plants, workers at the firms with the integration programs were found to have much less anti-Negro prejudice than those at the non-integrated plants. In both the earlier and later studies, Negroes felt many measures were more discriminatory than did whites.

In general, those persons with the "highest culture, education and social aims," the white collar workers, showed the most derogatory and hostile feelings toward Negroes, although this group had contact with similarly cultured and educated Negroes.

In non-integrated firms, about half the white workers questioned thought Negroes should have an equal chance at jobs, while about 45% said they would object to having a Negro working beside them and believed whites should have the first chance at any kind of job.

In the integrated firms, more than 90% of the white workers accepted working beside Negroes as a matter of course. The same percentage thought Negroes should have equal rights in matters pertaining to their jobs.

About two-thirds of the white integrated workers expressed acceptance of Negro supervision over whites. Only four percent of the white workers thought they would be angry enough to leave under these conditions.

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GYROSCOPE FOR SATELLITE—*Phillip La Hue, an aeronautical engineer of Minneapolis-Honeywell Regulator Company, uses a child's gyroscope and a spinning model of the earth to illustrate principles involved in operating the HIG, or hermetic integrating, gyro, three of which will be used to guide the rocket pushing the first man-made satellite into its orbit. A gyro always seeks to spin in the axis in which it was set in motion.*

PUBLIC HEALTH

Polio Cases Equal Those in 1955

► TOTAL NUMBER of polio cases reported to the Public Health Service for the first three months of this year is almost the same as the number for the same period last year. The figures are 1,072 for 1956 and 1,063 for 1955.

About 26% more cases of paralytic polio were reported this year than last. The figures are 584 paralytic cases this year so far, compared to 464 last year.

This cannot be taken to show anything about the failure or success of the polio vaccine given last year, health authorities pointed out.

About all it does show with respect to the vaccine is that a lot more work is needed before the disease is controlled.

Better information on the total number of cases last year might change the difference between the two years in numbers of paralytic cases, it is pointed out. Last year 29% of cases reported were not specified as to whether they were paralytic or nonparalytic. This year the figure is 18%.

If some of the unspecified cases last year were paralytic, there might have been as many or more paralytic cases showing in the record for the first quarter of 1955 as for that of 1956.

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AERONAUTICS

Breaking Barriers to Space

► MAN will break through the known barriers keeping him from higher altitudes in space, Dr. John R. Poppen, a retired U. S. Navy captain, told the Society of Automotive Engineers' National Aeronautic meeting in New York.

The four barriers now standing between man and outer space are reduced barometric pressure, velocity, vision and radiation.

Each in some way taxes man's physical and mental thresholds, Dr. Poppen said, but "there is no doubt that, as engineering and scientific skills make further progress in flight, possible ways will be found to accomplish human adjustment and the limiting factor will not be human limitations."

Atmospheric barriers, Dr. Poppen noted, can be met by providing pressurized and conditioned compartments with an equable artificial environment. This would solve the problem of having enough oxygen to sustain life and balance the changing temperatures encountered in outer space travel. The pilot would literally travel in a man-made world of his own.

Protective equipment will be designed, Dr. Poppen said, to help man adapt to

velocity. Flight, he said, requires a flier to know where he is, where he is going and what he should know to make correct decisions about his actions.

"In this respect," he pointed out, "man has a finite impediment. Speed of vision, time of decision and time of reaction are built-in limitations." Protective equipment will help overcome these limitations, as well as those imposed by gravitational factors.

Vision is still a third barrier. Empty field myopia, for example, Dr. Poppen reported, "results when there is no object in space to provide a reference for focusing the eyes."

This could be overcome, he suggested, by providing an artificial projected image for reference purposes. Other visual barriers can be surmounted by "providing realistic data presentation, direct electronic control and appropriate illumination."

The fourth barrier, radiation, Dr. Poppen said will be reached when man escapes from the earth's blanket of air and is exposed to radiation not found at the surface.

Means for protection are available now, Dr. Poppen reported.

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