

Research in Brief

ROBERT L. BRUCE, *editor*

EFFECT OF ANXIETY AND COMPETITION

FOUR-H CLUB members in activities such as demonstrations and judging are called upon to perform competitively in the presence of their peers and others. In this study fifth grade boys were divided into high and low anxiety groups on the basis of a test of manifest anxiety. Boys in each group were then called upon to perform a complex psychomotor task under conditions where peers were present or absent. Results were studied to determine: (1) the effects of the presence or absence of a reference group on the levels of aspiration and on performance; (2) the effects of anxiety on the subject's levels of aspiration and performance; and (3) which subjects (low anxious or high anxious) would be most affected by the presence of a reference group in a level of aspiration situation.

Analysis indicated that the combination of anxiety and peers had more effect on performance on the first trial than did anxiety or peers alone. The low anxious subjects in the absence of their peers performed better than they did in the presence of their peers.

In goal-setting it was found that the high anxious subjects were more variable when their peers were absent and that the low anxious subjects were more variable when their peers were present. When peers were absent, the high anxious subjects were more variable on the total of ten trials than were the low anxious subjects, although this was not true of the first trial. When peers were present the low anxious subjects were more variable than the high anxious subjects for the ten test trials.

This study indicates that competition has different effects on different children. Anxious children performed better and were more stable in goal setting when in frankly competitive situations. Less anxious children performed at a higher level on first trial and were less variable in goal setting when performing alone.

C. J. Cobes, "The Effects of Presence and Absence of Peers on Performance and Level of Aspiration of High and Low Anxious Subjects." Unpublished M.S. thesis, Bucknell University, Lewisburg, Pennsylvania, 1965.

MORE ON ADULT LEARNING

RATHER THAN a single study, this paper is a summary of a great deal

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of research in the general area of adult learning. Among the conclusions cited:

Capacity to Learn There is no decline in intelligence with increasing years, barring health problems or brain damage. More old than young subjects show evidence of brain damage, but this is taken to mean simply that incidence of brain pathology is higher later in life. Older people are held to be capable of compensating for changes which might impair their performance.

Use and Disuse ". . . it seems clear that the maintenance of ability to learn requires continuing use of the learning function . . . Also, the significance of teaching which inspires adult learners to continue to learn is clearly indicated."

Measurement of Learning Tests designed to favor older people are not available nor have norms for older groups been established on the tests now used. Elimination of the speed factor appears to remove some of the bias in favor of youth, but results indicate that older people do make more errors than younger people and persist longer in the errors they make.

Complexity of Learning Adults, by living, have accumulated a background of experience and response tendencies. This background, which makes them able to deal with present problems efficiently, may interfere with the learning of new responses. Thus, present success may actually handicap the adult in new learning.

Importance of Time Perspective Evidence indicates that increasingly, in older life, there is a demand for meaning and progression. Thus many of the programs designed to enrich the lives of older people are regarded as substitute activities rather than as meaningful experience.

The picture of the adult learner as presented by the author is one of great challenge to the educator. Here is a learner who has supplemented raw ability with some sense of strategy. He demands reality and meaning and a sense of progress, on his terms. He brings a body of experience and responses to the learning situation. If this past learning is still valid, it gives the adult a great advantage over the younger learner. The problem is that old responses — even successful ones — don't remain valid.

Wilma T. Donahue, "Adult Learning: Limits and Potentialities." Excerpted in Ruth E. Hartley and Eugene L. Hartley (eds.), *Readings in Psychology* (3rd ed.). New York: Thomas Y. Crowell, 1965. Appears in full in L. H. Evans and G. E. Arnstein (eds.), *Automation and the Challenge to Education*. Washington: National Education Association, 1962.

CLASSIFYING PART-TIME FARMERS

ONE BADLY NEEDED aid to Extension work with new or difficult clientele groups is some means of detecting individual differences within the groups. Extension workers accustomed to dealing with full-time commercial farmers tend to regard part-time farmers as a single group or to lack criteria for distinguishing meaningful sub-types. This study is based on the premise that there are significant differences between full-time

farmers and part-time farmers and that part-time farmers are not a homogeneous group.

A typology of part-time farmers was proposed consisting of:

1. *Commercial part-time farmer* — an operator of a farm with value of agricultural products sold amounting to \$2500 or more and who works off the farm 100 or more days per year.
2. *Noncommercial part-time farmer*:
 - a. *Off-farm work part-time farmer* — an operator of a farm with value of agricultural products sold of less than \$2500 and whose major source of income is off-farm work.
 - b. *Subsistence part-time farmer* — an operator of a farm with value of agricultural products sold of less than \$2500 and whose net farm income exceeds the income from off-farm work or nonwork sources.
 - c. *Nonwork income part-time farmer* — an operator of a farm with value of agricultural products sold of less than \$2500 and whose major source of income is from nonwork sources.

A full-time farmer was defined as an operator of a farm with value of agricultural products sold amounting to \$2500 or more, who does not work off the farm 100 or more days per year. To test the practical validity of the typology, differences among fulltime commercial farmers, part-time commercial farmers, and off-farm work part-time farmers were tested.

The area selected for the study was St. Lawrence County — a dairy area of northern New York State with relatively low incomes and high rates of unemployment and underemployment. Data for the study were obtained through personal interviews during the summer of 1963 with 206 farm operators.

Of the types tested, the off-farm work part-time farmers were most different from full-time farmers. They were more likely to have completed high school, to be employed by a governmental agency and to be in an early family life cycle stage, but less likely to feel that farming interferes with their off-farm job. With respect to the farm, off-farm work part-time farmers were more likely to be full owners, to operate poorer land, and to have smaller farms. They were less efficient than full-time farmers, less likely to have increased their dairy herd size, less likely to have sought agricultural information, and less likely to have home production of \$600 or more.

These findings indicate that part-time farmers can be classified on the basis of this typology and that significant differences exist between full-time farmers, part-time farmers, and among sub-types. The study casts doubt on any assertion that part-time farmers are a homogeneous group.

Nelson L. LeRay. "Full-Time Farmers and Part-Time Farmers in a Low Income Area of Northern New York State: A Study of Their Socio-Economic Characteristics." Unpublished Ed.D. dissertation, Cornell University, Ithaca, N.Y., 1965.

THE VALUE OF VISUAL AIDS

THE EVALUATION OF ANY METHOD, as such, is a very chancy thing. Variations in presentation, in audience, in situational context, etc., make standardization almost impossible and prevent real confidence in comparison of results. Even the enthusiasm of the researcher for one treatment or the other has been known to affect results.

Nevertheless, the effort to improve our performance demands that we investigate questions of this sort. In this study 715 adults in 46 audiences heard the same speech given by the same speaker. In half of the cases the speech was supplemented by charts and by flannelboard. Every effort was made to keep the treatments identical except for the test variable. The following conclusions were reached:

1. When the speech was supplemented with visual aids audiences learned significantly more (as measured by immediate recall) than audiences presented the same speech without visual aids.
2. Younger audiences had significantly greater immediate recall from the presentation of an informative speech than those of higher age levels. Lower and higher age levels benefited equally from having the speech supplemented with visual aids.
3. Audiences of higher levels of formal education had significantly greater immediate recall with visual aids when the speech was supplemented than did audiences with less education, but there was no significant difference in immediate recall when the speech was not supplemented.
4. Audiences reported giving more attention and interest to the speech when it was supplemented with visual aids. They believed they learned more and remembered more than when the same speech was not supplemented. Respondents of the higher age levels indicated greater attention and interest than respondents of lower age levels. Women, more than men, saw visuals as adding to the effectiveness of the speech, and increase in educational level was positively associated with the belief that visuals add to the overall effectiveness of an informative speech presentation.
5. When the speech was supplemented with visual aids the audiences expressed greater confidence in their ability to present the information given than where the speech was not supplemented. In addition, a significantly higher number of the "visual aids" audience indicated they would be interested in attending a second meeting on a similar subject. Respondents of lower age levels indicated greater interest in attending a second meeting than did older respondents.
6. Audiences given a pre-test over the subject matter had greater immediate recall following the speech than the audiences not given the pre-test. This was true whether the speech was presented with or without visuals.

Schell H. Bodenhamer, "The Effects of Presenting Informative Speeches with and without the Use of Visual Aids to Voluntary Adult Audiences." Unpublished Ph.D. dissertation, The Ohio State University, Columbus, Ohio, 1964.