

Research in Brief

ROBERT L. BRUCE, *editor*

APTITUDE TESTS FOR COUNTY AGENTS

About 450 new county Agricultural Extension agents are employed each year in the United States. Selection is usually based upon some combination of biographical data, personal references, undergraduate and graduate grades, and personal interviews. Reasoning that some form of selection device might add to the predictive capacity of these procedures, a number of studies were undertaken during the early 1950's to determine what factors were associated with high performance.

One of the early studies (at the University of Missouri) resulted in a testing procedure called the Missouri County Agent Inventory. Fifteen states took part in a longitudinal study between 1956 and 1963 using this Inventory. Pre-employment scores and performance ratings were secured on 819 newly employed agents.

Scores on the total inventory were found to have little relation to rated effectiveness. However, 98 items were found which discriminated high- from low-performance individuals. When these items were combined into a revised test, scores were found to discriminate to a low degree. Following the same procedure on a state-by-state basis resulted in very high correlations when the original sample was re-scored, causing speculation that this method might allow states to develop their own predictive tests.

Considering the method by which the revised inventory was compiled, high correlations using the original sample are not surprising. While there is no assurance that a new sample will exhibit the same relationships, they do indicate a direction for further tests.

Fred P. Frutchey, *The Development of an Aptitude Test for the Selection of County Agricultural Agents*. Washington, D.C.: Federal Extension Service, 1965. For information about the earlier studies and problems of predicting effectiveness in Extension workers see also: Fred P. Frutchey, *Differential Characteristics of the More Effective and Less Effective Teachers: A Report of Nine Studies Made for the ONR* (Washington, D.C.: Federal Extension Service, 1953); Ivan Nye, *The Relationship of Certain Factors to County Agent Success*, University of Missouri Research Bulletin 498 (Columbia: University of Missouri, 1952); Robert L. Bruce, "Predicting Administrative-Supervisory Effectiveness in Senior County Agricultural Extension Agents," unpublished Ph.D. dissertation, Cornell University, Ithaca,

ROBERT L. BRUCE is Associate Professor of Extension Education, 201 Stone Hall, Cornell University, Ithaca, New York 14850.

N.Y., 1962; Charles Aiken, "Identification of Procedures Associated with the Teaching Effectiveness of New York County Extension Agents," unpublished Ph.D. dissertation, Cornell University, Ithaca, N.Y., 1952; and Harold Benn, "Identification of Attitudes and Values Associated with the Teaching Effectiveness of New York County Extension Agents," unpublished Ph.D. dissertation, Cornell University, Ithaca, N.Y., 1952.

WHAT MOTIVATES AGENTS TO PROFESSIONAL DEVELOPMENT?

A recent study of county agricultural agents in Minnesota offers some clues as to why one Extension worker may choose, at some sacrifice, to pursue graduate work or other professional improvement while another will forego such opportunities. This study, involving 90 agents, disclosed that agents varied greatly in their motivation toward graduate work, but were highly motivated toward professional development in general. Most felt that they had administrative support for such motivations, but many saw opposition from family and local groups—especially to leaving the county for graduate work.

Agents motivated toward graduate work tended to be younger, aspired to higher positions, and had a higher level of professional orientation than their less motivated colleagues. They were more likely to have done previous graduate work and felt that they had family support. Positive influences in this motivation were the prospect of reward and of satisfying personal needs. Negative motivations were the time and cost of study and group forces such as family obligations.

There was an association between motivation to professional development of other sorts and levels of aspiration and professional orientation. Previous graduate work and a perceived favorable attitude on the part of colleagues and local authorities were also associated with high motivation. The most important positive influence was a recognized need for knowledge. Negative influences were time and cost, lack of opportunities, and family pressure.

The author suggests that administrators may want to take seriously the influence of age, aspiration, orientation, previous graduate work, etc., on the degree and direction of motivation in developing professional improvement programs. They may also wish to deal with negative forces by convincing local groups of the value of professional development for staff members.

Agents can demonstrate to local audiences the value their professional development will have. It is also suggested that agents might examine their own attitudes toward professional development as a personal responsibility and make use of the flexibility inherent in their jobs to incorporate professional development.

Harold B. Swanson, "Factors Associated with Motivation toward Professional Development of County Agricultural Agents in Minnesota." Unpublished Ph.D. dissertation, University of Wisconsin, Madison, Wisconsin, 1965.

CAN AUDIENCES BE URBANIZED?

A "cosmopolitan," "open-minded," "urbanized" point of view has been repeatedly linked with early adoption of practices by researchers in this country and abroad. It has been speculated that educational efforts directed at urbanizing an audience might have the effect of increasing the general receptivity of that group to innovation.

In this study members of the leadership structure in a Pennsylvania county-seat community were involved in an urban policy seminar directed specifically at broadening their views. A measure of community orientation was obtained before and after the ten-session effort.

Findings indicated little effect on the group's position on a local-cosmopolitan scale, but there was a greater acceptance of varying points of view on the relation of the community to the larger society. An unexpected result was that some of the more cosmopolitan participants actually became more localistic in the course of the seminar—perhaps, the authors speculate, because the localistic views of their fellow participants constituted new ideas to them.

The authors also conclude that older and more experienced students may present more of a challenge to educators than is usually thought; that study which identified closely with local problems may actually localize rather than broaden viewpoints; and that a local orientation on the part of a community leader may make him more effective if set in a context of broad perspective.

Robert A. Rath and Roy C. Buck, "An Adult Education Program in Urban Policy and Its Impact on the Community Orientations of Open- and Closed-Minded Civic Leaders." Paper presented at the annual meeting of the Rural Sociological Society, Chicago, Illinois, 1965.

YOUNG HOMEMAKERS: WHAT ARE THEY REALLY LIKE?

Young homemakers as a group have been the subject of considerable concern in home economics extension. They have been less apt than their older counterparts to participate in Extension programs, and they are believed to be more in need of help. The problem of designing programs which will meet their needs and which will be attractive to them has been complicated by a lack of information about them.

To provide information about young homemakers as people as well as statistics, the author of this study—a nutrition specialist—conducted extended interviews with twenty young women in an urban county. All were non-participants in Extension programs; only one lived on a farm. The results are summarized in individual case studies and supplemented by summary tables. Each homemaker is characterized in a brief vignette covering her family composition, organization memberships, interests, attitudes, information behavior, and other relevant data.

Among the information gathered: Most of the young women interviewed had been married less than five years and had lived in their present homes for less than two. The twenty had 34 children, 25 of which were pre-school age. Thirteen belonged to three or more organizations

and all belonged to a church. Ten per cent said they had no free time during the day, 40 per cent had 1 to 2 free hours, and the remainder had 3 to 4 free hours.

Most had heard of the Extension Service but, when asked what it does, gave 18 different answers. They expressed need for 14 different kinds of homemaking information and spoke in the interviews of problems indicating additional unrecognized needs.

Mabel Doremus, *Pilot Study of Young Homemakers: 1964*. New York State Cooperative Extension Service, Cornell University, Ithaca, N.Y., 1964.

GROUPS VS. INDIVIDUAL LEARNING

The relative efficiency of group and individual learning is a matter of concern to all educators. If the lower unit cost of group instruction is offset by lower efficiency, there may be some value in working with individuals. In this study, college students were assigned to work as individuals, in pairs, or in foursomes in learning to solve simple "concept-attainment" problems. After varying periods of delay, subjects then worked as individuals in solving similar "transfer" problems.

Initially, the pairs and quads performed more efficiently than the individuals. Quads needed only 3.27 minutes to learn the solutions, compared to 3.89 and 4.62 minutes for pairs and individuals, respectively. Later, when working alone on new problems, the individual learners came into their own. Individuals were greatly superior on immediate retest and remained faster, though less so, after a short delay.

The authors speculate that the groups were able to grasp and analyze a great deal of information quickly and to arrive collectively at correct answers more quickly than individuals could. However, not all members of the groups were active in the process, and some had to start from scratch when working alone on the transfer problems. The individuals, on the other hand, were active throughout the process. While this meant that the first solution came more slowly, the individual had been forced to learn the principle and was able to carry this learning into the new situation.

This suggests that special care needs to be taken where group learning techniques are used to make sure that good group response does not mask cases where individuals have not learned. The bright group-member who is quick to respond with the correct answer may be robbing his fellows of the chance to learn.

Herbert J. Klausmeier, William Wiersma, and Chester W. Harris, "Efficiency of Initial Learning and Transfer by Individuals, Pairs, and Quads." *Journal of Educational Psychology*, LIV (June, 1963) 160-64.

EDUCATION is a social process. Education is growth. Education is not preparation for life; education is life itself. —JOHN DEWEY.