



## Research in Brief

### Poverty Doesn't Guarantee Low Intelligence

Contrary to some popularly held views, Wolfe's study, among other findings, found that poverty status alone doesn't guarantee below-average scores on intelligence tests.

This study was designed and conducted to determine the appropriateness of two conventional intelligence tests for assessing the ability of economically deprived young adults participating in job training programs. Test results generated by the study sample were compared with scores of the test standardization groups for the Wechsler Adult Intelligence Scale (WAIS) and the Langmuir Oral Direction Test (ODT). The tests were administered to the subjects on different days.

Analysis of the results revealed that two of the poverty samples, the manpower and vocational training groups (MVT), were found to be homogeneous.

These sample groups differed from the Neighborhood Youth Corps (NYC) group. Furthermore, the former resembled the WAIS normative sample on means, standard deviations, and correlations, while the latter differed significantly. Possible explanations for these discrepancies may be chronological age, sex, or race. Evaluations of these factors weren't conducted.

Other important findings indicate that the WAIS verbal scale appears to do about as good a job as the full scale (.89 for NYC and .94 MVT). Highest subtest predictors of verbal scale and full scale performance were the information and vocabulary subtests. The ODT, requiring only about 15 minutes to administer and a minimum of administrative skills, appears to be a promising instrument for screening candidates for the vocational setting studied.

"An Assessment of Cognitive Behavior of Economically Disadvantaged Young Adults in North Mississippi." Lillian S. Wolfe and others. University of Mississippi, University, Center for Manpower

Studies, 1973. [Order number:  
Ed 072 295. Price: MF 65¢,  
HC \$3.29.]\*

H. Long

### **Job Satisfaction and Decision Participation**

How important is it for rank-and-file Extension personnel and other adult educators to have a part in organizational decision making? To what degree is participation in organizational decision making related to job satisfaction?

The level of satisfaction experienced by members of educational organizations has been a concern of educators for many years. One of the most frequently mentioned sources of job dissatisfaction has been the desire on the part of organizational members for greater involvement in the decision-making process.

Research in industry has shown that there's a definite positive relationship between employee productivity and participation in organizational decision making.

Bleasco and Alutto conducted a study in two school districts that explored the relationship between decisional participation and teacher satisfaction.

The measure of teacher satisfaction used was "the degree of probability that a person would continue in his organization despite a variety of inducements to leave."

Decisional participation was computed from teacher responses to a series of questions that posed 12 decisional situations that occur in school systems. The decisional situations included such items as: hiring new faculty, selecting texts, resolving student learning problems, determining methods and techniques, establishing instructional policies, planning school budgets, determining specific faculty assignments, resolving faculty grievances, planning new buildings, resolving problems with community groups, and determining faculty salaries.

Teachers were asked whether they currently participated and if they wanted to participate in each decision.

The data indicated that decisional climate is a major factor influencing teacher satisfaction levels.

Teachers with lower satisfaction levels had the highest level of decisional deprivation.

The researchers concluded that "it is apparent that if a given educational organization is to sustain itself over time it must be concerned with both the attraction and retention of teachers and the faithful performance of their interrelated role activities. Levels of teacher satisfaction have been inexorably linked with these crucial organizational concerns. Therefore, for both humanistic and organizational reasons, educational institutions must create the condi-

tions which enhance the probability of high satisfaction levels among their teaching personnel."

The study reported here was limited to two school districts in western New York State and may not be representative of school districts as a whole. However, there may be important implications for Extension and adult education organizations. The need for further research in this important area is obvious.

"Decisional Participation and Teacher Satisfaction." James A. Bleasco and Joseph A. Alutto. *Educational Administration Quarterly*, VIII (Winter, 1972), 44-57.  
C. Trent

### Electrical Skills Learning

This investigation evaluated the effect of two instructional units on educationally disadvantaged and not educationally disadvantaged student learning of electrical knowledge and skills. The outcomes were tested by a 30-question, multiple-choice achievement test of electrical knowledge and by the grade each student received for performance of electrical skills.

The two instructional units were a skill unit and a theory unit. The skill unit, "Electrical Wiring Skill Sheets," was developed by the investigator. It contained 2 jobs and 27 skills. The theory unit, "Basic Electricity and Practical Wiring Lessons," was developed by a professor and a grad-

uate assistant in the Agricultural Education Department at The Pennsylvania State University.

A pamphlet, "Outline for Methods of Teaching the Educationally Disadvantaged Student," was prepared by the investigator for use in in-service teacher education. The in-service education methods were: Group 1, no formalized treatment; Group 2, pamphlets mailed; and Group 3, pamphlets delivered and contents discussed. The students were classified as educationally disadvantaged or not educationally disadvantaged by high school fifths.

Eighteen vocational agriculture teachers and their students were randomly assigned to the experimental treatment groups. Nine teachers and their students received the skill unit. The teachers who received the skill unit were randomly assigned to each of the in-service education methods with three teachers assigned to each method.

The nine teachers who received the theory unit were randomly assigned to each of the in-service education methods with three teachers assigned to each method. Six teachers received each in-service education method.

The two dependent variables used in the investigation were the post-test of electrical knowledge and the grade received for performance of electrical skills. The classification variables used in the co-variance analysis of electrical knowledge were the pre-test and

agricultural class fifth. High school fifth is the academic performance of a student (1st, 2nd, 3rd, 4th, 5th) based on his academic achievement in school.

The classification variables for grade received for performance of electrical skills were the knowledge pre-test and high school fifth. Agriculture class fifth is the ranking of students in fifths based on the teacher's concept of the student's ability to perform in the agriculture class.

Student reading level by grade and the pre-test were used as the classification variables for testing the effect of the instructional units on educationally disadvantaged and not educationally disadvantaged student grade received for performance of electrical skills.

Students who studied the skill unit scored higher on the achievement test compared to the students who studied the theory unit. The students who studied the skill unit had better grades for performance of electrical skills compared to the students who studied the theory unit.

There was no significant difference in effect attributed to the in-service teacher education methods on the achievement test scores. Students whose teachers received their in-service education material through the mail received better grades for performance of electrical skills.

There was no significant interaction of the two instructional materials by the three in-service education methods on the achieve-

ment test scores and grades received for performance of electrical skills.

The educationally disadvantaged students who studied the skill unit had higher scores on the achievement test and received higher grades for performance of electrical skill than the educationally disadvantaged students who studied the theory unit. There were no differences in the scores of the following groups of students: the educationally disadvantaged students who studied the skill unit and the educationally advantaged students who studied the skill unit, and the educationally advantaged students who studied the theory unit. The educationally disadvantaged students who studied the theory unit had lower mean scores on both tests.

"Effect of Performance Objectives on Electrical Skill Learning of Educationally Disadvantaged Students." Freddie L. Richards. Ph.D. dissertation, Pennsylvania State University, University Park, 1972. [Available from: University Microfilms, A Xerox Company, Ann Arbor, Michigan 48106. Order number: 73-21,276. Price: \$4.00, xerographic copy, \$10.00.]

F. Richards

### "Discrimination Day"

"The idea for Discrimination Day came to me on the day after the assassination of Martin Luther King. I discovered, after a fairly short discussion of the assassination of Dr. King, that my stu-

dents were thoroughly conditioned to the idea of the superiority of the white man, the expendability of any black person who might disagree with that idea.

"In an attempt to develop some empathy in my students for minority group members, particularly blacks, I divided my 27 students into two groups, those with brown eyes and those with other-than-brown eyes. I then informed the class that brown-eyed children were superior to the other students in the room. In view of this fact, we would be forced to lay down some new guidelines for our behavior in the room, on the playground, and throughout our school day.

"Within minutes, the blue-eyed children began to do poorly on their lessons and became sullen, depressed, and angry. The brown-eyed children changed from marvelously cooperative, thoughtful children to nasty, vicious, discriminating little third graders.

"In line with the irrationality of racial prejudice, I told the class on the next school day that I had lied, that it was really the blue-eyed children who were superior and the brown-eyed ones who were inferior. I watched the brown-eyes switch from their previously 'happy,' 'good,' 'sweet,' 'nice,' 'smart' labels to derogatory ones similar to those used the day before by the blue-eyes. Their academic performance deteriorated, while that of the new ruling class improved.

"Adults react to the experience very much the way children do. I exposed over a hundred so-called sophisticated, well-adjusted, educated, knowledgeable adults to the exercise and was amazed at the similarities between their reactions and those of my third graders.

"Watching groups before, during, and after this exercise has also proved to me the damage prejudice does, not only to the minority group members but also to those in the majority group. What I am suggesting is that rather than exposing every child to this exercise, we expose every teacher to it."

"'Discrimination Day': An Experience in Moral Education."  
Jane Elliott, *People Watching*, II  
(Spring, 1973), 17-21.

C. Martin

### Educational Needs of Disadvantaged Adults

Paramount in importance of problems confronting our society in large urban areas are: unemployment, underemployed people who live at bare subsistence levels, and undereducation. The problems can be seen again in misery, frustration, and despair. The social consequences are growing crime rates, ever-expanding welfare roles, and frustrated behavior.

Hampton and Ashton conducted a study to find the educational needs of disadvantaged adults. The study was done to de-

termine the felt needs and attitudes of the residents of a model cities neighborhood in Savannah, Georgia, with respect to evidence desired for training in certain generic program offerings (adult basic, job training, family and life adjustment, self employment, and community development).

Data were collected via questionnaire from 200 respondents who were 16 years or older, representing 120 households. Item analysis and chi-square tests were used to determine the differences in training desires of different age groups among male and females.

The results suggest that females were more attracted to supplemental training than were males and age was significantly related to training desires. The study emphasized that:

1. More women than men are interested in continuing education and job training, suggesting that agencies offering educational opportunities need to emphasize program offering for this group.
2. Most of the respondents participating in the study were over 55 years of age. This suggests programs for aging clients.
3. Annual income for a vast majority was under \$3,000, which suggests programs to upgrade skills and earning power.
4. For the unemployed, due to lack of necessary basic

skills, programs designed to equip residents for entry into a trade or profession are recommended.

5. One third of all respondents (employed and unemployed) expressed an interest in education and job training. More systematic linkage between educational agencies is a must to meet the total needs. For example, on-the-job training could be provided to individuals who need upgrading in skills, while basic education could prepare the unemployed for entry into employment.
6. New and innovative methods of program delivery are needed to replace traditional "canned" programs. For example, the use of paraprofessionals in a one-to-one ratio or in small groups in working with the disadvantaged has been employed with success.
7. The number and complexity of problems that are peculiar to residents of this neighborhood seem to indicate the need for counseling services to include education and job training opportunities.

*Educational Needs of Disadvantaged Adults: Implications for Programming.* Leonard A. Hampton and Dub Ashton. Savannah, Georgia: University of Georgia, Georgia Center for Continuing Education, 1973.

F. Richards

### Aging and IQ: The Myth of the Twilight Years

Extension professionals, like many adult educators in other institutions, have been confronted with the popularized concept that learning ability is inversely related to age. However, personal experience has often revealed the fallacy of such folk knowledge. Baltes and Schaie have recently reported significant findings that reveal intelligence *does not* slide downhill from adulthood through old age.

Baltes and Schaie report their work on four general, fairly independent measures of intelligence. First, crystallized intelligence encompasses the skills acquired through education and acculturation, such as verbal comprehension, numerical skills, and inductive reasoning. To a large degree, this kind of intelligence reflects the extent to which one has accumulated the collective intelligence of one's culture.

Second, cognitive flexibility measures the ability to shift from one way of thinking to another, within the context of familiar intellectual operations, as when one must provide either an antonym or synonym to a word, depending on whether the word appears in capital or lower-case letters.

Third, visuo-motor flexibility measures a similar, but independent skill, the one involved in shifting from familiar to unfamiliar patterns in tasks requiring

coordination between visual and motor abilities.

Fourth, visualization measures the ability to organize and process visual materials and involves tasks such as finding a simple figure contained in a complex one of identifying a picture that is incomplete.

The idea that age and learning ability are inversely related hasn't been without scientific support for the concept appears to have come from cross-sectional studies.

Baltes and Schaie's study overcomes the bias of cross-sectional studies by using a longitudinal design, with which the subjects were tested in 1956 and 1963. Their findings indicate that crystallized intelligence and visualization scores may increase with age. Cognitive flexibility and visuo-motor flexibility may decrease with age.

"Aging and IQ: The Myth of the Twilight Years." Paul B. Baltes and K. Warner Schaie. *Psychology Today*, VII (March, 1974), 35-40.

H. Long

"Citizen Participation, Democratic Representation, and Survey Research." John S. Jackson and William L. Shade. *Urban Affairs Quarterly*, IX (September, 1973), 57-89.

The authors describe how survey research can be employed as a form of citizen participation. They also compare citizen par-

ticipation elites of Carbondale, Illinois, to the community as a whole.

This study used an attitudinal questionnaire, interviews, and participant observation. Working with the CP (citizen participation) unit, two random samples of "activists" and "masses" were selected to represent the city of 30,000 population.

The survey made a contribution to CP committee program planning, although older and less educated members had doubts about the efficacy of survey research. Survey findings in the decision-making process probably suffered some reduction of impact when competing with other kinds of "inputs." The city council was less receptive than the CP committee to survey "input." The council also felt that newcomers and the uninformed shouldn't be allowed equal say in planning and decision making.

Individuals with high formal education and occupational status were heavily overrepresented in the elite category (and students seriously underrepresented).

The authors acknowledge that CP units may enhance the "opinion-policy" linkage or merely add to its symbolic legitimacy. The article challenges the legitimacy of community planning and decision-making organizations and the notion they serve the interests of all. It also suggests that political officeholders aren't necessarily accepting the survey form of

citizen participation. (Vested interests and the "people that count" may continue to provide the main input).

D. Blackburn

**"The Relationship Between Group Process Training and Group Problem Solving."**

Mary Pankowski, Wayne Schroeder, and Irwin Jahns. *Adult Education*, XXIV (Fall, 1973), 20-42.

The study was designed to investigate the relationship between group process training and group effectiveness. The sample studied consisted of 16 graduate students enrolled in an adult education course. They were matched according to their scores on three things: (1) Rokeach's Dogmatism Scale, (2) a questionnaire concerning their experience with group process training and/or experience in groups, and (3) a pre-test of the graduate course they had enrolled in. They were then randomly divided into two equal groups.

The experimental group received 12 hours of group process training before the two groups worked on a number of problems requiring group decision making and consensus. The group process training instructed the students in such topics as effective communicative skills, group problem-solving skills, and human relations skills. Data were collected and analyzed on both the quality of the groups' decisions and group interaction.



The authors conclude that the experimental group had a greater distribution of participation and made a smaller percentage of self-oriented contributions and a greater percentage of group-oriented contributions than the control group. The experimental group also produced higher quality solutions to their assigned problems than did the control group.

The authors conclude that training in group processes negated many inhibiting factors involved in the group interactional process and facilitated the expression of ideas and opinions from *all* group members—thus, contributing greatly to the quality of group decisions.

D. Blackburn

**"Aspects of Stevens County Farmers' Knowledge and Practices as Related to Sorghum Pest Management.** James Dale Carson. Master's thesis, Kansas State University, Division of Cooperative Extension, Manhattan, 1974.

This study measured the knowledge and experience of farmers in controlling the greenbug, *Shizaphis graminum* (Rondani), which became a major problem on sorghum plants in Stevens County (Kansas) and the High Plains in 1968.

Mail questionnaires and personal interviews were used by the county Extension director to collect data on: farmers' knowledge concerning the identifica-

tion and economic behavior of sorghum pests and predators, number of farmers using control measures, acres of sorghum treated from 1968-72, and which pesticides were applied.

Data from both study methods were in agreement and revealed: (1) over 75 percent of the farmers applied pesticides; (2) 86 percent of the farmers believed the greenbug was the most destructive insect, but 50 percent of the farmers were unable to distinguish between corn leaf aphid (a noneconomic pest) and the greenbug; (3) 75 percent of the farmers believed that the corn leaf aphid was damaging to sorghum; and (4) all the farmers indicated a need for a sorghum pest management program.

Based on the findings of this study, the county Extension director developed: (1) a series of realistic and relevant short- and long-range goals for the educational program, (2) several objectives to serve as guides in achieving the goals, and (3) a series of educational activities, including a slide presentation, with accompanying script, on how to identify and control the greenbug in sorghum.

F. Richards and W. Prawl

**A Survey of the Effectiveness of Management Development Programs.** Pamphlet T-14. Michael E. Spautz. Washington, D.C.: U.S. Civil Service Commission, Bureau

of Training, 1971. [Order number: ED 064 599. Price: none given.]\*

This paper summarizes the results of a survey of recent unpublished research studies, conducted in private industry and business, on the effectiveness of a variety of programs designed to develop management abilities.

The purpose of the survey was to obtain information about private industry training evaluation practices that might be used or adapted for use by federal agencies. Out of a total survey sample of 244, 17 studies were located that were substantial enough to be included in the report.

The summaries are organized into two major categories defined in terms of the type of criteria against which the programs are evaluated: (1) external criteria and (2) internal criteria.

In addition, the criteria used in a particular study are classified into four levels of sophistication: (1) participants' reactions, (2) learning, (3) behavior change, and (4) results. Some general conclusions, recommendations, and the questionnaire used in the study are also presented.

C. Trent

**"Reasons Why Women Do Not Attend Adult Homemaking Classes in Selected Towns of Iowa."** June Elizabeth Kreutzkamp. Master's thesis, Iowa State University, Ames, 1970.

Since adult education is a voluntary activity, the decision to participate rests with the individual adult. It's influenced by factors that are components of the individual's personality and the social group life of the individual involved.

A constant challenge to educators and administrators trying to provide this type of learning experience is that of reading those individuals who may need help badly, but rarely take advantage of, the available adult programs. An answer to the question of why women don't attend adult homemaking classes would be invaluable to people trying to develop and maintain an adult program.

A random sample of 30 women in each of 4 towns in Iowa responded to 76 reasons for not attending adult homemaking classes. A nine-point scale was used to indicate the importance of each reason given for not attending adult homemaking classes.

Six clusters of reasons for not attending adult homemaking classes were: reasons related to content; age and feelings about attending adult homemaking classes; family responsibilities and children's reactions; employment and other activities outside the home; psychological feelings about adult homemaking classes; and personal and social reasons.

The three most important reasons for not attending adult classes were: (1) the topics offered didn't interest me, (2) I would

rather do other things than attend adult classes in homemaking, and (3) the time of meetings was inconvenient.

Results indicate that women have definite psychological feelings about adult homemaking classes. People must be motivated to attend them. Topics possibly are taught where women haven't had a chance to help choose the subject matter. Involvement of people in planning seems to be the best way to get subjects of interest to participants.

I. Beavers

**Selected Socioeconomic Characteristics of Farmers Associated with the Use of Soil Testing.** Harold R. Ott. University Park, Pennsylvania, Pennsylvania State University, 1972. [Order number: ED 073 339. Price: MF 65¢, HC \$3.29.]\*

Extension personnel are constantly confronted with a "need to know" more about their clients. This study by Ott doesn't necessarily open up a "new" area as much as it confirms existing understanding.

Ott paired 166 soil testing farmers in Pennsylvania with non-testing farmers. By telephone interview, the following data were generated: nontesters had a lower level of formal education, were older, had lower gross income, and had lower organizational participation scores.

Conversely, testers or adopters were more likely to own crop land and were slightly more prone to adopt other farming innovations than were discontinuers. Nontesters who had considered testing had a higher level of organizational participation than other nontesters.

H. Long

**"Public Expectations of a University Campus."** Francis E. Hazard. Ph.D. dissertation, Ohio State University, Columbus, 1973. [Available from: University Microfilms, P.O. Box 1764, Ann Arbor, Michigan. Price MF \$4.00.]

This study assessed expectations of the general public in a specific two-year, post-high school institution of higher education identified as a university branch. The study sought in a broad sense to determine insofar as they affected the role and mission of the university branch:

1. The public image of the university branch under study.
2. The broad purposes and needs to be fulfilled.
3. The organizational plans, policies, and issues affecting the institution.

A random sample of 920 adults in Tuscarawas County, Ohio, were interviewed in the respondents' homes by means of a special questionnaire. Cross-tabulations were made with 17 demographic variables against 77 questions.

A majority of the public has the following expectations or characteristics:

1. A perception of the most important reason for offering programs, services, or courses: "to enable adults to continue an education that may have been interrupted in life."
2. A perception of the second most important reason: "to make the same programs available in the evening to the part-time working adult as are available to day time students."
3. A tendency to confirm certain of Havighurst's developmental tasks as appropriate educational objectives for the branch campus.
4. Satisfaction with the branch in meeting community needs.

Extension personnel concerned with the role and mission of the community college and its relationship to the Extension program will find this study of interest particularly as it relates to the public image of the community college.

I. Beavers



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