Research in Brief

Technology Alone Isn't Enough

In 1967, Pakistan imported about 42,000 tons of high-yielding dwarf wheat seed from Mexico to launch its accelerated wheat production program. The purpose of this study was to identify and explain some of the differential characteristics of farms and farmers in relation to diffusion patterns of this new wheat technology. Several socioeconomic, personal, and communication behavioral factors were examined in relationship to 4 major dependent variables: (1) rate of growth in use of dwarf wheat, 1966 to 1970; (2) level of use of dwarf wheat for the 1969-70 season; (3) level of use of fertilizers; and (4) adoption of associated dwarf wheat production practices.

The research design hypothesized that the following independent variables would be found significantly related to the dependent variables: farm size, tenure status, availability of inputs and credit, education, geographical isolation, wheat marketing, urban orientation, knowledge of practices, extension contacts, extension knowledge, radio listening, and use of sources and channels of communication.

The study was conducted in 30 randomly selected villages in Pakistan's Punjab in late 1970. A complete census of farmers was conducted in the 30 villages to delineate the sample universe. Stratified random sampling with disproportionate allocation was used to select 350 farm decision makers. Data collection instruments for personal interviews were translated into the local language and pretested by the investigator who was fluent in the language.

Several multiple regression models were used in the analysis; difference of means tests and nonparametric methods were used for comparing five farm-size classes. Various cross-checks on the validity of this section is prepared by the editors in cooperation with the ERIC Clearinghouse on Adult Education.

44
of data were made and the test-retest method was used to measure reliability. Data were analyzed in the Cornell University Computer Center.

Major findings: (1) There was a "tidal wave" of acceptance of the new seed over the time period; farmers of all classes used high levels of dwarf wheat in the 1969-70 season. Farm size, distance to markets, tenure status (inversely related), and the time factor were significantly related to rate of growth in the use of the new wheat in the time series analysis. (2) Farmers haven't adopted associated wheat production technology; relatively low levels of nitrogen were used and almost no phosphorus. Water control, nitrogen use, seed rate, seedbed preparation, and sowing method explained over 90 percent of the variation in dwarf wheat yields. (3) Size of holdings, credit availability, distance to fertilizer agencies, and urban orientation were significantly related to fertilizer use and, with 3 other variables, explained 45 percent of the variation in fertilizer use. (4) Farmers of all classes exhibited low levels of knowledge about improved production practices which may largely account for their extremely low use of these practices. (5) A surprisingly low level of farmer-extension contacts was found among all classes of respondents.

These findings indicate that several critical macro-level policy decisions are required to sustain progress in wheat production. Among these are: vastly improved extension services, improved credit facilities, ready availability of fertilizer, and improved supportive communication systems.

Without these and related facilities for helping farmers learn about improved production practices and the establishment of others conducive to their profitable use, it's highly questionable whether farmers (without large subsidies) will either increase irrigated wheat acreage or improve current yields with decreasing per unit input cost which characterizes modern agriculture.

The overriding message conveyed by this research is that successful "green revolutions" in agriculturally deficient countries require multidimensional approaches: that the unidimensional approach commonly based on new technology, no matter how powerful, won't alone do the food production job.

Developmental change starts with people and accumulating evidence suggests that changes in the behavioral patterns of people, at both the macro and micro levels, constitute the ultimate dependent variable in the modernization mix.


J. P. Leagans

Patrons of the Poor

This case study concentrates on the relationships of people and agencies relating to a poor community in southwestern United States. The study was carried out while the poor were trying to start self-help housing.
The study points out that there are many different types of people working in poor communities and for various reasons, some of which aren’t in the best interest of the client community.

The article points out that the values and beliefs held by the clients and the larger community regarding the client community were both in error and self-serving. These beliefs or assumptions were that: (1) the people or clients were incapable of doing anything for themselves, (2) if something was being done it must be the work of behind-the-scenes manipulators, and (3) the improvement plan that called for removal to suburbs was highly offensive.

The study’s major focus was directed at the “disruption patrons.” This type of patron was described as building clienteles by dispensing goods and services, but this isn’t done to gain an economic advantage. “The distinctive quality of these clienteles is that they involve competitive influence statuses and that the processes of competition are disruptive with respect to the poor community.”

It was found that each group or institutional unit tried to build its own sphere of influence within a community without regard to other social units such as kinship groups or communitywide grouping. This creates organizations independent of the internal authority system of the community and, in some degree, of the interest system of the clients.

The author draws three conclusions from his study:

“First, disruptive clienteles seem to be widespread in the United States . . . . Moreover in the United States the three varieties of the disruptive type analyzed here constitute a very widespread combination. The school, the religious denominations and the governmental bureau with these clienteles are found everywhere operating in ways similar to those described.

“Second, such clientele systems operate effectively to destroy, to inhibit or to subvert internal organizations in communities of the poor only so long as those communities are relatively small and the individuals in them are reachable by the patrons.

“Third, what is called civil disorder tends to appear among those poor whom the patron system fails to reach. Such disorder is actually symptomatic of a developing community organization. It heralds a phase in industrial society in which the patron system as a control in the relations between lowest income and other groups ceases to function as an important maintenance function.”

Editor’s note: This is a most useful case study for people conducting and planning programs with the poor as their primary audience. It vividly points out how agencies tend to regard people in relationships to the institution rather than to the indigenous community of the client.


D. Littrell

Journal of Extension: Fall 1972
Widowhood and Preventive Intervention

This paper discusses the needs of the new widow to make a transition from the role of wife to that of widowhood. It points to the lack of a transition ritual in American culture which helps the bereaved individual know how to make the needed changes in her life.

A mode of intervention, developed in the Widow-to-Widow program, is described in which another widow is the primary care-giver. Using her own experience as a widow, she offers the newly bereaved individual an opportunity to get some help in coping with her grief and then points the way to making the transition.

The widow aide is helpful in at least three ways. She provides support, is a role model, and is a bridge.

Widowhood can be viewed as that social category that every married person will enter when one of the couple dies first. Most people put aside any thought that this change of status will happen to them. Most contemporary traditions and patterns of behavior support people in their reluctance to face death and its consequences for family life. In fact, few people understand what it means to be widowed. While it's common to re-arrange for marriage during courtship, no similar rituals prepare the individual for the inevitable termination of this marriage when one of the partners dies.

Any verbal discussion of what widowhood involves rarely occurs even when the spouse is seriously ill and death is anticipated. On the other hand, silent consideration of what's involved may be taking place in an older population as people observe friends who are becoming widowed.

In 1968, there were about 11,000,000 widowed individuals in the United States, while in 1960 there were only 9,000,000. For all age groups: men were becoming widowers at the rate of 5.9/1000 or 251,000 a year, while women were becoming widows at the rate of 13.9/1000 or 592,000 per year. The widowed are increasingly a female population.

Widowhood isn't solely a problem of the elderly as one-fourth of those widowed are under 65. However, many people grow to old age as widows and widowers. For example, of those who die of old age, on the average women have been widows for 18.5 years and men have been widowers for 13.5 years.

The Widow-to-Widow Program

This paper discusses several aspects of what it means to be widowed based on the experiences of the Widow-to-Widow program. The program developed in response to the finding that most care-givers who might normally be available to the widowed were fearful of a bereaved individual, trying to shut off his or her mourning prematurely and withdrawing while there was still great need.

The Widow-to-Widow program was an experiment to test the feasibil-
ity of another widow becoming a care-giver to the newly widowed. It was hypothesized that she would be able to use her own experience to help others, that her special empathy would enable her to understand the support needed, that she could accept the new widow's distress over an extended period of time, and that she would be accepted if she offered her help to the new widow.

Discussion

What has been proposed here is a method of intervention in a normal life crisis. The method of intervention to a large extent bears many similarities to a self-help program since the primary care-giver is a widow and she is serving other widows.

In addition, the widows served can move into the role of care-giver. This is one of the new roles available to them as they move to redefine their lives without a spouse. The care-giver in turn then is helped. This is another aspect of self-help efforts that the person helping is being helped by this activity.

The Widow-to-Widow program provides a systematic effort as re-engaging the bereaved individual in a new but acceptable role. A widow care-giver bears no stigma of illness or disability. To take help from such a person doesn't reflect negatively on the individual's own competence. As a teacher, as a role model, as a bridge she helps make order out of the chaos of grief and provides the widow direction in the role transition. This is the essence of prevention.


V. McGaugh

Attractiveness Vs. Expertness in Communication

Why do people believe what you tell them? Many “persuaders” wish they knew! So do educators. There’s been research showing that how the audience sees the source of a message influences how they react to that message — the degree to which they agree with it, possibly how much they learn from it, etc.

Some people tend to agree with a source because they get real satisfaction out of being identified with, or identifying with, that source. The power-to-influence that such a source has is due to his attractiveness to members of his audience.

Other people are swayed by the expertness of a source. Here the influence the source has is due to the truthfulness and validity of his logical arguments.

Mills and Harvey studied attractive and expert sources. They figured it would make some difference in how you’d feel about a message, depending on whether you found out about the attractiveness and expertness of the source before or after you read the message.

Study in Brief

Mills and Harvey studied 72 college women volunteers from a
general psychology class. Their experimental design included four groups. Two of the groups of 18 women were told the source of a written speech text they were to read was a sophomore majoring in education. Along with other information, a picture of an “attractive, smiling young man” was included. This was the attractive source condition. One group saw this material before they read the speech and the other saw it afterwards.

The two other groups were told that the source of the speech text was “a professor of education ... one of the country’s leading experts on the problems of higher education.” The speech favored general education. This was the expert source condition. Again, one group saw the material about the “speaker” before they read the speech, and the other group saw it after. As before, the author information also included a photo — this time of “an unattractive, frowning, middle-aged man.”

Opinion change was measured by the women filling out 10 Likert-type items after they’d read the speech. These items concerned general versus specialized education. They were seven-place scales ranging from “strongly agree” to “strongly disagree.” The researchers’ operationalization of “attractive” and of “expert” source seemed to work. The women saw the young man as more “attractive” and the professor as more “expert.”

Interestingly, the two sources seemed to be about equally persuasive. In the “before” condition, the women students agreed with the source to about the same extent, whether they thought the message came from the attractive or the expert source. Agreement with the attractive source message in the “after” condition was about the same.

This wasn’t true for the expert source message in the “after” condition. Here the women were significantly less in agreement with the source than in any of the other conditions.

Thus, it did seem to make a difference not only what kind of source the message came from, but also when the reader found out about the source. The expert source had less influence on the audience when they weren’t told about his expertise until after reading his speech.

Implications for Extension

Extension and other adult educators have “expertise” as their stock in trade. Of course we try to be attractive to people as well. But expertise is our business.

What this research seems to say—at least for women students—is that we need to emphasize our expertise when we’re going to try to influence such an audience. We can’t take it for granted that they’ll understand we’re experts before we get through. We probably need to make our areas of expertise known to them early and directly for us to have the most effect.

There’s an old rule for people making introductions of public speakers that says you should tell the
audience why this particular speaker is important for them to hear at this time on this topic. This research seems to support that idea. For the most persuasive effect from an expert source, let the audience know at the beginning that he's qualified and expert.

Too, this research makes you wonder about “anonymous” publications put out by educational organizations such as Extension Services. Of course there’s credibility for the message simply with the source being one of the land-grant universities, for example. But maybe we overlook a persuasive factor in not always listing an author or authors and giving their “pedigrees” at the beginning of a publication.


M. Miller

Moral Orientations of Student Activists

The following is a study of the values and moral positions of student activists. The authors’ conclusion is that student protest is a manifestation of a strong moral concern on the part of intelligent and sensitive young people.

Method

The authors employed a Q-Sort in which the respondents were asked to describe their “ideal selves” by sorting 63 adjectives into 7 equal piles, ranging from those most descriptive of the ideal self to those most contrary to the ideal self.

The moral judgment phase of the study drew on Kohlberg’s scheme of three levels of moral development. According to this scheme the levels are:

Level 1: Premoral.
Level 2: Morality of conventional role conformity.
Level 3: Morality of self-accepted moral principles.

Measurement of the processes of moral judgment revolved around stories and questions for paper and pencil testing. After 957 subjects responded to the moral dilemmas presented, trained judges scored the results.

Data were collected during the spring of 1966 from undergraduate Free Speech Movement arrestees at Berkeley and from a comparable cross section of students at large. The following year the study was extended to San Francisco State College and to groups of Peace Corps volunteers in training.

Findings

The authors were able to discern a clear value pattern, on both campuses for both men and women, for which the activists were comparatively low and the cross section of students high. The pattern of values can be labeled as the Protestant ethic and best identified by four value areas: ambitious, fore-
sightful, orderly, and conventional. The positive characterization of the activists' values is less clear. However, there are two values that hold up on both campuses for both men and women: creative and imaginative and free—unfettered and not hung up.

The comparison of activists, the cross section of students on the two campuses, and the Peace Corps volunteers on moral development is clear. The percentage functioning at the highest level, that of principled morality, was highest among the activists. The activists were substantially more likely to be classified at the highest developmental level on the basis of their moral reasoning.

The authors also found the familiar values of the Protestant ethic to be linked to level two morality—morality of conventional role conformity.

Men functioning at level three morality see their ideal self as rebellious, idealistic, creative, sensitive, loving, self-controlled, perceptive, empathetic, and altruistic. Distinctive ideal values for women at level three were rebellious and sensitive, free and individualistic.

The level three morality—the morality of self-accepted principles—seems to be linked with the humanistic value of self-actualization.

Values Influencing Youth in Vocational Choices

A developmental task of the teen years is the crystallization of an occupational preference. Career exploration in Extension work has been an attempt to program for this developmental need. The research summarized below is an excerpt on vocational values from a larger study on vocational maturity.

Method

The subjects of the study were ninth grade students in three northern Michigan rural schools. Among other instruments administered to the 243 subjects was a vocational values inventory.

The vocational values inventory is a research instrument developed to explore the occupational values that motivate people. The inventory contains 84 items designed to measure the following values:

1. Altruism—important to those who seek work primarily as a means of helping others.
2. Control—for those who get vocational satisfaction out of running things and being in charge of situations. They like to be in the position of decision making.
3. Job freedom—important to those who want to be free to decide what they do and how they do it.
4. Money—for those who are interested in material satisfactions and the psychological

—D. Stormer
gratifications brought by wealth.

5. Prestige—for people concerned about what others think of them and their work.


7. Self-realization—for those wanting to do what they consider creative work. They want work to be an outlet for their interests and aptitudes.

Findings

The students in all three schools scored highest on self-realization as a vocational value. The three classes were also congruent on the value of security which ranked second highest of the seven values measured.

Two of the three groups were in agreement on the rank-order of the other five values. In addition to self-realization and security, they held altruism third; money, fourth; prestige, fifth; job freedom, sixth; and control, seventh.

The coefficient of variation was used as an expression of homogeneity, resulting in a pattern much like the one discussed above for mean scores. That is, the scores for the three groups were most homogeneous on the values of self-realization and security. The groups were also in close agreement with the rank order of the coefficient of variation for the other five values.

Conclusion

Most research to date indicates that values don’t enter into the vocational choice-making process until late adolescence. This research would tend to refute these earlier findings. Clearly, these three distinct groups of youth in the early teen years have a well-established pattern or hierarchy of vocational values. The youth wanted to realize themselves through work by finding an outlet for their interest and aptitudes. They also wanted the psychological support provided by secure employment.


D. Stormer


The “package approach” to agricultural development is almost universally advocated. The underlying theme of this paper is the relevance of the package program approach to the development of peasant agriculture in Southern Africa, particularly where there are livestock and population pressures with a declining soil fertility situation.

In Rhodesia, full-time short literacy courses were held in June and July, 1970, as a means of improving the technical efficiency of savings clubs and as a means of improving the technical efficiency of savings clubs and as a possible starting point for a broad program of adult education, starting with agricultural development. The agricultural
"package program" was organized as part of the literacy follow-up program, the participants being those who were members of savings clubs, but not necessarily those who had attended the literacy course, and who could grow one or one-half acre of maize. The four major steps of the crop production were: (1) land preparation, (2) planting, (3) post-planting operations, and (4) grain storage.

Though still in its early phases, the advantages of a "package" type program are that members of the project receive specific advice, and they have access to the loan financing necessary to purchase recommended agricultural inputs, which are available locally at a cost less than that of other suppliers. The long-term aim is for the savings clubs to develop into full credit unions that can finance agricultural development by loans to members.

J. P. Leagans


This pamphlet is designed to help those thinking about conducting a community attitude survey. The purpose of the publication isn't to answer all the questions about such a survey, but to suggest that certain factors be taken into account during the planning stages.

D. Littrell


For those interested in developing programs in which citizen participation is desired, this article is must reading.

The section on "Myths About Citizen Participation" provides people (Extension personnel specifically) with how professionals become committed to their plans and courses of action and try to sell the citizen rather than involve the citizen. It argues that "most typical efforts at citizen participation are a sham."

The author presents an interesting analysis of how one "gets into power" or into the decision-making process. For those interested in further study, the references provide an excellent study guide.

D. Littrell

Training Police as Specialists in Family Crisis Intervention. Morton Bard. New York, New

Recognizing the need for more manpower in preventive mental health, this project sought to demonstrate the feasibility of training police in techniques of intervention in family disturbances, to improve mental health, and reduce violence. After 2 months of preparation, including a 160-hour, on-campus course, the 18 police volunteers were assigned to an experimental precinct in New York City.

During the last four months of the two-year project, evaluation was conducted by comparison with a control precinct with similar characteristics. The project showed that training can reduce violence, improve personal safety of police officers, strengthen community relations, and increase police morale and job satisfaction.

V. McGaugh


Discusses the need for a program that would "leave the responsibility of child rearing with the parents, but take measures to assure that virtually all parents have the necessary skills and knowledge to do the job well." Appended are 16 references.

V. McGaugh


Can the hard-core unemployed be reached via a TV home study course? Not particularly, according to this study. Most participants were housewives.

Intent of the course was to prepare high school dropouts to pass the General Education Development test. The program didn't appear to be doing that. The major reason participants withdrew from the course was a "lack of two-way communication."

Neither success nor withdrawal from the program could be predicted on the basis of age, sex, race, education, marital status, or employment status.

A clear problem that emerged from the research was that most dropouts aren't aware of equivalency programs. Steps are needed to overcome this lack.

M. Miller

Filmed demonstrations are sometimes used for teaching skills. This research tried out some ways of improving student learning over just showing such a film.

An extra showing of the film helped reduce the need for extra time and for help among Army trainees.

Showing the film one step at a time, then stopping the projector after each step to allow practice of that step, also reduced time and need for help.

In addition, the original Army film was revised. The revision came about through repeated tryouts with novices. Again, the revised film reduced the time needed and the need for help by the trainee.

Thus, each of these changes made from just straight showing of the original filmed demonstration improved learning for the trainee.

M. Miller


Purpose: To determine (1) trainee and trainer agents’ assignment of the importance of selected learning experiences for newly employed Extension agents to engage in during induction training, (2) trainee and trainer agents’ assessment of timing of selected learning experiences for newly employed Extension agents to engage in during induction training, and (3) differences between responses of the two groups of agents concerning importance and timing of the selected learning experiences.

Method: Sixty-six learning experiences were devised from North Carolina's Induction Training Guide for New County Extension Agents (1968).

Questionnaires were used to obtain data from 84 unit Extension staff members in Virginia who were employed as trainees and 85 unit Extension agents who were identified as those primarily responsible for supervising the trainees during the induction period.

Frequency distributions, percentages, and the chi-square test were used in data analysis.

Findings: High ratings were assigned experiences in the areas of office and time management; program processes; philosophy, organization, objectives, policies, and procedures; and the 4-H program. Both groups of agents rated experiences listed under the headings of communications and understanding human behavior lowest. The null hypothesis was rejected as the data partially supported the generalization that both groups of agents would assign varying degrees of importance to the 66 experiences.

A majority of both trainees and trainers indicated the first and second 6 months of employment as appropriate for all the 66 experi-
iences. A large majority assigned experiences in the areas of “philosophy and objectives” and “office and time employment” to the first six months.

C. Trent


Purpose: To determine the extent to which the dogmatism level of presidents in the North Carolina community college system was related to their attitude toward change. It was also this study’s intent to examine the attitude toward change of presidents and their faculties.

Method: The population consisted of the presidents and a sample of their faculty members from the North Carolina community college system. Sixteen technical institutes were selected randomly from a total of 39. Fourteen of 15 community colleges participated in the study, resulting in a total number of 30 institutions.

Instruments employed included the revised “Attitude Toward Change Scale,” Form E of “The Dogmatism Scale,” and “The Personal Data Questionnaire.” All three instruments were administered to presidents, while the faculty responded to the change scale and the personal data questionnaire.

Findings: Presidents exhibited relatively open belief systems and a moderate receptivity toward change. Similarly, the faculty preponderantly were receptive to change. However, under statistical analysis, no significant relationship was found to exist between presidents’ attitudes toward change and dogmatism, or attitudes toward change between presidents and their faculties.

Age and experience as an educator were related to presidents’ attitude toward change. No significant correlation was recorded between personal characteristics and dogmatism among chief administrators. Analogous to these findings, faculty attitude toward change wasn’t related to any of the personal characteristics.

C. Trent

* Reproductions of these documents are available from the ERIC Document Reproduction Service, P.O. Drawer O, Bethesda, Maryland 20014. To order, give this information:
1. Title.
2. ED order number.
4. Type of reproduction wanted—microfiche or hard copy.
5. Number of copies wanted.
Payment must accompany orders less than $10.00. Add a handling charge of 50 cents to all orders, and include the appropriate local state sales tax or tax exemption certificate.