

IMPACT OF THE TRAINING PROGRAM OF THE PHILIPPINE TRAINING CENTERS FOR RURAL DEVELOPMENT ON FARMER MODERNITY

Henry Y. Goltiano and Gelia T. Castillo

Chief Training Officer, National Training Center for the Visayas of the Agricultural Training Institute, ViSCA, Leyte and University Professor, University of the Philippines at Los Baños, College, Laguna, Philippines.

Portion of MS thesis in Rural Sociology conducted by the senior author in U.P. at Los Baños.

Funded by the Philippine Training Centers for Rural Development (PTC-RD).

ABSTRACT

This study assessed the impact of PTC-RD training on farmer modernity. It specifically determined whether or not there were significant differences in modernity among three comparison groups that represented a continuum of training experience: the never-trained, slightly-trained and highly-trained farmers.

There were 61 respondents whose personal, family and occupational characteristics did not differ significantly. Twenty respondents had never attended a PTC-RD training, 27 were trained only once, and 14 thrice or more.

An interview schedule was developed to gather data and information from the respondents. Based on the Wilcoxon Rank-Sum test of difference in means, the three groups of respondents significantly differed in active public participation, efficacy, occupational aspirations, planning valuation, technology valuation and time valuation. The highly-trained respondents proved to be the most modern among the three groups.

Ann. Trop. Res. 11: 1 - 11

KEY WORDS: Modernity. Never-trained farmer. Slightly-trained farmer. Highly-trained farmer. Training program.

INTRODUCTION

Society development is strongly associated with changes in the attitude-value-behavior complex of individuals.

According to Grandstaff (1977), these changes are customarily lumped under the rubric of modernization.

Modernization to Anderson (1966) is development; to Moore

(1963), it is economic development particularly industrialization. According to Black (1966), modernity describes the characteristics common to advanced countries and modernization describes the process by which they acquired these characteristics.

Modernization has been further defined from other perspectives. However, Holsinger (1973) suggests that the starting point of any definition of modernization is not in the character of society but in the character of individuals. As Bellah (1968) puts it, the modern should be seen not as a form of political or economic system but as a spiritual phenomenon or a kind of mentality.

Studies both in developed and developing countries show education as a major tool for the modernization of individuals (Flores, 1977; Armer and Youtz, 1971; Cunningham, 1974). Whenever education is considered from the point of view of development, Myrdal (1968) says that its primary purpose is to rationalize or modernize attitude.

In the Philippines, formal education does not only seem rigid and irrelevant to immediate needs but is also an elitist tool to exclude the poor, the rural and the old. Thus, nonformal education has come out as a viable and practical supplement and/or alternative. Works of Blaug (1974) and Cuyno (1982) indicate that participation in nonformal agricultural and rural development training programs is significantly related to the adoption of improved farm practices; and/or attitude changes, value and behavior of participants.

The Philippine Training Centers for Rural Development (PTC-RD) was created to help rural manpower acquire the basic capabilities and qualities indispensable for countryside development through nonformal schooling. Established on May 30, 1977 through Presidential Decree 1145, the PTC-RD pursues its broad mandate by undertaking various trainings and related activities.

The legitimacy and effectiveness of PTC-RD could be gauged through the basic changes it cause in the very nature of its clientele. Farmers who number most among PTC-RD clientele are considered by Castillo (1983) as potentially PTC-RD's most positive output. This study attempted to answer the question of whether PTC-RD training had ripped apart farmers' old ways of thinking and acting, and supplanted them with new ones. This study was socio-psychological rather than purely sociological to assess the effect of PTC-RD training courses on farmer modernity. Specifically, it determined differences in modernity among the never-trained, slightly-trained and highly-trained farmers along these attitudinal and behavioral dimensions which should be possessed by a modern farmer: active participation, aspirations (educational and occupational), efficacy, openness to new experience, planning valuation, readiness to accept social change, technology valuation, and time valuation.

METHODOLOGY

Locale of the Study

The study was conducted in the towns of Talibon, Trinidad and San

Miguel in the province of Bohol. These towns were selected because they were the ones which closely approximated the following criteria:

1. Fifth class town with the least in these socio-economic characteristics: annual municipal revenue; number of barangays energized, number of health personnel; number, area and type of market; number of technical/vocational or tertiary schools; and it must be far from Tagbilaran City, the province's major urban center. These criteria were used to ensure that selected respondents live in a milieu with limited worldly and technological sophistication and exposure to other modernizing factors.
2. With large land area devoted to rice to ensure enough qualified rice farmers respondents.
3. Home to a good number of participants of previous PTC-RD farmer trainings.
4. Relatively peaceful.
5. Accessible.

The Research Design

This study compared three groups of farmers assumed to be alike in all other characteristics except for their participation in training. The three comparison groups represented a continuum of training experience: Group

1, the never-trained; Group 2, the slightly-trained; and Group 3, the highly-trained.

Since the study wished to assess only the influence of training on farmer modernity, the effects of other characteristics were controlled. Respondents selected for the three comparison groups have closely similar personal, socio-economic and occupational characteristics but different in the number of training courses participated.

Since the resultant sets of samples were alike in all important respects save their training participation, any difference in their modernity score could be attributed to the training without fear that the outcome was spurious effects of other uncontrolled factors. Furthermore, to ensure that respondents were similarly launched and situated in life, each of the three paired respondents were selected, whenever possible, from the same barangay.

Technicians of the then Ministry of Agriculture and Food in the towns served as the interviewers. Before the actual interview, the objectives of the study and the interview schedule were first discussed together by the researcher and the interviewers to attain a common frame of reference. The interview schedule was also pretested in the town of Ubay, because it is similar in condition and proximity to the three survey towns.

Collection of Data

A highly purposive sampling was used in the selection of respondents. Interview schedules were administered to 97 farmers perceived to meet the sampling provisions. However, only

the filled-in interview schedules of 61 respondents who actually met the sampling provisions were analyzed.

The Research Instrument

The instrument developed for this particular study to measure farmer modernity was patterned mainly after the Overall Modernity or OM Scale of Inkeles and Smith (1974). The instrument was successfully used by Inkeles (1968) in six developing countries. Flores (1977) found the instrument reliable and valid in his study of high school students in Southern Leyte.

It measured the following attitudinal-behavioral dimensions for which substantial inputs were provided by PTC-RD training: active public participation, aspirations, efficacy, openness to new experience, planning valuation, readiness to accept social change, technology valuation and time valuation. The dimensions are not mutually exclusive. Items in one of them are not necessarily tightly sealed off from those of others.

The instrument had 45 items, 31 of which were purely attitudinal. Active public participation and technology valuation had behavioral measures too. Behavioral measures provided tests to verbal claims to modernity. It was possible that some of the respondents might be sincerely adopting modern attitudes and opinions, while still continuing to act in their traditional ways. This study thus wished to obtain information about the actual behavior of the respondents. Behaviors were tested by objective methods and by self reports of the respondents to the effect that they had done one thing or another, or had not done anything.

Annals of Tropical Research

Objective methods included items which assessed the farmer's knowledge of political figures, national problems, and new rice farming technology.

Analysis of Data

The collected data and information were edited, collated, analyzed and tabulated according to the objectives of the study. They were processed at the Computer Service Unit of the University of the Philippines at Los Baños.

To determine significance of differences in modernity between two comparison groups, the Wilcoxon Rank-Sum (WRS) test of difference in means for two independent samples was used (Snedecor and Cochran, 1967).

The Kruskal-Wallis one-way analysis of variance by ranks (Siegel, 1956) was used to compare means of the three groups on some personal, family and occupational characteristics.

The minimum level of significance in all statistical tests was set at 5%. Descriptive statistics such as frequency counts, percentage, measures of central tendency, measures of variability and ranking were used whenever applicable.

The following system of scoring responses to each item in the farmer modernity measurement instrument was adopted:

1. For two-choice items; the modern or correct answer was scored 5; the traditional or wrong answer, 1.

2. In three-choice items; the most modern response got 5; the moderate, 3; and the traditional, 1.
3. In four-choice items which offered no middle ground answer; the most modern response got 5; the second, 4; the most traditional, 1 and the next traditional, 2.
4. In five-choice items; the most modern response got 5 points; the second, 4; the third, 3; the fourth, 2 and the most traditional, 1.

Items requiring respondent to enumerate or list his responses were scored for the number of correct response. No response meant a score of 0.

RESULTS AND DISCUSSION

Difference in Overall Modernity Between Two Comparison Groups

The major purpose of this study was to determine whether never-trained, slightly-trained and heavily-trained farmers significantly differed in modernity.

Data presented in Table 1 indicate that among comparison groups, Group 1 had the lowest overall modernity mean score of 139.20 and Group 3 had the highest with 181.64. The WRS test showed that the three comparison groups significantly differed from each other in overall modernity at 1% level indicating that the amount of training affected the modernity of the farmer.

Groups 1 and 3 representing extreme positions in training experience, registered the biggest difference in overall modernity mean scores among the comparison groups. This implies that the more trainings attended by the farmers, the more modern are their attitudes, values and behavior. The difference between Groups 1 and 2 was the next biggest. This indicates that training has modernized farmers far beyond the point they had reached before their training.

To assess whether those recruited for training were pre-selected based on their existing psychological traits, five Group 1 respondents who were once recruited and had decided to attend training but failed to come were compared to 15 respondents in the same group who were never recruited for training. The WRS test bared no significant difference in overall modernity between them, denoting that farmers who were recruited for training were not more modern than those never recruited.

Groups 2 and 3 were compared to assess the modernizing effect of the number of trainings on farmers who already have attended trainings. The WRS test showed that the two groups differed significantly in overall modernity but the difference was very small. This suggests that although every training attended by a farmer adds to his modernity, the increment is not substantial and that the same farmer repeatedly exposed to the same type of training may learn less and less. Therefore, recruitment should be spread to those never reached yet by training.

Table 1. The WRS test of difference in modernity mean scores between two comparison groups.

Modernity Dimension	Mean Scores of Two Groups Compared		Signifi- cance ¹	Mean Scores of Two Groups Compared		Signifi- cance	Mean Scores of Two Groups Compared		Signifi- cance
	Group 1 n = 20	Group 3 n = 14		Group 1 n = 20	Group 2 n = 27		Group 2 n = 27	Group 3 n = 14	
Purely Attitudinal									
Active public participation (APP-A)	4.35	7.21	**	4.35	5.44	ns	5.44	7.21	**
Aspirations (ASP)									
Educational (ASP-E)	14.50	15.00	ns	14.50	15.00	*	15.06	15.00	ns
Occupational (ASP-O)	2.30	4.36	**	2.30	4.07	**	4.07	4.36	ns
Efficacy (EFF)	13.70	20.86	**	13.70	17.00	*	17.00	20.86	**
Openness to new experience (ONE)									
Planning Valuation (PLV)	10.40	17.14	**	10.40	13.74	*	13.74	17.14	*
Readiness to accept social change (RSC)	6.60	7.29	ns	6.60	6.81	ns	6.81	7.29	ns
Technology valuation (TEV-A)	15.30	23.30	**	15.30	18.74	ns	18.74	23.30	*
Time Valuation (TIV)	17.85	18.86	ns	17.85	18.37	ns	18.31	18.86	ns
Behavior-Information									
Active public participation (APP-8)	18.10	27.93	**	18.10	23.41	**	23.41	27.93	**
Technology valuation (TEV-8)	26.65	30.00	ns	26.65	28.85	ns	28.85	30.00	ns
Overall modernity	139.20	181.64	**	139.20	161.04	**	161.04	181.64	**

1**-highly significant at 1% level, *-significant at 5% level, ns-not significant

Attitudes of the Respondents in Specific Modernity Dimension

Active Public Participation. Two questions measured the respondents' attitude on active public participation. Data indicated that farmers with more trainings were more active in public affairs than others. It can thus be inferred that training which promotes involvement in group efforts, might have stimulated its participants to go beyond their personal concerns and join collective efforts of the larger community. Table 1 shows that highly-trained respondents, with a mean score of 7.21 in the two questions, lead the other groups in modernity in this respect. Slightly-trained respondents had a mean score of 5.44 and the never-trained, 4.35. The WRS test showed highly significant differences between the highly-trained and the never-trained and between the former and the slightly-trained ones. No significant difference was found between the never-trained and slightly-trained.

Educational Aspirations. The three questions that measured the respondents' educational aspirations showed that all three groups valued education highly. Their mean scores were: highly-trained, 15.00; slightly-trained, 15.00; and never-trained, 14.50 (Table 1). The WRS test showed significant difference only between the never-trained and the slightly-trained. Data could indicate that whether trained or not, the Filipino farmer puts high premium on education as a ticket out of poverty.

Occupational Aspirations. Data show that the farmer with more trainings had higher occupational aspirations. Therefore, the training might

help raise the farmer's hopes and capability to attain them for a better tomorrow for himself and his family. The mean scores of the groups in occupational aspirations were: highly-trained, 4.36; slightly-trained, 4.07; and never-trained, 2.30. The WRS test showed highly significant differences between the highly-trained and never-trained, and between slightly-trained and never-trained farmers. No significant difference was found between slightly-trained and highly-trained respondents.

When asked what is the best occupation for a person of their experience and ability, 79% of the highly-trained farmers indicated that they aspire to own and manage large agribusiness firms. Fifty-nine percent of the slightly-trained and 30 percent of the never-trained aspired similarly. The bulk of the never-trained (60 percent) did not flatter themselves to be more.

Efficacy. Five questions measured the respondents' efficacy. Highly-trained respondents led with mean score of 20.86 compared to slightly-trained (17.00) and the never-trained (13.70) (Table 1).

The WRS test showed significant difference in the mean scores between the never-trained and highly-trained, and the slightly-trained and highly-trained at 1% level; and the never-trained and slightly-trained at 5% level.

Data which show that highly-trained farmers are more efficacious than others could mean that training through integrative learning exercises that extol participants' virtues and potentials, may help bolster participants'

mettle to face the challenges of development.

Openness to New Experience. Apparently, the more trainings undergone by a farmer, the more audacious he is in testing untried ideas. The profitable exposure to new experiences and people with differing beliefs and motivations during training has probably whetted the farmer's appetite for what is novel. In the five questions that measured openness to new experience, highly-trained respondents had a mean score of 17.14 followed by the slightly-trained, 13.74; and never-trained, 10.40. The WRS test showed significant differences in means between highly-trained and never-trained at 1% level; and slightly-trained and never-trained, and slightly-trained and highly-trained at 5% level.

Planning Valuation. The two questions which measured the respondents' attitude in planning could yield the highest possible score of 10 and an expected mean score of 6. The overall mean of the three groups considered together (6.90) was close to the expected mean and indicates that the respondents do not generally put much importance to planning. The WRS test showed no significant differences between the group mean scores (Table 1).

Results show that even trained respondents did not care much about planning. This could either mean that training was deficient in teaching this value or if training was good, planning valuation could simply not thrive because of lack of institutional support or planning simply could not be appreciated because it is not necessary for the farmer.

Readiness for Social Change. The data show that highly-trained farmers readily acknowledged basic change, including changes in various kinds of social organizations from his family to his community. This implies that training by creating a milieu of free exchange of ideas between young and old, superior and subordinate, experienced and neophyte, had helped foster openmindedness and cognitive flexibility.

As shown in Table 1, the highly-trained farmers' mean score in the six questions that measured readiness for social change was 23.30. Slightly-trained and never-trained respondents had 18.74 and 15.30, respectively. The WRS test revealed a highly significant difference in the mean scores of the highly-trained and never-trained at 1% level. The slightly-trained and highly-trained significantly differed at 5% level. No significant difference was found between never-trained and slightly-trained ones.

Technology Valuation. The four questions which measured this attitude could yield the highest possible score of 20 and an expected mean score of 12. The observed total mean of the three groups was 18.36 which indicates that the respondents generally valued technology highly. The WRS test showed no significant differences among the groups' mean scores (Table 1).

Time Valuation. The respondents' attitude toward time was measured by three questions which could yield the highest possible score of 15 and an expected mean score of 10. The observed total mean of the three groups was 9.58 which indicates that the respondents generally did not have much

sense of time. The WRS test showed no significant differences among the groups' mean scores (Table 1).

The time sense of the trained respondents was not considerably better than the untrained ones. This could point to either or a combination of three things: 1) the weakness of training regarding the inculcation of this value; 2) the possibility that training, no matter how well-planned and implemented, is insufficient to dislodge a strongly ingrained trait of *time-unconcern*. It is still *unfilipino*, particularly among rural folks, to be time-conscious; 3) the absence of forces in the farmer's environment which foster or support better sense of time. In the rural areas where air and water are free, time is also a luxury. Thus, the farmer may not feel the need to budget his time or keep appointment on the dot.

Behavior of the Respondents

Active Public Participation. As earlier mentioned in the major subsection, The Research Instrument, active public participation and technology valuation had behavioral measures too. Behavioral measures provided tests to verbal claims to modernity.

The respondents' behavior on active public participation was measured by three objective tests and three self-report questions. In all three times, the highly-trained respondents obtained a mean score of 27.93; the slightly-trained, 23.41; and the never-trained, 18.10 (Table 1).

The highly-trained farmers substantiated their claim of active public participation. They cited more prob-

lems faced by the country and correctly identified key political figures, proving that they were more energetic in acquiring facts and information. They would make more positive suggestions to improve a law under discussion by their local governments. They also joined more organizations.

No significant difference was noted between the never-trained and slightly-trained in purely attitudinal measures of active public participation but they significantly differed in the behavior-information measures at 1% level (Table 1). This indicates that although never-trained respondents either adopted modern attitudes and opinions or pretended to, they failed to act accordingly as manifested by their low scores in the behavior-information items. It is indeed easy to claim modernity but it is another matter to authenticate and substantiate it with deeds.

Technology Valuation. The eight behavior-information questions on technology valuation could yield the highest possible score of 38 and an expected mean score of 23. The observed total mean of the three groups considered together was 28.5 which indicates that the respondents generally had considerable knowledge and skills on modern farming. The WRS test showed no significant difference among the groups' mean scores (Table 1). This could mean that never-trained farmers caught up with modern farming technology from various sources such as the media. It is also possible that trained farmers fulfilled their promise (as indicated by many in their action program) to share what they learned with other farmers, thus helping bridge the knowledge gap between

them and the never-trained ones. If so, then the training is an effective way to train para-extensionists in the person of farmer-leaders.

CONCLUSIONS

The findings of this study indicate that rural development training with strong socio-psychological components contributes to the modernization of outlook and personality of farmers raised in traditional settings.

Participation in rural development trainings like that of PTC-RD helped raise the farmers' public awareness and involvement, made him more open and ready to social and technological changes, emboldened his resolve to meet challenges and improve his lot in life. These implies that nonformal education programs and projects which mold commendable values, attitudes and behavior should be given continuing and vigorous support. A peasantry that is more modern in attitudes and values acts to support and facilitate the progress of society.

Trainings did not have considerable impact on farmer's attitudes toward planning and time. This implies three things, foremost of which is the review of training clientele scope and

composition. A farmer may have learned, or even practised modern attitudes and behavior. However, it could not be sustained because of the absence of these attitudes and behavior in his family. Without the support of his family, nothing can be accomplished by the farmer. Although basic power lies in his hands, the farmer's faculty to act upon his new found values can only be favored or crippled by the support or lack of it from his family. Thus, instead of recruiting only farmers, wives and selected children must also be included in the training that they may learn with the farmer not only modern farming technology, but also modern attitudes and values. With the members of the family mutually bolstering each other, the chances for the values learned in training to thrive are raised. In the Philippines, farming and the socio-psychological support it needs is more of a family concern than that of the farmer alone.

Various rural development institutions to operate together is also necessary because each, like training alone, may not be enough to supplant unwanted attitudes, values and behavior strongly embedded not only in the farmer's personality but also in the culture of his community.

LITERATURE CITED

- ANDERSON, A.C. 1966. The modernization of education. In *Modernization: The Dynamics of Growth*, Myron Weiner (ed.). New York: Basic Books.
- ARMER, M. and YOUTZ, R. 1971. Formal education and individual modernity in an African society. *Amer. J. Sociology* 76: 604-626.

- BELLAH, R.N. 1968. Meaning and modernization. *Religious Studies* 4:39.
- BLACK, C.E. 1966. *The Dynamics of Modernization: A Study of Comparative History*. New York: Harper and Row Publishers.
- BLAUG, M. 1974. *Education and the Employment Problem in Developing Countries*. Geneva, International Labor Office.
- CASTILLO, G.T. 1983. How Participatory is Participatory Development. Institute for Development Studies, Philippines. p. 389.
- CUNNINGHAM, I. 1974. The relationship between modernity of students in a Puerto Rican high school and their academic performance, peers and parents. In *Education and Individual Modernity in Developing Countries*. A. Inkeles and D.B. Holsinger (eds.). Leiden, The Netherlands.
- CUYNO, R.V. 1982. A non-formal education strategy for agricultural development: The Case of Bulacan Farmers' Training Center. Occasional Paper No. 5, NFE/WID Exchange-Asia, UPLB.
- FLORES, F.R. 1977. *Modernity and formal education among students in selected secondary schools in the Philippines*. Unpublished Ph.D. dissertation. UPLB, College, Laguna.
- GRANDSTAFF, M. 1974. *Historical perspectives of nonformal education*. A study team report on the program of studies in nonformal education. Michigan State University, East Lansing.
- HOLSINGER, D.B. 1973. The elementary school as a modernizer: a Brazilian study. *Inter. J. Comparative Sociology* 14(3-4): 180-202.
- INKELES, A. and SMITH, D.H. 1974. *Becoming Modern*. Cambridge, Massachusetts. Harvard University Press.
- MOORE, W. E. 1963. *Social Change*. Englewood Cliffs: Prentice Hall.
- MYRDAL, G. 1968. *Asian Drama: An Inquiry into the Poverty of Nations*. New York: The Twentieth Century Fund. p. 377.
- PHILIPPINE TRAINING CENTERS FOR RURAL DEVELOPMENT (PTC-RD). 1981. *Devstance: The Executive Director's Reports*. College, Laguna.
- SIEGEL, S. 1956. *Nonparametric Statistics for the Behavioral Sciences*. McGraw-Hill Book Company, Inc. pp. 184-193.
- SNEDECOR, G.W. AND COCHRAN, W.G. 1967. *Statistical Methods*. Ames, Iowa State University Press. pp. 144-145.