The Role of Expert and Peer Speakers in a Short Term Training Seminar

MATISYOHU WEISENBERG, Ph.D.

PSYCHOLOGISTS and sociologists have been accumulating evidence on the process by which people are influenced. Much of this research has been conducted in the laboratory under strictly controlled conditions. Other evidence has accumulated through survey research dealing with problems such as voting behavior and farmers' acceptance of new agricultural techniques. Much of this research could have implications for short term training if it were more widely known and investigated from such a point of view.

The main question is whether an outside expert or a fellow trainee who is not an expert has more influence on participants in a training seminar. To answer this question it is necessary to understand how behavior and attitudes are organized in relation to the groups, such as family and work, to which people belong, as well as the process involved in the acceptance of new ideas and behaviors.

The Problem

It is common in short term training to schedule speakers who are well known experts in their fields. Thus, a cardiologist would be invited to address a group of health educators who were discussing heart disease. The basic assumption underlying such an approach is that the cardiologist possesses more expert knowledge about heart disease than a fellow health educator. The greater the expert, the more influence he should have on the group.

Laboratory studies of communicator credibility have supported this assumption (*1–3*). The more credible or expert the communicator, the more his arguments and conclusions are judged to be fair and the greater his ability to change opinion.

However, even in the laboratory differences between communicators with varying degrees of expertise are maximal only at the time of the initial communication. When opinion change is measured a few weeks after the initial experiment, differences in effectiveness of these communicators seem to vanish (*4*).

Problems of inducing change are even greater outside the laboratory than in it. Hovland (*5*) has pointed to the problem of reconciling differences between laboratory studies and real life attitude surveys, questioning why attitude change is obtained so easily in the laboratory yet few changes are obtained outside it. He suggests that credibility may be different in the laboratory than outside, where effects of friends and family interact with those of the expert communicator. In addition, Cartwright (*6*) has pointed out that in many types of training seminars and workshops little actual behavior change is obtained at the home base of the participant even when the participant is deeply interested and enthusiastic during the actual meeting.

Thus, the process of changing attitude and be-

Dr. Weisenberg is research psychologist, Behavioral Science Section, Division of Community Health Services, Public Health Service.

havior by training at a seminar is complex. There is reason to question the assumption that greater change is obtained by the outside expert. In fact, research from the fields of psychology and sociology on group norms and social influence, such as the approach of reference group theory of Sherif (*7*, *8*) and the personal influence approach of Katz and Lazarsfeld (*9*), could lead to the prediction that greater change is obtained by the insider who addresses the group.

I attempted to reconcile these apparently inconsistent research findings by placing the outside expert into the total influence situation. There are implications for the short term training seminar that could be tested by the methods of behavioral science. Such a test could lead to more effective use of the potential power in short term training seminars.

Interrelationships of Behaviors and Attitudes

Attitudes and behaviors do not exist in isolation, but are interrelated with other behaviors and other attitudes as illustrated in the study by Aronson and Golden (*1*). Overall effects showed that the communicator considered as an expert was more effective than the communicator not considered as an expert in bringing about attitude change in the desired direction regardless of the race of the expert. However, an examination of the attitude toward Negroes showed that those students who were prejudiced against Negroes were less influenced by the Negro communicator, while those not prejudiced against Negroes were more influenced by him.

What this means is that any time change in behavior or attitudes is to be brought about it may not mean change in one isolated element of behavior alone, but rather change in a number of interrelated sets of behaviors or attitudes. The more integrated, central, or important to the system of organization is the behavior or attitudes to be changed the more difficult it is to bring about change since such change requires greater realignment of other behaviors (*10*).

In addition, a person's attitudes and behavior tend to follow and be similar to those of similar persons or groups. These shared attitudes and behaviors, called norms, represent shared expected standards of behavior among group members (*8*, *9*).

Sherif and Sherif (*8*) have demonstrated the importance of group influences in understanding juvenile delinquency. They show how attitudes and behaviors develop as a function of group interaction and how they serve important functions as shared standards of expected behavior for persons in the group. Many actions which society regards as antisocial behavior are really very social indeed. These persons are conforming to the norms of their own groups rather than the norms of society in general.

There are many reasons for shared attitudes and behaviors. Festinger (*11*, *12*) maintains that what we call social reality is determined by other people. People want to validate their opinions and beliefs in some manner and unlike physical reality, there are no objective, easily used measures for determining social reality. If a person wanted to see if a window were breakable, he could hit it with a hammer. After the window broke it would make little difference if someone else claimed that this was an unbreakable window. However, if a person claimed that there would never have been race riots in a given city with a Democratic mayor, no physical test could measure the truth of that statement. Such validation is achieved by seeing if other persons of an appropriate reference group share this opinion. If a person attending a Communist Party rally observed the audience endorsing the opinions of the speaker, he would probably not be influenced to accept these opinions as valid unless he were a Communist himself, but would compare the speaker's views with those of his reference group.

Sherif and Sherif (*8*) mention additional reasons for following social norms. These include the need for a dependable anchor to establish a clear self-identity, as well as a need for sources of effective social support for ventures in which persons would not engage on their own. Groups also demand conformity to these shared norms, and those who deviate from the norms are often rejected. Conformity is often necessary in order to achieve group goals (*11*).

Thus, when attempts are made to induce change in people, more than just having an expert outside communicator is necessary. It might even be more important to have an insider who is a part of the person's reference group to argue for the proposed change.

Attempts at such an approach were tried in the series of experiments by Lewin (*13*) who compared the group discussion and lecture methods for persuading housewives to accept meats not usually eaten. The group discussion emphasized the idea to participating housewives that all participants were housewives like themselves. The group discussion was more effective than the lecture in obtaining acceptance by housewives. Other studies by Lewin have also found greater acceptance of cod liver oil by mothers who participated in a group discussion with other mothers while in maternity wards than by those who received the usual lecture by a nurse.

Exactly why the group discussion was effective is not clear. Was it because people are willing to go along with a proposed change that they perceive others are willing to accept (group consensus)? Was it because persons have committed themselves publicly? Was it the discussion itself which acted as a catharsis for talking out emotional problems surrounding acceptance of a new behavior, as suggested by Katz and Lazarsfeld (*9*)?

Bennett (*14*) has emphasized the importance of the act of making a decision and the degree of group consensus as the key elements. Hare (*15*) has emphasized the action of discussion as breaking the old value system. He also mentions that group discussion is more effective when the leader is a natural group leader rather than some one who has joined the group only to lead.

Although it is not clear exactly which factors are responsible for gaining greater acceptance by group discussion as opposed to lectures, the concept seems to rest on the observation that a member will be persuaded to change his opinion when he perceives that other people similar to himself have been persuaded, even though they may have been initially opposed to acceptance of the new behavior (*10*).

Acceptance of Innovation

Some evidence of the function of the insider or outsider in the acceptance of new attitudes and behaviors can be obtained from the sociological literature on acceptance of new ideas. The process by which new ideas are spread from their origin to users is diffusion, and approaches and problems of diffusion research have been reviewed by Katz and co-workers (*16*).

The process of adopting new ideas has also been divided into a series of stages by rural sociologists studying the adoption of new practices by farmers (*17*). The early stages of adoption have been called awareness and interest-information. During these early stages the potential user learns of the new idea and with the arousal of his interest searches for more information concerning it.

During the intermediate step, evaluation, the new idea is examined in reference to the potential user's existing situation. The next stage in the adoption process is usually trial, tentative use of the new practices before the final adoption.

Lionberger presents evidence showing that different channels of information are important at various stages of the adoption process (*17*). During the awareness and interest stages mass media are most important, while during the evaluation and trial stages, friends and neighbors are most important. In the final adoption stage the person's own experience becomes most important.

Lionberger (*17*) also presents evidence on the effects that the time a new practice is adopted has on the importance of different sources of information about the practice. For example, the first persons in a group of farmers to accept a new practice rely more on information received from colleges and other research sources, mass media sources, and other highly competent farmers, while the majority of farmers rely more on adoption leaders and other farmers more similar to themselves as a source of information. The reference group for acceptance of new ideas for the group of early adopters may be the outsider. The extent to which a group at a training seminar is made up of those who use insiders or outsiders as a reference group is generally not known, although conceivably it could be measured. However, there is an implicit assumption here that the majority of seminar participants would more likely use colleague participants as a reference group than the outsider.

Katz (*18*) and Coleman and co-workers (*19*) measured the degree of a physician's integration with his colleagues by the number of physicians

who named him as an adviser on medical problems, frequent discussion partner, or frequently visited friend. Those physicians who were most socially integrated typically introduced a new drug months before their isolated colleagues. The person-to-person spread of acceptance of a new drug was most important during the early months following the new drug's release into the market. The authors point to the need for social support, judgment, and validation by colleagues in situations in which there is a degree of uncertainty, such as the introduction of a new drug by a physician. Those physicians who are socially integrated receive social validation and support from their colleagues. Interestingly, the extent of social integration as a factor in new drug acceptance appears to be more important than factors such as age, medical school, or readership of medical journals. The most influential physicians, however, were more likely to be readers of a large number of journals and valued them more highly than physicians with less influence. These influential physicians said that the opinions of local colleagues were important factors in their decision to adopt the new drug.

Katz and Lazarsfeld (*9*) showed the importance of personal influence of key persons who were usually asked for advice in a number of areas such as fashions, public affairs, and marketing. These opinion leaders act as mediators between other sources of influence, such as mass media or other opinion leaders, and the final decision.

The Training Seminar

The role of the outside expert. The expert has a special place in the training seminar. Following Lionberger's (*17*) model, it appears that the expert can best be used in the awareness and interest phases of adoption. He is a better source for arousing an initial interest in the topic, and is most valuable as a source of information, especially technical information that the average participant may not have access to or be competent to acquire.

The example of the cardiologist and the health educator may be referred to once more. The fact that the cardiologist is speaking is likely to arouse an initial interest in participants to listen to the presentation. That is, health educators might be more interested in attending the session to hear a known cardiologist than to hear another health educator.

To that extent the more credible communicator or expert would be the preferred one. However, there is more to accepting and using the information than learning that it exists. The health educator can believe that what the cardiologist says is true and interesting. However, is it relevant and meaningful to the health educator other than being interesting?

What is relevant for the cardiologist may not be accepted as relevant and meaningful for the health educator, even if the cardiologist himself knows what might be relevant for a health educator. This is part of the evaluation stage, and at this point the function of the insider becomes important.

The role of the insider. Information is sifted through in reference to the potential user's existing situation at the evaluation stage. At this point, the functions of conformity to group norms become important. The health educator can test the opinions of other health educators to determine if they see the relevance of the cardiologist's presentation to their own circumstances and to obtain social support for the acceptance of new ideas and behaviors from people similar to himself. In addition, the outside expert may not always be completely familiar with the situations and possible applications which the insider may know, and the insider can thus supplement the outsider's presentation.

Some complicating factors. It has been assumed that the appropriate reference group for acceptance of new ideas is found among the other participants at a seminar. It must be remembered, however, that although these other participants may be a more appropriate frame of reference than the outside expert, the most important frame of reference might be at the home base of the participant where the trial and final adoption stages of acceptance must take place (*20*). Here many other variables can prevent adoption of new behavior. The participant may not have the freedom to implement new behavior and his colleagues or superiors back at the job may not be sympathetic to it.

In addition, persons in any one group differ in the degree to which they respond to the group

that is present as a frame of reference. They also differ in the degree to which they are willing to assume any or all the risks involved in adopting a new behavior. These risks can involve expense where some investment in equipment is necessary or rejection by colleagues back home.

Of course, the extent to which the new behavior or attitude conflicts or is compatible with existing behavior will also influence the degree of acceptance. If an issue is not controversial, participants may not need much persuasion to adopt the desired behavior. However, if the issue is extremely controversial and contrary to existing norms, it may be almost impossible to convince the participants to accept the desired behavior.

Although seminar planners cannot take everything into account, they should try to present advocated new behavior in such a way as to achieve maximal success.

A Summing Up

The evidence from literature in the fields of psychology and sociology suggests that the more credible or expert a communicator is, the more effective he is in influencing behavior. It is common practice for the sponsors of training seminars to invite outside experts rather than insiders to present new material, behavior, and attitudes.

The evidence also suggests that a great deal of influence comes from insiders, people who are similar to those adopting the new behavior. These insiders provide a basis in reality as well as social support for those who wish to adopt the new behavior.

It has been suggested that both outside experts and insiders are important in training. The outside expert should be most effective in providing awareness, motivation to listen, and technical information. However, it is still possible for the participant in training to reject the conclusions of the expert as irrelevant to his behavior.

At this point some form of interaction among the participants should be important in order to show the advocated behavior as relevant to themselves. This interaction could be a group discussion or a supplemental lecture by an insider.

Implications for Training

It is important to separate the process of attention getting from the process of acceptance and use, yet these two processes often are not separated in the minds of the planners. It is possible to attract attention and motivate people to attend a session by inviting a well known expert. However, this does not mean that each member of the audience is going to accept any or all of the thoughts of the speaker, and it certainly does not mean that they will apply them when they return to their jobs.

What happens back home is to a great extent determined by many other variables. One variable is the perceived relevance to the insider of the expert's communication. This may mean that the speaker cannot simply talk in terms of general principles, but must make his words and examples specific to the circumstances of the audience. If the speaker cannot do this, such activities as group and panel discussions should be held for this purpose.

In addition to the outside expert making specific recommendations, it seems advisable that the audience be made aware that the recommendations come from the insiders as well.

The fact that behaviors and attitudes do not exist in isolation means that if one part of the attitude and behavior system changes, other changes of attitudes and behaviors will be necessary. The speaker who recommends one type of change must consider that it may involve making many other changes. He should anticipate, if possible, what these other changes will be. Nurses in a hospital, for example, cannot institute certain changes without considering what effect they will have on the nurse-physician relationship. Introducing a new teaching topic might require changing a whole course syllabus. A new technique might require specialized equipment that not everyone has.

Even if agreement on the desirability of change is obtained among participants at the seminar, change still may not be obtained when a participant goes home, where his reference groups are his immediate colleagues, supervisors, and subordinates. What each of these groups think of the recommendations will influence the degree of acceptance. The job of a seminar, therefore, is almost to make partici-

pants change their reference group from those people back at the job to those people at the seminar who are willing to accept the new behavior or attitude. This change of reference group has to be sustained somehow while the participant is back at his job.

Practically, this means that some followup contact is necessary after a seminar. This followup could come as a result of an active attempt on the part of planners of seminars to encourage the development of lasting friendships and professional relationships with colleagues which continue after a formal seminar ends. These friendships can be used as a source of social support for new attitudes and behaviors. A social event as part of the formal program is one way of encouraging such friendships.

Other types of followup such as newsletters or bibliographies could be sent by the organization that sponsored the seminar. These formal followups might include examples of how other participants have applied ideas from the seminar.

However, acceptance of new ideas may be impossible because of other restrictions. Participants have different degrees of freedom in the extent to which they can institute change. Teachers must follow and fulfill certain course requirements. Subordinates must obtain approval from supervisors. Budget limitations may make the purchase of new equipment or the hiring of new personnel impossible. The planners of seminars cannot always take everything into account. There is a great deal that is unknown and these unknowns should be tested by the appropriate methods of research.

Research Questions

There are many unknowns in the conduct of seminars. The previous theoretical discussion suggests a number of questions that the methods of behavioral science could help answer.

1. To what extent and limits can an outside expert be influential at a seminar?

2. Which types of attitudes and behavior can the outside expert best influence? Ego-involving? Non-ego-involving? Controversial? Noncontroversial? What is the effect of the degree of discrepancy between the position of the expert and that of the participants? Would an expert whose position is closer to that of the participants or farther away be more influential?

3. What type of presentation by an insider is best suited to back up that of an outside expert? Should the outsider be followed by a group discussion that would allow for active involvement by participants? Would a single speaker who is an insider help? What would be the effects of a panel discussion in which opposing views could be heard?

4. How could seminar planners best measure which groups serve as insiders and which as outsiders for seminar participants?

5. What other important variables contribute to the consideration of a particular group as insiders or outsiders by a person?

6. How does heterogeneity or homogeneity of the background and opinions of seminar participants affect the acceptance of influence of a speaker on them?

Conclusion

Many more questions and problems in the conduct of short term training remain unanswered. Psychologists and sociologists have asked these questions in the laboratory, in survey research, and in industrial research. Some of these studies suggest possible approaches and answers in short term training. They could be formally and systematically tested by the techniques of behavioral science in the seminar itself. Such an approach could lead to the systematic accumulation of knowledge on the conduct of short term training that is theoretically and practically sound. Practically it means that each time a question is raised, we may not have to start at the beginning.

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Report on Suicide Trends

Suicide, one of the 12 leading causes of death in the United States, was committed on an average of 56 times daily in 1964, according to a report on suicide trends for 1950–64 released by the Public Health Service's National Center for Health Statistics. A total of 20,588 suicides, about 1 percent of all deaths in 1964, was reported for the nation.

Suicides occur more frequently among men than women. The rate for men was nearly three times that for women in 1964. The suicide rate for white men in 1964 increased with each successive age group, starting with a rate of 9.3 per 100,000 for ages 15–24 years and rising to 65.1 per 100,000 for those 85 years and older. In contrast, suicide rates for white women reached a peak of 12.5 per 100,000 in the age group 45–54 years and then decreased. The highest rate for nonwhite men was 16.2 per 100,000 in the age group 25–34 years, and the highest rate for nonwhite women was 4.7 in the age group 25–34 years.

According to the study, methods of committing suicide have changed since 1950. While firearms and explosives ranked far above all other means in 1950, 1960, and 1964, hanging and strangulation was second in those years. Forty-eight percent of all suicides in 1964 were attributed to self-inflicted gunshot wounds. However, poisoning by pain-killing and sleep-causing substances increased from about 5 percent of all suicides in 1950 to 12 percent in 1964; about three-fourths of these deaths were attributed to barbiturates in 1964. Poisoning by other means, primarily gas from exhausts of motor vehicles, also increased, accounting for about 6 percent of all suicides in 1950 and 11 percent in 1964.

Program Notes

Measles Cases Down 92 Percent

In New York State in the first half of 1967, measles cases were down to 850, a 92 percent reduction from the first half of 1966. Cases would have been expected to increase sharply in 1967. However, from mid-1965, some 532,000 doses of free vaccine had been distributed in the State. This vaccine was purchased with State funds supplemented by a Federal grant.—*Weekly Bulletin* (New York State Department of Health), Sept. 11, 1967.

Family Doctors for the Poor

The District of Columbia plans to put city-employed "family doctors" in all its poverty areas. Neighborhood clinics will be backstopped by hospitals and four area centers, which will offer more complex diagnosis and treatment.

The centers would provide medical care for economically eligible neighborhood residents. Dr. Murray Grant, health director, said that the program should ease the crush at the emergency room of the D.C. General Hospital, where nonemergency patients wait as long as 3 hours before seeing a physician.

The program is expected to start in three pilot centers by January 1, 1968. Eventually, the program calls for a health center for each 25,000 residents.—Washington *Post*.

First Rabies Death in 14 Years

New York State, in 1967, recorded its first rabies death in 14 years. The victim, wife of a State Department employee, was bitten by a wild dog in West Africa on May 31, 1967. Symptoms of rabies appeared 47 days after the woman was bitten and after she had received a series of duck embryo vaccinations in West Africa. The victim was flown to St. Albans Naval Hospital in New York, where she died on July 25, 1967, 5 days after admission.—*Weekly Bulletin* (New York State Department of Health) Sept. 4, 1967.

Resolution on Smoking

The Massachusetts Medical Society passed the following resolution at its 1967 annual meeting:

"WHEREAS, there is irrefutable evidence that cigarette smoking can kill and cripple, and WHEREAS, cigarette consumption and cigarette mortality both continue to increase, therefore BE IT RESOLVED, that the Society urge all its members to educate the public concerning the hazards of cigarette smoking, not only by professional advice, but by personal example."

Smoking and Health of Youth

The Pennsylvania Department of Health has announced the appointment of a coordinator of the Pennsylvania Program on Smoking and the Health of Youth. Alfred R. Barrios, who recently retired from the U.S. Air Force, has been given responsibility for managing a project directed at keeping young people from starting the smoking habit or inducing them to quit if they have already begun.

Health Classes in Appalachia

Professionals who offered medical examinations and health classes in the economically depressed hollows of West Virginia got results from a warm and understanding approach. In one community with 32 households, 29 women attended classes. The people rejoiced over their newly found knowledge.

One woman commented, "My kids have worms and I seed 'em but didn't know what more to do than give 'em peachbark tea. Didn't seem to help. Then the medical folks told me them worms came from eggs in the ground around the outhouse and the kids get 'em on their hands and eat 'em. If'n I get into the doc and get the right medicine and keep the kids better cleaned up, they don't have to have the worm fits no more."

Group discussions on disease prevention and health care in the home were sponsored by the American Red Cross and the West Virginia University Center for Appalachian Studies and Development. Technical advice was provided by Dr. Marilyn A. Jarvis, coordinator, community health activities, division of preventive medicine, West Virginia University Medical Center.

Because lesson materials available seemed unsuitable for the mountaineers, Louis Crawford and Mary Pullen, extension agents, and Jane Downin, State representative of the American Red Cross, prepared simple and direct lesson material which incorporated many visual aids.—*American Journal of Nursing*, November 1967, pp. 2345–2347.

Clowning for Health

Some 4,500 District of Columbia children enrolled in the 1967 summer Head Start Program got health information from a clown.

Through the use of skits, songs, dances, and participation of the children, the clown gained and held the attention of the children to teach them about cleanliness, good eating habits, brushing their teeth, and traffic safety.

The health department also created a large "Baffo the Clown" coloring book and a "Safety Officer" button, which was presented to each child at the end of the training session.