AN ASSESSMENT OF THE IMPACT OF STAFF INVOLVEMENT AND FACE-TO-FACE CONSULTATION ON ADOPTION OF INNOVATIVE PROGRAM EVALUATION METHODS

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ABSTRACT

AN ASSESSMENT OF THE IMPACT OF STAFF INVOLVEMENT
AND FACE-TO-FACE CONSULTATION ON
ADOPTION OF INNOVATIVE PROGRAM EVALUATION METHODS

By

William Francis Stevens

Innovation dissemination is a process by which underutilized knowledge is disseminated through an evolutionary and/or planned process. This research reviews the literature to identify possible strategies for disseminating innovative program evaluation methodology to human service programs.

Increased staff involvement and face-to-face interaction with evaluation consultants are identified as factors which should produce increased adoption of the evaluation methods advocated. A 2 x 2 x 3 factorial research design is developed to assess the impact of these factors.

The results indicate significantly greater innovation adoption among human service programs where more than one staff member is consulted and among programs that are consulted at the program site as opposed to telephone consultation.

Prior interest of the human service program as well as a pre-consultation assessment of the consultant by the

consultee also were found to significantly predict innovation adoption.

Measures of Staff attitudes and knowledge and program resources were not found to significantly correlate with innovation adoption.

Various recommendations were made for future research.

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By

William Francis Stevens

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INTRODUCTION

Program Evaluation and Knowledge Utilization

In recent years there has been a significant public outcry for more efficient management of human service agencies. As Jimmy Carter (1974) pointed out:

> "The hard question to be answered remains: On what basis and toward what end will these programs be directed and at what cost? The question can only be answered through an evaluation system for social services programs." (Evaluation, Spring, 1974, pp. 6-7)

Fortunately, accompanying this demand for a more rational approach to meeting human needs, a robust program evaluation methodology has emerged in numerous academic circles. Led by such pioneers as Campbell and Stanley (1963), Fairweather (1967) and, Rossi & Williams (1972) there has been an increase in the development of highly sophisticated approaches to assessing human service program effectiveness. Unfortunately, the growth of this knowledge base has not been accompanied by an equivalent wideswpread adoption of these new techniques in the field.

Underutilization of knowledge is actually quite common when an innovation emerges. Throughout history, there has always existed a time gap between the discovery of new knowledge, and the implementation or use of such knowledge. In an age when the speed at which new knowledge development seems to have increased, the adoption of such innovations

often seems to lag just as far behind. With the recognition of this time lag between innovation, and adoption of innovation, has come the development of a field of study often referred to as knowledge utilization.

As this new field of study has emerged, several approaches to conceptualizing knowledge utilization, or innovation dissemination, have developed. Havelock (1971) has aptly described a number of approaches that seem to have dominated the field. For example, the "Social Interaction" perspective describes a field of endeavor largely within the tradition of communications theory and research. Typically researchers operating from a Social Interaction perspective are interested in the communication process that occurs as knowledge of an innovation moves from the initial developer of the innovation, to the eventual user. Investigators such as Rogers and Shoemaker (1971) have been particularly active in this area.

Another perspective identified by Havelock (1971), is the "Research Development and Diffusion (R, D & D) perspective." This view of innovation dissemination approaches the problem from a very rational descriptive stance. From the R, D & D perspective, innovations arise because of rationally defined needs, and proceed through various discreet stages from initial development through ultimate adoption in the field. To a significant degree, the R, D & D perspective is a post-hoc description of an apparently rational process after much of the associated human interaction has been abstracted from it.

A third perspective identified by Havelock (1971) is

the "Problem Solver" perspective, which includes much of the work that has been done under the rubric of organizational development. Here, there is particular concern for facilitating the internal problem-solving behavior of adopting organizations. Problem Solver efforts are devoted to determining what interventions can help organizations become more participative, responsive, and humane. The Problem Solver perspective is primarily concerned with process, and is less concerned with the specific innovation being adopted by a client organization.

Another perspective on the innovation dissemination problem is an integral part of the methodology described by Fairweather and his co-workers (Fairweather 1967; Fairweather and Tornatzky, 1977). While beyond the scope of the particular issues addressed here, Fairweather describes a fairly sophisticated methodology designed to create new social innovations, refine and develop them through use of a data-based evaluation process, and eventually develop strategies which will lead to their dissemination to the field. A particularly innovative aspect of Fairweather's approach lies in his strong emphasis on empirical research of the innovation dissemination process itself. The strength of the Experimental Social Innovation approach to innovation dissemination advocated by Fairweather (1967, 1977) is an insistence that alternative change strategies should be compared in the context of classical experimental methodology. Through this process an empirical determination may

be made of the best strategy for fostering the adoption of an innovation. One research project undertaken within this tradition (Fairweather, Sanders and Tornatzky, 1974) has particular relevance for the research at hand, and will be referred to again later.

The perspective of the present research is that the adoption of evaluation methodology in human service organizations is a significant social problem and is, from a conceptual point of view, a knowledge utilization and organizational change issue. The attempt of this research will be to apply experimental methodology to a comparison of alternative change strategies.

A Conceptual Overview

As implied above, the problem of encouraging human service agencies to adopt program evaluation methodology is both a complex one, yet is an issue that is not dealt with directly by the literature. Much of the research utilization literature as reviewed by Havelock (1971) and Rogers and Shoemaker (1971) is concerned with the adoption of innovations in a non-organizational context. A major portion of this literature falls under Havelock's Social Interaction perspective and has been concerned with the adoption of innovations not particularly similar to evaluation methodology (e.g., new farming practices adopted by farmers in rural settings). This is a far cry from the adoption of highly complex evaluation methodologies by large human service agencies.

By the same token, much of the organizational

development literature, that is the heart of the Problem Solver perspective referred to by Havelock (1971), has little to say about strategies to foster the adoption of a specific innovation. Much of this organizational change literature can be described as peripheral to research utilization issues. The organizational development (OD) approach to organization change is based on the ability of an external change agent to function effectively in a role focused on facilitating organizational problem-solving and group processes. It is the change agent's mission to assist the client in identifying possible alternatives and to facilitate the organization's internal decision making processes, not direct them. From the perspective of such OD pioneers as Argyris (1970), Blake and Mouton (1969), and Bennis (1966), the intentional encouragement of agencies to use a specific program evaluation methodology would be inconsistent with the non-directive role of the organizational development practitioner.

However, aside from the rather narrow viewpoint of the organizational development practitioner, considerable understanding of the problem at hand can be gleaned from organizational theory in the broader sense.

Organization theory has been characterized for several decades by a controversy over the importance of informal group processes in the context of bureaucratic organizations. One party to this discussion is epitomized by Weber (1947) and has advocated the classical bureaucratic approach to organizing the world of work. Assuming that the

organization is a rationalizable place, an ideal-type organization might be structured by emphasizing hierarchy, specialization, formal modes of communication, and a priori specification of rights and privileges, all designed to maximize focused expertise on task accomplishment. The thrust of this view is to make the organization akin to a social machine, with its individual members being construed as replaceable parts.

In contrast to this point of view has been the theory underlying the organizational development practitioners. Beginning with the early Hawthorne Western Electric Studies (Rothlesburger and Dickson, 1964), the persistent point made by these theorists is that the work place is a setting in which interpersonal concerns and group dynamics issues are particularly important for successful task accomplishment. Individuals such as Whyte (1961) and McGregor (1960) have argued that organizations should be structured in such a manner as to maximize personal fulfillment, informal interaction, and participative decision-making. According to these authors such changes in organizations will produce more efficient, productive, and humane places to work.

The compromise position in this debate has been struck by organizational contingency theorists such as Litwak (1961), Thompson (1967) and Perrow (1972). The viewpoint taken here is that some organizational tasks are best handled in the context of more informal group processes, and others are best handled bureaucratically. As described by

Litwak (1961), some tasks are uniform, and other tasks are non-uniform in nature. The former might best be approached by bureaucratically structured organizations; the latter might best be handled by more informal, less hierarchical, face-to-face types of interaction within the organization.

The point of view taken in this research is that the innovation adoption process is, by definition, a problem that is analagous to a non-uniform task. As such, intervention strategies that rely on informal, "non-bureaucratic" modes of interaction should be related to successful change efforts. In a review of the literature to follow, we will consider two possible change intervention parameters that are seen to be of particular importance. First, it will be argued that the literature seems to indicate that participative decision-making may be related to organizational change and innovation adoption. Additionally, the literature will be reviewed to evaluate the evidence for and against the importance of face-to-face interaction in change interventions.

Participative Decision-Making

Literature supporting the importance of participative decision-making in facilitating change comes from a variety of sources, including both laboratory and field settings.

Laboratory Research. One area of research that seems to have particular applicability to the present discussion is the risky shift phenomenon, which has been studied in social psychological circles for some years. As has been frequently observed, innovation adoption seemed closely

related to risk taking behavior (President's Conference on Technical-Distribution Research for the Benefit of Small Business; 1957). Given that this assumption is accurate, there appear to be a great many laboratory studies which support the concept that simple group discussion prior to the decision-making of group members increases risk-taking behavior. (Wallach et al., 1962; Kogan and Wallach, 1967b, Levinger and Schneider, 1969).

Cecil, Commings and Chertkoff (1973), after reviewing a large quantity of risky shift literature, concluded that risky decision-making is significantly increased when subjects were asked to make the decision following group dission as opposed to private decision-making. Analogously, Cecil et al., conclude that group decision-making in a program management setting should increase program innovativeness.

In spite of these many supportive research findings, there have been a number of studies which have found conflicting results of the risky shift phenomenon. The thrust of these studies indicates that the group decision-making shift represents a polarization to either a conservative, or a risky position based upon the social norms of the majority of the group members. (Stoner, 1968; Kogan and Wallach, 1967a, Nordhoy, 1962).

The totality of research in this area, then, primarily supports a shift of some fashion which may support or oppose adoption of the innovation when participative decision-making

occurs.

Therefore, in a consultation setting it would seem that, if more than one staff member was involved in the consultation sessions prior to and/or during the decision to adopt the innovation, the cited research would suggest a difference (increase or decrease) in the innovation adoption rate between such a situation and that where only a single subject was consulted during the consultation process.

Based on the theories of Lewin (1947) and Pelz (1958), such "group carried" attitude changes in favor of innovation adoption should maintain themselves longer than single consultee attitude changes, thereby increasing actual completion of innovation tasks in organizations consulted in a group setting.

In another body of laboratory research Shaw (1976) reviewed several studies from the group dynamics literature. He was particularly concerned in his review with comparing alternative types of communication networks that have been used in small group laboratory studies. In this review, Shaw found that communication networks that were less hierarchical and more "open" were more effective in solving group problems that dealt with highly complex problem solving exercises. If one can make the conceptional leap from such a laboratory problem solving exercise to implementing complex social innovations then more "open" interactions might too be related to greater innovation.

Field Research. The evidence from the field setting in

this regard is more persuasive. Habbe (1952) suggested that regularly convened group meetings of lower level organization members was an effective means of breaking down intra-organization barriers to throughput of new ideas and innovations. In a classical study of this notion (Coch and French, 1948) a group of workers in a pajama factory were involved in initial planning for the utilization of new manufacturing techniques. Fortunately, the investigators in this study were able to set up their research in a true experimental design, and to compare different degrees of participative involvement in initial planning and decision-making as they affected acceptance of the changes. It was found that those employees who were more directly involved in the planning and decision-making were much more receptive to the changes in their work setting.

In a classical comparative organization study, Burns and Stalker (1961) investigated a number of manufacturing firms in Great Britian. They attempted to categorize these organizations in terms of the degree to which they followed a bureaucratic model of organizational functioning. The finding of particular importance to the present review is that those organizations which were more open and less hierarchical were those in which industrial innovations were more likely to be found. These authors went on to make the argument that an organizational climate for innovation can be created in such a setting.

In a national survey of school districts, some

evidence was found which tends to support a group-participative approach. Havelock and Havelock (1973) found that the degree to which school districts began new programs was significantly correlated with the degree to which they involved staff in their planning and development. In an analagous study, Tornatzky (1977) found that the degree to which school systems adopted new programs was significantly correlated with the amount of participative involvement by community and staff members. Further, in an experimental study in a prison setting, Lounsbury and Tornatzky (1975) found that the involvement of inmates in planning for changes in the physical environment of the prison was significantly related to a more enthusiastic attutidinal acceptance of such changes.

Most directly relevant for the research at hand is the work of Fairweather, Sanders and Tornatzky (1974). In this national experimental investigation of innovation diffusion to a sample of state and federal hospitals, one of the strongest findings was the highly significant correlations between participative involvement by staff in decisions regarding innovation, and the likelihood that such an innovation would be adopted. Specifically, in those hospitals where staff were heavily involved throughout the innovation adoption and decision-making process, there was a strong likelihood that a successful adoption would occur.

In summary, the literature reviewed here would seem to argue for importance of staff involvement, and participative

decision-making in the adoption of an innovation such as program evaluation methodology.

Face-to-Face Interaction

In the organizational theoretical literature reviewed above, it was pointed out that one of the characteristics of a non-bureaucratic organization is a greater reliance on inter-personal, informal interaction among organizational members. In turn, it was argued that such interpersonal processes might be quite congruent with change and innovation adoption. Fortunately, in the research utilization literature there have been several comparative studies that bear directly on this issue.

One of the common techniques used in the dissemination of information is mass media materials. As has been pointed out by Schramm (1962) those actually reading written materials are typically higher in education and socio-economic levels than those who do not. However, in using such a technique in a dissemination of innovation effort, one must be particularly attuned to the characteristics of the intended audience. Rogers (1971) indicates that while the receiving and reading of written materials is one possible step to later adoption of the proposed innovation, the likelihood of a potential adopter reading and subsequently disregarding the message is very high.

Lounsbury (1976) empirically demonstrated this point in his study of the dissemination of ecologically relevant information. Using a true experimental design on a

large sample of metropolitan residents, he compared various dissemination techniques that either used strictly mass media approaches, or supplemented this with more interpersonal interaction such as a series of phone calls. One of the findings of the study was that adoption behavior typically occured only with the intervention of a phone follow-up supplementing the written communication.

Some experimental laboratory studies have indicated that face-to-face communication is rated significantly more effective than telephone communication for complex group discussions (Christie, 1975). Following from such research, Conrath (1975), experimentally evaluated the effectiveness of telephone versus face-to-face diagnosis of hospital patient medical problems. Conrath found that in this one-way type of consultation (patients usually only providing, rather than receiving and using, information) that face-to-face diagnosis was more valuable in diagnosing more subtle secondary medical problems. Antonioni (1973), in a field comparison of counselor communication at an outpatient counseling program, found that face-to-face sessions yielded more positive observer ratings of counselor empathy, verbal concreteness, and client self-exploration than did counseling sessions over the phone.

In an interesting fusing of laboratory and field-based research, Chapanis (1971) compared the relative utility of face-to-face interaction, telephone interaction, and written messages in communicating complex information. In a

laboratory study comparing these techniques the major finding was that face-to-face interaction was essential. In a companion study, Chappanis found that utilization of a scientific information network was significantly enhanced if users of the network had an opportunity to communicate directly by phone with a "resource person" rather than submitting information requests to a tape recorder.

Perhaps the most directly relevant study is that of Fairweather, Sanders and Tornatzky (1974). This national dissemination study experimentally compared various intervention approaches that differed on the degree of interpersonal contact. One condition of the study consisted of the distribution of brochures to hospital staff, a second condition involved a one day workshop presentation, and a third condition consisted of a relatively intense consultation, leading to the establishment of a temporary demonstration program. Evidence clearly indicated that the more interactive modes of intervention were related to more long-term change and innovation adoption. In further research conducted within the Fairweather et al (1974) study, a comparison was made between different types of consultation assistance. Some hospitals were offered the possibility of a face-to-face consultation with a staff member of the research staff; other hospitals were given a do-it-yourself manual to assist them in establishing the new program. The former modality was clearly superior to the latter in producing adoption.

In summary, the data reviewed here, while fragmentary, argues for the importance of face-to-face interaction in fostering the adoption of a complex innovation such as program evaluation techniques.

Consultant Effectiveness Research

Over the years, many authors have extensively theorized the impact of consultant traits, skills and behaviors on the consultant's effectiveness in promoting innovation adoption. Credibility is one such trait which Rogers and Shoemaker (1971) define as:

> "... the degree to which a communication source or channel is perceived as trustworthy and competent by the receiver."

Rogers and Shoemaker go on to state that:

> "Change agent success is positively related to his credibility in the eyes of his clients."

Similar concepts have been suggested by a number of other authors (Zagona and Haiter, 1966; Caird, 1961; Neihoff and Anderson, 1964) who suggest also that credibility of a consultant is most directly related to the observation, by the potential innovation adopters, of the consultant in the performance of innovation-related tasks.

Some laboratory research has been conducted which shows that subjects who are given a high pre-consultation assessment of consultant credibility are significantly more likely to be persuaded to move their attitudes toward the positions advoacted by the consultant than subjects who are given a mildly credible assessment of consultant prior to consultation. (Aronson, Turner and Carlsmith, 1963; Hovland C. and

Weissy, 1951; Tannenbaum, 1968). The research of Osgood and Tannenbaum (1955) points out, however, that the relationship between communicator credibility and subject attitude change is curvilinearly affected by an incredulity factor as the communicator's (consultant's) advocated position moves further and further away from the subjects prior attitudes. Thus a communicator's credibility can drop sharply, and the subject's attitude change return to zero if the communicator advocates a position too far afield from the subject's prior attitude.

Several authors have outlined a number of factors which may improve the effectiveness of a consultant. These include but are not limited to: (1) holding a large quantity of knowledge in the area of consultation; (2) ability to provide emotional support, and; (3) ability to be relevant and practical. (Bowman, 1959; Gallessich, 1974; Caplen, 1970).

One of the few empirical studies which compared consultant effectiveness (Fairweather, Sanders and Tornatzky, 1974) showed no significant differences between consultants.

An interesting research document by Larsen (1976) describes a study which empirically addresses the consultation relationship. In this study a sample of 20 community mental health centers was provided with consultation visitations by ten consultants. A utilization score was obtained, which was the dependent measure of organizational/social change. Measures were taken about the nature of the

interaction, homophily scores, demographic descriptors of the agency, etc.

The results indicate a significant relationship between agency need as being highly correlated with change. This agency need had in fact been articulated before the arrival of the consultant, and thus high change agencies had high awareness of the nature of the problem, agreement on the need for consultation, clear expectation of what they wanted from consultation all in advance of the consultation.

In addition, a detailed analysis of the consultation interaction found that the more effective consultants were those that basically dominated the interaction. High utilization consultants spent 82% of the meeting time talking and suggesting ideas. The more effective consultants had studied the background information of the agency and had prepared an agenda for the consultation. There was little evidence to support the notion of the non-directive consultant or some of the other basic notions of the problem solving, facilitator role for the consultant.

In summary, the above literature review would indicate that, while many theoretical concepts have been linked to consultant effectiveness, the empirical data which exists does not consistently indicate predictable differences in consultant effectiveness.

The Experimental Plan

As indicated above, this research is designed to foster the dissemination of program evaluation technology to a

sample of human service agencies, specifically those funded by the Michigan Office of Substance Abuse Services, Michigan Department of Public Health. The mission of this agency is to improve services rendered to substance abuse clients throughout the State of Michigan. Congruent with this mission, in recent years there has been increasing emphasis on the utilization of program evaluation methodology, and large scale training efforts have been fielded to give program directors basic knowledge about evaluation. This study, then, has been designed to compare, experimentally, alternative technical assistance options to be offered to program directors of substance abuse agencies.

The operational plan of the study can be outlined in the following manner. A sample of program directors from substance abuse agencies across the state were asked to come to a preliminary training session on basic evaluation skills at a central training site. After this initial experience, these individuals were offered technical assistance options congruent with the hypotheses to be tested in this experiment. The principle dependent measure was the degree to which the substance abuse programs utilized the evaluation methodology advocated in the training experience. An important consideration of this experimental plan was the fact that these different substance abuse agencies included a wide range of evaluation experience, size, resources, prior interest, enthusiasm, etc. One of the efforts in this

research will be to determine the degree to which these capacity and attitudinal factors seem to impact on the process of change. Finally, the research will attempt to control for effects brought about by different consultant characteristics.

A major concern of this research will be to determine the adequacy of the conceptual notions that have been advanced. An argument has been made that group involvement and face-to-face interation seem to facilitate the innovation adoption process. In the study at hand, we will attempt to manipulate these variables, and hope to observe changes in the degree of innovation adoption by the client organizations.

Therefore, the two principle dimensions to be manipulated experimentally will be:

1. Staff involvement will be developed as a dimension -- with some organizations receiving interventions designed to maximize Group involvement and other organizations receiving intervention designed to minimize staff involvement in the context of a Private consultation;
2. Site will be considered as a dimension -- with some organizations receiving intervention designed to maximize interpersonal interaction through On-site face-to-face consultation with others receiving consultation designed to minimize interpersonal interaction via a Telephone consultation.

Experimental Hypotheses

Congruent with the theoretical rationale developed above, the following hypotheses are presented:

Intervening Variable Hypotheses. As it will be recalled, the thrust of the previous discussion argued that a maximizing of Group participation and On-Site face-to-face interaction will be associated with changes in a number of process-type intervening variables, which, in turn, are ultimately related to innovation adoption. One sub-set of hypotheses of the current study relate to these intervening variables. These include:

1. Group consultation will be more effective than Private consultation in enhancing positive attitudes toward the innovation.

2. Group participation will be more effective than Private consultation in fostering discussion and staff planning activity in the target organizations.

3. On-Site consultation will be more effective than Telephone consultation in fostering positive attitudes toward the innovation.

4. On-Site consultation will be more effective than Telephone consultation in fostering discussion and staff planning activity in the target organizations.

Outcome Hypotheses. As indicated above, the principal dependent variable in the study is the adoption of program evaluation techniques as an innovation in human service agencies. The following hypotheses are advanced:

1. Group consultation will be more effective than Private consultation in fostering the adoption of program evaluation techniques, and

2. On-Site consultation will be more effective than Telephone consultation in fostering the adoption of program evaluation techniques.

METHODS AND PROCEDURES

Design

The study design consisted of an 3 X 2 X 2 factorial analysis of variance format whereby subject organizations were randomly assigned to various forms of consultation modality, and consultant, as presented pictorially in Table 1 below:

Table 1: Subject Assignments in Final Factorial Design

	Telephone Consultation		On-Site Consultation	
	Private Consul-tation	Group Consul-tation	Private Consul-tation	Group Consul-tation
Consultant No. 1	n = 3	n = 2*	n = 3	n = 3*
Consultant No. 2	n = 3	n = 4	n = 3	n = 3*
Consultant No. 3	n = 3	n = 3	n = 3	n = 4

* Indicates previous attrition of one subject.

Sample

The final sample of the present study consisted of thirty-seven (N = 37) substance abuse (alcoholism and/or drug abuse) programs in the State of Michigan (as depicted in Table 1) which had just sent a representative to a three day evaluation skills workshop. Characteristics of these

organizations varied. The full-time staff size ranged from two to eighty; program budgets varied from fifteen thousand to a million dollars; the academic background of the director differed from a G.E.D. to Ph.D candidates and twenty-two of the thirty-seven organizations had evaluation staff prior to the consultations. However, this final sample was obtained after a series of preliminary recruitment efforts were undertaken. These steps are outlined below.

Initial Recruiting. All 420 licensed Michigan substance abuse agencies were contacted to determine their general interest in attending an evaluation skills workshop (See Appendix A). Following this initial contact, all programs were notified of the workshop dates (Appendix B and C) and were informed that all workshop participants must be program directors or administrators with some form of supervisory role. All potential applicants who indicated that they had a Ph.D. were rejected as inappropriately overeducated for the workshop.

The first sixty non-Ph.D. applicants were accepted, with the expectation that approximately 25% would drop out prior to the post-workshop consultation. An attempt was made to allow no more than one workshop participant from a particular program. Forty-two individuals, representing forty programs, actually attended the evaluation workshop.

Subject Assignment and Attrition. At the conclusion of the workshop, participants were notified that they would be randomly assigned to different treatment groups as per the design described in Table 1.

Because of the limited availability of the consultants,

usually no more than four consultations per week could be carried out by any one consultant. Therefore, organizations were told that they would receive their first consultation at varying lengths of time after the workshop. In order to control for this timing effect, the scheduling of consultations was developed such that each consultation cell would contain one early, one medium early, one medium late, and one late consultation.

After random assignment of subject organization to treatment cells was completed and initial consultations were scheduled, two subject programs decided that they did not wish to be involved (one in the Telephone-Group condition and one in the On-Site-Group condition). One other subject program in the On-Site-Group condition closed for lack of funding prior to the initial consultation. The above circumstances reduced the total sample of organization to the thirty-seven pictured in Table 1 on page 22.

The Innovation

The techniques and concepts which were advocated in the workshop and consultations, constituted a short course in program evaluation methodology. A number of works were consulted to develop the curriculum including Fairweather (1967), Rossi and Williams (1972), Wholey, et al. (1970), and Weiss (1972).

In the workshop, an abridged and simplified version of this methodology was presented in sequential components. A lecture format was generally used, supplemented by small group exercises. Some of the major issues covered in the workshop included:

1. Setting program objectives;
2. Comparison of types of evaluation;
3. Measurement;
4. Pre-post designs;
5. Matched group designs;
6. Experimental designs;
7. Chi-square and T-test statistics;
8. Logistics of a program evaluation system.

A complete schedule of workshop activities is presented in Appendix D.

The thrust of the workshop was to encourage participants to utilize more methodologically sophisticated, evaluation designs. There was a strong emphasis on eliminating threats to validity by employing true experimental designs.

In addition to the lecture and group activities, participants were given a 120 page manual which included text, bibliographies, exercise materials, and statistical tables.

The program evaluation concepts and practices presented at this workshop, then, represented the innovation to be diffused.

The Consultations

In each case, the first consultation was performed by a graduate student in psychology. All further consultations were performed by one of three Ph.D. consultants who were randomly assigned according to the previously illustrated design.

These same Ph.D. consultants, and the graduate student, acted as instructors in the workshop and therefore all consultee organizations had one staff member who was both

involved in the consultations and was previously familiar with the consultant.

The consultations for each subject organization were scheduled as follows:

1) 10-15 days after workshop--phone contact was made by the graduate student to schedule first consultation;
2) 2-8 weeks after workshop--first consultation by graduate student;
3) 3 weeks after first consultation--first consultation by Ph.D. consultant;
4) 5 weeks after first consultation--second consultation by Ph.D.;
5) 7 weeks after first consultation--third consultation by Ph.D.

Because of scheduling problems of the consultees the above plan was not strictly followed, but was closely approximated. Within the constraints imposed by consultee availability, consultations were generally carried out within 3 to 5 days of the scheduled date.

The initial phone contact for scheduling consultations consisted of the following:

1) An appointment was made with the workshop attender for the initial consultation.
2) Depending upon condition, the workshop attender was either requested to consult in Private or in a Group context with other staff.

3) The appointment was scheduled for either 9:00-11:30 A.M. or 1:30-4:00 P.M. If the program director requested the rationale for Group participation (or lack of it) in the consultation, he/she was told the following:

> "because of the anxiety often produced by evaluation issues it is not known whether or not it is more effective to involve other staff members in initial broad ranging discussions with outside consultants. Therefore, this evaluation skills project will attempt to involve program staff in certain consultations, and consult privately with program directors of other programs, and study the relative differences in effectiveness of the two techniques."

Telephonic consultations to those programs which were assigned to the Group Consultation condition consisted of one or more calls until at least three staff members, including the workshop participant, could be reached for each consultation. One organization in the Telephone-Group consultation condition did not fully satisfy these demands in that three persons were not uniformly contacted. For all other programs, however, the conditions of the cell were followed. Whenever possible participants in the Telephone Group consultations were encouraged to listen in on extension phone lines so that the group interaction could be enhanced. Telephonic consultations were limited to two and

a half hours (the same length as the on-site consultations), but usually did not extend past one hour.

The initial consultation consisted of the following:

1) The consultant reviewed all program services and asked the program staff or director which services they would best like to evaluate;
2) The consultant then typically worked with the consultee(s) to generate alternative research designs to meet the identified evaluation needs;
3) The consultant explored whether computer facilities or other evaluation resources had been investigated;
4) The consultant suggested arrangement of meetings with relevant personnel needed to carry out evaluation planning tasks;
5) Development of questionnaires and other data gathering devices were discussed;
6) The consultant asked what progress (calls, meetings, task completions) has been made toward the other sequential tasks outlined in the workshop.

Following the first consultation, the Ph.D. consultant assigned to the particular program met with the graduate student to discuss his experiences with the consultee. The two discussed possible evaluation projects, along with the problems the graduate student had perceived to exist about each outlined project.

The second, third, and fourth consultations generally consisted of a reiteration and recycling of tasks 2-6 described above. The mandate given consultants was a fairly open-ended agreement: to give whatever assistance that was necessary to foster use of evaluation techniques. Throughout the consultation period consultees had the option of making unlimited self-initiated calls to the consultant. In fact, no more than a handful of such calls were made.

Data Collection Schedule

Data was collected according to the following schedule:

1) Data related to interest in the proposed innovation were obtained from a pre-workshop survey instrument (See Appendix A) which was mailed to all possible workshop applicants sixteen weeks prior to the workshop;
2) Descriptive data about the programs, pre-consultation attudinal data, and workshop attenders' assessment of the consultant's (instructor's) effectiveness were collected from forms distributed at the workshop (See Appendices C, E and F);
3) Innovation adoption data and related staff activity data were collected by phone 150 days after the initial post-workshop consultation (See Appendices G and H).
4) Data on amount of actual staff involvement in the consultation sessions and total amount of time spent in consultations were obtained from

consultant report forms (See Appendix I)

5) Subjective ratings by the subjects on the effectiveness of the consultation and the inhibiting factors associated with lack of adoption of the innovation were obtained from follow-up questionnaires mailed to all subjects 150 days after the initial consultation (See Appendix J).

Data Reduction Procedures: Descriptive, Process and Outcome Measures

Prior to analysis it was obvious that the number of variables measured in the study involved a considerable degree of redundancy. In order to enable a more coherent use of comparative techniques, such as analysis of variance or analysis of covariance, several prior data reduction steps were taken.

The available data were reviewed for identification of variables which could be combined into a priori rational scale scores, particularly those major factors which the literature had indicated may be relevant to innovation adoption. Several other variables were not combined into scales, but were considered discretely.

Because of the severe time limitations, and the bureaucratic constraints imposed on this state government funded project, test-retest reliability of the instruments could not be accomplished prior to initiation of the data collection process. Therefore, single variable measures will be of uncertain reliability. However, the variables which

could be combined to form a priori scale scores were analyzed for their scale reliability using Cronbach's alpha analysis (Mehrans and Ebel, 1967).

Following these procedures the data were organized into Descriptive, Process, and Outcome measures. Descriptive measures included a set of variables that described, in a generic sense, organizational capacity and interest in innovation. These variables were of minor conceptual interest in themselves, but were considered in the analysis for their possible confounding effects. These included interest and attitudinal measures, staff resources, and size. Process measures consist of a series of assessments of intervening variables, assumed to be influenced by the intervention, and in turn to be related to eventual innovation adoption. The Outcome measure was an index of a program's adoption of the evaluation techniques. Eight Descriptive measures, eight Process measures, and one Outcome measure were identified. The results of this review, selection, and scale analysis process is described below.

Descriptive measures. There were eight Descriptive measures identified as follows:

1. Interest (behaviorally expressed by the program) in the innovation prior to initial consultation (Prior Interest). A measure of this factor was obtained by creating a dichotomous variable of whether or not the pre-workshop survey instrument (Appendix A) was returned;
2. Academic resources available to the program

Academic Resources). Data relevant to this particular factor consisted of the academic background of the workshop attender (Item 3 of Appendix C) and the distance to the nearest graduate school (Item 11 of Appendix C). The correlation between these two variables was found to be .57 (significant at the .001 level) and therefore, these two items were converted to Z-scores and summed to form an Academic Resources scale;

3. Staff available for evaluation activities (Evaluation Resources). Data relating to this factor was obtained from the evaluation staff resource items on the workshop application form (See Items 8 and 9 of Appendix C). The correlation between these two items was found to be .59 ($P < .001$). Therefore, the two items were converted to Z-scores and summed to create an Evaluation Resources scale;
4. General program resources (Program Size). Data relating to this factor included the number of full-time employees of the organization, the number of employees supervised by the workshop attender, the total budget of the program (Items 4 and 12 of Appendix E and Item 2 of Appendix C). These three variables were converted to Z-scores and tested for their scale reliability. Cronbach's alpha (Mehrens and Ebel, 1967) was computed and found to be .847. Therefore, these three items were summed and used as a Program Size scale.

An analysis of Cronbach's alpha for the Program Size scale is shown in Table 2 below:

Table 2: Cronbach's Alpha Analysis for Program Size

Variables	Alpha if item deleted
Staff Supervised (SS) by Workshop Attender	.95362
Total Full-time (FTE) employees	.67573
Annual Budget (AB)	.68737

5. Workshop attender's theoretical agreement with the innovation concepts (Attitude-Concepts). Data related to this attitude was available from Items 2a through 2d of the post-workshop (pre-consultation) questionnaire (See Appendix F). These four items were converted to Z-scores and tested for their scale reliability. Cronbach's alpha test of scale reliability was found to be .853 and these four items were combined to form an attitude toward innovation concepts scale.

An analysis of Cronbach's alpha for the Attitude-Concepts scale is shown in Table 3 below:

Table 3: Cronbach's Alpha Analysis for Attitude-Concepts Scale

Attitude Variables	Alpha if item deleted
Measurable criteria (MC)	.76861
Pre-testing (PT)	.77444
Comparison group (CG)	.86211
Random assignment (RA)	.83837

6. Predicted staff cooperation with adoption of the innovation: (Attitude-Staff Cooperation). Data related to this attitude was available from items 3a to 3d of the post-workshop questionnaire (See Appendix F). These four items were converted to Z-scores and tested for their scale reliability. Cronbach's alpha test of scale reliability was found to be .879, and these items were combined to form an Attitude-Staff Cooperation scale.

An analysis of Cronbach's alpha for the Attitude-Staff Cooperation scale is shown in Table 4 below:

Table 4: Cronbach's Alpha Analysis for Attitude-Staff Cooperation Scale

Attitude Variables	Alpha if item deleted
Staff cooperation with ...	
Measureable criteria (MC)	.83677
Pre-testing (PT)	.78250
Comparison groups (CG)	.84839
Random assignments (RA)	.89737

7. Prediction of ability to implement the innovation (Attitude-Capability). The only measure of this variable available was obtained by using Item 1 of the post-workshop questionnaire (See Appendix F).

8. Pre-consultation rating of consultant effectiveness (Consultant Pre-Rating). All four consultants acted as instructors in the workshop and were rated on seven different scales by the workshop attenders at the conclusion of the workshop (See Items 5 through 11 of Appendix F). Items 7 and 8 were scored differently than the other scales and therefore, did not correlate favorably with the other five scales. Therefore, these two items were discarded from the analysis and the remaining five ratings for each consultant were converted to Z-scores and

tested for their scale reliability. Cronbach's alpha was found to be .688 for these five different ratings.

An analysis of Cronbach's alpha for the Consultant Pre-Rating scale is shown in Table 5 below:

Table 5: Cronbach's Alpha Analysis for Consultant Pre-Rating Scale

Rating Variables		Alpha if item deleted
Patience	(PAT)	.57519
Practicality	(PR)	.60488
Organization of presentation	(ORG)	.65416
Openness to consultee opinions	(OCO)	.68283
Understanding of materials	(UM)	.66320

In summary, the following Descriptive measures were used in subsequent analyses:

1. Prior Interest
2. Academic Resources
3. Evaluation Resources
4. Program Size
5. Attitude-Concepts
6. Attitude-Staff Cooperation
7. Attitude-Capability
8. Consultant Pre-Rating

Process Measures. There were eight Process measures identified as follows:

1. Staff involvement in consultation (Staff Involvement). In order to develop a check on the experimental manipulation of staff involvement, names of the staff present at consultations were recorded on consultant forms (Appendix J). These names were used to create two measures of staff involvement in the consultation.
   a. Total number of different persons involved.
   b. Total number present at all consultations.
   The correlation of these two measurer were found to be .923. Therefore, these two items were converted to Z-scores and combined to create the Staff Involvement scale.
2. Staff planning meetings to discuss adoption of the innovation (Meetings). As a measure of the frequency of staff planning meetings, items 1 Dy to 16 Dy of Appendix G were summed both before and after consultation. The Pre-post difference of these sums were then used as a measure of staff planning.
3. Total staff involvement (Total Staff Involvement). A measure of the total staff involvement in the innovation planning and implementation process was obtained from combining the total number of different staff directly in-

Process Measures. There were eight Process measures identified as follows:

1. Staff involvement in consultation (Staff Involvement). In order to develop a check on the experimental manipulation of staff involvement, names of the staff present at consultations were recorded on consultant forms (Appendix J). These names were used to create two measures of staff involvement in the consultation.
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2. Staff planning meetings to discuss adoption of the innovation (Meetings). As a measure of the frequency of staff planning meetings, items 1 Dy to 16 Dy of Appendix G were summed both before and after consultation. The Pre-post difference of these sums were then used as a measure of staff planning.
3. Total staff involvement (Total Staff Involvement). A measure of the total staff involvement in the innovation planning and implementation process was obtained from combining the total number of different staff directly in-

volved (total number of different people listed in column B of Appendix G), the total people involved in any aspect of planning (total of columns B and C of Appendix G) and the dichotomous variable of whether or not a formal research team had been established (Item 6A of Appendix G) to form a staff involvement scale. Cronbach's alpha for these three items was found to be .547, and therefore, these items were combined to form a Total Staff Involvement scale.

An analysis of Cronbach's alpha for the Staff Involvement scale is shown in Table 6 below:

Table 6: Cronbach's Alpha Analysis for the Total Staff Involvement Scale

Item		Alpha if item deleted
Total staff directly involved	(TSD)	.1012
Total people involved	(TPI)	.1622
Research team established	(RTE)	.6752

4. Workshop attender cooperativeness (Attender-Cooperativeness). A measure of the workshop attender's attitude toward the innovation at follow-up was obtained from Items 2a, 2f, 2h, 2j, 2l, 2o of Appendix I. These items were

then tested for their scale reliability. Cronbach's alpha for these items were combined and used as a measure of Attender-Cooperativeness.

An analysis of Cronbach's alpha for the Attender-Cooperativeness scale is shown in Table 7 below:

Table 7: Cronbach's Alpha Analysis for Attender-Cooperativeness Scale

Attitude Items	Alpha if item deleted
2a	.81081
2f	.81616
2h	.78259
2j	.80512
2l	.77796
2o	.81413

5. Staff Cooperativeness. Data relating to the program staff's cooperation with the innovation was obtained from Items 2b, 2g, 2i, 2k, and 2m of Appendix I. These items were then analyzed for their scale reliability. Cronbach's alpha for these items was found to be .870. Therefore, these five items were combined and used as a measure of Staff Cooperativeness.

An analysis of Cronbach's alpha for the Staff Cooperativeness scale is shown in Table 8 below:

Table 8: Cronbach's Alpha Analysis for the Staff Cooperativeness Scale.

Attitude Items	Alpha if item deleted
2b	.84551
2g	.86359
2i	.83238
2k	.85117
2m	.82633

6. Value of resources to the adoption of the innovation (Attitude-Resources). Data relevant to the importance of the workshop attender placed on resources for innovation adoption was obtained from Items 2e, 2d, and 2e of Appendix I. These three items were then analyzed for their scale reliability. Cronbach's alpha was found to be .711. Therefore, these three items were combined and used as an Attitude-Resources scale.

An analysis of Cronbach's alpha for the Attitude-Resources scale is shown in Table 9 below:

Table 9: Cronbach's Alpha Analysis for the Attitude-Resources Scale

Attitude Variables	Alpha if item deleted
Value of funds	.39472
Value of computers	.68740
Value of trained staff	.73566

7. Total time spent in consultation sessions (Time). After each consultation session the consultant recorded the time elapsed during the consultation. On the consultant reporting form (See Appendix J) the total time recorded on each of the four consultation sessions were added together to represent the total consultation.

8. Total innovation-related tasks completed since initiating consultation (Total Tasks). A measure of the total innovation-related tasks completed by the subjects since the first consultation was obtained by computing the gain in the sum of column A of Appendix G from consultation initiation to follow-up. (While these tasks were prerequisites to high outcome measures, they were not considered outcome success in themselves.)

In summary, the following Process measures were used in

subsequent analyses:

1. Staff Involvement
2. Meetings
3. Total Staff Involvement
4. Attender-Cooperativeness
5. Staff-Cooperativeness
6. Attitude-Resources
7. Time
8. Total Tasks

The Outcome Measure. As has been noted in the Data Collection Schedule, 150 days after the initial consultation the workshop attender was contacted by phone by the experimenter, and asked to verbally report on the extent to which they were using program evaluation techniques. This information constituted the raw data for the measure of innovation adoption. The responses of the subjects were noted and recorded by hand by the interviewer in the narrative form in which the reports were given. Photo-copies of these hand written reports were then rated by two raters. Both raters had masters degrees in Social Work and had completed a series of graduate courses in psychometrics and were familiar with evaluation methodology.

Both raters were asked to carry out a blind scoring of the reports they were given using the rating scheme shown in Appendix K. An inter-rater reliability coefficient of .972 was obtained from these ratings.

RESULTS

Analysis of Variance: Descriptive Measures

Prior to analysis of the Outcome measures, all eight Descriptive measures were analyzed by three way analysis of variance to check on the effectiveness of random assignment procedures (See Tables 10 to 17). As can be seen from these tables there are no significant main or interaction effects for any of these Descriptive measures with the exception of Evaluation Resources (See Table 12).

To determine the potential confounding impact of this measure on the experiment, and to analyze the relationship of other Descriptive measures to the Outcome measure, the eight Descriptive measures were correlated with the Outcome measure. These correlations are presented in Table 18 on page 52.

Table 10A: Cell means for Prior Interest

	Telephone Consultations		On-Site Consultations		
	Private Consultation	Group Consultation	Private Consultation	Group Consultation	Means
Consultant #1	-.5249	1.1946	-.1448	-.1448	.2814
Consultant #2	-.1448	-.3122	.5249	.5249	.1128
Consultant #3	.2353	-.1448	-.1448	-.3122	-.3509
Means	-.1448	.0784	.0784	-.0109	.0000

Table 10B: Analysis of variance Prior Interest

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	2.764	4	.691	.626
Site	.039	1	.039	.035
Staff	.037	1	.037	.033
Consultant	2.689	2	1.345	1.219
2-Way Interactions	5.197	5	1.039	.942
Site X Staff	.426	1	.426	.386
Site X Consultant	4.694	2	2.347	2.127
Staff X Consultant	.309	2	.154	.140
3-Way Interaction	.456	2	.228	.207
Site X Staff X Consultant	.456	2	.228	.207
Residual	27.582	25	1.103	
Total	36.000	36	1.000	

Table 11A: Cell means for Academic Resource

	Telephone Consultations		On-Site Consultations		
	Private Consultation	Group Consultation	Private Consultation	Group Consultation	Means
Consultant #1	.4858	-.0898	-.3544	-.2777	-.0562
Consultant #2	-.3879	.2890	1.4736	.6865	.3201
Consultant #3	.2910	-.6318	-.9959	.1169	-.2725
Means	.1296	-.3590	.1086	.1694	.0000

Table 11B: Analysis of variance of Academic Resources

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	3.253	4	.813	.206
Site	.461	1	.461	.117
Staff	.274	1	.274	.070
Consultant	2.518	1	1.259	.319
2-Way Interactions	7.858	5	1.572	.399
Site X Staff	.809	1	.809	.205
Site X Consultant	6.312	2	3.156	.801
Staff X Consultant	.363	2	.181	.046
3-Way Interaction	3.417	2	1.709	.434
Site X Staff X Consultant	3.417	2	1.709	.434
Residual	98.524	25	3.941	
Total	113.051	36	3.140	

Table 12A: Cell means for Evaluation Resources

	Telephone Consultations		On-Site Consultations		
	Private Consultation	Group Consultation	Private Consultation	Group Consultation	Means
Consultant #1	-.12	1.85	.26	-.12	.47
Consultant #2	1.29	-.54	-.79	-2.20	-.56
Consultant #3	-.12	2.04	.26	.77	.35
Site Means*	.35	1.15	-.09	-.48	.12

Table 12B: Analysis of variance of Evaluation Resources

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	20.746	4	5.186	1.857
Site	12.699	1	12.699	4.548*
Staff	.469	1	.469	.168
Consultant	7.578	2	3.789	1.357
2-Way Interactions	18.350	5	3.670	1.314
Site X Staff	6.229	1	6.229	2.231
Site X Consultant	1.578	2	.789	.283
Staff X Consultant	11.251	2	5.625	2.015
3-Way Interaction	5.631	2	2.816	1.008
Site X Staff X Consultant	5.631	2	2.816	1.008
Residual	69.805	25	2.792	
Total	114.532	36	3.181	

*p < .05

Table 13A: Cell means for Program Size

	Telephone Consultations		On-Site Consultations		
	Private Consul-tation	Group Consul-tation	Private Consul-tation	Group Consul-tation	Means
Consultant #1	-.3423	.9738	-.6116	-.0443	-.0952
Consultant #2	-.4903	-.0436	.0126	-.7151	-.2887
Consultant #3	-1.1380	3.7017	-1.0596	.0718	.3662
Means	-.6569	1.4309	-.5529	-.1991	.0000

Table 13B: Analysis of variance of Program Size

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	21.887	4	5.472	.705
Site	5.250	1	5.250	.676
Staff	13.269	1	13.269	1.710
Consultant	3.367	2	1.684	.217
2-Way Interactions	28.217	5	5.643	.727
Site X Staff	8.562	1	8.562	1.103
Site X Consultant	5.174	2	2.587	.333
Staff X Consultant	15.599	2	7.800	1.005
3-Way Interaction	3.916	2	1.958	.252
Site X Staff X Consultant	3.916	2	1.958	.252
Residual	194.040	25	7.762	
Total	248.060	36	6.891	

Table 14A: Cell means for Attitude-Capability

	Telephone Consultations		On-Site Consultations		
	Private Consultation	Group Consultation	Private Consultation	Group Consultation	Means
Consultant #1	.1827	-.2871	-.4437	-1.0702	-.4751
Consultant #2	-.1305	.6525	-.4437	.1827	.1104
Consultant #3	.1827	.4959	.1827	.1827	.2550

Table 14B: Analysis of variance of Attitude-Capability

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	4.980	4	1.245	1.098
Site	1.824	1	1.824	1.608
Staff	.278	1	.278	.245
Consultant	2.877	2	1.439	1.268
2-Way Interactions	2.783	5	.557	.491
Site X Staff	.100	1	.100	.088
Site X Consultant	.408	2	.204	.180
Staff X Consultant	2.156	2	1.078	.950
3-Way Interaction	.012	2	.006	.006
Site X Staff X Consultant	.102	2	.006	.006
Residual	27.225	24	1.134	
Total	35.000	35	1.000	

Table 15A: Cell means for Attitude-Staff Cooperativeness

	Telephone Consultations		On-Site Consultations		
	Private Consultation	Group Consultation	Private Consultation	Group Consultation	Means
Consultant #1	1.9765	-.5815	-.9024	-3.7150	-1.1062
Consultant #2	1.8063	2.7871	-1.3871	.6160	1.0373
Consultant #3	.3447	-.5783	1.1271	-1.1030	-.1332
Means	1.2285	.9168	-.3875	-1.3709	.0099

Table 15B: Analysis of variance of Attitude-Staff Cooperativeness

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	59.761	4	14.940	1.160
Site	33.306	1	33.306	2.586
Staff	3.994	1	3.994	.310
Consultant	22.461	2	11.231	.872
2-Way Interactions	45.081	5	9.016	.700
Site X Staff	.108	1	.108	.008
Site X Consultant	16.641	2	8.321	.646
Staff X Consultant	26.285	2	13.142	1.020
3-Way Interaction	2.035	2	1.018	.079
Site X Staff X Consultant	2.035	2	1.018	.079
Residual	296.218	23	12.879	
Total	403.096	34	11.856	

Table 16A: Cell means for Attitude Concepts

	Telephone Consultations		On-Site Consultations		
	Private Consultation	Group Consultation	Private Consultation	Group Consultation	Means
Consultant #1	3.9077	.6153	-.1194	-3.4009	-.4777
Consultant #2	.0257	.4541	-1.2069	-.7715	.3060
Consultant #3	.9424	.0238	1.4665	-.0615	.0615
Means	1.3400	.3465	-.1194	-1.2763	.0000

Table 16B: Analysis of variance of Attitude Concepts

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	34.104	4	8.526	.670
Site	21.343	1	21.343	1.677
Staff	10.460	1	10.460	.822
Consultant	2.301	2	1.151	.090
2-Way Interactions	41.040	5	8.208	.645
Site X Staff	.039	1	.039	.003
Site X Consultant	31.698	2	15.849	1.245
Staff X Consultant	9.019	2	4.509	.354
3-Way Interaction	8.113	2	4.057	.319
Site X Staff X Consultant	8.113	2	4.057	.319
Residual	305.428	24	12.726	
Total	388.686	35	11.105	

Table 17A: Cell means for Consultant Pre-Rating

	Telephone Consultations		On-Site Consultations		
	Private Consultation	Group Consultation	Private Consultation	Group Consultation	Means
Consultant #1	1.9874	7.5781	.9288	.0244	2.3310
Consultant #2	-5.1347	-1.5781	4.3937	-.7611	-.8322
Consultant #3	1.7709	-.5595	-5.4301	.0799	-.7888
Means	-1.1268	.7870	.5969	-.1890	.0449

Table 17B: Analysis of variance of Consultant Pre-Rating

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	67.677	4	16.919	.579
Site	.282	1	.282	.010
Staff	2.295	1	2.295	.079
Consultant	65.100	2	32.550	1.114
2-Way Interactions	163.664	5	32.733	1.120
Site X Staff	15.510	1	15.510	.531
Site X Consultant	132.406	2	66.203	2.266
Staff X Consultant	13.028	2	6.514	.223
3-Way Interaction	106.745	2	53.372	1.827
Site X Staff X Consultant	106.745	2	53.372	1.827
Residual	613.491	21	29.214	
Total	951.577	32	29.737	

Table 18: Correlations of Descriptive Measures with the Outcome Measure

Descriptive Variables		Correlation with Outcome Measure
1.	Prior interest	.2734*
2.	Academic resources	.1998
3.	Evaluation resources	-.0881
4.	Program size	.1493
5.	Attitude-Capability	-.1248
6.	Attitude-Staff Cooperativeness	-.0258
7.	Attitude Concepts	-.0438
8.	Consultant Pre-Rating	.3535**

*p < .10 one-tailed
**p<.05 one-tailed

As can be seen from Table 18 the Evaluation Resources measure does not correlate significantly with the Outcome measure. Therefore, the unequal scores on this variable across conditions should not affect the experiment.

The results above do indicate, however, a strong trend (p. < .10) toward a relationship between the Prior Interest measure and the Outcome measure, and a significant correlation (p < .05) between the Consultant Pre-Rating measure and the Outcome measure.

In spite of the fact that neither of these measures achieved statistical significance on the analysis of

variance described earlier, it was decided that a conservative approach to subsequent analyses should consider their possible confounding effects. It was determined that in all analyses of variance the effects of Prior Interest and Consultant Pre-Rating would be considered as possible covariants.

Analysis of Variance: Process Measures

The Process measures were analyzed in the analyses of covariance, with Prior Interest or Consultant Pre-Rating acting as covariates. Since parallel analyses of the Outcome measure (See pp. 64&67) had determined no significant differences across consultants, and since Consultant Pre-Rating was being used as a covariate in the analyses of the Process measures, it was determined that analytical redundancy would be eliminated if one collapsed across the consultant cells. The results of these analyses are shown on Tables 19 through 26 on pages 55-62.

Inspection of the tables indicates that the following results were obtained on the Process measures:

1) As would be expected from the experimental manipulation, the amount of Staff Involvement in consultations was significantly greater in the Group Consultation condition (See Table 19).

2) For Frequency of staff Meetings, a significant interaction was found between the Site and Staff Involvement conditions, such that the Telephone/Group Consultation, and On-Site/Private cells

appeared to bring about significantly more staff planning meetings (See Table 20).

3) Subjects in the On-Site condition felt less impaired by resource shortages than did subjects in the Telephone condition (See Table 24).

4) As would be expected from the conditions, Total Time of consultations was significantly greater in the On-Site conditions (See Table 25).

5) Total Tasks were significantly greater in the Group Consultation condition, and the covariant Prior Interest significantly correlated with Total Tasks completed since the first consultation (See Table 26).

No other main, interaction, or covariant effects were found to be statistically significant.

Having identified the empirical relationships between the Process measures and the experimental conditions, the Process measures were then correlated with the Outcome measure. The results are shown in Table 27 on page 63.

Table 19A: Cell means for Staff Involvement

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	-1.7244	.1832	-.7565
Group Consultation	1.3376	1.6705	1.5128
Site Means	-.1934	.9657	.3862

Table 19B: Analysis of variance and covariance for Staff Involvement

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	2.199	2	1.100	.623
Prior Interest	1.056	1	1.056	.598
Consultant Pre-Rating	.402	1	.402	.288
Main Effects	75.226	2	37.613	21.309
Site	.876	1	.876	.496
Staff	73.810	1	73.810	41.815*
2-Way Interaction	.008	1	.008	.004
Site X Staff	.008	1	.008	.004
Residual	47.659	27	1.765	
Total	125.092	32	3.909	

*$p < .005$

Table 20A: Cell means for Meetings

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	3.2500	17.4444	10.3472
Group Consultation	17.5000	5.5000	11.1842
Site Means	10.3750	11.1579	11.1711

Table 20B: Analysis of variance and covariance for Meetings

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	.793	2	.396	1.295
Prior Interest	.108	1	.108	.354
Consultant Pre-Rating	.448	1	.448	1.463
Main Effects	.065	2	.032	.106
Site	.004	1	.004	.012
Staff	.062	1	.062	.202
2-Way Interaction	4.963	1	4.963	16.221
Site X Staff	4.963	1	4.963	16.221*
Residual	7.649	25	.306	
Total	13.469	30	.449	

*p <.001

Table 21A: Cell means for Total Staff Involvement

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	4.241	6.722	5.482
Group Consultation	10.916	6.598	8.757
Site Means	7.579	6.660	6.971

Table 21B: Analysis of variance and covariance for Total Staff Involvement

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	11.412	2	5.706	1.070
Prior Interest	2.220	1	2.220	.416
Consultant Pre-Rating	11.262	1	11.262	2.112
Main Effects	10.455	2	5.228	.980
Site	6.614	1	6.614	1.240
Staff	3.568	1	3.568	.699
2-Way Interaction	1.765	1	1.765	.331
Site X Staff	1.765	25	1.765	.331
Residual	133.301	25	5.332	
Total	156.933	30	5.231	

Table 22A: Cell Means for Attender Cooperativeness

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	-.5297	.8429	.1566
Group Consultation	.3549	-.7072	-.2041
Site Means	-.0874	.0273	-.0286

Table 22B: Analysis of variance and covariance for Attender Cooperativeness

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	66.232	2	33.116	1.628
Prior Interest	10.629	1	10.629	.523
Consultant Pre-Rating	33.572	1	33.572	1.651
Main Effects	5.790	2	2.895	.142
Site	1.007	1	1.007	.050
Staff	4.558	1	4.558	.224
2-Way Interaction	17.015	1	17.015	.837
Site X Staff	17.015	1	17.015	.837
Residual	508.446	25	20.338	
Total	597.483	30	19.916	

Table 23A: Cell means for Staff Cooperativeness

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	.2930	-.3047	-.0059
Group Consultation	1.6422	-1.6316	-.0808
Site Means	.9676	-1.0030	-.0443

Table 23B: Analysis of variance and covariance for Staff Cooperativeness

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	36.800	2	18.400	.820
Prior Interest	17.023	1	17.023	.759
Consultant Pre-Rating	6.351	1	6.351	.283
Main Effects	24.054	2	12.027	.536
Site	23.549	1	23.549	1.049
Staff	1.091	1	1.091	.049
2-Way Interaction	17.180	1	17.180	.766
Site X Staff	17.180	1	17.180	.766
Residual	516.136	23	22.441	
Total	594.169	28	21.220	

Table 24A: Cell means for Attitude-Resources for site and staff involvement

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	-1.7940	.3851	-.7045
Group Consultation	.0855	.9862	.5596
Site Means	-.8534	.6857	-.0554

Table 24B: Analysis of variance and covariance for Attitude-Resources

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	3.411	2	1.706	.308
Prior Interest	2.172	1	2.172	.392
Consultant Pre-Rating	.261	1	.261	.047
Main Effects	31.646	2	15.823	2.856
Site	28.138	1	28.138	5.078*
Staff	4.543	1	4.543	.820
2-Way Interaction	8.206	1	8.206	1.481
Site X Staff	8.206	1	8.206	1.481
Residual	138.522	25	5.541	
Total	181.785	30	6.059	

*p < .10

Table 25A: Cell means for Time of Consultations (in minutes)

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	150.3	436.1	293.2
Group Consultation	196.6	445.5	327.6
Site Means	173.5	441.0	310.9

Table 25B: Analysis of variance and covariance for Total Time of Consultations

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	1.558	2	.779	2.226
Prior Interest	.686	1	.686	1.962
Consultant Pre-Rating	.334	1	.334	.955
Main Effects	21.909	2	10.954	31.304
Site	21.900	1	21.900	62.584*
Staff	.002	1	.002	.006
2-Way Interaction	.236	1	.236	.674
Site X Staff	.236	1	.236	.674
Residual	9.448	27	.350	
Total	33.151	32	1.036	

*$p < .001$

Table 26A: Cell means for Total Tasks adjusted for the Prior Interest covariant

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	.800	1.420	1.110
Group Consultation	1.555	1.594	1.574
Site Means	1.175	1.510	1.348

Table 26B: Analysis of variance and covariance for Total Tasks

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	3.183	2	1.591	2.337
Prior Interest	3.060	1	3.060	4.495*
Consultant Pre-Rating	.087	1	.087	.128
Main Effects	5.050	2	2.525	3.709
Site	.063	1	.063	.093
Staff	4.949	1	4.949	7.270**
2-Way Interaction	1.327	1	1.327	1.950
Site X Staff	1.327	1	1.327	1.950
Residual	18.381	27	.681	
Total	27.940	32	.873	

*p < .10
**p < .05

Table 27: Correlations between innovation Outcome and Process measures

Measure		Correlation with the Innovation Outcome Measure
1.	Staff Involvement	.2141
2.	Meetings	.3843**
3.	Total Staff Involvement	.2094
4.	Attender Cooperativeness	-.0094
5.	Staff Cooperativeness	.0010
6.	Attitude-Resources	.2789*
7.	Time	.4149***
8.	Total Tasks	.7520****

*p < .10 one-tailed
**p < .01 one-tailed
***p < .005 one-tailed
****p < .001 one-tailed

A review of Table 27, juxtaposed with Tables 19 through 26, sheds considerable light on the relationship between these intervening variables and Outcome. As discussed earlier, meeting frequency (Meetings) and consultation intensity (Time) seem to be related to the manipulation and to Outcome. Not surprisingly, the accomplishment of instrumental tasks (Total Tasks) appears to be an intermediate step between the intervention and the change Outcome. Finally, the effect of the On-Site Consultations appear to make staff more confident of their internal resources

(Attitudes-Resources), which in turn covaries with innovation adoption.

Analysis of Variance: Outcome Measure

Because of unequal cell sizes, the Outcome measure was analyzed using a three way hierarchical analysis of variance procedure whereby the highest order interaction effects are to be interpreted first. The results of this analysis of variance is displayed in Table 28 on page 65.

As is clear, there are no significant three way interaction effects. Further, none of the two way interaction effects are significant, with the exception of a significant interaction between the Site and Staff Involvement. Normally, this finding would prohibit further analysis of the main effects because of the confounding nature of a significant interaction effect in unequal cell size experiments. However, if the cell size matrix of the experimental design is reduced to that matrix relevant to this significant interaction (i.e., Site by Staff shown in Table 29 on page 65) it can be seen that this matrix is orthogonal and therefore will not confound the main effect analysis.

In reviewing the main effects then, it can be seen that significant results exist for both the Site and Staff Involvement conditions at the .05 level, with no significant difference across the Consultant conditions. As can be seen from Table 28, the significant differences found indicate that the On-Site consultations show significantly more change than do Telephone consultations, and that

Table 28A: Cell means for the Innovation Outcome Measure

	Telephone Consultations		On-Site Consultations		
	Private Consultation	Group Consultation	Private Consultation	Group Consultation	Means
Consultant #1	1.83	4.00	2.83	2.67	2.72
Consultant #2	1.17	2.50	2.83	3.58	2.52
Consultant #3	1.00	2.67	3.00	2.38	2.57
Means	1.33	2.89	2.89	2.81	2.61

Table 28B: Analysis of variance of the Outcome Measure

Source of Variation	Sum of Squares	DF	Mean Squares	F
Main Effects	8.870	4	2.218	3.022
Site (i.e., telephone versus on-site involvement)	3.916	1	3.916	5.336*
Staff	3.715	1	3.715	5.063*
Consultant	1.240	2	.620	.845
2-Way Interactions	7.605	5	1.521	2.073
Site X Staff	5.017	1	5.017	6.837*
Site X Consultant	2.686	2	1.343	1.830
Staff X Consultant	.376	2	.188	.257
3-Way Interaction	1.182	2	.591	.805
Site X Staff X Consultant	1.182	2	.591	.805
Residual	18.343	25	.734	
Total	36.000	36	1.000	

*$p < .05$

Table 29: Collapsed table of Cell sizes for Site versus Staff conditions

	Consultation by Telephone	Consultation On-Site
Private Consultation	n = 9	n = 9
Group Consultation	n = 9	n = 10

Group consultations are more effective than Private consultations.

As described previously, in the analysis of the Descriptive measures, an argument was made to consider Prior Interest and Consultant Pre-Rating as possible covariates. In the analysis of Process measures, these covariates were used together for an economical treatment of these intervening variables. However, in the analyses of the Outcome measure, which is the dependent variable in the study, it was felt that a more fine-grained analysis would be appropriate. Therefore, separate analyses of covariance were performed using these two covariants.

The analysis of covariance with Prior Interest as a covariant is reported in Table 30 on page 68. As can be seen, the results are essentially equivalent to that of the simple analysis of variance.

Prior to initiating an analysis of covariance with Consultant Pre-Rating as a covariate, it should be noted that in the original analysis no differences had been noted

across consultants. Therefore, in order to avoid a possible "over analysis" of the consultant effect, the consultant conditions were collapsed to yield only Staff and Site cells as was conducted in the previous analysis of Process measures.

Inclusion of Consultant Pre-Rating as a covariant did produce a meaningful impact on the analysis of variance. When considering the data in Table 31 the following changes occur:

1. The significance of the site condition is slightly reduced from $p < .05$ to $p < .10$.
2. The significance of staff involvement is increased from $p < .05$ to $p < .005$.
3. The significant interaction effect vanishes.

As was previously shown the Consultant Pre-Ratings were not significantly different across conditions. However, it is clear that the effect the lower consultant ratings in the Telephone-Private and On-Site-Group Consultation conditions could have brought about the interaction effects demonstrated in the initial analysis of variance.

Clearly, as the analysis of variance and covariance indicate there are main effects of consultation site (On-Site more effective than Telephone consultation) and Staff Involvement (Group consultation more effective than Private consultation). There were no significant differences between consultants and no significant interaction effects.

Table 30A: Cell means for Outcome Measure adjusted for the Prior Interest covariant[1]

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	-.9832	.3250	-.3291
Group Consultation	.3250	.2902	.3067
Site Means	-.3291	.3067	.0000

Table 30B: Analysis of variance for Outcome Measure using Prior Interest as a covariate

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	2.691	1	2.691	3.557
Previous Interest	2.691	1	2.691	3.557*
Main Effects	7.774	4	1.944	2.569
Site of Consultation	3.710	1	3.710	4.904**
Staff Involvement	3.527	1	3.527	4.662**
Consultant	.538	2	.269	.355
2-Way Interactions	6.329	5	1.266	1.673
Site X Staff	4.639	1	4.639	6.132**
Site X Consultant	1.702	2	.851	1.125
Staff X Consultant	.411	2	.206	.272
3-Way Interaction	1.049	2	.525	.693
Site Staff Consultant	1.049	2	.525	.693
Residual	18.156	24	.757	
Total	36.000	36	1.000	

*p < .10
**p < .05

Table 31A: Cell means of the Outcome Measure adjusted for the Consultant Pre-Rating covariant[1]

	Telephone Consultations	On-Site Consultations	Staff Involvement Means
Private Consultation	-.939	.305	-.271
Group Consultation	.298	.312	.271
Site Means	-.307	.307	.000

Table 31B: Analysis of variance for Omnibus Outcome Measure using Consultant Pre-Rating as a covariate

Source of Variation	Sum of Squares	DF	Mean Squares	F
Covariates	2.321	1	2.321	4.137
Consultant Pre-Rating	2.321	1	2.321	4.137**
Main Effects	5.484	2	2.742	4.886
Site of Consultation	2.153	1	2.153	3.837*
Staff Involvement	5.416	1	5.416	9.652***
2-Way Interaction	1.255	1	1.255	2.237
Site X Staff	1.255	1	1.255	2.237
Residual	15.712	28	.561	
Total	26.020	32	.813	

*p < .10
**p < .05
***p < .005

[1] Adjustments were completed using regression analysis where the normalized Outcome measure Z-scores were adjusted by subtracting the product of the Consultant Pre-Rating Z-score and the correlation between Outcome and the Consultant Pre-Rating

DISCUSSION

Group Consultation versus Private Consultation

The impact of the Staff Involvement manipulation can be demonstrated by the effect on Process measures, Outcome measures, or both. Process measures will be addressed first.

Process Measures and Staff Involvement. Those Process measures which were significantly affected by the Staff Involvement manipulation include the following:

1) Staff Involvement in consultation

2) Total innovation-related tasks

As per the original design, the number of staff participating in the consultations was intended, by the experimental manipulation, to be higher in the Group Consultation condition. This result then acts more as an affirmation of the consistency of the experimental manipulation than as a finding to be further interpreted.

The total innovation-related tasks, however, were found to be both strongly correlated with Outcome ($r = .7520$, $p < .001$) and significantly higher in the Group Consultation condition. These findings would appear, then, to be a strong predictor of the superior effectiveness of Group Consultation in increasing innovation adoption.

The number of staff meetings were found not to be

significantly affected by the Group Consultation condition itself, but rather were shown to represent an interaction effect produced by the combination of On-Site Private Consultation or Telephone Group Consultation. Interpetation of such results is not readily apparent. However, one possible explanation may be that the On-Site Group Consultations may have fulfilled, in themselves, a portion of the need for staff planning meetings. This would account, then, for the fact that the On-Site Group Consultation subjects organizations took part in significantly fewer (non-consultation) staff planning meetings than did On-Site Private or Telephone Group Consultation subject organizations.

Should such meetings be viewed as a causal factor of innovation-adoption, future research may wish to study the effects of randomly assigning consultees to consultants who advocate, design or somehow reinforce varying amounts of non-consultation meetings of the staff.

Assessing these planning activity results together with the previously cited significant effect of Group consultations on outcome, it appears that the staff-involvement manipulation may have brought about more innovative decisions, but did not significantly effect the quantity of group participation in the innovation implementation. Such results seem to lead to the conclusion that group impact into the decision-making process is capable of impacting on outcome independently of further group participation during implementation.

A review of the measures that were not significantly

affected by the Group Consultation condition include the following:

1) All three attitudinal measures;

2) Time in consultation; and

3) Total Staff Involvement

Outcome Measure and Staff Involvement. The most important finding of the present research appears to be that the hypothesized effect of Group Consultation on the Outcome measure, previously implied by the research of Fairweather, Sanders and Tornatzky (1974), was supported in a controlled experimental study.

The data analyses which appear to confirm this original hypothesis are the following:

1) Significantly higher Outcome Measure scores in the group consultation condition when the data was analyzed by
   a) Analysis of variance ($p < .05$)
   b) Analysis of variance with the covariant Prior Interest ($p < .05$)
   c) Analysis of variance with the covariant Consultant Pre-Rating ($p < .005$)

2) The findings previously cited which indicate that total innovation-related tasks were both highly correlated with Outcome and also were significantly higher in the Group Consultation condition.

The data which tends not to support the superior effectiveness of Group Consultation comes from the

correlations between the two different measures of staff involvement. For, while both the total amount of staff involvement in the consultations, and the total staff involvement in all activities, correlated positively with innovation adoption ($r = .2141$ and $r = .2094$, respectively), neither was significant ($p < .102$ and $p < .114$).

However, these latter results may indicate that the number of staff may not be as significant as whether or not any staff are involved. Even one additional staff member may bring about the interpersonal contacts and commitments to action that a lone consultee may avoid. The present findings offer direction to more subtle research on the finer distinctions between different forms of staff involvement in future consultation experiments. Such research may include the manipulation of the amount, nature, job functions, task assignments or group planning activities of consultee organizations.

On-Site versus Telephone Consultation

Process Measures and Site. Those Process measures which appear to have been significantly affected by the Site manipulation include:

1) Attitude toward the inhibiting effect of resource shortages; and

2) Total Time of consultation.

Both of these measures were also found to be significantly correlated with the Outcome measure and thereby may be able to provide some insight into the effectiveness of

On-Site Consultation in producing stronger Outcome.

Again, as cited earlier, staff planning meetings were affected by a potential interaction effect between site and staff involvement conditions. The low number of staff planning meetings produced by the Telephone-Private Consultation would be consistent with the other results cited in this research. However, the infrequent meetings produced by the On-Site Group condition (strongest on most other measures) can only be explained by either reduced need for such meetings in this condition, or a generally poor quality of the data.

Measures not demonstrating significant differences across such categories include:

1) Cooperativeness - Staff or Attender
2) Staff involvement (during or after consultation)
3) Total innovation-related Tasks

Outcome Measure and Site. The second major experimental finding of this research is that On-Site consultations showed a strong trend toward being more effective ($p < .10$) than Telephone consultations in the analysis of variance with Consultant Pre-Rating as a covariate and significantly ($p < .05$) more effective when either Prior Interest or no variable was used as a covariant.

Such findings tend to support the research of Conrath (1975), Antonioni (1973), and Christie (1975), and tends to confirm the second major outcome hypothesis of this experiment.

Additional data which tends to support this finding comes from the analysis of variance of the Attitude-Resources measure which showed that subjects receiving On-Site Consultations felt significantly less impaired by resource shortages than did Telephone Consultation subjects. Since the Value of Resources measure also was strongly correlated ($r = .2789$, $p < .10$) with the innovation Outcome measure, the On-Site condition effect on Outcome tends to be further supported.

The major non-supportive finding in this area is that total innovation-related tasks, while greater in the On-Site condition, were not significant at any level.

There are at least two explanations of the positive On-Site results. They are:

1) The very fact that consultations were on the program site required, in many cases, that the consultant come in contact with other staff if only to say hello and be recognized. Such recognition could later bring about staff interaction with the workshop attender, and, thereby, initiate some of the staff involvement in the innovation adoption process which has already been shown to be an effective stimulant to adoption.

2) The analysis variance of total Time of the consultation session found that On-Site consultations were significantly longer than Telephone consultations. Further, the correlational analysis of Time and Outcome was found to be very significant

($r = .4149$, $p < .005$). Therefore, it is possible that the On-Site consultation was more effective simply because it allowed more time (comfortable time, without a phone against one's ear) for consultation activities. For this reason more limited On-Site consultations may be no more effective than Telephone consultation of equal length. There appears to be no way of determining at this time whether the On-Site consultations were more effective because of the face-to-face nature of the consultations, the contact with other staff, the additional information available to the consultant at the program site or the additional consultation time available.

Cost-Effectiveness

A further question which must be addressed prior to the implementation of any of the present findings is the costs involved in the various conditions. The fact that Telephone-Group consultations were only slightly less effective than On-Site consultations creates a great many questions as to the cost-effectiveness of On-Site versus Telephone-Group consultation. Future research in this area may include manipulating On-Site and Telephone consultations at different stages in a series of consultations. Such experiments could perhaps establish the usefulness of Telephone versus On-Site consultation in the various stages of the consultation sequence. Further research could be conducted

which used more comfortable communication techniques, such as a phone system coupled to closed circuit television.

Consultant Effect

As expected from previous research by Fairweather, Sanders and Tornatzky (1974), there was no significant difference in the innovation Outcome measures across the three consultants. However, the Consultant Pre-Rating by a staff member of the subject program was a significant predictor of innovation outcome.

This conclusion was supported by the direct correlation with the innovation outcome measure ($r = .3535$, $p < .05$) and by the analysis of variance of the Outcome measure with the Consultant Pre-Rating used as a covariant ($p < .05$).

These results are particularly interesting in light of the fact that the present study did not produce significant differences between consultants in the analysis of variance of either the Outcome measure or the Consultant Pre-Ratings. Thus, it can be theorized that, while the skill level of the three consultants was relatively the same, there were certain measurable factors by which the consultee could assess the credibility or "compatibility" of consultant with his or her organizational or personal needs. This result could be interpreted in at least two ways:

1. Consultees are able to reliably review the skills of the consultant pertaining to their organizational situation in a relatively short limited interaction. This interpretation would support

Zagona and Haiter's (1965) theory that consultant credibility, as assessed by consultees, will significantly correlate with Outcome if the consultant is observed in a situation quite similar to the actual consultation format (i.e., the workshop training setting);

2) Initial interpersonal impressions or personality assessments by the trainees determine an autistic relationship (Thibant and Kelley, 1959), which pre-determines to some extent the future outcome of consultation sessions, regardless of consultant behavior during the sessions. Unfortunately, since none of the process or intervening variables correlated significantly with the Consultant Pre-Rating, there is little empirical data from the present study which can provide clear direction for further study.

Future research could investigate rival hypothesis such as those above by establishing an experimental setting whereby different degrees of consultee-consultant congruity could be compared as they effect innovation adoption.

Other research could focus on defining more cost-effective methods of obtaining Consultant Pre-Ratings. The method of Consultant Pre-Rating used in this study was very expensive and time consuming. Additional research may wish to delve into the possibility of assessing consultant credibility with less expensive techniques. These may include

ratings by consultees after:

1. Shorter periods of face-to-face interaction.
2. Some form of videotape review of many possible consultants who are later randomly assigned to the consultees.
3. Different forms of written, pictorial and/or audio cassette recordings of the consultant in the act of consultation.

Descriptive Measures

Aside from Consultant Pre-Rating, described above, there was little relationship between the pre-consultation measures of program resources and attitudes, and the innovation Outcome measure. One follow-up measure of the value of resources was found to strongly correlate ($p < .10$) with the innovation Outcome measure. However, because this measure is a subjective assessment of resources it is very difficult to say whether the results are due to a real resource factor or the effects of cognitive dissonance (Festinger, 1964). Such a dissonance effect could cause a program to assess it's resources more favorable after having accomplished an innovation than if the innovation could not be accomplished, regardless of the actual level of resources. It is obvious that more valid and sensitive measures of program resources are possible and should be utilized in future research.

However, based upon the obtained results it is concluded that general capacity (i.e., funding, staff size, etc.) does not correlate with innovation adoption as

significantly as does the internal decision-making methods of the organization members and the nature of the interpersonal interaction between the organization staff and the consultant. If the capacity of the organization does not have an impact on adoption, such impact probably occurs only when gross differences exist between program capacities. (Such differences did not exist in the present experiment.) The correlational analysis of the relatively simple behavioral test of Prior Interest demonstrated a strong trend ($p < .10$) toward predicting innovation adoption in both correlative and covariate analyses of variance. Further, the Prior Interest measure was found to strongly ($p < .10$) covary with total innovation-related tasks completed.

However, none of the attitudinal measures of interest in innovation, both before and after consultation, were found to correlate significantly with Outcome. These measures included attitudes of the workshop attender and the workshop attenders' pre-consultation prediction and post-consultation assessments of staff attitudes toward the innovation.

Such findings tend to support the theory that measures of Prior Interest should be based on innovation-related behaviors rather than attitudes.

Summary and Future Research

The major conclusive findings of the present research indicate the significant positive impact of the following on

innovation adoption:

1) Group Consultation

2) On-Site Consultation

3) Consultant Credibility

4) Prior Interest in the innovation

Each of these findings invite a number of future research projects.

Group Consultation. In the area of group consultation further research could be conducted which manipulates the number of staff involved in the group consultation (one versus three versus five etc.). Future research may wish to control the status of the staff participating in the group consultation such that lower level staff could be encouraged to participate in one condition while only top managers are included in other group consultation conditions. A related issue might be to determine at what stage in the adoption process group interaction is needed. Zaltman and Duncan (1977) have argued that participative involvement is particularly important in the early phases of adoption, and less so during the latter stages. In the current study it can safely be concluded that the group consultation occurred in the adoption cycle, this perhaps accounting for the results.

In situations where large numbers of subject organizations are available, a number of strategies could combine aspects of all of these potential projects, while investigating the most productive placement of group participation

in a long series of consultation sessions. Such research could identify whether other staff should be involved immediately, or only after the program director has been thoroughly consulted. Obviously here, as in our present research, consultant credibility and prior interest should be measured and included in development of the research design.

On-Site Consultation. The present research identified the superior effectiveness of the technique in producing innovation adoption. However, the relative cost involved in On-Site consultation may imply that more effective Telephone consultation, or some other electronically-mediated intervention, may be able to play a cost-effective part in disseminating innovations.

Here, as with the group consultation research, there is the potential to compare different schedules of combined On-Site and Telephone consultation. In such experiments, subject organizations could be randomly assigned to all On-Site versus a single initial On-Site visit followed by Telephone Group consultation. Other research may wish to assess the relative effectiveness of periodic On-Site consultation augmented by regular telephone consulations.

In order to obtain a less confounded comparison of On-Site versus Telephone consultation, a project similar to the present research may wish to limit both Telephone and On-Site consultations to one hour per contact. Such a limit would eliminate the potential confounding effect of

Time on research findings and would more clearly identify the value of the On-Site setting.

In the present research, subjects apparently perceived that On-Site consultation provided additional resources needed to implement the innovation. A further investigation of subject organizations perception of the resources provided by On-Site consultation could more clearly identify such resource factors and determine whether such perceptions were based on actual resource differences or were merely a perceptual phenomenon such as described by cognitive dissonance.

Consultant Credibility. The present research succeeded in identifying a measure of consultant-credibility with the consultee which was correlated with Outcome. However, the specific behaviors demonstrated by the consultants which brought about these consultee impressions were not addressed.

Once the relevant consultant behaviors and/or traits which determine consultee assessments of consultant credibility are identified with greater precision it may be possible that a group of consultants could be trained to demonstrate the behaviors or traits previously identified by consultees as important. Trained consultants could then be compared with untrained consultants based upon the success of their consultee organizations in adopting the advocated innovation.

Such research may represent a first step toward developing reliable and valid instruments for assessing the

relevant factors within the presently vague concept of consultant credibility, and could lead to identification of behavioral methods by which consultants could improve their effectiveness with any consultee.

Should such research identify credibility as a combination of relatively fixed consultee and consultant traits the findings could be used to "match" consultees to consultants and increase the cost-effectiveness of any consultation system.

Prior Interest. As was demonstrated in the present research, a behavioral measure of Prior Interest in the innovator was a strong predictor of Outcome.

Should future research be able to develop more subtle behavioral measures of interest in the innovation, it may be possible to examine directly the relationships between consultee interest and consultant method. Future experiments could be conducted which randomly assign different forms of consultation to a population of consultees dichotimized into high and low interest groups. Such research could perhaps identify consultation methodologies which are uniquely effective with one or the other of the two subcategories of consultee interest in the proposed innovation.

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APPENDICES

APPENDIX A

STATE OF MICHIGAN

WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF PUBLIC HEALTH
3500 NORTH LOGAN STREET, LANSING, MICHIGAN 48914

MAURICE S. REIZEN, M.D., Director

Dear Program Director:

The Office of Substance Abuse Services is now in the process of investigating the possibility of providing various workshops and on site consultations in program evaluation skills.

Therefore, in order to determine the size, format and number of such workshops to offer, we are attempting to identify the number of substance abuse staff members interested in obtaining additional expertise in program evaluation techniques. Would you please complete the enclosed questionnaire and return it to our office at your earliest convenience.

Thank you for your cooperation.

Sincerely,

Bill Stevens

Bill Stevens
Program Analyst
Education & Training Division

BS/mc

enc.

Program Director's Name _____

Phone Number Where You Can Be Most Easily Reached _____

If the following evaluation skills workshops were available, at no cost, in Lansing on the indicated dates, how many staff members would you send? (Travel and living expenses would need to be carried by your local program budget.)

Number of Employees You Would Send	Length of Workshop
_____	A one-day workshop
_____	A two-day workshop
_____	A three-day workshop

If the following evaluation skills workshops were offered within 50 miles of your program, at no cost, how many employees would you wish to attend?

Number of Employees You Would Send	Length of Workshop
_____	A one-day workshop
_____	A two-day workshop
_____	A three-day workshop

If a program evaluation consultant, whom you believed competent, was available free of charge, how many hours of your time would you spend with such a consultant? (Fill in any appropriate blanks or otherwise indicate hours.)

_____ Hours per day for _____ days

_____ Hours per week for _____ weeks

_____ Hours per week indefinitely

If you could, through your own decision, now reallocate some percentage of your budget to evaluation efforts, what percentage of your budget would you reallocate? (Check One)

_____ 0% - 2%

_____ 3% - 5%

_____ 6% - 10%

_____ 11% - 15%

_____ 16% - 20%

_____ Over 20%

_____ I would shift some monies out of evaluation efforts.

If I and my staff had a more thorough understanding of evaluation techniques, I could arrange for my staff, as a whole, to spend approximately _____ additional man-hours per week on evaluation efforts.

APPENDIX B

Evaluation Skills Workshop
Kellogg Center
Michigan State University
East Lansing, Michigan

The Office of Substance Abuse Services will be performing a 20-hour workshop designed to improve the evaluation skills of the local program staff

The knowledge and skills being offered in this upcoming workshop, while definitely of value in meeting the Office of Substance Abuse Services evaluation guidelines (not yet developed), are offered more importantly to help local programs to learn more about which aspects of their services are working well and which aspects need improvement.

The skills being presented, therefore, will probably be of more value to participants interested in internal staff-operated evaluation used to improve services than to those participants interested primarily in meeting minimum evaluation guidelines.

The workshop is designed as a "learning by doing" experience which will involve all participants in the practice of the skills presented. Therefore, if you are planning to attend these sessions, plan to work.

The skills being introduced in the workshop will include the following:

1) Identifying or creating measurable success indicators
2) Factors which improve or detract from the usefulness of data
3) Goal attainment scaling - strengths and weaknesses
4) Evaluation designs
   a. time series design
   b. comparison design
   c. experimental design
   d. other designs as time permits
5) Locating evaluation resources in your community

Each of the above topics will include a small group exercise which will allow for participants to practice the skills presented and receive feedback on their performance.

Because we want to learn as much as possible about the effectiveness of the pilot project a great deal of information and feedback will be requested from participants. This request for information will begin with the application form you will find enclosed with this workshop description. Please be as thorough as possible in completing the information requested. Thank you.

APPENDIX C

Application for
Evaluation Skills Workshop

Applicant's Name _____

Program Name _____ Program Address _____ Telephone _____

Position (Check most appropriate box)

1. ☐ Director ☐ Coordinator of a service within the program ☐ Other Administrator

2. Number of Employees You Supervise _____

3. Highest Degree of Diploma Received to Date _____ 4. Major Field of Study _____

5. Degree you are currently studying toward (if any) _____
Field of Study _____

6. Total College Credits in Mathematics and/or Statistics (if any) _____

7. Type of program (Check as many as appropriate)

☐ primarily serves alcohol problems ☐ outpatient

☐ primarily serves opiate problems ☐ crisis intervention

☐ primarily long-term treatment ☐ prevention and education

☐ residential ☐ highway safety

☐ administrative or coordinating agency ☐ methadone

8. Do you have a staff member in your program whose responsibilities include evaluation activities? _____ Yes _____ No

9. IF YES, how many hours per week, on the average does she/he spend on evaluation activities? _____ 0-2 _____ 3-5 _____ 6-10 _____ 11-20 _____ 21-40

10. Do you have a separate written evaluation plan for your program which is different from other programs in your coordinating agency? _____ Yes _____ No

IF YES, please include a copy of your plan with your application.

11. How many miles away is the nearest community college _____ Four Year College _____ Graduate School _____

12. Does your program presently use or have access to computer facilities? __ Yes __ No __Unsure

When you have completed the above, please return your application to:

Bill Stevens, Program Analyst
Education and Training Division
Office of Substance Abuse Services
1019 Trowbridge Road
East Lansing, MI 48823

before December 16, 1974

APPENDIX D

WORKSHOP SCHEDULE

Day 1

8:30 - 9:00		Coffee and Donuts Trainees Pick Up Materials
9:00 - 10:30		Jarl Nischan Makes Presentation of OSAS Evaluation Policy Bill Stevens Describes Workshop Goals, Activities and Schedule Question and Answer Session With Jarl Nischan and Bill Stevens
10:45 - 12:00	Session 1	Definition of Five Types of Evaluation: Effort Evaluation Impact Evaluation Effectiveness Evaluation Process Evaluation Efficiency Evaluation the purpose, general procedures and various facts and information each can provide will be discussed.
Noon - 1:30		Lunch
1:30 - 3:00	Session 2	Defining and utilizing measurable objectives in pre-post and post only evaluations. Defining methods by which achievement of program objectives can be measured by defining observable, and/or measurable outcome measures - a small group exercise will follow a 45 minute presentation.
3:00 - 3:20		Break
3:20 - 5:00	Session 3	Methods of Measurement--Will include basic concepts, different types of scales, unobtrusive measures, questionnaires and other data gathering techniques. Small group exercises will follow presentation.
5:00 - 6:30		Dinner

Day 2

8:30 - 9:00		Coffee and Donuts
9:00 - 10:00	Session 4	Effectiveness Evaluation--Introduction to comparison designs and their applicability to drug and alcohol programs.
10:00 - 10:45		Small group exercise on applying the pre-post and comparison design to program evaluation.
10:45 - 11:00		Break
11:00 - Noon	Session 5	Effectiveness Evaluation--Continued presentation of comparison designs and the problems involved in identifying "matching" or other groups comparable to drug or alcohol program clients.
12:00 - 1:30		Lunch
1:30 - 3:00	Session 6	Effectiveness Evaluation--Introduction to Experimental Design and various advantages and difficulties involved in application of such designs to drug and alcohol programs. Discussion of ethical considerations of the use of experimental designs.
3:00 - 3:15		Break
3:15 - 3:45		Exercise Session--Trainee will develop an experimental design for use in a drug or alcohol program.
4:45 - 6:30		Dinner
6:30 - 7:30		Critical review of evaluation reports.
7:30 - 8:30	Session 7	Presentation on Goal Attainment Scaling--Its strength and weaknesses.

Day 3

8:30 - 9:00		Coffee and Donuts
9:00 - 10:30	Session 8	Planning for Evaluation--A presentation of all factors needed to be considered prior to implementing an evaluation design. Will include monetary, interpersonal, inter-program and client considerations.
10:30 - 10:45		Break
10:45 - 12:00		Exercise--Trainees will partially create a plan for implementing an evaluation design for a program(s) in their area.
12:00 - 1:30		Lunch
1:30 - 4:00		Individual Consultation with Consultants--All workshop instructors will be available during this time for discussing specific program evaluation problems with individual trainees.

APPENDIX E

WORKSHOP PRE-TEST

NAME: _____

1. In what county is your program located? _____

2. How long has your program been in existence?

   _____ 0-6 months
   _____ 6 months - 1 year
   _____ 1-2 years
   _____ 2-3 years
   _____ 3-4 years
   _____ 4-5 years
   _____ over 5 years

3. What is the average length of contact with your clients?

   _____ 0-1 hour
   _____ 1-24 hours
   _____ 1-7 days
   _____ 7-14 days
   _____ 14-30 days
   _____ 30-90 days
   _____ 90-120 days
   _____ over 120 days

4. How many full-time paid staff are employed by your program? _____

5. How many part-time paid staff are employed by your program? _____

6. How many hours per week does a part-time employee work? (on the average) _____

7. How many volunteers work at your program? (on the average) _____

8. How many hours per week does the average volunteer work? _____

9. What is the average turnover rate per year for your

   (a) full-time staff? _____
   (b) part-time staff? _____
   (c) volunteers? _____

10. Does your program hold regular staff meetings which involve all staff? _____ Yes _____ No

    IF YES, how frequent are such meetings? _____

11. Does your program hold other staff meetings on a regular basis which do not involve all staff members? _____ Yes _____ No

    IF YES, which staff positions attend? _____

    _____

12. What is the total budget for your program for fiscal year 1974-75?

    _____

13. What's your program's present evaluation budget? _____

14. What is the maximum amount of contractual or other funds in your present budget which could be diverted to evaluation efforts provided you made a maximum personal effort to do so? _____

15. How long have you been employed...

    (a) in your present position? _____
    (b) by your present program? _____
    (c) in the substance abuse field? _____
    (d) in the general human services field? _____

16. If you are not the director of your program, how long has your program director been employed as director? _____

17. What types of information or skills do you hope to gain from attending this workshop? (TRY TO LIST FOUR ITEMS)

    1. _____
    2. _____
    3. _____
    4. _____

APPENDIX F

WORKSHOP EFFECTIVENESS

1. In general I believe that the evaluation concepts presented in this workshop are capable of being incorporated in my program activities.

   _____ Strong Agree
   _____ Agree
   _____ Agree Slightly
   _____ Uncertain
   _____ Disagree Slightly
   _____ Disagree
   _____ Strongly Disagree

2. How closely do you personally agree with the concepts presented in the workshop?

   (a) Need for establishing measurable evaluation criteria.

   _____ Strongly Agree
   _____ Agree
   _____ Agree Slightly
   _____ Uncertain
   _____ Disagree Slightly
   _____ Disagree
   _____ Strongly Disagree

   (b) Need for pre-testing.

   _____ Strongly Agree
   _____ Agree
   _____ Agree Slightly
   _____ Uncertain
   _____ Disagree Slightly
   _____ Disagree
   _____ Strongly Disagree

   (c) Need for a group to compare with your program client.

   _____ Strongly Agree
   _____ Agree
   _____ Agree Slightly
   _____ Uncertain
   _____ Disagree Slightly
   _____ Disagree
   _____ Strongly Disagree

(d) Need for randomized assignment to alternative services within your program.

_____ Strongly Agree
_____ Agree
_____ Agree Slightly
_____ Uncertain
_____ Disagree Slightly
_____ Disagree
_____ Strongly Disagree

3. How willing do you believe your staff will be to change their work routine or responsibilities to initiate the following aspects of the workshop?

(a) Establishing measurable evaluation criteria.

_____ Extremely Willing
_____ Very Willing
_____ Willing
_____ Complain But Willing
_____ Would Quit or Try To Undermine Project

(b) Pre-testing.

_____ Extremely Willing
_____ Very Willing
_____ Willing
_____ Complain But Willing
_____ Would Quit or Try To Undermine Project

(c) Identification of a "matched" group to compare with your program client.

_____ Extremely Willing
_____ Very Willing
_____ Willing
_____ Complain But Willing
_____ Would Quit or Try To Undermine Project

(d) Need for randomized assignment to alternative services within your program.

_____ Extremely Willing
_____ Very Willing
_____ Willing
_____ Complain But Willing
_____ Would Quit or Try To Undermine Project

4. What changes would you like to see made before holding another workshop such as this? _____

_____

_____

(continued on reverse side)

INSTRUCTOR EFFECTIVENESS

Instructor, Presentor or Trainer Name	Stevens	Calsyn	Johnson	Tornatsky	
5. Patience	☐	☐	☐	☐	1 = always patient 2 = usually patient 3 = sometimes patient but sometimes too demanding 4 = usually too demanding 5 = almost always too demanding
6. Practicality or on-the-job usefulness of Instructor's Presentation	☐	☐	☐	☐	1 = far too theoretical 2 = too theoretical 3 = sometimes practical but sometimes too theoretical 4 = usually practical 5 = very practical
7. Vocabulary used by the Instructor	☐	☐	☐	☐	1 = far too complicated 2 = a little too complicated 3 = just about right 4 = a little too simple 5 = far too simple
8. Instructors Answers to Trainee's Questions Were:	☐	☐	☐	☐	1 = drawn out far too long 2 = drawn out a little too long 3 = usually clear and complete 4 = a little too short and/or incomplete 5 = far too short and/or incomplete
9. Organization of Presentation	☐	☐	☐	☐	1 = very well organized 2 = well organized 3 = fairly well organized 4 = a little disorganized 5 = very disorganized
10. OPENNESS of Instructor to Different Points of View	☐	☐	☐	☐	1 = encouraged trainees to present different points of view 2 = would always accept different points of view 3 = occasionally argued too long with a trainee 4 = usually argued with trainees too long 5 = argued with trainees far too much

	Instructor, Presentor or Trainer Name	Stevens	Calgyn	Johnson	Tornatsky	
11.	Your perception of the instructor's understanding of material					1 = Excellent 2 = Good 3 = Adequate 4 = Poor 5 = Very Poor

WRITTEN MATERIALS

12. IN GENERAL, VOCABULARY USED IN MATERIALS WAS: ☐

1 = FAR TOO COMPLICATED
2 = A LITTLE TOO COMPLICATED
3 = JUST ABOUT RIGHT
4 = A LITTLE TOO SIMPLE
5 = FAR TOO SIMPLE

13. THE AMOUNT OF MATERIAL PRESENTED ☐

1 = WAY TOO MUCH
2 = TOO MUCH
3 = ABOUT RIGHT
4 = TOO LITTLE
5 = WAY TOO LITTLE

14. IN GENERAL, THE ORGANIZATION OF MATERIALS WAS: ☐

1 = EXCELLENT
2 = GOOD
3 = FAIR
4 = POOR
5 = VERY POOR

15. AS AN OVERALL EXPERIENCE, I WOULD RATE THIS TRAINING PROGRAM AS: ☐

1 = EXTREMELY VALUABLE
2 = VERY VALUABLE
3 = VALUABLE
4 = MEDIOCRE
5 = A WASTE OF TIME
6 = SOMEWHAT COUNTERPRODUCTIVE
7 = VERY COUNTERPRODUCTIVE

RANK EACH OF THE FOLLOWING STAFF FOSITIONS ACCORDING TO THE BENEFIT YOU BELIEVE THEY WOULD RECIEVE FROM THIS TRAINING (USE CODES BELOW).

16. ADMINISTRATORS, DIRECTORS, COORDINATORS ☐
17. COUNSELORS, SOCIAL WORKERS ☐
18. CLERICAL WORKERS ☐
19. COMMUNITY OUTREACH OR ORGANIZATION WORKERS ☐
20. PHYSICIANS, NURSES OR OTHER PROFESSIONAL MEDICAL PERSONNEL ☐
21. CRISIS CENTER WORKERS ☐
22 TRAINERS OR TRAINING COORDINATORS ☐
23 PUBLIC INFORMATION OR EDUCATION SPECIALISTS ☐

RANK EACH OF THE FOLLOWING PROGRAM TYPES ACCORDING TO THE BENEFIT YOU BELIEVE THEY WOULD RECIEVE FROM THIS TRAINING (USE CODES BELOW).

24. ADMIN. OR COORDINATING AGENCIES ☐
25. ALCOHOL INPATIENT OR RESIDENTIAL PROGRAMS ☐
26. ALCOHOL OUTPATIENT OR RESIDENTIAL PROGRAMS ☐
27. DRUG INPATIENT OR RESIDENTIAL PROGRAMS ☐
28. DRUG OUTPATIENT PROGRAMS (INCLUDES METHADONE) ☐
29. CRISIS CENTER ☐
30. PREVENTION OR EDUCATION PROGRAMS-OTHER THAN CRISIS CENTER. ☐
31. ALCOHOL HIGHWAY SAFETY PROGRAMS ☐

1 = WOULD BENEFIT THE MOST
2 = WOULD BENEFIT GREATLY
3 = WOULD BENEFIT SOME
4 = WOULD BENEFIT A LITTLE
5 = WOULD NOT BENEFIT AT ALL
6 = DON'T KNOW

BELOW, PLEASE LIST ANY SUGGESTION YOU MAY HAVE FOR IMPROVING FUTURE WORKSHOPS OF THIS KIND.

WRITTEN MATERIALS

12. IN GENERAL, VOCABULARY USED IN MATERIALS WAS: ☐

1 = FAR TOO COMPLICATED
2 = A LITTLE TOO COMPLICATED
3 = JUST ABOUT RIGHT
4 = A LITTLE TOO SIMPLE
5 = FAR TOO SIMPLE

13. THE AMOUNT OF MATERIAL PRESENTED ☐

1 = WAY TOO MUCH
2 = TOO MUCH
3 = ABOUT RIGHT
4 = TOO LITTLE
5 = WAY TOO LITTLE

14. IN GENERAL, THE ORGANIZATION OF MATERIALS WAS: ☐

1 = EXCELLENT
2 = GOOD
3 = FAIR
4 = POOR
5 = VERY POOR

15. AS AN OVERALL EXPERIENCE, I WOULD RATE THIS TRAINING PROGRAM AS: ☐

1 = EXTREMELY VALUABLE
2 = VERY VALUABLE
3 = VALUABLE
4 = MEDIOCRE
5 = A WASTE OF TIME
6 = SOMEWHAT COUNTERPRODUCTIVE
7 = VERY COUNTERPRODUCTIVE

RANK EACH OF THE FOLLOWING STAFF POSITIONS ACCORDING TO THE BENEFIT YOU BELIEVE THEY WOULD RECIEVE FROM THIS TRAINING (USE CODES BELOW).

16. ADMINISTRATORS, DIRECTORS, COORDINATORS ☐
17. COUNSELORS, SOCIAL WORKERS ☐
18. CLERICAL WORKERS ☐
19. COMMUNITY OUTREACH OR ORGANIZATION WORKERS ☐
20. PHYSICIANS, NURSES OR OTHER PROFESSIONAL MEDICAL PERSONNEL ☐
21. CRISIS CENTER WORKERS ☐
22 TRAINERS OR TRAINING COORDINATORS ☐
23 PUBLIC INFORMATION OR EDUCATION SPECIALISTS ☐

RANK EACH OF THE FOLLOWING PROGRAM TYPES ACCORDING TO THE BENEFIT YOU BELIEVE THEY WOULD RECIEVE FROM THIS TRAINING (USE CODES BELOW).

24. ADMIN. OR COORDINATING AGENCIES ☐
25. ALCOHOL INPATIENT OR RESIDENTIAL PROGRAMS ☐
26. ALCOHOL OUTPATIENT OR RESIDENTIAL PROGRAMS ☐
27. DRUG INPATIENT OR RESIDENTIAL PROGRAMS ☐
28. DRUG OUTPATIENT PROGRAMS (INCLUDES METHADONE) ☐
29. CRISIS CENTER ☐
30. PREVENTION OR EDUCATION PROGRAMS-OTHER THAN CRISIS CENTER. ☐
31. ALCOHOL HIGHWAY SAFETY PROGRAMS ☐

1 = WOULD BENEFIT THE MOST
2 = WOULD BENEFIT GREATLY
3 = WOULD BENEFIT SOME
4 = WOULD BENEFIT A LITTLE
5 = WOULD NOT BENEFIT AT ALL
6 = DON'T KNOW

BELOW, PLEASE LIST ANY SUGGESTION YOU MAY HAVE FOR IMPROVING FUTURE WORKSHOPS OF THIS KIND.

APPENDIX G

PRE-TESTED I...ORMATION

Evaluation Tasks	A Accomplish...	B Who was actually involved in developing or carrying out the task?		C Were there others who were contacted to provide input, review or approve the tasks?		D How were these people contacted?
		Name	Position	Name	Position	
1 Determine services to be evaluated	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
2 Determine alternation service for comparison to existing service	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
3 Measurable outcome criteris established	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
4 Computer facilities	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written

Evaluation Tasks	A Accomplished	B Who was actually involved in developing or carrying out the task?		C Were there others who were contacted to provide input, review or approve the tasks?		D How were these people contacted?
		Name	Position	Name	Position	
5. Evaluation consultants obtained	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
6. Research team established	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
7. Client Assignment procedures established	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
8. Client contract written	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written

Evaluation Tasks	A Accomplishments	B Who was actually involved in developing or carrying out the task?		C Were there others who were contacted to provide input, review or approve the tasks?		D How were these people contacted?
		Name	Position	Name	Position	
9 Measuring instruments developed	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
10 Development of draft evaluation plan	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
11 Written approval from coordinating agency	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written
12 Developed working agreements with "outside" agencies	YES ___ NO ___					x ___ Phone y ___ Meetings z ___ Written

Evaluation Tasks	A Accomplishments	B Who was actually involved in developing or carrying out the task? Name / Position	C Were there others who were contacted to provide input, review or approve the tasks? Name / Position	D How were these people contacted?
Purchase or arrangement of filing space 13.	YES ___ NO ___			x ___ Phone y ___ Meetings z ___ Written
Assignment of clients to groups (number assigned - total number planned for experiment) 14.	YES ___ NO ___			x ___ Phone y ___ Meetings z ___ Written
Analysis of data 15.	YES ___ NO ___			x ___ Phone y ___ Meetings z ___ Written
Final report completed 16.	YES ___ NO ___			x ___ Phone y ___ Meetings z ___ Written

APPENDIX H

WOULD YOU PLEASE TELL ME ANYTHING AND EVERYTHING YOU ARE NOW DOING TO EVALUATE YOUR PROGRAM. I WILL BE TRYING TO WRITE DOWN WHAT YOU SAY SO PLEASE TALK SLOWLY .

APPENDIX I

EVALUATION SKILLS WORKSHOP
FOLLOW-UP QUESTIONNAIRE

1. How willing was your staff to change their routines and responsibilities to initiate the following aspects of the workshop?

   (a) Establishing measurable evaluation criteria.

   _____ Extremely Willing
   _____ Very Willing
   _____ Willing
   _____ Complain But Willing
   _____ Would Quit or Try To Undermine Project

   (b) Pre-testing.

   _____ Extremely Willing
   _____ Very Willing
   _____ Willing
   _____ Complain But Willing
   _____ Would Quit or Try To Undermine Project

   (c) Identification of a "matched" group to compare with your program clients.

   _____ Extremely Willing
   _____ Very Willing
   _____ Willing
   _____ Complain But Willing
   _____ Would Quit or Try To Undermine Project

   (d) Randomized assignment to alternative services within your program.

   _____ Extremely Willing
   _____ Very Willing
   _____ Willing
   _____ Complain But Willing
   _____ Would Quit or Try To Undermine Project

2. To what extent did the following factors inhibit implementing the concepts presented in the evaluation skills workshop? (Please check the appropriate boxes)

	Very Greatly	Greatly	Some	Slightly	None
a. My personal disagreement with workshop concepts					
b. Staff disagreement with workshop concepts					
c. Lack of funds					
d. Lack of computer facilities					
e. Lack of available trained staff or consultants					
f. My confusion about the concepts					
g. My staff's confusion about the concepts					
h. My feeling that such evaluation issues are a low priority					
i. My staff's feeling that such evaluation issues were a low priority					
j. Other issues were so pressing that I did not have time					
k. Other issues were so pressing that my staff did not have time					

		Very Greatly	Greatly	Some	Slightly	None
l.	I did not feel it would provide clients with any benefits or rewards					
m.	My staff did not feel it would provide clients with any benefits or rewards					
n.	Concepts did not fit the goals and values of our program					
o.	I believe in subjective evaluation rather than trying to use numbers to define success					
p.	Difficulty in establishing working and planning meetings					
q.	Other (please specify) _____ _____ _____ _____ _____					

3. To what extent were the telephonic consultations helpful in implementing the concepts presented in the workshop?

_____ Extremely Helpful
_____ Very Helpful
_____ Helpful
_____ Slightly Helpful
_____ Not Helpful

4. Please rank from 1 to 6 the following categories according to which were the most valuable services provided by the telephonic consultations. (1 equals most valuable, 6 least valuable)

_____ provided information on resources
_____ provided information on techniques for planning of evaluation project(s)
_____ acted as a reminder to carry out evaluation tasks which had been forgotten
_____ provided emotional support
_____ provided referral to needed information
_____ other specify: _____

3. To what extent were the site-visit consultations helpful in implementing the concepts presented in the workshop?

_____ Extremely Helpful
_____ Very Helpful
_____ Helpful
_____ Slightly Helpful
_____ Not Helpful

4. Please, from 1 to 6, rank the following categories according to which were the most valuable services provided by the on-site consultations. (1 equals most valuable, 6 least valuable)

_____ provided information on resources
_____ provided information on techniques for planning of evaluation project(s)
_____ acted as a reminder to carry out evaluation tasks which had been forgotten
_____ provided emotional support
_____ provided referral to needed information
_____ other specify: _____

APPENDIX J

CONSULTANT REPORT FORM

Program_____ Date_____

Consultant_____ Sequence_____

Telephone ☐ On-Site ☐ Length of Contact_____

1. What aspects of the consultee's situation, intensions or actions tend to support development of a more refined evaluation design?

2. What aspects of the consultee's situation, intensions or actions tend to inhibit development of a more refined evaluation design?

3. Where does the consultee need to place most emphasis (work hardest) prior to the next consultation? Were these areas discussed with the consultee as a formal list of tasks?

APPENDIX K

RATING SCHEME

Review all material written about the subject's evaluation methodology. Then rate the subject as follows:

5 = any experimental design (uses the word random)

4 = any design which compares two or more groups of subjects regardless of the inappropriateness of the match

3 = any pre-test - post-test design (includes subjects who indicate that the same data is collected at intake and exit or follow-up but DO NOT use the phrase "pre-test")

2 = any kind of follow-up or post-testing of subjects after some form of treatment (EXCLUDE follow-up which request ONLY subjective opinion of the client about quality of service received)

1 = all others

*Add 1/2 (.5) to any subject who indicates plans for some kind of correlation study.

A. If a design is being planned, give credit to the design only if some task has been completed in preparation for carrying out the design

Examples:

1. Questionnaires have been completed
2. Release form completed
3. Formal approval of a related agency has been obtained
4. Subjects assigned

Plans that were started but discontinued for some reason should not be given credit.

B. Any activities which are labeled as:

1. Goal Attainment Scaling (GAS)
2. Management by Objectives (MBO)
3. Milepost Evaluation System (MES)

Should be rated (1) unless included in some other sophisticated design.

C. Each subject should be rated according to the most sophisticated aspect of his/her evaluation activities.