

Planning for
Creative Change in
Mental Health Services
A MANUAL ON
RESEARCH UTILIZATION
...for Researchers for Community
...for Administrators

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PREFACE

A Manual on Research Utilization is one of a series of Institute publications on mental health services research and development. The purpose of the series is to offer assistance to persons working toward continually increased effectiveness of delivering mental health contributions to people in need.

Reflected in all publications in the series is a three-phase process of services improvement through planning for creative change:

(1) Identification of problems and needs for change in services.

Use of Program Evaluation is one publication aimed toward the improvement of formal approaches in front line facilities to help determine when change is—or is not—needed.

(2) Search and research to provide direction for effective change to solve problems and meet needs.

The publication, *Innovations and Current Conclusions*, issued several times each year, is to highlight innovative techniques. *Information Sources and How To Use Them* is offered as an aid to mental health workers seeking new knowledge through all relevant literature. A section of this document, *Manual on Research Utilization*, has been addressed to those planning original research on innovative mental health services delivery techniques.

(3) Promotion of the diffusion and adoption of innovations through planned change.

Out of recognition that the dissemination of knowledge alone ushers little change, sections of the *Manual on Research Utilization* have been devoted to techniques of planned change, addressed to consultants and administrators/practitioners. For persons wishing to become more thoroughly familiar with the utilization of knowledge in planned change, *A Distillation of Principles on Research Utilization . . . Volume I* is offered. With the hope that it will foster continued investigations in refined techniques of change through utilization, *A Distillation of Principles on Research Utilization . . . Volume II—Bibliography with Annotations* has been issued as a part of this series.

This manual—in which current knowledge has been reduced to the briefest form practicable—is presented as an initial guide toward bringing about continually more effective mental health services through the utilization of knowledge and planned change techniques. The employment of this specialized approach in mental health services is still new, so examples which ideally illustrate techniques already used in mental health are not abundant. Research on planned change specific to mental health is, for the most part, in the early stages. Most of the findings and principles have come from other fields, including agriculture and education. On the other hand, results from three NIMH-supported researches on the topic have

yielded results which parallel closely those from other fields. For that reason, at least cautious generalization to mental health services seems warranted. It is hoped that the material presented in the Manual will help provoke, stimulate, and lead the way toward more efficient adoption of validated and worthwhile innovations in mental health services.

The literature review which forms the primary basis for this manual, as well as part of the original manuscript, are products of Contract No. 42-69-1, National Institute of Mental Health, awarded to the Human Interaction Research Institute. Deep gratitude is extended to Dr. Edward M. Glaser and his HIRI associates (particularly Drs. Michael McKee, Goodwin Watson, and Gilbert Wrenn), consultants, and advisory panel, for their excellent work in condensing a voluminous literature on research utilization to a brief outline of principles. Special thanks are due to the many researchers, consultants, administrators, and practitioners who responded to Dr. Glaser's request for critiques on the original outline of principles and findings, later adopted for this manual. In a real sense, this manual is partly an end result of work stimulated in 1965 by Mr. Myles Cooper, consultant with the San Francisco Regional Office of DHEW. It was he who first engaged Dr. Glaser in the interest of studying payoff from mental health service projects. Grateful regard is held for him.

Ms. Irma S. Lann, head of the NIMH Research Implementation Section, initiated the comprehensive review of the research utilization literature. As project officer, she guided the planning toward a distillation of findings and principles, the annotated bibliography on research utilization, and this manual. Her original conception of the idea, collaboration with the panel of advisers, attention to countless details, resourcefulness, and continual encouragement to all participants in the effort made this manual possible. Warm thanks are due Ms. Dorothy Penso who supervised the typing of the repeated revisions of the manuscript.

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CREATIVE CHANGE TOWARD BETTER PROGRAMS

Change in the delivery of mental health services seems to be in the air. Examples of two major changes of concern to community mental health workers, according to a recent NIMH survey, are: (1) new methods of financing and (2) new ways of coexisting with health delivery systems. As seen by members of that sample, consisting largely of community mental health center directors, over the next 5 years a high rate of change will be necessary in adopting new methods of using third-party payment plans, capitation systems, and alternate sources of funding. The influence on service delivery techniques and program operations may be sizable. Utilization review plans commonly may be adopted by mental health facilities. Compliance with standards could signal shifts from former ways of operating. Some mental health programs will move toward affiliation with health maintenance organizations. That could lead to a demand for direct service with the possible lessening of support for community services such as consultation and education; the result may be potentially heavy pressures to accommodate change. The urgency of assimilating increasingly effective technology in mental health delivery systems appears to mount. The rapidly spreading use of program evaluation practices in front line facilities may heighten needs for change.

But the suggestions in this manual also pertain to everyday changes in the operation of mental health programs, many of which are never actually looked on as events that could be rendered more salutary by employment of planned change techniques. For instance, new assignments among secretarial staff may be made less disruptive by a moment's pause to consider planned change techniques. In one mental health agency a problem arose because the person who had been asked to carry timekeeper responsibilities faced hardships in tracking down professional staff to account for their absences. A solution was *mandated*: all staff were to assume responsibility for sending to

the timekeeper signed slips noting hours gone and status of leave. In this case it hardly seemed profitable to consider planned change techniques. The system failed to survive even the first week! A subsequent reassessment of the circumstances, followed by the simple application of planned change techniques with renewed consideration of the persons involved, led to enduring success.

Planned Change and Mental Health

The chief subject of this manual is organizational change—specifically, toward desired improvements in mental health services utilizing knowledge yielded by research to give direction to the change.

There is a different aspect of planned change that is highly relevant to mental health—the application of change techniques in reducing suffering from community social problems. Mental health workers serving as catalysts for improved community social conditions may sense still more effectiveness by incorporating into their other skills planned change techniques.

At another level, there is good evidence that when organizational change of the type described here occurs it has a significant impact on the mental well-being of involved persons. If planned change has been employed it will mean that one's sense of dignity, one's self-expectancy, the effectiveness of one's response to the situation will be enhanced. In change by fiat or by crisis resolution persons involved commonly suffer in these same dimensions.

The concept of planned change is perhaps even more relevant in the case of individual mental health. In coping with life's stresses the principles of planned change seem still to prevail. Effective ego functioning and problem-solving behavior entail the same elements of planned change—assessment of reality, consonance with values and circumstances at the time, motivation to cope, selection of response

in keeping with one's capacity and balancing of the response with the counter-needs of one's self or of relevant others, and readiness to try a new plan if the first doesn't work out well.

In one sense, planned change is close to the core of the mental health business, whether one is talking about relieving social problems or growth toward personal self-actualization.

On the other hand, *unplanned* change can be costly. As G. B. Shaw once said: "If it is not necessary to change, then it is necessary *not* to change." In these days of pressure and flux, old ways are being jettisoned, often unavoidably for socio-political reasons. One can assume that usually it is for the better. However, the substituted policies and practices may be as feckless as those they replaced. Eventually, if that condition exists, a felt need will dictate yet another stab at change. So unplanned processes actually may escalate the tempo of change dizzily. But change based upon careful assessment of needs for better methods, guided by sound knowledge regarding the better methods to be adopted, probably will be more effective, more economical from all standpoints, as well as most lasting. For that reason, this manual stresses: (1) program evaluation as an identifier of needed change, (2) research-based directions for change, and (3) planned techniques for adoption of change.

The Track Record of Research Utilization and Planned Change

Unfortunately, planned change does not always work so quickly and easily as do more common methods of bringing about change. These include—

- (1) Change by fiat.
- (2) Change brought about by the ineluctable valence of special funds made available for the purpose.
- (3) Change ushered by socio-political exigencies.
- (4) Change by charisma of a leader zealously touting a new idea.
- (5) Change resulting from intolerable problems created by old patterns.
- (6) Changes swept in by broad trends throughout the field.

Case examples of ideally conducted planned change are not abundant. It must be acknowl-

edged that those instances which are available for review suggest that the process is more painstaking, slower, and may lead to final results somewhat altered from the original intention. But payoff is promised in durability and effectiveness.

The evidence that change occurs through the utilization of research findings is disappointingly meager. One pair of investigators studied the sources of actual innovations that have occurred in mental health services (Roberts and Larsen, 1971). They found that the initial stimulation had come from printed material in only 8.7 percent of the instances. Formal retrieval systems were found to have been used the least of all methods to arrive at solutions to pressing problems. Other investigators have found the same to be true in the field of general medicine (Coleman, et al., 1966).

One effort was made to correlate staff use of the scientific literature with rates of innovation. But the extent to which staff had used printed material was so little as to render further study useless (Roberts and Larsen, 1971).

Evidence of the confidence practitioners and administrators have in research was revealed at a Midwest conference on research utilization. Social scientists from the community were invited to meet with representatives of health and welfare agencies of the same community. The meeting was scheduled for 2 days. However, by early afternoon of the first day the administrators/practitioners began to excuse themselves and steal out one by one.

From the other side of the gulf, a researcher produced most impressive findings about a new program to help chronic mental patients become self-sufficient. After excellent dissemination, including a book, on his project, only one mental hospital had adopted the innovation—and that one through a Hospital Improvement Project grant (Fairweather, 1971). A base rate survey of NIMH applied research grants found that barely one in five research investigators could name any person or setting making use of his findings during the year following termination.

There is good reason to believe that planned change techniques toward utilization of research *can* help bridge the gulf. After a deliberate program to employ special utilization tech-

niques, the investigator whose findings on chronic patients had been picked up by only one hospital succeeded in having 25 hospitals either adopt his innovation in its original form or indicate that initial plans to do so were underway (Fairweather, 1971). Following special efforts toward utilization in the applied research grants program of the Institute, the percentage of investigators who could report others using their findings rose from 19 to over 60 percent.

Though this manual considers planned change through direct utilization of the results of a research project, the fact should be acknowledged that the research-into-practice process is often a subterranean one. The adoption of research findings may not become apparent until similar findings from multiple projects have mounted to a sort of Zeitgeist that spreads across the country. Aftercare, for instance, did not become commonplace because of one project result, but grew in association with some 50 projects on the subject supported by NIMH alone. The use of paraprofessionals in the delivery of mental health service was tested in more than 100 projects before it became commonly implemented.

There is another position that should be stressed about planned change: A person could gain the impression from the step-like format used in this brief outline that planned change entails the imposition of rigid, unnatural manipulations. Further, the emphasis on program evaluation to give direction to needed change may seem to imply that only problem-oriented change lends itself to deliberate and planned techniques. Neither is at all true. This inventory of what has been found or asserted to influence change will be most effectively used with flexibility, picking-and-choosing, and ingenuity appropriate to the natural circumstances. And though problem identification may represent a critically needed starting point for planned change, there are other positive generators of change that are perhaps more omnipresent than the 6 mentioned on Page 2: The drive of healthy organizations to grow and develop; evolutionary processes in the life cycles of institutions; and the altered ecology of organizational settings. The position is that planning for change, whatever its source or nature, allows you to at

least collaborate with change instead of being mastered by it.

It is hoped that the suggestions in this manual, gleaned from an original array of over 1,000 investigations, reported experiences, and notions on research utilization, can help lead to a still healthier association between research and improved services.

The contents of the manual will be presented according to the following headings*:

INFORMATION

Primarily addressed to the **Researcher**, this heading encompasses the development of needed knowledge through research. For suggestions on the assessment of needs in front-line mental health service facilities, the reader is referred to the NIMH publication *Using Program Evaluation*. Methods of searching for already existing relevant knowledge are covered in the NIMH publication *Information Sources and How To Use Them*.

RESOURCES

Addressed to the **Consultant**, or middle man, in the research utilization process, suggestions on the role and functions of change agents are outlined in this portion.

METHODS

This section may be of primary interest to the **Consultant**, though the methods described may be employed by the **Administrator/Practitioner** as well. Techniques of promoting planned change are presented.

ADOPTION

Addressed to **Administrators/Practitioners**, the content of this section deals with determinants and techniques of organizational change.

* Where helpful references related to a point exist, they are cited. Most will be found in *A Distillation of Principles on Research Utilization . . . Volume II—Bibliography with Annotations*.

INFORMATION

Producing Utilizable Research

Principles of planning, designing methodology, and conducting research are presented on the following pages. As can be inferred from the citing of references, the principles have been drawn from both the literature and NIMH studies on the characteristics of research projects which render them utilizable.

Planning the Research

CRISIS ANTICIPATION — The investigator planning to do research in the mental health services delivery area should, insofar as possible, sensitize himself to problem areas which are growing increasingly critical with no real remedies being found.

FUTURES FOCUS — "Futures techniques," such as Delphic predictions and scenario writing, are coming into frequent use as a means of predicting critical problems facing the field of mental health services delivery 5 years from this point. On the average, research on services delivery requires a full 5-year period from inception to dissemination of results. Unfortunately, one of the reasons that utilization of such projects has not been better than it has is that those efforts were launched in the *midst* of a critical problem exposure. But by the time the research results are reported, most mental health programs will have long since developed their own ad hoc solutions, one way or another, to the problem. Often, the problem will have reduced itself by the time the research report comes out. For this reason, there is a most urgent need to focus on future planning as the first step in selecting research topics. (Croker, 1961; Flanagan, 1961; Glaser, et al., 1966; Glaser and Taylor, 1969; Glaser and Wrenn, 1966; Halpert, 1966.)

IDENTIFY USERS — To increase the chances of having potentially useful findings utilized by practitioners, investigators have found it

helpful to think about and *identify* the categories of potential *users* of their research findings. To help see things from the practitioner's point of view (and thus be in a position to focus the research question in a way which will speak to his needs) the researcher may wish to visit practitioners on their home grounds, observe their work settings, attend meetings where practitioners are participants, and listen to them as they air their problems and their unanswered questions to their colleagues. To be optimally effective it appears that the interchange between researchers and practitioners should best start before the beginning of the project, when the area of inquiry is being decided upon. A group of potential users can be of significant help if available as consultants as the project is being designed.

UNDERSTAND THE USER — To bridge the gap between researcher and practitioner, it is advisable to be aware of some of the classic differences in attitudes and goals:

The researcher tends to ask his question in the form of "Why"; the practitioner, "How."

Practitioners have to *believe* in what they are doing; researchers have to *doubt*.

The researcher's approach is primarily logical and seeks to gain knowledge; the practitioner's often is intuitive and seeks to help clients.

The researcher attempts to discover common patterns in a population; the practitioner tends to view each case as unique.

The researcher can live indefinitely with the tentative and the hypothetical; the practitioner wants firm answers which will enable him to act with confidence. (Archibald, 1968; Chesler and Flanders, 1967; Cohen, 1959; Croker, 1961; Greenwood, 1962; Halpert, 1966; Joly, 1967; Nagi, 1965; Poser, Dunn, and Smith, 1964; Rodman and Kolodny, 1965; Rosenblatt, 1968; Weiss, 1971.)

SEARCH THE LITERATURE — Once the project's subject or problem has been identified, investigators generally want to find out what professional colleagues already have done on this or related fields. Though it is common practice to review the research literature in more fundamental research efforts, it is astonishingly rare that investigators in the field of mental health services make the same diligent effort in their area. One obvious reason is that the formal literature on mental health services research and demonstration is much less systematic and common than it is in more fundamental researches.

PILOT PROJECTS — In designing the project, the researcher may want to consider carrying it out as a pilot project, if appropriate, to experiment with procedures, to gain experience and obtain evidence with reference to whether a full-scale project seems warranted. In the past this has been difficult to do because of grant periods and funding gaps. However, increasing efforts are being made on the part of NIMH, at least, to accommodate investigators who are willing to engage in pilot projects before launching major efforts. (Fliegel and Kivlin, 1966; Glaser and Taylor, 1969.)

CONSIDER LONG-RANGE EFFORTS — In preparing the budget and seeking financial support, it is advisable to think of the project in long-range terms. The project need not necessarily be regarded as completed when the final report has been submitted to the funding agency. If the findings appear to have potential for helpful application elsewhere, there will be a need to have funds made available for broadly disseminating them and helping to get them put to use. The cost of this post-report activity may be anticipated in the original budget planning. Also, however, some funding agencies are arranging for special "diffusion and adoption" supplementary grants. The determination to add these to the basic budget is made early enough in the course of the project to begin diffusion efforts before the final stages are reached. (Glaser, et al., 1966; Glaser and Taylor, 1969; Goldin, Margolin and Stotsky, 1969; Halpert, 1966.)

SEEK CROSS-VALIDATION—Many reported research findings are only "half-baked" because

they have not been validated under varying conditions, and their possible side effects have not been studied over time. It is important to avoid over-hasty adoption of new practices that later may prove to be of dubious value or even to be harmful fads based upon inadequate evidence or superficial interpretation of findings. It is suggested that the investigator think through ways and means of obtaining cross-validation if the results seem sufficiently promising. He may wish to keep in touch with other research projects which might be exploring comparable hypotheses under somewhat varied conditions, with a view to reducing the need for subsequent cross-validation effort. It helps to try to "debug" the innovation so that it is worth a tryout by others. It is unfortunate that the incentive for cross-validation studies cannot be made higher. Some funding agencies, in the past, have felt that grants for replicated studies did not yield the same payoff as the same funds invested in initial studies. However, that philosophy is changing with advancing concepts of utilizable research. (Glaser, 1968; Glaser and Wrenn, 1966.)

SIMULATE USER CONDITIONS — Insofar as possible, circumstances under which the research is carried out should be like those in which the results are expected to be used. This includes dollars available, practitioner talent, and other resources.

Practitioner-consultants can be asked to help provide verisimilitude to a demonstration setting; for example, to help approximate a typical patient mix.

Research activities which are user-oriented stand a better chance of replication; one would do well to resist the "ivory tower" stance. (Flanagan, 1961; Klein, 1968; Mackie and Christensen, 1967.)

USE OF ADVISORY GROUPS — Some researchers ask representatives of the user and operator groups to sit as advisers. Investigations of research efforts have found that this may mean early difficulty for the investigator as he attempts to assimilate guidance and opinions. Interestingly, however, the consequent course of the investigation has been found to smooth out for projects having advisory groups, whereas the course grows

increasingly difficult with time for projects which do not use such groups. (Glaser and Taylor, 1969.)

INVOLVEMENT — Potential users and operators close to the project activities should be given a piece of the action from the start. A recent case study of mental health service projects found that the investigator's greatest problem lies not in technological difficulties but in organizational constraints upon his work. Early involvement is at least one way to ameliorate that condition to the benefit of all. (Weiss, 1971.)

Designing the Proposal

Holding equal importance with the scientific merit of the planned methodology, including potential for theory-testing, is the selection of intervening variables and criterion measures which will be of concern to potential users. Those that have been found to be significantly associated with the utilization of research results may be summarized under the acronym **CORRECT**:

CREDIBILITY — Potential users have manifested considerable concern over the degree to which there is evidence of cross-validation "debugging" or successful replication under normally varied conditions. Credibility stems either from the seeming soundness of the evidence for the value of what is reported as promising, or from its espousal by highly respected persons or institutions, or from both of these sources. (Fliegel and Kivlin, 1966; Guba, 1968; Havelock, 1969; Katz, 1963; Miles, 1964; Rogers, 1962.)

OBSERVABILITY — Users are more likely to implement practices they can see in a demonstration. "Re-motivation therapy," with its clearly delineated steps, for example, was picked up much more readily by ward personnel than was "humanization."

RELEVANCE—Results should be relevant for coping with a significant problem of concern to a considerable number of people, or to decision-makers. Results also should be measured in terms that are of actual importance to potential users. For example, *costs* now represent a most respectable criterion measure. To an ad-

ministrators, that information may be much more relevant than, say, a statistically significant change on a given scale of a psychological test.

RELATIVE ADVANTAGE — The evaluation design should be selected to yield clear, cogent data telling whether the project idea will indeed be better than current practices. This leads to motivation or reinforcement in favor of trying it. In many cases special incentives may be needed to get already overburdened potential users to change from a standard, current procedure for dealing with the problem to a new procedure. Similarly, researchers may need some special psychological incentives or rewards to motivate them to translate and diffuse promising findings in ways that will mesh with the "learning readiness" of potential users.

EASE OF UNDERSTANDING AND INSTALLATION—Effective diffusion of results depends largely on one's being able to describe them clearly and briefly. The more readily potential consumers feel they can learn to use the innovation, the more rapid its adoption. A project idea that involves intricate clusters of conditions and techniques is not only hard to evaluate, it defies adoption. Leaning toward simplicity is preferred—insofar as it is possible to do so and still retain innovativeness.

COMPATIBILITY — Other things being equal, the project practices should not clash with the prevailing values of those expected to be users.

TRIALABILITY, DIVISIBILITY OR REVERSIBILITY—An innovation should be so designed that it can be tried without scrapping the entire ongoing system, or can be pulled back if necessary. More use can be made of results when the evaluation allows separation into principles, modules, and techniques; seldom are innovative programs adopted as a package. Most users prefer to invent their own innovations, using "kits" yielded by other researchers.

Conducting the Research

SENSITIVITY TO HOST AGENCY — If the research is being carried out by a host agency, chances of ultimate utilization by that agency and by comparable agencies will be materially

affected by the relationships the investigator establishes with the host agency during the life of the project. Points that help in developing a positive relationship are as follows:

Establish a climate of mutual trust and candor.

Prepare the host administrator or director for possible embarrassment over results.

Carry out activities with a high degree of sensitivity for the day-to-day problems of the practitioner.

Give official and unofficial credit for all assistance obtained from the practitioners.

Make it clear from the beginning that the outcome of the research is not foreordained to change the functioning of the host agency after the study is concluded. (Chesler and Flanders, 1967; Fairweather, 1967; Glaser and Taylor, 1969; Kogan, 1963; Lippitt and Butman, 1969; Poser, Dunn, and Smith, 1964; Rodman and Kolodny, 1965; Weiss, 1971.)

TARGET AUDIENCE PARTICIPATION — During the life of the research project, involving potential users as consultants or colleagues can be a rewarding process. These could include not only the practitioners in the host agency (if there is one) but also the practitioners who collaborated in the research design. A suggested strategy would be to establish an advisory committee representing potential user agencies (their professional staff, administrators, board members) and confer with them at frequent intervals during the project to evoke their concurrence and their commitment. (Glaser and Taylor, 1969; Shartel, 1961; Van den Ban, 1963.)

REGULAR REPORTS — Most funding agencies require progress reports during the life of the project. If allowable, it is good practice to disseminate progress reports—not only to the advisory committee, if any, but to as large a group of potential users as possible. By inviting critical comment and heeding it, many benefits can be reaped. It is important, of course, to acknowledge all help received. (Fairweather, 1967; Glaser and Taylor, 1969.)

CONFERENCES — Meetings to discuss problems and progress offer two rewards: those invited retain an investment in the project, often continuing to serve as “diffusers” of the

project ideas; and helpful suggestions are supplied for the flexible investigator to use as his judgment indicates.

MAINTENANCE OF COMMUNICATIONS — Few practices have been found to be so rewarding as continually informing project supporters of how things are going. The good will is retained of administrators and operators at the host's site: despite the fact that they seldom reach out for information—perhaps because of sheer overload problems—such persons rarely fail to appreciate the courtesy.

DISSEMINATION — If a “change agent” by whatever other title is available consultation might well be arranged. The experienced change agent will recognize that many investigators, as scientists, will need to fulfill certain professional expectations, such as journal publication prior to broad diffusion of findings via utilization channels. But the change agent also will help to plan for effective transfer techniques—including efforts beyond the publication of reports.

On the other hand, if the researcher does choose to be involved in postproject activities himself he might wish to consider what kinds of influence he would like to exert:

Does he want the project duplicated, even if certain adaptations are necessary in other settings? (*Spread.*)

Does he want the demonstration to attract attention to the underlying problem and serve as a catalyst rather than as a model in moving others to solve the problem? (*Spillover.*)

Does he want the original model continued on a more permanent basis? (*Continuity.*)

Does he want some side effect of the research or demonstration to be picked up and tried as an innovation (*Spinoff.*) (Glaser and Wrenn, 1966; Rein and Miller, 1966.)

It is often helpful to submit a draft of the final report to all those actively involved in the research and to a number of potential users; and then to invite their criticism. (Glaser, 1968; Glaser and Taylor, 1968.)

READABLE REPORTS—The usual dull tome expected by some funding agencies seldom attracts much readership elsewhere. When the report is in semifinal draft, the services of a

professional editor or writer can help make the report lucid, brief, and readable. Packaging the report attractively may serve to whet the readers' interest.

Conclusions from researches on communication indicate that:

(1) The communicator should identify himself with his audience.

(2) The presentation should be pretested for readability, coherence, and understanding from the viewpoint of the audience for whom it is intended.

(3) Factual report should be made that people of prominence and influence agree, if indeed that is true.

(4) Positive reinforcement or benefits which can result should be made clear, and any risks involved should be surfaced and discussed.

(5) Logical and non-exaggerated emotional appeals should be combined.

(6) Pictorial and other illustrative material should be used where appropriate.

(7) If objections are likely to arise, it is more effective to take account of them at once.

(8) The essential information should be repeated, reiterated, and said again when practicable.

(Glaser, et al., 1966; Golden, Margolin, and Stotsky, 1969; Klein, 1968; Cohen, 1964.)

Utilizing a wide range of media for disseminating findings to the potential user has proved effective. Written accounts of the project may have to be developed in various forms to accommodate various levels of readers. In addition one should encourage site visits (during the project and after it). Be prepared to discuss the project in professional meetings and conferences, as a member

of a traveling resource group, or as a member of an in-service technical assistance team for staff of potential users. (Becker, 1970; Cooper and Archambault, 1968; Glaser, 1968; Glaser, et al., 1966; Glaser and Wrenn, 1966; Halpert, 1966.)

Mass Communication is seldom used to disseminate research findings, it seems. Despite its obvious drawbacks mass media communication can be helpful in making many aware of the problem requiring an innovative solution. The implementation of a new system of health care agencies in a community, for instance, might gain necessary support through mass messages. But interpersonal communication should follow mass efforts in order to lend credulity to the new awareness.

INVESTIGATOR'S PARTICIPATION IN DIFFUSION AND ADOPTION — After the research has been completed, if the investigator is willing, he can play an important role in the dissemination-utilization phases—as a consultant, colleague, and change agent to assist the interested practitioner. If he encounters resistance when presenting and interpreting the innovation to a practitioner, institution, or agency, the following points may prove helpful:

Aim for stage-by-stage installation; do not try to impose innovation on potential users *in toto*.

Establish an egalitarian climate vis-a-vis potential users; avoid coming in as an authority figure.

Admit any doubts, reservations, and the pitfalls involved; do not present the innovation as foolproof and immutable. (Glaser and Taylor, 1969; Klein, 1968; Taylor, 1968.)

RESOURCE

The change agent, or consultant, is seen as one resource for bridging the gap between the producer of knowledge and the consumer. Various, he may be called social engineer, linking agent, popularizer, knowledge linker, research translator, learning engineer, applied behavioral scientist, research utilization specialist, technical assistance specialist, and a host of other currently popular titles.

Within the mental health field, one "change agent" is the comprehensive community mental health center staff member serving with the consultation and education element. Increasingly, interest is extending beyond case consultation with formal agencies toward assisting citizens in solving community social problems.

Change agent functions certainly are regularly carried out by many State-level mental health consultants. Most of the skills considered in this section are required in their effective stimulation of continued development and improvement of local services, both within State mental hospitals and community centers.

In numerous respects mental health consultants in the DHEW Regional Offices serve as change agents. One of their major contributions is facilitating optimum lasting benefits from Federal grant support extended to States and local communities. Regional Office consultants also provide "brokerage" functions in acquainting their clientele with innovative solutions to local service problems, and how they might be implemented. In addition, Regional Office staff members guide the diffusion of results of NIMH-supported research throughout their respective regions.

Staff consultants of the NIMH Mental Health Services Research and Development Program are especially trained to give assistance in planning desired change. Within specialty areas subtending critical topics in the development of mental health services, staff members carry out the three-phase process underlying the organization of this manual; namely, sensing needs for research and development, searching

for available solutions or fostering research on new solutions, and facilitating desired change through knowledge utilization.

Perhaps most "change agency" is carried out by administrators and practitioners within frontline service programs. Anyone who launches an innovation, who even improves on an operating service, is in a literal sense a change agent.

Characteristics of Effective Consultants on Change

First of all, the change agent is a person who has competence in consultation skills. He tends by nature to be a "marginal man," a little like both the investigator and the administrator/practitioner, but strongly identified with neither. Yet he is capable of temporary identification of himself with both parties, as the situation dictates. He does not feel compelled to "push" the orientation of his own agency. He is emphatic, has relatively high social status among his clients; he is a social participator; he is usually better educated and more inclined to get around to national meetings and so forth than is his client. He will work best with clients whom he more closely resembles—in terms of values and background. (Rogers and Shoemaker, 1971; Havelock, 1967.)

Inside? Outside? Change Agent

Who should be the change agent/resource person/improvement gadfly? The outside consultant or the internal change agent?

The outside consultant offers the advantages of (Watson and Glaser, 1965):

- detachment
- perspective
- a fresh start, unburdened by stereotypes
- independence of the organizational power structure
- energy which is not drained off by ongoing organizational duties

The outsider, as change agent, may be variously perceived by the practitioners, depending on how he is initially presented and how he functions vis-a-vis the practitioners. Do they view him as:

- a knowledgeable specialist?
- a troublemaker?
- a helpful colleague?

The outside consultant must have the trust of those inside the mental health facility. Whether he achieves this depends on:

- his sensitivity
- his perception of himself
- his presentation of himself
- his competence
- the credibility with which he communicates that competence

The internal change agent offers the advantages of knowing the program

- its problems
- its strengths (sometimes hidden)
- its potential and actual resources
- its informal centers of power

If he is drawn from the management level (the program director for example), he may get only the kind of feedback his subordinates think he wants to hear.

If he is too insistent on implementing change, he may incur resistance or even sabotage.

If he moves too fast in changing things or if he moves unilaterally, the change may be perceived by the staff as having been rammed down their throats.

If the inside change agent is a colleague, he may be viewed with suspicion . . . perceived as a spy . . . what he offers may be filtered through resentment, jealousy, a sense of betrayal. (Havelock, 1970.)

The change agent (particularly when he is an outside consultant) might find it useful to be aware of these components in his role:

He must act in the client's interest rather than in his own.

He is marginal by virtue of not having formal membership in the client organization.

His role often is ambiguous, not widely understood, frequently lacking in legitimacy and credibility.

His role is insecure; he may be considered expendable.

He must be inventive and resourceful; there are relatively few guidelines for his actions.

His role is potentially risky—for himself and his client; he must be temperamentally equipped to handle this sense of risk. (Bennis and Schein, 1969; Havelock, 1968.)

The Tasks of the Change Agent

Almost every scholar who has written about the management of planned change has enumerated the phases through which the process passes and the specific tasks of the change agent with respect to each phase. From among them, the following are presented as being particularly practical and functional from the point of view of the change agent.

1. Diagnosing (or clarifying) the client's problems.

The change agent may:

Take cognizance of existing program evaluation and/or management information systems; or guide development of evaluation or monitoring systems.

Obtain information by direct questioning, by seeking it from neighboring systems, by demonstration (of problem), or by participant-observation.

Process information by acting independently and cooperatively, and by encouraging client self-analysis.

Stimulate understanding and acceptance of diagnostic insights.

2. Stimulating the problem-solving process.

Encourage staff to retain responsibility for selecting solutions, avoiding the giving of direct advice and decision making for the staff on related matters. Guide staff in establishing goals and tentative intentions of action.

3. Taking cognizance of the organizational climate and attributes relevant to change.

Determine whether . . . the organization is so large that inflexibility may pose a problem; the organization has too few resources to back-up the change; it is so threatened with survival problems that it cannot afford to change;

it is over-receptive to change because it feels it has nothing to lose; it is so hierarchical and tightly organized that innovation will be improbable; it allows existing practices to be challenged without fear of recrimination; it is under pressure from the community or limited by legislative constraints; its staff morale and cohesiveness are sufficient to launch change efforts; the organization leadership is bold enough to risk a change and secure enough to be open about staff participation in change.

4. Assessing readiness for change.

Determine the urgency and source of the felt need for change—discern whether the pressures come from outside the organization as through competition or public opinion; or whether they are internal pressures stimulated by employees who are either dissatisfied or wish greater sense of accomplishment for their efforts.

5. Developing a need for change.

Heighten the client's sensitivity to specific problems, if necessary by . . . using confrontation techniques; using the system's more sensitive, or its more influential persons; or conducting a problem census.

6. Establishing a change relationship.

Assess the client's capacity to accept and use help.

Assess the client's motivation to accept and to use help.

Obtain a mutuality of expectation for the change relationships in terms of how much time will be required and how many people will be involved.

Clarify expectations about the kind and amount of work required.

Anticipate difficulties which might emerge in the change relationship.

7. Preparing tactics for change.

Determine the resources that will be required to support the change, both in terms of training, funding, and authority.

Ascertain that the change is consonant with the values of the clients, staff, and

supporters of the program; plan modifications of the change to render it compatible with the organization.

Design method and materials for communicating information about the change idea to all relevant persons.

Assess needs for modification of prevailing circumstances to ensure optimum accommodation of the change; identify the point of entry.

Select a time for entry based upon approaching crises, activity cycles of the organization, social or political issues relevant to the change.

Reexamine the organization's need for the change and ensure its awareness among all relevant parties.

Anticipate all probable resistances, giving special regard to those who will be personally less well-off after the change or whose values are violated by the change; plan ways of easing the stress for such persons.

Compile and communicate cogent information about the anticipated benefits of the change, both in terms of program goals and personal benefits to individuals involved.

8. Enlisting the participation of those most affected by the change.

Ensure, insofar as possible, that the participants in the change have an opportunity to identify their needs themselves.

Provide an opportunity for persons affected to take part in working through details of how the innovation will be applied to their work setting.

Facilitate open, unstructured feedback of participants after the idea of the innovation is first presented and described.

9. Summoning and developing resources.

Make final plans for budget accommodation and handling of product-losses that may occur as a result of the innovation. Ensure the backing of authority for the change.

Plan orientation and training programs for persons affected by the change.

10. Employing appropriate methods of change.

Draw on special techniques (as illustrated in METHODS section), helping client to select and use those he prefers.

11. Evaluating the consequences of the change.

Guide client in preparing for evaluation of the goal and system impact of the change.

Plan for method of feedback and response.

(Lippett, Watson and Westley, 1958; See also: Lippett, 1962; Havelock, 1970; Griffiths, 1964; Rein and Miller, 1966; Gallaher, 1965; Likert and Lippett, 1963; Lippett, et al., 1966; Mansfield, 1968; Miles, 1965; Mann and Neff, 1961; Beckhard, 1959; Bennis, Benne and Chin, 1969; Glaser, et al., 1966.)

as well as fear of loss, etc. (Bright, 1964; Judson, 1966; LaPiere, 1965; Marmor and Ottenberg, 1960; Smith, et al., 1969; Spicer, 1952.)

Should *resistance* always be *countered*?

There are some advantages in developing empathy with those who do not go along with a proposed change. Their criticisms or questions about the proposed change in their situation may be perceptive and valid. The conservers of what is valuable in the old way of doing things should be given a full hearing. What they have to say may provide valuable insights concerning the norms of the organization . . . and may lead to relevant modification of the innovation.

In other instances it may be more strategic to subdue support for an innovation than to subdue resistance. Sometimes those who will be affected by the change have unrealistic expectations of it. That is, they enthusiastically accept and support the change because they see it as self-enhancing, when that may not necessarily be an accurate perception. In this situation, the change agent may have to scale down the expectations—modify them to a more realistic level—to prevent the practitioner's developing an ultimate disillusionment which may be destructive to the entire organization. (Blum, Downing, 1964; Lippett and Havelock, 1968; Mann and Neff, 1961; Spicer, 1952.)

Among the suggested ways of *minimizing resistance* to change (often utilized by a change agent but sometimes by an agency administrator), are the following:

Compulsion: may be the most effective in the short haul, but has many hazards; increases sense of frustration and resentment, develops dependence among subordinates and reduces their resourcefulness.

Persuasion: its success depends on the ability of the persuader to convince that the rewards of the change counterbalance or outweigh the reasons for resistance.

Dispelling the fear that security is threatened: this might call for assuring a member of the organization that his position will not be eliminated in the process of change nor will he be called upon to perform new tasks that are beyond his capacity to master.

Developing a full understanding of the change: this includes need for change, what is to be changed, how, by whom, when, what

benefits can be expected, what other outcomes can be anticipated. When there is a vacuum created by lack of understanding, it is filled by conjectures.

Adroit timing: the greater the feeling of dissatisfaction with the status quo, the lower the resistance to some form of change. The longer the actual process of change takes, the greater the resistance.

Involvement: the greater the extent of personal involvement in making decisions related to change, the less resistance will there be.

Avoiding implications of criticism: if those involved in the change perceive it as criticism

of what they have been doing, they will become resentful and defensive. These responses are frequently translated into resistance.

Installing the change with flexibility: give those who are affected by the change the opportunity to modify the innovation to meet their specific work situation . . . or to evaluate it after it has been put into effect . . . and then suggest modifications.

Overall strategy: *reduce* the resistance rather than try to overwhelm it. If opposition is met with pressure, resistance is increased. (Eichholz, 1963; Judson, 1966; Watson and Glaser, 1965.)

On the Matter of Resistances

In coping with resistance in the user organization, it is often helpful to be able to anticipate the typical sources of resistance. The following checklist of possible *reasons for resisting change* may facilitate this process:

Fear of economic loss.

Fears about personal security.

Fear of inability to learn readily the new skills required or to perform in the new role.

Fears about decreased personal convenience.

Fears about decreased job satisfaction.

Social fears (loss of status, separation from customary work associates).

Irritation with manner of handling the change.

Cultural beliefs ("This will never work, goes against what I have learned in the past, etc.").

Inertia.

Sense of present over-commitment.

Lack of interest.

It might be helpful to remember that virtually each of these negative values has an opposite and equal positive value—that is, there can be anticipation of economic gain as well as fear of loss, anticipation of status improvement

METHODS

Facilitating Change

Several specific methods of helping improvement or desired change come about are presented here for consideration. They are the sorts of activities the change agent might be prepared to help arrange. On the other hand, administrators/practitioners also might wish to employ the methods directly.

PERSONAL CONTACT — There is high consensus among studies on the diffusion of research findings that most users learn mainly from other people. They learn most readily from "influentials" in their line of work. But they also learn from people with contagious enthusiasm, and from those with whom they feel easy rapport.

It looks as though we could learn much about diffusing information from the pharmaceutical houses' detail men: He is—if we can extend the findings from one respected study—far in front of any other source of information the physician has about new drugs. Professional journals represent a seldom-used source. In turning for information about treatment methods in general, the physician again relies mostly on personal contacts, with colleagues in this case. Apparently, retrieval services such as Medlars are utilized least of all sources (Coleman, et al, 1966).

The challenge to the personal contact approach is how to systematize it. Detail men and county agents exist through rather special sources of funding and manpower. (In the social and behavioral field change agents face the additional difference that they promote the adoption of new behaviors more often than the adoption of things—a much harder trick to turn.)

MEDIATING JOURNALS AND REPORTS — Many special efforts have been made to facilitate research utilization through publications designed for that purpose. (*Journal of Social*

Issues, Trans-Action, Psychology Today, SRS' Research and Demonstration Briefs, NIMH's Mental Health Digest and Innovations and Current Conclusions.)

Investigators on the printed report advise:
(1) It is more effective if it gets the right bit of information to the right person at the right time.

(2) It should be brief and readable.

(3) The information should reach the user several times in slightly differing forms.

(4) The report will be received better if it recognizes that the reader has respectable knowledge and experience related to the topic.

(5) "Aggressive dissemination" is advocated. It refers to careful selection of readers according to their known interests, as in the Selective Dissemination of Information system.

INDIVIDUAL COUNSELING — This approach is more commonly used in maintaining organizational health. It may be called on in helping a key man grow from a "late adopter" type to an innovator if he is critical in the organization's adoption of a new idea.

Consultants in management development work counsel employees on behavioral patterns that have become apparent in job performance or psychological evaluations. A rather direct surface-level confrontation is made sometimes: "Here is a perception of the situation; if you want to work on it let's talk about how we might profitably do so."

PEER GROUP DISCUSSION — In one classical study, supervisors were unconvinced in the face of findings on older women employees. The research had shown them to be highly desirable employees. The supervisors, in peer group discussion (no managers included), reached a consensus on what they would like: another experiment using *their* criteria of desirability. It was granted. Results were posi-

tive again.

There are three advantages in using the peer group discussion to facilitate review of present policies, programs and procedures, and the changes which may be called for: (1) The behavior of associates often does exert tremendous power over the individual. (2) Changing several people at the same status level in the organization introduces the possibility of continuing reinforcement of the behavioral changes. (3) The possibility of discovering an acceptable solution calling for change is greater in groups not inhibited by authority figures.

(The efficacy of discussion to bring about change appears to rest not quite so much on the personal involvement it affords as on the perception of the willingness of others to go along with the change.)

TEMPORARY SYSTEMS (T-groups, encounter groups, sensitivity training, utopias, etc.)—These are widely advocated now to free up communication, enhance trust, and build more productive cooperation. There is evidence that the wish of management to have an innovation accepted can be more often met if the decision follows team training.

Common to temporary systems is freedom for a while from the usual demands and constraints of organizational existence. The groups favor openness, authenticity, sharing, inquiry, and mutual aid.

When members from one organization form a group, they do learn to work more effectively with one another back on the job. However, the growth seems not to extend to relationships with other members of the organization who were not in the temporary system. Linkage with permanent systems where the change has to take place remains a problem.

TAVISTOCK GROUP THERAPY—This approach to helping an organizational group adapt to change has proved effective in at least one formal study. The setting was a factory in England. The method is receiving growing attention in this country.

The program involves the process of helping the group to unearth and modify some of the less obvious influences of its behavior. Irrational concerns are "worked through."

Three conditions are considered necessary if

the group is to gain benefit from the program: (1) All members have to be involved with the same change problem within the organization. (2) The members must recognize a severe and painful problem—they must be hurting. (3) The group must have solidarity and cohesiveness. A fourth desired condition is the frustration created by the failure of denial or other mechanisms of defense to ease their pain.

A limitation in the Tavistock approach is that not all resistances to change within an organization are irrational in nature.

LEGITIMATION AND ENCOURAGEMENT OF CHALLENGE—This approach, worked out by Edward Glaser as an outgrowth of Arnold Toynbee's observation that the most viable civilizations (and organizations) have been those that have remained responsive to challenge, actively encourages critiques of present policies, practices, and procedures at all levels. It starts with role-modeling at the top wherein the top administrator nondefensively invites critiques or questions of his own performance in relation to organizational or group goals. Other members of the group in turn invite the same challenge, with the result, usually, that individual and group behavior changes in response to what is brought out.

MANN SYSTEMATIC USE OF FEEDBACK—"Systematic feedback" has been developed by Floyd Mann and his associates at the University of Michigan's Center for Research on the Use of Scientific Knowledge. It works like this: The implementation of an innovation begins with a study of the organization function which would be the focus of change. All members of the organization affected by the study participate in both its formulation and the analysis of the results; hence "feedback." If the survey of the function calls for change, the appropriate directions or innovations are discussed. A second evaluation is conducted after the change is launched. Again, the results are fed back for interpretation.

The approach has the advantage of winning the high personal investment of the members. Level-of-aspiration studies confirm that individuals tend to raise their sights when they see the outcome of their efforts.

Skinner has pointed out that feedback of

performance results to a task group generally is perceived as positive reinforcement—especially if the task group has participated in goal setting, or in establishing criteria of desirable performance.

One conceivable limitation to the systematic feedback approach is that organizational wishes and those of members within one function may not be the same. Perhaps it reduces to a philosophical question of whether sub-components of an organization can operate in a truly democratic fashion.

DIRECT SYSTEMATIC ALTERATION—The approach to change by modifying organizational variables was first introduced through what has become known as the "Morse-Reimer Experiment." In that study the target of change was the hierarchical distribution of decision-making power in a larger clerical organization.

The aim is to obtain a better fit between the social and technical systems which comprise the organization. When the fit is poor there is strain and imbalance caused by (1) the competition between different functioning subsystems—"horizontal strain," and (2) the conflict between various levels in the hierarchy of power, privilege, and reward, or "vertical strain." A simpler way of describing this might be to say that the people who carry responsibility for doing the work get to make decisions about their work and also receive the rewards for the work.

The assumption is that whenever change occurs, whether from outside the organization or from within it, the fit between social and technical systems is threatened. So change can leave unseen strain unless this phenomenon is given consideration in planning change.

TRAVELING SEMINAR—This approach was first tried by Systems Development Corporation when it took 120 potential users in education on a tour of innovative programs. Following the visits, tour members reviewed, discussed, and generalized their observations. After a year, the tour participants, in contrast to a plausible control group, had introduced many more innovations.

ANTICIPATORY REHEARSAL—Ronald Lippitt and Ronald Havelock, of the University of Michigan's CRUSK, found this technique helpful. This is how it can be used: When the change involves an innovation calling for specific modification of practice at a point in time, the prospective adopters first talk it over. But in this case the discussion is not around whether to adopt the change; focus is on what the change will entail. After verbally running through the new practices, the adopters do a dry run with as much simulation of actual conditions as possible.

The method reduces anxieties sometimes raised by facing an unsure situation. It also allows a talking-through of apprehensions that could mount to resistances after the innovation is launched in earnest.

DEMONSTRATION/CONSULTATION VISITS

—The results can be disappointing when a potential user merely observes a demonstration. The first step in making a visit profitable is to ensure that there is a good match between general circumstances at the demonstration site and the visitor's own site. If this cannot be met then time should be taken during the visit to discuss the factors that are different; possibly they will not be relevant. If this is the way the visitor comes to feel about the differences the innovation is less likely to be dismissed. Relevant differences can be considered from the standpoint of the adaptations that would be necessary to utilize the whole innovation or parts of it.

Edward Glaser of the Human Interaction Research Institute has instituted a "consultation" aspect to the visit. Instead of expecting the visitor to be a passive observer, a request is made for his consultation on how the project might be rendered more effective—either for the sake of the site where the demonstration is being carried out or for the sake of better demonstration and diffusion value.

"ACTION CONSULTATION"—In this approach a "change agent" or technical assistance consultant is made available to the potential user.

The agent, or consultant, will have expert knowledge of the innovation to be implemented.

His specific role is to assist the user in adapting the innovation to the circumstances of the new site. Special needs relative to the change process also are dealt with, e.g., involvement of staff, marshalling resources, planning a time and sequence for the change itself. The action consultant may plan to spend as much as two weeks with the user, and to make return visits as necessary.

CONFERENCE CONSULTATION — Conferences in which research reports are presented to, discussed with, and reviewed for usefulness by practitioners are more influential than publications or other one-way reports. A good illustration of the use of the consultation conference was on promoting the use of systemized care programs for chronic obstructive pulmonary disease. An unusually effective training program for practitioners involved 12 sessions with the same persons over a six-month period, giving opportunity for them to assimilate the research findings, to criticize them, to devise applications, to simulate or role-play these, to try them out in practice and to report back.

This "Glaser model" combines the ANTICIPATORY REHEARSAL approach of Lippitt and Havelock and the DEMONSTRATION/CONSULTATION VISIT.

FAIT ACCOMPLI — When people seem to be finding it hard to accept change because it is hypothetical, the change-by-fiat approach may

be defensible. Attitudes are not ignored; they are simply dealt with after the needed change has been initiated. Obviously, it may be the approach of choice when, say, stress from the supraordinate system makes swift change essential. Also, if it appears that a consensus will not be gained, thereby undermining the existing confidence of some, an administrator may find it a wiser move to proceed swiftly before resistance mounts. It is easier to resist hypothesized change than accomplished change.

The cost of this approach is that the change may never be fully implemented in spirit, and its endurance may be shortened.

PERSUASION — As an approach toward changing, persuasion can operate at three different levels: (1) Compliance, when the persuasion is enforced by sanctions and close supervision. ("bargaining") (2) Identification, when the power of the persuasion rests on the admiration of the persuader. Such change usually lasts only so long as the admiration and presence of the persuader lasts. ("belonging") (3) Internalization, when the individual truly believes the message and sees its reward for himself. ("belief") No policing or approval of an authority is necessary. The point, of course, is that in promoting change, the easier method, if one has the power, is to resort to bargaining and belonging, and to overlook the long range payoff of the more arduous persuasion toward belief.

Determiners of Change

Innovativeness of an organization is not a matter of chance. The administrator/practitioner can be a most powerful influence. Studies of innovativeness have yielded a rich assortment of knowledge that he might use. Most of the techniques, in addition to facilitating the adoption of innovation, foster the development of an effective and rewarding organization.

TOP MAN — The characteristics of the leader of the organization or of any of its components are critical. No other factor has been reported as correlating so highly with innovativeness as the attitude of the top man in a program. Five characteristics are frequently described:

He advocates self-renewal both of himself and his subordinates. He places high priority on continued training opportunities and experiences that increase motivations and broaden familiarity with tasks of staff.

He is goal-oriented, not a "stylist." Going about things in accepted or fashionable ways is of little importance to him. Rather, he organizes his operation toward achieving clearly understood goals. He promotes the same goal orientation among his staff. He is tolerant of individual choices in manners of reaching the goals.

He accepts risks. With full awareness that his security may be disturbed by bad decisions on new approaches not fully tried, he offers his support and accepts responsibility for failure at the point that is appropriate and necessary.

He rewards effectiveness. He is less concerned with either the prestige or the personality of his subordinates than with their ability to achieve goals. But he does not take goal achievement for granted; appropriate rewards are given with good timing.

He is an innovator himself. Not only is he a person who is accustomed to conceiving and developing new ideas of his own, he reinforces

ADOPTION

Organizational Change

this tendency in his staff. Unfortunately, it is not uncommon to find innovative leaders who destroy their own effectiveness as leaders by being more jealous than proud of subordinates who are innovative.

(Becker, 1970; Howard, 1967; Roberts and Larsen, 1971; Schmuck, 1968; Mackie and Christensen, 1967.)

ORGANIZATION MEMBERS — the administrator/practitioner can facilitate innovativeness through the recruitment of persons who can be identified as "early adopters." Or, in promoting the adoption of the specific change, he can increase the probability of its acceptance by selecting "early adopter" types for his staff to help with launching innovation. These factors have been found to be characteristic of innovative persons:

They are bright, usually more so than the average employee.

They enjoy rather high respect and status among the staff members.

They are "authentic"; that is, they are people who seem to be comfortable in presenting themselves as they really are.

Despite the respect most of them enjoy they are nevertheless deviants from the rest of their group.

By the same token most of them are not buddy-buddy with others. Rather, there is a certain comfortable, non-hostile, independence about them.

They are "cosmopolite"—their interests extend far beyond the local facility. They seize opportunities to attend national meetings and to talk with persons with broader variety of settings.

They are persons who have had positive experience in the past with change.

They are either younger or older than most of the other staff members. It seems to be the

middle-aged staff member who is least willing to change.

They are really not too successful in the organization. Logically enough, the person who has a "plum" of a position can hardly help preferring to maintain the status quo.

They are secure; they assume that their usefulness to the organization does not depend upon their being excessively conforming or compliant.

(Coleman, Katz and Menzel, 1966; Katz, 1961; McClelland, 1968; Rogers, 1962; Rogers and Shoemaker, 1971.)

THE SUPRA SYSTEM — Certainly no one who has run any program needs to be reminded of how important his supervisor, board, commissioners, or legislators are when it comes to considering change. Perhaps one of the most difficult jobs the innovative leader faces is working with his "supra system" around problems of conflicting values, economic restraints, or simply disinclinations to accept change. The community in which a mental health facility lies may, in itself, prescribe the degree of innovativeness that will be tolerated. In one study from the educational field, the investigators found that innovativeness is significantly more common in schools that are located in urban, well-to-do, liberal neighborhoods.

BENEFICIARIES — Probably the most important persons to consider in change are the organization's clients—those to whom the change presumably will be a benefit in the ultimate sense. Increasingly, clients of mental health services are having more to say about their needs and what is being offered to meet them. The literature on change offers little in this respect, but it seems an incontestably wise idea to consult with representatives most likely to be affected by change, even if they are not the decision-makers or activators of the change. Subsequent evaluation should be carried out to determine whether the change has actually resulted in a benefit to the client population.

Organizational Factors

OPEN SYSTEM — Highly associated with innovativeness is the "openness" of an organiza-

tion. An open system has been defined as being (1) democratic (2) flexible (3) promotes extensive participation all levels of employees (4) mutual trust among organization members exists, and (5) communication is three-way; that is, workers at subordinate levels do not simply receive orders in memoranda from above. They do feedback to management levels and internally to other parts of the organization their own responses and inputs to the operation.

Time for problem-solving and change related activities is another factor which contributes to a self-renewing organizational climate.

Goals that are clear to the members of an organization and reasonably well accepted by members of the organization plus feedback of performance of progress in relation to those goals constitute another key ingredient in the formula for healthy, self-renewing organization.

An organization climate that encourages and rewards problem-solving, continual challenge, and review of role-performance and operating practices . . . serves to support an open-minded willingness to consider new ideas. A basic requisite for creating such an organizational climate is consistent administrative support plus rewards. Colleague-support is a second requisite.

TEAM MANAGEMENT — Blake's "Managerial Grid" describes coordinates between management's concern for production, on the one hand, or concern for people on the other. Exclusive concern for production leads to "task management"—regarding employees as machines for processing orders into needed tasks. But concern for people in the extreme leads to "country club management"—preoccupation with trying to keep all employees happy and free from pressure. In neither extreme can innovativeness take place. "Team management" by contrast embraces both clear awareness of goals to be achieved and human rights and needs of the organization members. Participation in decision-making—in the identification and solution of organizational problems—by all persons concerned, is conducive toward readiness to change. (Costello and Zalkind, 1963; Greiner, 1967; Havelock, 1969; Miles, 1965; Thompson, 1965; Watson and Glaser, 1965.)

MANAGEMENT BY OBJECTIVES — Mental health organizations in particular seem to be vulnerable to management that adheres to style rather than to the pursuit of clearly defined objectives. The reasons for this are probably familiar to most people in the mental health field. But if we can draw from research on innovative organizations outside mental health, the conclusion would be that the more the program leader pushes the clarification of measurable objectives the more likely that improvement in services will be adopted.

RESEARCH AND EVALUATION — Organizations which place emphasis on researching their own problem areas and resources, and which evaluate progress toward achievement of specific goals, have been found to be more innovative than those that do not.

COMPETITION — An organization that has similar organizations with which it can compare itself (or with which it is compared by others) is more innovative than outfits that do not feel a sense of competition.

DISTRIBUTION OF POWER SEATS — The more a leader shares his power—along with assigning responsibility commensurate with the power—the more innovative his organization will be.

INDEPENDENCE — Programs that are excessively dependent upon the next higher echelon have been found to be non-innovative.

Introducing Change

There are several steps which the program person can observe to increase the likelihood that a change toward improvement will be smoothly adopted:

ADOPT A SET FOR INNOVATIVENESS — Be aware of the need for change . . . be able to identify areas of practice in which change might mean improvement. Sometimes the first indication that change is needed is nothing more explicit than a vague and nagging sense of dissatisfaction.

Be open-minded about the possible effectiveness of new practices and procedures.

Be willing to take the time for fact-finding and analysis . . . and be resistant to the pres-

sure for crash programs to correct problems.

Be non-defensive—admit that the need for change does not necessarily mean that one has not done his job right. Encourage criticism from colleagues and subordinates.

(Cartwright, 1962; Dykens, et al., 1964; Greiner, 1967; Havelock, 1969; Kogan, 1963; Spicer, 1952.)

IDENTIFY PERCEIVED NEEDS—Begin with a need that is clearly perceived by the persons who are to be involved in the change. Sometimes patience may be required while awareness of the need is being developed. In some instances the wiser course of action may be to wait for a need to be critical. Change usually is more readily brought about during crisis situations.

USE CONSULTATION — When a potential user wishes to explore the possible desirability of a change in goals or organization or practice, he might call in a consultant (or other change agent) at any one of a number of steps in the change process (to help identify the needs, to seek the solution, to implement the change, to evaluate it after it has been put into effect) or he might use the consultant throughout, from start to finish. How the practitioner reacts to the change agent depends on:

- How the presence of the consultant is interpreted to the professionals in the user agency (by the administrator).
- The practitioner's perception of why the consultant is there—what effect might his presence have on their professional roles . . . function . . . status? What might they have to gain by the successful outcome of his mission?

(Costello and Zalkind, 1963; Guetzkow, 1959; Lippitt and Havelock, 1968; Havelock, 1970.)

LEARN WHAT OTHERS HAVE DONE — Once a practitioner (or group of practitioners) has identified a problem which can be resolved or illuminated by research, he usually wants to know if any applicable research has been carried out. If not, how can the assistance of a research-oriented expert be acquired to undertake such an inquiry? (Some suggested methods of keeping in touch with past and

current research are given in the NIMH publication *Sources of Information and How to Use Them.*) In addition, the practitioner may find it helpful to:

- Seek out experts in the field for advice.
 - Attend professional meetings and conferences (and come prepared with information about who is to speak, and in what special ways they can help with the problem the practitioner has in mind).
 - Take part in workshops (and be prepared to share his innovations with others as well as to find out what they have to offer).
 - Keep in touch with the full range of professional literature; keep in mind that significant innovations come not only from research but from other practitioners as well.
- (Cooper and Archambault, 1968; Kaplan, 1958; Klein, 1968; Lippitt and Havelock, 1969; Watson and Glaser, 1965.)

SENSE REACTIONS — The practitioner ought to be prepared to carry out critical self-examination (and examination of colleagues and subordinates) to see what the reaction is to the prospect of change.

- Is it viewed as hazardous?
 - Is the inclination to postpone action in the hope that the trouble (that is, the situation that needs changing) will go away?
 - Is a scapegoat sought . . . the boss? . . . government agency? . . . the community? . . . rather than tackling the problem through some form of change?
- (Judson, 1966; Mann and Neff, 1961; Thompson, 1965; Watson and Glaser, 1965.)

SENSE IMPACT — The practitioner will find it useful to assess the *impact* of an innovation not only in terms of how it will affect him professionally . . . and his organization . . . but also how it will affect the *ultimate consumer*, his clients/patients. *Their feedback should be invited.* (Criswell, 1969; Evans and Leppmann, 1968.)

LEGITIMIZE — Arrange for the endorsement of "legitimizers" and opinion leaders within the organization. Unless the leaders to whom staff members are responsible are in favor of

an idea, it is only reasonable that involvement will be less than enthusiastic.

CONSIDER REJECTIONS — In attempting to enlist the support of colleagues, it is useful to be aware of some of the recognizable reasons underlying rejection. An innovation may be rejected because of:

- Ignorance—it is unknown or too complex to be understood.
- Default—it is known but the practitioner is not interested in using it.
- Societal mores—it is not accepted within the context of the practitioner's society.
- Interpersonal relationships—one's friends are not using it.
- Erroneous logic—a seemingly rational but actually unfounded reason is given for the rejection.
- Fulfillment—practitioner feels that problem has already been solved; hence innovation is unnecessary.
- Experience—practitioner has already tried new technique and feels that it has failed.
- Competing priorities—the potential adopters or implementors feel too preoccupied by other demands on their time, energy or resources. (Eicholz, 1963; Eicholz and Rogers, 1964.)

RECOGNIZE PARTICIPANTS — See that all persons who are involved in the change receive a "slice of the action." Again, the techniques discussed under **METHODS** may be usefully employed at this point. Resistances need to be given special attention. But it is wise to recognize that some resistances are quite rational and should be given most serious consideration. For example, it may be that what is being done now really is not so ineffective that it must be replaced. Resources to support the new change may be so heavily burdened that other parts of the program will suffer. Deep values of those affected by the change may be violated. On the other hand, there are certain irrational factors that can be worked through. Most members of an organization prefer to adopt a new technique that they feel they have invented themselves. This can often be done by simply putting forth a few of the principles that are essential to the proposed change, inviting staff to use these as parts of the kit with which

they could tailor the innovation to fit circumstances of their own organization. The primary consideration, of course, is that persons who are involved in the actual change receive reward for their part in some form or another. It is the inventiveness of the leader in finding methods to reward staff that may be the most critical element of all in the effective implementation of change toward improved services.

TRAINING — The practitioner who is seriously considering adoption of an innovation also might consider the need to invest in skill training for relevant members of his staff in the proper application of the innovation. Many experiences of failure in utilizing a new idea stem from ineffective or unskilled application, rather than lack of basic merit in the innovation. Sometimes other kinds of in-service training beyond skill training may be needed to facilitate the effective adoption of change, i.e., sensitivity training; organizational laboratory training; problem-identification and problem-solving training. (Bennis and Schein, 1969; Chesler and Fox, 1967; Jung and Lippitt, 1966; Schmuck, 1968; Shartle, 1961.)

LISTEN — The introduction of change requires an increase in communication and in opportunities to confer. When members of an organization are confronted with a change that they perceive as important to them personally but about which they do not have adequate information, rumors become more prevalent and more easily accepted. These rumors can, however, be useful in identifying the problem areas about which people want more information.

GRADUAL CHANGE — If it is feasible to do so, put the change into effect gradually. Ideally, institute it as a pilot project, so that its implications can become evident, not only to the practitioners who will be directly involved in it, but to their colleagues who may at some later date become involved. A stage-by-stage introduction of an innovation gives the re-

search utilization specialist and the administrator of the user agency an opportunity to observe unanticipated side effects—and to correct where necessary. Avoid all-or-nothing approach to change; it tends to stiffen resistance and heighten the sense of threat.

SOFTEN INTRODUCTION — The administrator or practitioner may wish to consider how he can make it easier for people in the practice setting to absorb an innovation. Suggested strategies:

- Watch for shifts in status, and do what can be done to minimize threats and bolster professional self-esteem.
- If innovation increases workload, offset this by relieving practitioners of some of their routine duties.
- Provide opportunity for "dry run" of new procedures and practices, so that staff can have the experience of working with the innovation without fear of failure.
- If possible, introduce the change as a pilot project, so that total operation is not dislocated by it . . . and so that, if it turns out to be advisable to do so, the effects of the change can be reversed. (Bright, 1964; Cawelti, 1967; Costello and Zalkind, 1963; Halpert, 1966; Havelock, 1969; Howard, 1967.)

PARTIAL CHANGE — If an agency is confronted with a promising innovation but is handicapped by inadequate resources for putting it into effect or by organizational inflexibility (which may be imposed by statute), the practitioner can look for ways to use the innovation on a piecemeal basis — applying it to only one unit, one ward, a selected group of patients, a limited number of staff members, etc. (Glaser and Taylor, 1969.)

EVALUATE — Once the innovation has been put into practice, those who are affected by it should be given a chance to evaluate it and to suggest modifications.

CHECKLIST FOR CHANGE

A Comprehensive Behavioral Model

So far, we have considered the findings and principles on change according to (1) their logical relatedness, or (2) their sequence in steps advised to bring about the desired modification of services. But clustering what is known does not necessarily subtend all factors that may be relevant to determining whether change will then take place. For that reason, the Checklist on Change will be based upon a behavioral, theory-based model. A bit more effort may be necessary to comprehend such a model initially than is true of a logical clustering. On the other hand, there are four distinct advantages to thinking about change according to a comprehensive model:

(1) It provides a meaning from which one can draw his own specific methods of change according to a situation.

(2) It allows a rational selection of change techniques rather than the trial and error applications of recommended steps.

(3) An adequate model should encompass all variables that are "necessary and sufficient" to account for the phenomenon. If this model precludes overlooking important determinants is adequate then it provides a framework that of change that should be considered.

(4) A behavioral model based upon the field of learning research—as this one will be—lends itself to extensive refinement of highly effective change determinants.

A Quick Look at the Basic Behavioral Formula

$B = E + T + S + ((P + H) D \times C) - I$
B = Behavior which the desired change represents. In this instance let B equal seeking help at a community mental health center.

E. = One's self-expectancy—values, life styles, etc. Turning to others for help is consistent with the seeker's self-concept.

T = Timing. Middle-of-the night panic is the sudden problem. Last evening a staff member discussed the center's services at PTA. Timing brings the two together in association.

S. = Stimulus conditions. The environmental circumstances have a great deal to do with whether specified behavior will or can occur. The presence of the speaker from the center becomes part of the picture.

P = The pattern for the behavior. P is the idea or the information that one must have to perform the behavior. Information was given last evening about how to request help, where to go, what to pay. Without this patterning, the behaviors cannot occur. For that reason, P is a multiplier.

H. = Habit strength. This refers to the tendency to engage in a specified behavior because similar behaviors have been rewarding in the past. The seeker recalls having been helped by doctors before. The speaker's words made relief sound quite likely.

D = Drive. It is probably a safe generalization to say that no behavior initially occurs without some motivation. In this case the motivator is the pain of the panic.

C = Capacity to perform the behavior. Transportation to the center is possible. Funds for payment of fees are available. C is another multiplier because if it reaches zero the behavior could not occur.

I = Inhibitors. This is one of the the most important variables in considering behavior. It represents all competing behavioral proclivities at the time—counter-anxieties, product-loss events, etc. It is "I" which is commonly helped through desen-

sitization or, in learning jargon, experimental extinction. In this instance, the seeker has no inhibitions overbalancing the preceding seven influencers. He will go to the center for help, according to this formula.

This illustration has drawn upon individual behavior; however, it is supportable that organizational behavior responds to the same influences, broadly considered. To a large extent, determination of the probability that any specified change will occur is a purpose of the formula. Application of learning techniques—such as instrumental and operant conditioning, experimental extinction, generalization, transfer of training, cognitive learning, drive manipulation, modification of stimulus conditions—allow increasing the likelihood that specified change will occur. Other approaches, of course, such as sensitivity training toward work with expectancy, or the application of refined communication technology to patterns, also can help to usher desired change, as outlined in the preceding section of this manual.

A VICTORY — The behavioral model for change expressed in learning theory terms may be a bit more than most wish to recall and use in everyday change efforts. So here it is converted into a recallable acronym:

B = A VICTORY

(All factors may interact and overlap with one another)

B = Behavior

A = Ability to carry out the change. (Capacity in the behavioral formula.)

V = Values that give purpose, direction, perceptions. (Self-expectancy)

I = Idea, or information, that forms a pattern of behavior. (Pattern)

C = Circumstances which prevail at the time. (Stimulus conditions)

T = Timing.

O = Obligation, the felt need, or motivation to act. (Drive)

R = Resistances as they are relevant to the desired change. (Inhibitors)

Y = Yield—The perceived likelihood that there will be some payoff to following the pattern of behavior. (Habit strength)

Application of the model in the adoption of a new service technique

Glaser and Ross (1971) studied the process of introduction of a new service technique to potential users. The new service is a "weekend hospital," employing saturational group therapy, a marathon approach. The program is designed to help persons so precariously adjusted that they need intensive help, yet who because of job or family responsibilities are quite unable to accept inpatient or day patient status. Research on the approach found it to be highly effective in terms of treatment outcome.

ABILITY — The adoption of the weekend hospital calls for two kinds of resources: (1) staff competence in conducting marathon therapy; (2) \$6,000 to \$9,000 for staff time and incidental costs in cycling one group of patients. As it turns out, very little is found in the research utilization literature about ability, yet Glaser and Ross found that even such modest resource requirements as these constituted perhaps the greatest deterrent to the adoption of the program.

VALUES — In facilities where most staff members had family responsibilities on weekends, there was understandable disinclination to volunteer to take on such a heavy commitment (16 weekends from Friday evening to Sunday afternoon). Because of past training or personal disinclinations some otherwise potential therapists responded negatively to the idea of marathon group therapy.

INFORMATION — Despite good traditional dissemination of project results on the weekend hospital, very few potential users had familiarity with it—an all-too-common finding about the impact of traditional dissemination! But the special diffusion afterward soon rendered the information clearly known by more than half the potential user group. It posed no great problems in terms of communication. In fact, the project was selected at the outset partly because information about the technique seemed to meet most of the requirements for utilizable research outlined in this manual.

CIRCUMSTANCES — Community mental health centers that carry day hospital programs found themselves in a good position to provide the necessary spatial arrangements for the weekend hospital. But those without such facilities found that their circumstances really were not conducive to adoption of the program. Also, distance from communities proved to be a relevant varying circumstance. Centers serving suburban neighborhoods with a high proportion of family units were better prospects for adoption.

TIMING — The common observation is that changes toward program improvement are less inclined to take place when no unusual event is occurring, such as a change of directors, the recruitment of new staff, the obtaining of a new funding source, etc. The fact that an innovative idea was presented to staff of mental health facilities was insufficient in itself to usher in change in most instances.

OBLIGATION — The weekend hospital idea was viewed as a welcome solution if a mental health facility was pressed with a heavy case load of the sorts of patients the innovation served best—those who could barely "stay afloat" without intensive help but who were unable to leave their roles for hospitalization during the week. But unless facilities were hard pressed to do something about that group the motivation to employ this solution understandably was slight. Some persons, of course, were interested simply out of their natural drives to be innovative and progressive.

RESISTANCES — A rather understandable inhibitor to adoption of the weekend hospital was consideration of the "product-loss." This term refers to what would have to be given up in order to provide the resources to initiate the new program. Someone would have to give up something. If all of the other factors up to this point are sufficiently strong, of course, that consideration would not be enough to overcome the adoption. The fact that values were not, in all cases, entirely consonant with working weekends or engaging in marathon group therapy

amounted to one kind of resistance that lessened the probability of adoption.

YIELD — The results of the research on the weekend hospital cogently presented the prospect of greater effectiveness in serving certain kinds of patients. Still, doubts were expressed by many potential users because the project had not been cross-replicated under circumstances similar to those at their respective facilities. They were not sure that the yield would be all that great. On the other hand, there were subtle "promises" of yields of a personal sort for individuals who gain rewards just for their moving ahead with innovative experiences.

Glaser and Ross presented a sobering lesson in research utilization: Despite the fact that their dissemination and diffusion efforts were exemplary, and that the original project director, Dr. Frank Vernallis of Olive View Hospital, Olive View, Calif., had done an excellent job in developing and researching the innovation, the track record for the utilization of the results of this research remains very modest. Indeed the world does not necessarily beat a path to the door of a man who builds a better mousetrap.

A review of the factors determining change, as set forth in the A VICTORY model, helps us to see in retrospect why there was such feeble nationwide adoption of the worthy weekend hospital idea. If NIMH had used this as a guideline at the outset of the project, the grant probably still would have been funded; however, efforts could have been made to render certain of the factors more conducive to efficient and effective adoption of the results. (Now, for Mental Health Services Research projects supported by the Institute, the checklist will be used as a guide in the processes of proposal consultation, review, liaison, and diffusion.)

The checklist may provide the program person with one way of looking with a fresh view on desired modification of services or operations. Used with flexibility and considered from the viewpoint of one's own situation, the checklist should assist in piloting smoother and surer transitions. As a quick guide, it enables a person to frame questions encompassing most of the key determinants and methods of change which have been found to be important so far.

A CHECKLIST FOR CHANGE THROUGH RESEARCH UTILIZATION

This checklist is intended to serve as a guide rather than as an outline for a systematic plan to bring about change. All factors interact, so that a given manipulation to increase the probability of desired results could influence more than one factor.

ABILITY

_____ Are staff skills and knowledge appropriate to accommodate the desired change?

_____ Are fiscal and physical resources adequate for the change?

VALUES

_____ Is the change consonant with the social, religious, political, ethnic values of the beneficiaries?

_____ Is the change consonant with the philosophies and policies of the program supporters?

_____ Is the change consonant with the personal and professional values of staff?

_____ Is the top man in the organization in support of the desired change?

_____ Are the characteristics of the organization such as to render change likely?

INFORMATION

_____ Is information on the desired change clear?

_____ Does information about the idea bear close relevance to the improvement needed?

_____ Is the idea behind the desired change one that is "tryable," observable, of demonstrated advantage, etc.?

CIRCUMSTANCES

_____ Are conditions at this setting similar to those where the idea was demonstrated to be effective?

_____ Does the present situation seem to be conducive to successful adoption of this particular plan?

TIMING

_____ Is this a propitious time to implement this plan?

_____ Are other events going on or about to occur which could bear on the response to this change?

OBLIGATION

_____ Has the need for this change been ascertained through sound evaluation?

_____ Has the need for this change been compared with other needs in this program?

RESISTANCES

_____ Have all reasons for not adopting this change been considered?

_____ Has consideration been given to what may have to be abandoned if this plan is launched?

_____ Has consideration been given to all who would lose in this change?

YIELD

_____ Has the soundness of evidence about the benefits of this proposal been carefully assessed?

_____ Have possible indirect rewards for this change been examined?

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