

AN EXPLORATORY STUDY OF ATTITUDES AND
PERCEPTIONS TOWARD CHANGE AMONG A. I. D.
TECHNICAL ASSISTANCE PROGRAM PARTICIPANTS

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
William Wiley Frank
1965



This is to certify that the
thesis entitled
AN EXPLORATORY STUDY OF SELECTED ATTITUDES
AND PERCEPTIONS TOWARD CHANGE AMONG
AID TECHNICAL ASSISTANCE PROGRAM PARTICIPANTS

presented by
William Wiley Frank

has been accepted towards fulfillment
of the requirements for
Ph.D. degree in Communication

Date April 26,

ABSTRACT

AN EXPLORATORY STUDY OF ATTITUDES AND PERCEPTIONS TOWARD CHANGE AMONG A. I. D. TECHNICAL ASSISTANCE PROGRAM PARTICIPANTS

By William Wiley Frank

As one of the major purposes of a large majority of cross-cultural education programs is to provide a basis for the introduction of change by the returning program participant, considerable attention must be placed on factors relating to the increased probability of change activity.

On the assumption that there will be a greater probability of a returning participant introducing change if he feels optimistic about his personal ability to introduce change, this exploratory study attempted to identify individual variables which were felt to have a bearing on the participant's perceived ability to introduce change.

The major purpose of the study was to enumerate and describe the differences between participants in terms of reported ability to introduce change upon return to their home countries after completion of a cross-cultural training program.

The investigation was based on the construction of a questionnaire containing 99 Likert type items, 13 demographic items and four open-ended questions. The instrument was administered to eight groups of A.I.D. Technical Assistance Program Participants (N = 381) representing fifty-two different countries attending communication seminars prior to their return home.

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In general, independent variables in five areas were considered:

Attitude toward Change

Perceptions of Supervisory Behavior

Influence of Physical Factors

Training Program Relevancy

Background or Demographic Factors

A seven-item scale designed on the basis of pre-tests, personal interviews and item analysis was used as the operational measure of Change Agent Efficacy or the participant's perceived ability to introduce change.

Results of correlation and analysis of variance indicated that high expectations of success in introducing change occurred in relation with favorable attitudes toward past change activity. Measures concerning supervisory behavior were generally not supported, however perception of the supervisor's attitude toward past change appeared to have utility as an effective predictor for expectations about ability to introduce change.

Those participants who felt that physical factors (money, equipment, etc.) would be an obstacle in their attempt to introduce change felt less confident in their ability to introduce change. On the other hand, influence of physical factors in the past did not appear to be an effective predictor concerning future change ability.

In terms of relevancy of the United States Training Program, participants reporting high relevancy also reported high expectations of change agent ability.

As a result of individual analyses eight variables were combined

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to provide a generalized description of participants in terms of perceived ability to introduce change. On the basis of this analysis, eight typologies were developed ranging from participants classified as generally confident in their ability to introduce change to those classified as generally pessimistic.

A general description of those participants who hold high expectation of their ability to introduce change would be as follows.

(These participants felt that their training programs were relevant. They did not perceive physical factors as obstacles. They also held favorable views concerning past change. Furthermore, they felt their supervisors would agree with their particular viewpoints regarding this change activity. In regard to ideal supervisory behavior, they indicated that consideration toward subordinates is of considerable importance.

Several demographic variables were also of importance. It was found that participants described as the more optimistic among the sample tended to be older, higher in their organization, and had been in the United States a relatively shorter period of time.

In general, however, the background variables added only slightly to predictability. The results indicated that the attitudinal variables were of prime importance concerning differentiation between high and low groups.

CHANGE AM

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By

William Wiley Frank

A THESIS

Submitted to

Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Communication

1965

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ACKNOWLEDGMENTS

This research was supported by the Agency for International Development. My appreciation goes to those officials who made the study possible. I would also like to thank Professor Erwin P. Bettinghaus, Director of the Seminars on Communication, for his assistance, both administratively and conceptually, in conducting this study.

I owe a great deal to Professor Eugene H. Jacobson, for a multitude of reasons; not the least of which is for his generous counsel and constructive advice in directing this dissertation.

A special acknowledgment must be given to Professor Verling C. Troidahl for his assistance in research methodology and for his efforts to eliminate the excessive amount of jargon insisted upon by the author in earlier drafts.

My greatest debt is owed to my wife Nancy, for having far more patience and understanding than I could ever hope to have. Finally, an extra thanks to Janet, Kirsten, Tommy and Nora.

CHAPTER

I

II

III

IV

V

VI

REFERENCE
APPENDICE

TABLE OF CONTENTS

CHAPTER		Page
I	RATIONALE AND HYPOTHESES	1
	Rationale	1
	Hypotheses	13
II	RESEARCH DESIGN	21
	Background of the Study	21
	Data Gathering Procedures	22
	Questionnaire Construction	23
	Single Item Scales	44
III	RESULTS	45
	Description of the Sample	45
	Characteristics of the Sample	45
	Hypotheses of the Study	48
IV	ADDITIONAL ANALYSES	67
	Demographic Data Analysis	68
	Measures Related to Attitude toward Change	72
	Perceived Agreement with Supervisor	78
	Physical Factors in the Future	82
V	GENERAL ANALYSIS AND DESCRIPTION	88
	Method	88
	Procedure Followed	89
	Summary and Discussion	98
	Analysis of Attitudinal Variable Relationship	99
VI	CONCLUSIONS, DISCUSSION AND SUGGESTIONS FOR FURTHER RESEARCH	104
	Conclusions and Discussion	104
	Conclusions and Discussion of General Descriptive Analysis	114
	Suggestions for Further Research	121
REFERENCES		131
APPENDICES		134

TABLE

1

2

3

4

5

6

7

8

9

10

11

12

13

LIST OF TABLES

TABLE		Page
1	Educational Background of Participants	46
2	Work Experience of Participants	47
3	Sojourn Length at Time of Seminar Attendance	47
4	Weeks Remaining in Program	48
5	Comparison of the Mean Change Efficacy Scores for Participants with Different Attitudes toward Work-Related Change	49
6	Comparison of the Mean United States Trip Satisfaction for Participants with Different Attitudes toward Training Program Relevancy	50
7	Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes Toward United States Training	51
8	Comparison between the Mean Change Agent Efficacy Scores for Participants with Considerable and Little Change Activity in the Past	52
9	Comparison of the Mean Change Agent Efficacy Scores for Participants Involved in Considerable Change Activity with Different Attitudes toward Ease or Difficulty of Task	53
10	Comparison of the Mean Change Agent Efficacy Score for Participants Involved in Considerable Change Activity with Different Attitudes toward Task Satisfaction	54
11	Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward the Consequences Resulting from Past Change	55
12	Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future	56
13	Comparison of the Mean Change Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Past	57

TABLE

14

15

16

17

18

19

20

21

22

23

24

25

TABLE

Page

14	Perception of Relation between Influence of Physical Factors in Future and Influence of Physical Factors in Past in regard to Change Activity	57
15	Comparison of the Mean Change Agent Efficacy Scores for Participants under Three Levels of Described Supervisory Initiation of Structure	58
16	Comparison of the Mean Change Agent Efficacy Scores for Participants under Three Levels of Described Supervisory Consideration	59
17	Comparison between the Mean Change Agent Efficacy Scores for Participants with Different Combinations of Authority Level and Supervision within the Organization	61
18	Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Perceptions as to Supervisor's Attitudes toward Past Change	62
19	Comparison between the Mean Change Agent Efficacy Scores for Participants Agreeing with Perceived Supervisor's Favorable or Unfavorable Attitudes toward Past Change	63
20	Comparison between the Mean Change Agent Efficacy Scores for Participants Agreeing with Perceived Supervisor's Favorable Attitude and for Participants Disagreeing with Perceived Supervisor's Attitudes toward Past Change	64
21	Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Degrees of Agreement Between Described Supervisory Behavior and Their Own Supervisory Behavior Philosophy	65
22	Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Degrees of Agreement Between Described Supervisory Behavior and Their Own Supervisory Philosophy	66
23	Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Time in the United States	69
24	Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Age	69
25	Comparison of the Mean Change Efficacy Scores for Participants Differentiated as to Geographic Area	70

TABLE		Page
26	Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Occupational Background	70
27	Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Past Change Activity	74
28	Summary of Mean Change Agent Efficacy Scores for Participants with Three Different Attitudes Toward Past Change Differentiated by Amount of Change	75
29	Summary of Mean Change Agent Efficacy Scores for Participants with Three Different Attitudes toward Past Change Differentiated by Perceived Supervisory Attitude toward Past Change	76
30	Summary of Mean Change Agent Efficacy Scores for Participants with Three Different Attitudes toward Past Change Differentiated by Discrepancy Between Perceived Supervisor Attitude and Participant Attitude toward Past Change	77
31	Subgroups of participants by (1) Perceived Agreement with Supervisor, and (2) Attitude toward Past Change	79
32	Comparison of the Mean Change Agent Efficacy Scores between Participants who Perceive Agreement or Disagreement with Supervisor's Attitudes Toward Past Change	80
33	Summary of Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future Differentiated by Attitude toward Influence of Physical Factors in the Past	83
34	Summary of Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future Differentiated by Participant's Attitude toward Past Change	84
35	Summary of Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future Differentiated by Amount of Time in United States on Current Training Program	85

TABLE**Page**

36	Summary of Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future Differentiated by Relevancy of U.S. Training	86
37	Favorable and Unfavorable Attitude Groups for Eight Predictor Variables	90
38	Favorable and Unfavorable Scores for Eight High Frequency Cells	93
39	Expected Relationships between Attitudinal Variables	100

LIST OF ILLUSTRATIONS

FIGURE		Page
1	Examples of Cell Make-up	91
2	Analysis and Breakdown of High Frequency Cells	91a

CHAPTER I

RATIONALE AND HYPOTHESES

Rationale

The field of cross-cultural education and training, in the past ten years, has become of major interest in a number of disciplines and related research areas. Lundstedt has recently written:

The study of human behavior in cross-cultural travel and exchange is now a defined field....But growth in public awareness and in the number of actual exchange programs has increased the need for more precise information about the human problems associated with international travel, exchange, and communication. (1963, p. 1)

This point is generally supported by the fact that in the United States during 1963 there were over 80,000 foreign citizens either attending universities or involved in some non-degree training activity within the country. (International Institute for Education, 1963) The fact that the Federal Government is by far the largest single sponsor of foreign nationals studying in the United States suggests the concern of the United States with the educational and developmental problems in other countries. The purpose of these technical assistance programs provided by the United States is basically to increase the economic strength of the cooperating countries through this exchange of technical information. (U.S. Department of State, 1963)

As these programs are designed not only for learning on the part of the individual but also for the introduction of change within his home culture, there are a number of questions which must be considered

in regard to the subsequent value of the programs.

There have been a number of studies dealing with various aspects of cross-cultural education ranging from the effects of orientation programs, (Selltiz, Christ, Havel, and Cook, 1963) adjustment problems in cross-cultural situations, (Morris, 1960; Deutsch and Won, 1963) social relations and attitude change, (Selltiz et al, 1963) to difficulties encountered by participants returning to their home countries, (Useem and Useem, 1955; Watson and Lippitt, 1955; Scott, 1958). Many of these have touched on how the individual participant views his home situation in regard to his subsequent re-entry into it. (Gullahorn and Gullahorn, 1963). Few however, have dealt with the participant's perception of his home situation as it relates to the subsequent introduction of change. They have not been directly concerned about the probability of introduction or application of those things learned during the participant's sojourn in the United States nor the possible subsequent results of the training program of the visitor.

Factors Affecting Subsequent Change

Obviously, the results of any training program can be measured by the extent to which the training was adequate in helping the participant understand, interpret, adapt and implement United States techniques and methods in his own country. It would certainly be necessary for any participant to learn the required skills by which the innovation must be brought about. As Kelman has suggested, a training program should provide the participant with "a professionally useful experience, yielding new information, new ideas, new contacts that can enhance his professional work." (1963, p. 63)

Although the formal training situation and the content material

are important, concern about the effects of training is not limited solely to considerations about the presentation of subject matter in the immediate physical situation. This training takes place in some larger social environment. Although interaction takes place between the trainee and the trainer in the immediate learning situation, other factors such as host-culture, the trainee's home culture, experience, profession, and social relationships also condition the learning or training.

We may also expect that there will be a number of factors occurring in the pre-arrival stage which will influence the impact of the training. In other words, certain things will happen to the participant or will have happened to him prior to his coming to the United States which will bear on the training effectiveness. Attitudes toward change, both work-related and in general, will make a difference in the viewpoint or outlook of the participant toward his training program. Studies in selective retention indicate that attitudes toward the material presented to subjects will determine, partially at least, the amount of information retained. (Klapper, 1960) Directly related to training program effectiveness will be those situations in which the participant was involved with change activities, particularly if they were satisfying experiences. Trumbo (1958) found, in studying the effects of the introduction of data-processing equipment within a company, that favorable reactions toward past change activities were related to generally favorable attitudes toward change. In relation to this, other factors to consider would be how often the participant has introduced change, his general satisfaction with change activities and the problems he has encountered in bringing about the changes. The consequences resulting from past change, as well as the personal con-

sequences accruing to other people within his organization, are factors which also have a bearing on the training experience.

The subsequent impact of the training will also be influenced by factors which will be in operation in the participant's home country after the completion of this training sojourn. In effect, the impact of the United States training program is influenced by the situation or environment from which the participant comes and to which he will return. (Jacobson, 1963)

Watson and Lippitt (1955) have suggested that attitude change, although beginning with a situation in which influence and change are possible, is crucially tested in a situation which is far removed from the area of influence. The participant may develop a favorable attitude toward some process which is utilized in the United States. However, upon return home he is faced with the question of whether or not he should maintain the change in the home culture. "If the original change situation has included full awareness of the home context, the problem of maintenance is minimized." (1955, p. 147) The training program effectiveness then may be a function of the perceived relevance of the training material in terms of the participant's home environment.

Although the work has been done within an industrial climate in the United States, studies by Fleishman and his associates (Fleishman, 1953; Harris and Fleishman, 1955; and Fleishman, Harris and Burt, 1955) provide a basis for the consideration of the effects, values, and impact of the home environment on people engaged in a training program. Fleishman et al., (1955) found that foremen who had attended a human relations training program at a centralized school location had changed in their attitudes toward leadership practices. Subsequent measurement indicated

that after return to their jobs for a few months, the foremen had moved back to their pre-training attitudes concerning leadership practices. The authors conclude that the behavior taught in a specific school may be in conflict with the behavior expected in the actual work experience, and if this conflict does occur, the stronger influence of the work climate will predominate. They point out:

Leadership behavior is not a thing apart but is embedded in a social setting. Besides, the foreman is actually being "trained" everyday by the rewards and examples provided by his own boss. We are apt to lose sight of the fact that this everyday kind of learning is more potent than a "one shot" training course. (Sutermeister, 1963, p. 423)

A study of Lippitt (1949) dealt with basically the same problem, i.e., conflict between formal on-the-job training and off-the-job pressures. Although the basic issue in this case was whether or not people trained as part of a team could withstand these pressures more than those trained as individuals, Lippitt's recognition of the conflict or differences between the training situation and the work situation again suggests the same kind of concern cited by Fleishman, Harris, and Burt.

The major point to be made concerning these studies is not that there are serious deficiencies in many approaches to training programs, but rather that the climate or conditions to which the trainees must return is a major factor in effective training for functional results.

The difficult question, however, is: What is the climate to which the participant returns? There are a number of observations which might be made concerning the situation to which he returns; the nature of the governmental structure, the type of organization with which he is associated, or various economic variables. However, these are observations normally made and classified by others and not by the participant him-

self. We are concerned with how the individual participant faces his returning environment, and his attempt at introducing innovation into this situation. It is his behavior within this area which is of crucial concern.

In considering factors influencing training effectiveness and the probability of change activity, this paper takes the position that behavior is governed not by any set of objective facts itself, but by the individual's perception of those facts. This behavior is determined to a great extent by the way the individual perceives himself in relation to the situation or situations in which he operates. In effect, he develops a frame of reference within which to operate. His behavior depends, to a considerable degree, upon his definition of the situation.

In relation to this, the consistent defining of the situation is dependent upon some organized perspective or an organized view of the individual's world. As an outgrowth of this, he is able to develop a moderately well-ordered, and reliable stability within a world in constant change. (Shibutani, 1960)

Toch and MacLean make a similar point in suggesting the notion of expectation development:

Each experience or perception helps to provide us with unconscious expectations or assumptions about reality. We expect the world to behave in accord with these assumptions. Like the data supplied in a racing form about the performance of horses under particular conditions, the accumulation of our past experiences provides the basis for bets as to success or failure of our intended enterprises. These bets are repeated or discontinued depending on whether they pay off or fail to pay off. (1962, p. 58)

Stogdill (1959), although primarily concerned with group theory, has suggested that the concept of expectation is fundamentally an individual activity, which is essential in considering group and individual purpose.

Following Kelly (1955) in his basic postulate that "a person's processes are psychologically channelized by the ways in which he anticipates events," Stogdill proposes:

Expectation, defined as readiness for reinforcement, is a function of drive, the estimated probability of occurrence of a possible outcome and the estimated desirability of the outcome. (1959, p. 63)

The primary concern in this case is with the estimates of desirability and probability of outcome. Expectation, in this sense, is partially determined by (1) an individual's prediction of the likelihood of a given event occurring, (2) an individual's judgment as to how much he would like the event to occur. The participant in a cross-cultural education program is faced with the fairly difficult decision of determining what aspects of his United States training may be introduced into his organization or community. The change or changes that he might possibly make must be placed on some kind of desirability continuum. At the same time he must consider the various factors which will influence the probability of actually initiating and bringing about a proposed change or series of changes. Not only must the obvious physical and financial factors be taken into account, but the psychological and social factors as well. Even though the participant's desire to innovate may be high, he is still faced with whether or not it is socially possible.

As an example of this, Joshi (1962), in studying values of Indian peasants, found that adoption of a new or a changed mode of technology depends primarily on the receptivity of the culture and its people rather than on the material and technical resources.

In the Watson and Lippitt study (1955), one result indicated that the return to Germany by the program participants resulted in a reduction in the amount of explicit interest in democracy. The authors sug-

gest one possible interpretation. Although the departing Germans showed an interest in democracy and were willing to give it a trial, (desirability) after returning to Germany and realizing the difficulties involved, (probability) they gave up the idea.

How the participant sees the situation and makes these estimates results, to some extent, in a "readiness for reinforcement," a preparation for certain experiences. Merton, in discussing the Thomas theorem, has suggested that:

...once they (men) have assigned some meaning to the situation, their consequent behavior and some of the consequences of that behavior are determined by the ascribed meaning.
(1957, pp. 421-422)

Part of this meaning is developed by a consideration of the expectation of the people of the home country for the visitor's ability to return with usable and functional ideas and techniques. The participant, however, is exposed to a vast array of techniques, practices, and procedures which could be utilized within his occupational or social system in his home country. But there are a number of problems which arise in regard to these various procedures. A number of them may require facilities, equipment, and financial resources which are not available in the home country. Another group may, in the long run, be usable but in terms of present usage would require a great deal of adaptation. Some may be quite adequate for transfer with little or no adaptation. A very careful and continuous reality testing system must be utilized in the adaptation process on the part of the participant. An evaluation of what the home situation will permit is required if a training program is to be effective.

Zimmerman and Bauer (1956) supported the hypothesis that material which was incongruent with the imagined attitudes of a prospective audi-

ence would be less well remembered than material which was congruent with those imagined attitudes. In the case of the participant, the anticipated audience may very well be the people in the home environment with whom he must work. The imagined or anticipated attitudes are undoubtedly influenced by the participant's past experience with these people.

This influence may be due to the fact that roles within formal organizations tend to be highly detailed, relatively stable, and usually defined in fairly explicit terms. Related to this is the fact that the role is not only defined in considerable detail but also is generally known in considerable detail by a number of people who have contact with the individual filling the role. A change in behavior affecting the individual's role in the organization will not only be considered by the individual and his superior but by many of his associates as well. The participant also knows their roles. The environment of others surrounding the individual becomes fairly stable and predictable. The extent to which the individual sees his activities as a change agent as being in conflict with this environment will function as a conditioning variable in his perception of himself as a change agent.

The kind of supervisory climate in which the participant has been operating is another factor which has a bearing on the effectiveness of his training. In particular, the kinds of management practices his supervisor has engaged in, and the extent to which he was satisfied with them, should influence the impact of the training. The participant's perception of the supervisory structure of his organization, primarily supervisory relations and work activity independence, is also relevant. Important in this sense as well, are the attitudes that he has developed regarding his own supervisory behavior and philosophy.

As Hollander (1961) found, there was an inverse relationship between accorded status and disapproval of deviant behavior. Therefore, the general positional level and the participant's place in the organizational hierarchy prior to the U.S. trip, the number of people directly affected by the change and the number of people supervised will also be related to the eventual impact of his training experience in his role of change agent.

The Concept of Change Agent

Lippitt, Watson, and Westley (1958) approach the concept of change agent in terms of what they designate as planned change. In their terms, planned change develops from a decision to make a deliberate effort to improve a system and to obtain the help of an outside agent in making the improvement. The outside agent, in this case, would be designated the change agent. In this scheme of things a distinction is made between planned change and such change which comes about through a system mobilizing its resources to improve its own operation; or through normal processes of maturation or by movement to a different environment or by changes in the external environment.

A number of qualifications to this approach have been suggested. Bennis, Benne, and Chin (1961) take exception to Lippitt et al, and suggest that the view expressed by them is much too narrow because it restricts the role of change agent to someone outside the system. In their view, change agent refers to a helper, person, or group, who is attempting to effect change within some client system, i. e., an individual person, group organization, or community or culture.

Loomis (1961) defines change as a role function suggesting that the term "change agent" might conveniently serve as a way of designating an

actor or representative of some social system who attempt to consciously bring about some directed or planned social change.

Rogers (1961) regards a change agent as a professional person who attempts to influence adoption decisions in a direction that he feels is desirable. Rogers suggests that a particular type of change agent is the technical assistance worker in his attempt to transfer new ideas from one culture to another.

The definition of change agent, as applied to a technical assistance program participant, must account for the case of an individual returning to his same position upon completion of his training, and whose change activities will be primarily centered within his own work group. On the other hand, it must take account of the professional person, who, although from the same general social system as his client system, will be expected to initiate change in some sub-system of the generalized system.

The definition must also make no restriction on the magnitude and implications of the change activity of any one individual participant. It must also include the person whose change activities might have significant ramifications in the social or economic course and activity of the country.

A number of the points made thus far by others may be combined to provide a definition for use in this paper. A change agent is a person who attempts to influence adoption decisions, within a client system, in a direction that he feels is desirable. He may be either a representative of a particular social system, or he may be a professional person outside the system, who is either requested or directed to initiate or direct change within the system.

Focus of Study

This study is exploratory in nature. It is not intended to support any one specific theoretical position. However, it does have, as a general purpose, the testing of a number of hypotheses which are felt to be of interest and value in understanding those factors which would appear to influence the introduction of change following cross-cultural education programs.

If these programs are to be successful, then the introduction of new techniques, methods, processes, and systems must take place as a result of the programs. In effect, the introduction of change into other countries becomes a measure of program success. To evaluate these programs, it would be important to attempt to determine whether or not innovation had taken place within the cooperating countries as a result of this transmission of technical information and knowledge. However, there are other considerations which may be helpful in predicting whether innovation would follow the training program.

One such approach would be to consider the likelihood of whether the probability of successful introduction of change may be partially dependent on the participant's expectations about the situation to which he will return. In effect, how does he see himself as a change agent?

If the participant expects success or perceives himself as being able to introduce a particular change; that is, in having the ability to bring this about, then the probability of it occurring, other things being equal, should be greater than if he feels he will be unsuccessful. Despite the influence of experienced success on the future, the participant's perception of success or failure will have an effect on the probability of innovation occurring. Gebhard (1948) suggests that both

expected and experienced success increases the attractiveness of a task, and that the attractiveness of an activity is decreased by expected and experienced failure. Research dealing with the differential effects of experienced and expected success and failure indicates that the attractiveness of an activity is reduced more when failure is expected than when the actual failure has been experienced. (Cartwright, 1942) In effect, the participant's evaluation or estimate of his expected innovational success within his home situation is an important factor to be considered in the overall assessment of the technical training program.

It is also important to consider the participant's general satisfaction while engaged in the training activity. The value of having a participant take part in a training program in a climate of general satisfaction, as far as he is concerned, also influences the eventual application of the program material. An activity does not occur in isolation but rather in some kind of social context. In this case, the performance of the trainee takes place within a total societal setting within the United States, and is influenced, to some degree, by his feelings concerning his overall satisfaction with his trip. Although the general relevancy and value of the program is of major importance in determining utilization of the training, the participant's general satisfaction with his U.S. sojourn should temper or influence the likelihood of the utilization of the training to which he has been exposed.

Hypotheses

1. Participants with favorable attitudes toward work-related change should feel better able to introduce change into their organizations than those who do not have a favorable attitude.

In considering whether or not an individual sees himself as a change agent, a major factor must be his generalized attitude toward change within the work situation itself. If the participant sees change as a negative value, then it might be expected that he would not place a very high value on his participation in the role of change agent.

Trumbo (1958) found that favorable attitudes toward change are related to the individual's capacity for adjustment to change. In the case of the participant, we might expect a similar result; namely that attitude change bears a direct relationship to adjustment to, and introduction of, change.

2. Participants who have favorable attitudes toward change in general should feel better able to introduce change into their organizations than those who do not have favorable attitudes toward change.

There is a broader dimension to attitude toward change than merely that associated with the work situation. Although the participant's attitude toward the work-related change is the more important, a measure in regard to his overall attitude toward change should be taken.

3. Participants who perceive their United States training as being relevant and purposeful for their needs should be more satisfied with their United States trip than those who perceive the training as irrelevant and with little purpose.

In essence, the proposition presented in this case is that if the purpose of the trip is fulfilled, then the participant's satisfaction and favorable feeling about the entire trip should be increased. As the participant has been sent by his country to be trained in some particular process or procedure, it is generally expected that his value to his organization will increase as a result of the training. The

training program, is essential in helping to fulfill these expectations.

Kelman suggests that:

Perhaps the key factor in a person's satisfaction with his experience abroad is how much value it has from the point of view of his specific professional concerns.... In the final analysis his satisfaction with the experience will depend on its relevance to his specific professional concerns. (1963, p. 104)

Even though there may be other factors involved in overall trip satisfaction, if the participant sees the training as being valuable to him in terms of applicability and practicality, then his trip satisfaction is increased.

4. Participants who perceive their United States training as being relevant and purposeful should feel better able to introduce change into their organizations than participants who do not perceive their United States training as relevant.

This hypothesis is based on the fact that if the training is perceived as providing a basis for bringing about the change, then the participant should feel that he is better prepared to take the action involved in making the change.

5. Participants who have been involved in a great deal of change activity in their past roles should feel better able to introduce change into their organizations than those who have not been involved with change activity in the past.

This hypothesis should be modified, however, in regard to perceived difficulty of bringing about change and the degree of satisfaction involved with change activity. Although the participant may have acted as a change agent in the past, his perception of future change activity should be affected by whether or not he found his activity hard or dif-

difficult. By the same token, whether the participant enjoyed, or was satisfied in, engaging in the activity will also have a bearing on his estimate of his future change agent ability.

6. Participants who have been involved in a great deal of change activity in their past roles and have found it to be an easy task should feel better able to introduce change into their organizations than those who found it to be a difficult task.

7. Participants who have been involved in a great deal of change activity in their past roles and have found it to be satisfying should feel better able to introduce change into their organizations than those who felt it to be unsatisfying.

8. Participants who perceive the consequences and effects of past changes as being favorable should feel better able to introduce change into their organizations than those who see the implications and effects as unfavorable.

If the participant's experience with the subsequent results of past change has been favorable, then he probably would place a higher value on future change activity. His observations of and experience with the various phases and steps in the change process may increase his degree of confidence and understanding of how to bring about further change.

Another important feature influencing his estimate of his change agent ability would be his perception of the results or benefits accruing to the people who have introduced or initiated changes in the past. If these people have not benefited as a result of the change, then he may feel that change activity is not well thought of within his organization. If he has seen other change agents punished or not personally benefiting

from change, he may feel that his change activity might result in similar consequences to him, and thereby not feel favorably inclined toward bringing about change.

9. Participants who feel that physical factors will be obstacles in introducing change should feel less able to introduce change into their organizations than those who do not feel that physical factors will be obstacles.

Physical factors such as materials, equipment, money, men, time, and travel requirements must be taken into account in considering change activity. However, whether or not these are perceived as obstacles by the participant will influence his perception concerning his ability or efficacy as a change agent. The assumption made in this case is that there is a correlation between the amount of confidence a person has in his ability to introduce change and how he perceives the influence of physical factors on his intended change activities.

10. Participants who feel that physical factors did not make it difficult to introduce change in the past should feel better able to introduce change in their organizations than those who feel that physical factors made change difficult.

If future expectations are a function of past experience, then the participant who considers physical factors as having hindered change activity in the past should expect problems in the future. This would tend to make him feel less confident in his own ability to bring about change. He sees many more problems to overcome based on those problems which he has already encountered in the past.

11. Physical factors will be a greater problem for the participant's future change activity than they were for his change activity in the past.

The participant has completed a training program in the United States which has dealt with more advanced and complex procedures and techniques than those which he has used before. The nature of the problems for which the trainee is being trained are more involved and of a larger scale than those with which he has already dealt. Although physical factors, such as money, material, etc., were important considerations in the past, the increased magnitude of the change activity for which the participant is being trained increases the magnitude and importance of the physical factors necessary for the change to take place. The participant sees these factors as larger or as more of an obstacle in future change activity than they were in his past experience.

12. Participants who feel that their supervisors structure or determine the requirements of the jobs of subordinates would feel less able to introduce change into their organizations than those who feel that their supervisors do not structure or determine the requirements of their subordinates.

13. Participants who feel that their supervisors are considerate to subordinates should feel better able to introduce change into their organizations than those who feel that their supervisors are not considerate.

14. Participants who see their change activity as involving only themselves or a few other people should feel better able to introduce change into their organizations than those who see their change activity as involving more people. However:

15. those who hold higher positions in the organizational hierarchy should feel better able to introduce change than those who hold lower positions.

16. those who supervise relatively fewer people should feel less able to introduce change than those who supervise more people.

17. those who expect to introduce change at or below their positional level in the organizational hierarchy should feel better able to introduce change than those who expect to introduce it above their positional level.

If the change that a person has in mind may take place if only he or a few other people must change, then one problem in introducing an innovation is reduced considerably. On the other hand, if the change proposed involves acceptance by a large number of people, then the complexity of the problem is increased and, in effect, the task becomes more difficult. The participant then, realizing the difficulty of attempting to change a number of people in regard to the innovation he has in mind, will perceive himself as being less able to operate as an effective change agent.

The participant's position level in the organization will have a bearing on the ease with which the change is made and the participant's perception concerning the ease. Secondly, the number of people whom the participant supervises will make a difference in his perception of ease or difficulty of the change to be made. Both of these qualifications may be made in regard to the extent of authority he may utilize in bringing about the change. Finally, the level at which the participant expects to introduce the change will also affect the change agent efficacy of the participant. Stated in another manner, what differences will there be in the perceived difficulty of introducing change if the people involved are subordinates or peers rather than supervisors?

18. Participants who feel their supervisors perceive change made within their organizations in the past in a favorable manner should feel better

able to introduce change within their organizations than those who feel their supervisors perceive change in an unfavorable manner.

19. Participants who feel their supervisors agree with their favorable attitudes toward past change made within their organization should feel better able to introduce change within their organizations than those who feel that they agree with their supervisor's unfavorable attitude toward past change.

20. Participants who feel that their supervisors agree with their favorable attitude toward past change made within the organization should feel better able to introduce change within their organizations than those who feel that they disagree with their supervisor's attitudes.

21. In regard to initiation of structure, participants whose supervisory philosophy agrees with that of their supervisor's should feel better able to introduce change than those who disagree.

22. In regard to consideration, those participants whose supervisory philosophy agrees with that of their supervisor's should feel better able to introduce change than those who disagree.

CHAPTER II

RESEARCH DESIGN

Background of the Study

The Agency for International Development (AID) has stated that one of its purposes is to "...attempt to provide training and the exchange of technical information...between the United States and those countries which have shown a serious desire to use this assistance." (U. S. Department of State, Participant Handbook, 1963, p. 1.) Specifically, providing participants in technical assistance programs with effective technical training, adequate information, techniques and methodology, and encouraging them to utilize this training in their home countries are among the major methods of pursuing this purpose.

To achieve this purpose, AID, based in part on reports of former participants, saw the need to develop a seminar which would assist returning participants with the task of successfully adjusting to the home situation and successfully introducing ideas generated through their study in the United States. The AID sponsored Seminars on Communication as a Tool in Effecting Change are designed to provide primary emphasis on change as a necessary ingredient for economic and social development. Secondly, they are designed to provide the participant with a sharpened understanding of the role which communication must play if he is to successfully transmit to others his newly acquired knowledge and skills when he returns home. In general, the aims of the Seminars are: to stimulate and motivate the participant

through creating an awareness of (1) the need for improvement in communication practices, (2) the nature of the processes of change, and (3) the role of communication as a tool of planned change.

The Seminars are one week in length, during which time they deal with (1) a range of communication methods and practices appropriate to developing countries, (i.e. mass media, audio-visual techniques, interpersonal techniques), (2) the nature of social change, technological change and methods for handling resistance to change (i.e., economic, physical and social obstacles to planned change), (3) the use of communication practices as a tool in dealing with management, government, and the public of developing countries, for the introduction of orderly change and the related problems which may be expected concerning these changes.

The Seminars were started in 1958 and are under the direction and administration of the Department of Communication of Michigan State University.

Data Gathering Procedures

This study includes collection of data from all participants who attended eight Seminars held between April 19 and June 27, 1964, at Cacapon Lodge, Cacapon State Park, Berkeley Springs, West Virginia. Of the ten Seminars held during this period, two were not included in the sample. One Seminar was made up of participants who spoke only Spanish. The other Seminar which was not used was one in which administrative difficulties and scheduling necessitated a change in procedure. It was therefore not convenient under the circumstances to administer any measuring instrument at that time. The eight Seminars were made up of groups of participants ranging in size from 26 to 67.

All AID participants, as part of their training program, are supposed to attend a Seminar on Communication. Training or Project Managers schedule participants for the Seminar unless there is a conflict between available dates for the Seminars and other training activities. There is no attempt on the part of the Project Managers to send people from the same country to any one particular Seminar. From time to time, however, there are groups from a particular country who are sharing the same training program and, thus, are scheduled for the same seminar.

The source of data utilized in the present study was a self-administered questionnaire. (See Appendix A) The questionnaire was administered during a special session held Sunday afternoon, following registration of the participants, but prior to the first official session of the Seminar held on Sunday evening. All participants completed the questionnaire during the session in the main meeting room of the Lodge. Other than the instructions provided by the questionnaire itself, a brief introduction and explanation was made by the experimenter, which dealt with these four points:

1. Instructions for marking answer preference for an item.
2. Brief explanation of research arrangements between Michigan State University and the Agency for International Development.
3. Assurance of anonymity of participants.
4. Brief comments explaining that the questionnaire dealt with attitudes and opinions.

A cover letter signed by David K. Berlo, Chairman of the Department of Communication reiterated points 2 and 3 above. (See Appendix A)

Questionnaire Construction

The questionnaire used in this study was a revision of other materials pre-tested and evaluated prior to its administration with

the eight Seminar groups. Two pre-test measures were taken on two different Seminar groups. (N = 28, N = 60.) Both measures contained most of the items subsequently used in the final questionnaire. In addition to specifically constructed items, a number of open-ended questions were used in order to ascertain how the participant explained his feelings concerning change and his home situation, in his own terms.

Individual interviews were also conducted with eleven participants in order to probe deeper in regard to specific answers provided by them on the pre-test questionnaires. These interviews also provided suggestions for simplification of grammatical structure and vocabulary. The above procedures were useful in providing new material for items, identifying inadequate or poorly constructed instructions and for identifying ambiguous terms.

The questionnaire¹ administered contained (1) 99 Likert-type items; (2) 13 demographic items, and four open-ended questions. Items were systematically reversed within each section to reduce response set effects.

Following the collection of the data, item inter-correlations were obtained through item analysis, and a number of items were deleted prior to analysis. The following explanation of the variables used in this study will report the items retained and any items dropped. In all cases, the rationale for dropping those items was based on the results of the item analysis performed after the collection of data but prior to analysis. Items dropped were those with low or negative correlations with the others in the scale.²

¹ The complete questionnaire is reproduced in Appendix A. All references to items comprising scales, as well as those which were not retained will be made by citing the code number on the right side of the items.

² See Appendix B for the rationale of this procedure.

Change Agent Efficacy

As stated in Chapter I, a change agent is a person who attempts to influence adoption decisions, within a client system, in a direction that he feels is desirable. It was suggested that one possible way to determine the possibility that returning AID participants would introduce a change into his organization would be to determine the degree to which he feels confident in his own personal ability to introduce desired change. In effect, other things being equal, how the participant perceives himself as a change agent should be a determining factor in the eventual physical results which may occur as a consequence of his efforts.

Following this reasoning, it would then be possible to predict, to a limited degree, that those participants who feel they have the personal ability to introduce change upon returning to their organization would have a greater chance of success in actually introducing change, than those who feel they will not be able to introduce change.

As there was no established scale which could be used in this instance, a major requirement was to develop a scale which could be utilized as an indicator of Change Agent Efficacy, or the perceived ability of a participant to function as an agent of change. If a participant expects to be successful, or perceives himself as being able to introduce specific and planned change into his organization, we might say that he has high perceived ability or efficacy in his role of change agent. However, there are undoubtedly a number of things which might influence the participant's judgment about his change agent efficacy other than his own ability or lack of it. Therefore, in constructing items for this particular scale, a number of

considerations must be made in order to focus attention on the area of change activity which generally might be labeled as "being within the participant's own power." It is necessary to take into account a number of factors which might affect the participant's perception of his ability to introduce change which were beyond his personal control. Factors such as insufficient amounts of money, lack of an adequate organizational position for bringing about the change, or political pressures brought to bear against the participant could not be included in this general measurement scale.

Also in developing this scale, emphasis had to be placed on future activity rather than on the past, even though the past would influence the future considerations.

Development and construction of the finalized scale was based primarily on the two pre-tests, personal interviews, and the item analysis discussed above. In all, fifteen items were constructed and tested in connection with the development of the Change Agent Efficacy scale. Of these fifteen, seven items were used in the final analysis.³

Methodology

On the pre-tests, total scores were determined for the items in the Change Agent Efficacy scale. Two groups were established on the basis of a median split. Then each item was examined in terms of the mean item score for the above median and below median groups to determine whether or not the item discriminated between the two groups. Where the results indicated that it did not, the item was dropped.

On the basis of the first pre-test, several changes were incorporated prior to the second pre-test. Generally, a number of modi-

³ See Appendix C for a complete description of the items used in the Pre-tests.

fications were made in the language structure. The style of the statements was constructed in terms of simple declarative statements wherever possible. Secondly, the statements were changed to indicate a more specific concern with changes within a particular organization rather than merely change in general. Thirdly, a future orientation was introduced by the use of such phrases as "in the future" or "upon my return home."

In the case of both pre-tests, personal interviews indicated that in some cases, ambiguity resulted due to the use of certain words in the statements. Changes were made in relation to this in order to reduce as much of the ambiguity as possible.

Several items were dropped because they could be interpreted as indicating problems of introducing change as a result of factors other than the participant's confidence in his ability to introduce change. In all, there were eight items used on the final questionnaire administered to the participants. These items discriminated between the high and low groups on the basis of the pre-tests and were felt to measure the participant's perceived personal ability to introduce change in the future.

After administration of the final form of the questionnaire, the responses to the eight items were analyzed through inter-correlational item analysis. One question:

I expect to encounter a good many problems in bringing
about this change upon my return home.

did not correlate positively with the other seven items. Upon review of these items, it appeared that the seven items remaining provided a much tighter scale than when this item was included. With the exclusion of this item, the remaining items tended to fit more closely together, with a much higher degree of correlation.

Part of the difficulty concerning this item may be understood in the reactions of the participants concerning it. On an informal basis considerable difficulty in understanding this item was expressed by almost all the groups involved in the research. Primarily, the difficulty centered around the use of the word "encounter" and the participant's understanding of it. These instances occurred often enough to warrant concern over the use of the item.

On the basis of the points mentioned above, this item was deleted from the scale for analysis purposes. Then the scale was based on the seven items listed below.

Item 24. I have more ability to introduce change than to carry out pre-planned activities.

The following six items were contained within one section preceded by these specific instructions:

Briefly describe below what you consider to be the most important change which you wish to introduce in your organization upon your return home.

In relation to the change you described on the page before, please answer the following questions.

Item 72. My background and training in my particular field should be very helpful in the future in attempting to bring about this change within my organization.

Item 74. Upon my return home, when I discuss this change with a friend or fellow worker, whose views differ from mine, I feel that I will be able to get him to accept my views.

Item 75. Difficulties in introducing this change upon my return home will probably occur more often because of my lack of ability and skill than for other reasons.

Item 76. I feel that in the future I will be generally regarded by my fellow workers as a good source of advice on the introduction and effects of this change.

Item 77. I feel that the energy and effort required by me to bring about this change will be so great that it will be a major obstacle.

Item 78. I expect that most of the ideas I developed during my U.S. Trip, concerning this change, will be accepted by the people in my organization upon my return home.

Each subject's score was arrived at by summing scores across the seven items.

U.S. Trip Satisfaction

A second dependent variable was considered in this study; the participant's reported satisfaction with his United States trip. This variable was, by design, of secondary concern in the research. However, it was felt that an attempt should be made to determine, to some degree, the relationship between the perceived value of the training program and the general satisfaction with experiences of a more social nature in the United States.

There are aspects of the participant's experience in the United States which do not bear a direct relationship to the subject matter and design of the training program, but rather exist somewhat apart from it. However, they might very well influence the overall effect of the sojourn experience.

The scale was designed in such a way that the relevancy of the U.S. training program was not directly included in the measure. It was designed to measure the social nature of the participant's U.S. sojourn. Items used for this measure were constructed and tested on the basis of the two pre-tests. In total, there were eight items which were designed to measure this factor. Of these eight, four did not adequately discriminate between above and below median groups and, therefore, were not used in the final form of the questionnaire.

The four remaining items which constituted the scale are as follows:

Item 2. I made many close personal friends in the United States.

Item 9. I was very satisfied about the amount of time I had available to do some of the things I wanted to do in the United States.

Item 17. I did not enjoy the food in the United States.

Item 20. I was very lonely during my United States trip.

Each subject's score was arrived at by summing across the four items.

Attitudes and Perceptions of Change Activity

One of the major assumptions stated in Chapter I was that the participant's perceptions and attitudes concerning change activity would influence his outlook concerning his ability to introduce change upon return home. However, to consider this general attitudinal area, it was necessary to examine more specific aspects of it in detail. With this in mind, several different measures of attitudes toward change needed to be constructed. Scales were needed for (1) a generalized measure of the participant's attitude toward change, and (2) his attitude toward specific past change activity.

By this approach, several hypotheses could be measured directly and wherever possible, where results might warrant it possible combinations of these scales then could be utilized in an exploratory analysis of influence of attitudes toward change on the participant's perceived ability to introduce change.

Attitude toward Change

In order to measure this variable, two separate scales were developed. A nine-item scale developed and reported by Trumbo (1958) was used as the basis for measurement of how the participants per-

ceived changes occurring in the work situation. Based on pre-test data, three of the original nine items were deleted as they failed to adequately discriminate. The grammatical construction of the remaining items also was altered based on pre-test interviews with participants. One item on Attitude toward Work-Related Change was as follows:

I would rather stay with a job I know I can handle than to change to one where most things would be new to me.

Each subject's score was obtained by summing across the six items.⁴

As not to confine the investigation of attitude toward change to only change within the work context, and to provide a measure toward change in general, three items of a four item scale developed by Kossoff (1961) were used. The results of the item analysis indicated, however, that the three items did not positively correlate. Therefore, the measure was dropped.

Past Change Activity

A number of hypotheses in Chapter I were based on past change activity within the work situation. For purposes of analysis in connection with them, three specific areas of the participant's change activity were considered: extent of change activity, satisfaction with the activity, and difficulty with the activity.

To assist the participant in his consideration and to allow him to focus on a particular change, the participant was asked to respond to these instructions:

Briefly describe what you feel was the most important change which you introduced within your organization during the year before you came to the United States.

⁴

The Attitude toward Work-Related Change index contained the following six items: Numbers - 8, 13, 19, 22, 25 and 29

No items were deleted as a result of the item analysis.

A series of questions followed this which was prefaced by the instructions:

Please answer the questions in this section with this change in mind.

To obtain an index of the extent of the participant's past change activity, the following item was used:

I did very little of this kind of thing in my job.

Each participant then was asked to respond to the following item in order to provide an index for satisfaction with past change activity.

It was very satisfying for me to be able to do this kind of thing.

A third area considered to be important in studying past change activity was one dealing with the ease or difficulty in bringing about change within the organization. The following item was used as a measure to index difficulty of past change activity:

It has been hard for me to make changes within my organization in the past.

These items were not combined into a single measure for analysis purposes in this context. However, they were so designed that they might possibly be utilized in developing a scale for Participant Attitude toward Past Change if the results of the individual measures so indicated.

Consequences of Change by Others

Another measure of attitudes concerning past change activity was developed in order to take into account the participant's perception concerning change as it affects others. Two items were used in this regard; one which was directed toward the participant's perception of the general results and subsequent effects of changes introduced by others within the organization, and one which was designed to determine his perception of the personal consequences resulting from the intro-

duction of change by others. The following two items were used:

The results and effects of changes made within my organization by others in the past have been generally valuable.
(general results)

People who have introduced changes within my organization in the past have received recognition for their efforts.
(personal consequences)

Each subject's score was determined by summing across the two items.

Expectations of Others about Change Activities

To provide a more complete picture regarding past change involving the participant, a scale was developed which attempted to measure the expectations others held toward the participant in regard to his change activities. Three items were designed to index whether or not the participant felt others expected him to introduce change in his job. The three areas and the items are as follows:

Expectations of the organization in general: I was expected to introduce change as part of my job.

Expectations in regard to job requirements: My job required me to make many changes.

Expectations of the supervisor: My supervisor expected me to introduce change or changes within the organization.

Each subject's score was arrived at by summing across the three items.

Supervisor's Attitude toward Past Change

Another measure concerning past change was developed. This measure attempted to index how the participant's supervisor might feel about past change activities within the organization. To do this, the participant's report of his perception of his supervisor's attitude toward past change was used. To develop this index, four of the past change items cited above were used; difficulty of past change, satisfaction with past change, and the two items dealing with change con-

sequences resulting from changes made by others. Several modifications in the structuring of the items and the responses were made. The section in which the items appeared was prefaced by this statement:

In this section would you please answer the following four questions in the way that you think your immediate supervisor would answer them.

All four items were of the same general construction, i.e.,

It has been hard for supervisors to make changes in this organization in the past.

The responses provided for these items followed this form:

- ☐ My supervisor would strongly agree.
- ☐ My supervisor would agree a little.
- ☐ My supervisor would neither agree nor disagree.
- ☐ My supervisor would disagree a little
- ☐ My supervisor would strongly disagree

Each subject's score was arrived at by summing across the four items.⁵

By utilizing these four items in the context of both the participant and the supervisor, it was possible to determine a discrepancy measure between the sets of items. Each subject's score was arrived at by subtracting the sum of the Supervisor's Attitude toward Past Change index from the sum of the Participant's Attitude toward Past Change index. Thus, it is possible to view a participant's perception of his ability to introduce change based on positive and negative attitudes toward change of both superior and subordinate as well as taking into account conflict or agreement.

Attitudes toward Supervision

Despite attitudes toward change and the desirability of introducing it, there still remains some concern about the participant's expectations of the probability of introducing change. A major

⁵ The Supervisory Attitude toward Past Change index contained the following items:

Numbers 63, 64, 65, and 66.

No items were deleted as a result of the item analysis.

element of consideration in regard to how the participant feels about his ability to introduce change then must be the general area of supervision. The participant's perception of the supervisory climate in which he will work is an important concern in attempting to understand his perceived ability to introduce change.

In order to attempt to examine this area, three separate measures were included in the analysis of perceived supervisory practices: Supervisory Consideration, Supervisory Initiation of Structure, and Supervisory Interaction Style.

Supervisor Consideration

To measure the participant's perception of his supervisor's behavior, an abbreviated form of the Fleishman Supervisory Description Scale was used. Fleishman (1953) developed a 48 item scale which identified two basic factors regarding the description of supervisory behavior, one of which is "consideration."

Consideration is defined as:

Indicative of friendship, mutual respect, a certain warmth between the supervisor and his men, and a concern for their feelings." (Harris and Fleishman, 1955, p. 21)

The measuring instrument was constructed on the basis of a factor analytic study by Fleishman (1953). On this basis, eight items were chosen for inclusion in the questionnaire. However, pre-test data indicated that two of the items did not adequately discriminate; consequently, they were not included in the final questionnaire.

An introduction to the section containing the items on supervisory consideration was as follows:

This next section contains a number of questions about your supervisor or superior or "boss." Please answer them in relation to the man to whom you were directly responsible--that is, the person who would be considered your immediate superior.

Representative of the items following this statement and constructed to measure Supervisory Consideration is the following:

He was friendly and could be easily approached.

Each subject's score was arrived at by summing across the six items.⁶

Supervisory Initiation of Structure

A second measure of supervisory behavior was also adapted from Fleishman (1953). This measure was based on the factor of Initiation of Structure described by Harris and Fleishman in this manner:

The extent to which the supervision defines and facilitates group interaction toward goal attainment through its actions of planning, communication, scheduling, criticizing, and trying out new ideas." (1955, p. 21)

The measuring instrument was constructed on the basis of a factor analytic study of Fleishman (1953). Of the eight items chosen for inclusion in the questionnaire, pre-test data indicated that two of the items did not adequately discriminate; consequently, they were not included in the final form of the questionnaire. These items were systematically varied with the supervisory consideration items in the section which was preceded by the statement mentioned in the section on Supervisory Consideration. Representative of the Initiation of Structure items is:

⁶ The Supervisory Consideration index contained the following six items:

Numbers 51, 54, 57, 58, 60, 62

No items were deleted as a result of the item analysis.

He insisted that people under him follow standard ways of doing things in every detail.

Each subject's score was arrived at by summing across the six items.⁷

Supervisory Interaction Style

A two item scale was adapted from the Nelson Leadership Inventory (1949) to provide an index of Supervisory Interaction Style. This was designed to determine the style by which the supervisor exercises his leadership with his subordinates.

The two items are:

My supervisor seemed to depend most on his knowledge of organizational policies and his technical knowledge.

My supervisor tried to get the work out by carefully directing and disciplining those under him.

Each subject's score was arrived at by summing across the two items.⁸

Supervisory Philosophy

Although it is obviously important to have the participant describe his supervisor's behavior, it is also important to try to understand how the participant feels about supervisory behavior. By asking for his opinion as to what constitutes ideal supervisory behavior, it is possible to consider not only descriptive supervisory behavior but normative as well. By utilizing both types of measures, it provides opportunities to explore, not only the relationship between described and ideal supervisory behavior and Change Agent Efficacy, but the discrepancies between described and ideal behavior and their relationships to Change Agent Efficacy.

⁷ The Supervisory Initiation of Structure index contained the following six items:

Numbers 52, 53, 55, 56, 59, and 61.

No items were deleted as a result of the item analysis.

⁸ The Supervisory Interaction Style index contained the following two items:

Numbers 46 and 48

Item numbers 45 and 47 were deleted as a result of the item analysis.

The same set of 12 items mentioned in the sections on Supervisory Consideration and Initiation of Structure was used in order to construct a measure for the participant's own supervisory philosophy or for his description of "ideal" supervisory behavior. This section was prefaced by the following statement:

Please think about the following questions when you state your agreement or disagreement with the statements listed below:

How should a supervisor act?

or

How would an ideal supervisor act?

Although the items were of the same general construction, a basic change was made consisting of a substitution of the words "an ideal supervisor" for the subject in each sentence. Also each item was changed from a descriptive statement to a normative statement:

Supervisory Consideration statement

He makes those under him feel at ease when talking to him.

Supervisory Philosophy statement

An ideal supervisor should make those under him feel at ease when talking with him.

Supervisory Initiation of Structure statement

He insisted that he be informed on decisions made by people under him.

Supervisory Philosophy statement

An ideal supervisor should insist that he be informed on decisions made by people under him.

Each subject's score for the two Supervisory Philosophy measures was arrived at by summing across the appropriate six items.⁹ With measures

⁹ The Supervisory Philosophy-Consideration index contained the following six items: Numbers 89, 90, 93, 94, 97, and 98

No items were deleted as a result of item analysis.

The Supervisory Philosophy-Initiation of Structure index contained the following items: Numbers 88, 91, 92, 95, 96, and 99.

No items were deleted as a result of item analysis.

being taken for both observed behavior of supervision and ideal supervisory behavior, it is possible to determine discrepancies or disagreements between observed and desired behavior. Operationally the discrepancy measures were determined by subtracting the sums of the supervisory philosophy indices from the corresponding supervisory behavior indices. The possible range of discrepancy scores was from 0 to 48 due to the fact of adding a constant of 24 to each summated score.

Influence of Physical Factors

One aspect which appears crucial in considering relative optimism participants express concerning change activity is that dealing with adequate resources.

Apart from any other consideration about the probability of change, there must be some concern about the physical necessities required for change to take place. Factors such as the amount of money needed for the change, availability of equipment, manpower, and time are all important, not only for the actual change activity itself, but for the participant's attitude about the change.

There are two considerations to be made concerning the physical factors; influence of these factors in the past on change activity, and their possible influence in the future. To measure both of these variables, the same set of four items was used.

To measure the influence of physical factors in the past, the four items followed this general introduction:

Briefly describe what you feel was the most important change which you introduced within your organization during the year before you came to the United States.

Please answer the questions in this section with this change in mind.

This was followed by this statement:

There are a number of things which have made it difficult for people to introduce change within their organization. How did the following things affect the introduction of your particular change?

The following is representative of the items used:

It was very difficult to obtain the materials, equipment and tools needed to bring this change about.

To measure the influence of physical factors in the future, the same general format was used except that the statements and items were changed to future tense. An example of the items used is:

It will be very difficult to obtain the materials, equipment and tools needed to bring this change about.

Each subject's score was arrived at by summing across each set of the four items.¹⁰ A discrepancy measure also was arrived at by subtracting the sum of the Physical Factors-Future from the sum of the Physical Factors-Past.

Target of Change

Another attitude which was felt to be important was whether the participant felt a greater interest in change which involved people directly or in change which was of a more technical nature. The measure for this index was four items developed from a pre-test group of eight. Basically, the items presented the participant with an "either..or" situation, and forced a choice between social change and technical change as targets. One item in this index was:

¹⁰ The Physical Factors-Past index contained the following four items: Numbers 32, 33, 34, 36.

Item number 35 was deleted as a result of the item analysis.

The Physical Factors-Future index contained the following four items: Numbers 67, 68, 69, and 71.

Item number 70 was deleted as a result of the item analysis.

I feel that technical change is more important than social change.

Each subject's score was arrived at by summing across the four items.¹¹

Another measure related to target of change is the extent or degree to which participants were involved with the two general target areas; people or social change and physical or technical change. Two scales were developed: one containing two items which attempted to measure the amount of activity in which the participant was involved with people. The second measure was made up of three items dealing primarily with physical or technical systems or operations.

All five items were prefaced by the following statement:

Listed below are different kinds of change activities.
Indicate to what extent you will be personally involved
with these kinds of activities upon return home.

The five statements all followed the same basic structure:

I will be changing the attitudes of people.

I will be changing equipment or introducing new
equipment.

Each subject's score was arrived at by summing over the two items and the three items respectively.

Training Relevancy

The items for this variable were designed to attempt to determine, in part, whether the purpose of the U.S. trip had been fulfilled. In effect, was the training useful or applicable in terms of what the participant saw as his future occupational aspirations and requirements? This scale was intended to measure satisfaction with the relevancy of the material and education provided for the participant in the United States.

¹¹ The Target of Change index contained the following four items:
Numbers 1, 7, 12 and 27

Item number 15 was deleted as a result of the item analysis.

A five item Training Relevancy scale was constructed on the basis of the pre-test data, from an initial group of eight items. The pre-test data indicated that three of the items failed to discriminate adequately; therefore, they were not included in the questionnaire in its final form. An example of an item from this measure is:

My training program has been very important in preparing me for the job I am returning to.

Each subject's score was arrived at by summing across the five items.¹²

Authority Level

As suggested in Chapter I, the organization, and the ramification of the change within the organization, must be of considerable concern. As all the participants are returning to an organization in their home country, some consideration should be given to describing the position to which they will return in terms of authority. The measure constructed to accomplish this was made up of two items. The items differed in certain respects. The major difference was that one attempted to establish the level of authority at which the participant's position fell, and the other attempted to determine the number of people supervised, or the number of people over whom the participant had authority.

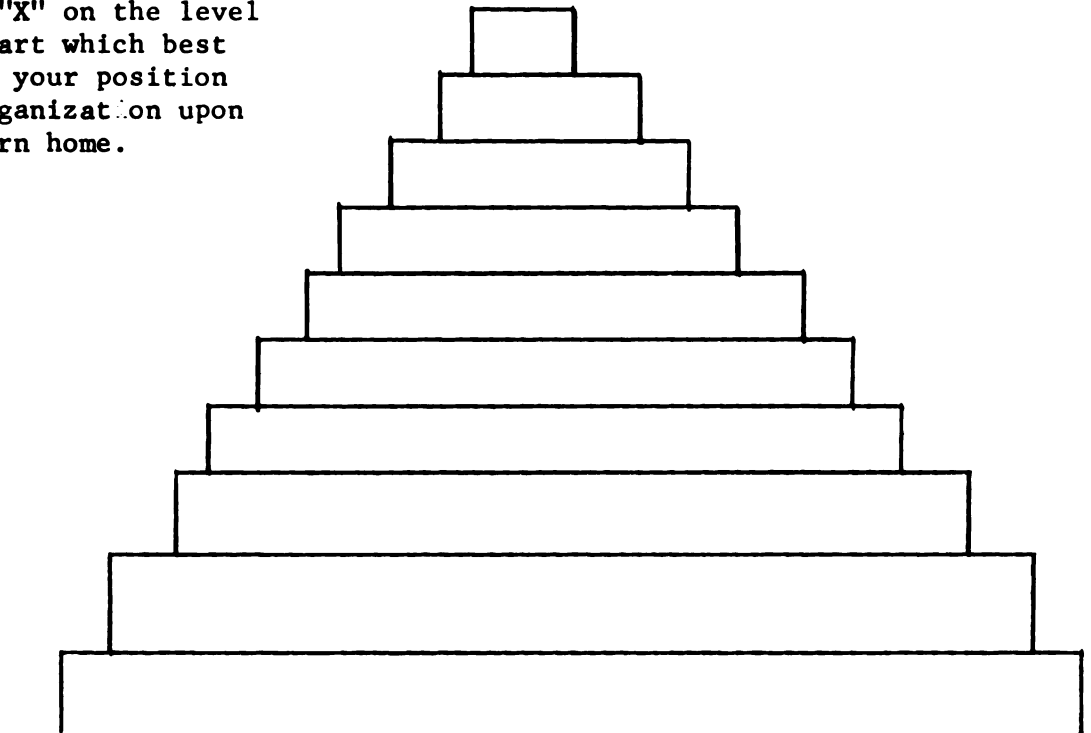
¹² The Training Relevancy index contained the following five items: Numbers 6, 9, 18, 23, and 26

No items were deleted as a result of the item analysis.

For the first item the participants were given the following instructions:

At the right is a chart which represents levels of an organization. Assume that this represents your organization. Please do the following:

Place an "X" on the level of the chart which best indicates your position in the organization upon your return home.



The second item was as follows:

How many people will you supervise? or, How many people will be accountable to you?

The responses provided were the following:

- ☐ None
- ☐ 1 to 5 people
- ☐ 6 to 25 people
- ☐ 26 to 50 people
- ☐ More than 50 people

Each subject's score was arrived at by summing across the two items.¹³

¹³ The Authority Level index contained the following two items: Numbers 84 and 86.

Item numbers 85 and 87 were deleted from this index as a result of the item analysis.

Single Item Scales

In addition to the multiple-item scales mentioned above, there were five single item scales used: Expected Change of Supervisor, Length of Work Experience under Supervisor, Supervisory Agreement about Training Relevancy, Expected Position Change, and Satisfaction concerning Position Change.¹⁴

Demographic Information

The following items were used as a means of acquiring background information about the participants, as well as for possible use in exploring relationships in combination with other variables.¹⁵

Name of Country
Months in United States
Weeks remaining in the United States
Age
Sex
Education
Highest Degree
Organization
Position within Organization
Experience in field of work
Time in other foreign countries
Number of countries visited

¹⁴ For the items used, See Appendix A. The respective item numbers are 44, 43, 50, 30 and 31.

¹⁵ For the items used, See Appendix A. Items 1 through 13, Section 9, of the questionnaire.

CHAPTER III

RESULTS

Description of the Sample

In total, data was collected on 381 participants. However, twenty completed questionnaires could not be used in this study because of incomplete data on the dependent variables. An additional twenty-eight questionnaires were not used because they were completed by students without previous work experience. Because the nature of this study places heavy emphasis on past work experience, it was felt that this group did not lend itself to analysis purposes. Of the remaining completed questionnaires, sixteen participants failed to complete the sections dealing with past change experience. The reason given for this was that they had experienced no past changes within their organizational activity. In reviewing frequency distributions of response, means and standards deviations for this group and for the balance of the group which had completed the entire questionnaire, no significant differences were found in regard to the completed sections. Elimination of this group of questionnaires resulted in an N of 317 for use in analysis.

Characteristics of the Sample

A summary of the characteristics of the sample indicates that the participants represent 52 different countries which, as defined by the United States Department of State, are considered to be underdeveloped economically. The largest single representation is that of Indonesia, which constitutes 14.4 percent of the sample. Fifteen of the countries,

on the other hand, are represented by a single participant. (See Appendix D for a complete list of participants by country.)

By far, the majority of the participants attending the Seminars are male. This is also the case among those completing the questionnaire. Only thirty-six of the respondents are female, or slightly over 11 percent of the sample. Although the range in age of participants is from 22 to 53, the median age of the participants is approximately 34 years, with an interquartile range of about 30 to 39 years.

In terms of educational background, 75 percent are either university graduates, or graduates of post-secondary schools other than a university. Table 1 indicates the breakdown of educational background of the participants.

TABLE 1. Educational Background of Participants

Highest Degree Earned	Percent
Secondary	10
University (or other Post- Secondary)	75
Post-Graduate	15

The occupational backgrounds of the participants are diverse and varied, representing some twenty-five occupational or governmental work areas. Two occupational areas, however, represent over one-third of the total sample: Education and Agriculture. Twenty-three percent list their job as one which could be classified as being in the general area of education. An additional thirteen percent had jobs which are primarily involved with agriculture or related processes. (See Appendix E for a complete listing of participants by position and occupational

area.) The median value for years of experience in the participant's field of work is approximately seven years. Table 2 provides a summary of years of work experience.

TABLE 2. Work Experience of Participants

Years of Experience	Percent
Less than 2 years	15
3 to 4 years	17
5 to 6 years	16
7 to 8 years	12
9 to 10 years	10
11 to 15 years	16
Over 15 years	14

The median length of the United States sojourn, at the time of attendance at the seminar, was approximately 9 months. Although there were participants who indicated that they would be remaining in this country while on their program for a prolonged length of time, most of the participants were very close to the end of their sojourns at the time they completed the questionnaire. Sixty-seven percent of the group indicated that they had less than three weeks remaining before they returned to their home countries. Tables 3 and 4 summarize time spent in the United States and time remaining on scheduled program.

TABLE 3. Sojourn Length at Time of Seminar Attendance

Months in United States	Percent
Less than 3 months	19
4 to 6 months	22
7 to 9 months	17
10 to 12 months	18
13 to 23 months	17
Over 23 months	7

TABLE 4. Weeks Remaining in Program

Weeks Remaining in United States	Percent
1 week	25
2 weeks	31
3 weeks	11
4 to 10 weeks	13
11 to 20 weeks	10
Over 20 weeks	10

In terms of travel experience in countries other than their own, 57 percent of the group indicated that they had spent time visiting other countries prior to this United States sojourn. Over 17 percent had spent at least one year in countries other than their own, prior to this United States sojourn.

Hypotheses of the Study

The hypotheses in this study were tested primarily by two methods: product-moment correlation and simple analysis of variance. Tests for linearity were made for each hypothesis. Where these tests supported a linear relationship existing between the independent and dependent variables, correlational techniques were used. Where the tests did not support the assumption, the measure of statistical significance used was analysis of variance.

The product-moment correlations were based on a sample of 317 subjects. With a sample of this size, a correlation coefficient as small as .11 would occur by chance only five in one hundred times, and a coefficient as small as .15 would occur only once in one hundred times if there actually were no relationship.

The analysis of variance measures differed in terms of degrees of

freedom and are therefore reported individually. In regard to this, in cases where the order of the means of the various groups is not in the predicted direction, the hypothesis will not be considered confirmed because the predicted linearity did not occur. Nevertheless, when the differences between the means seem substantial, additional analysis will be done to explore whether or not the observed curvilinear relationship might be significant.

Hypothesis 1

Participants with favorable attitudes toward work-related change should feel better able to introduce a change into their organization than those who do not have a favorable attitude.

Based on ungrouped data, the correlation coefficient was .05, which is not significantly greater than zero.* Therefore, the hypothesis is not supported.

For further information, the data was classified into three groups on the basis of the Subjects' Attitude toward Work-Related Change. Although no statistical tests were performed, Table 5 indicates the mean Change Agent Efficacy scores for the three groups.

TABLE 5. Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Work-Related Change
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants with unfavorable attitudes toward work-related change	20.2	123
Participants with neutral attitudes toward work-related change	20.4	113
Participants with favorable attitudes toward work-related change	21.0	81

* See Appendix F for description and results of the variables correlated.

Hypothesis 2

Participants who have favorable attitudes toward change in general should feel better able to introduce change into their organizations than those who do not have favorable attitudes toward change.

The hypothesis was not tested. The results of an item analysis indicated that three of the four items comprising the scale did not positively correlate, therefore this measure was dropped.

Hypothesis 3

Participants who perceive their United States training as being relevant and purposeful for their needs should be more satisfied with their United States trip than those who perceive the training as irrelevant and with little purpose.

Three groups of subjects were formed on the basis of total score in regard to Relevancy of United States Training. A simple analysis of variance was performed resulting in an F value of 21.5,* which is significant at the .001 level. Therefore, the hypothesis is supported.

Table 6 contains a summary of the mean United States Trip Satisfaction scores for the three groups classified in terms of Training Relevancy.

Table 6. Comparison of the Mean United States Trip Satisfaction for Participants with Different Attitudes toward Training Program Relevancy

(N = 317)

Group	Mean U.S. Trip Satisfaction Scores	N
Participants whose training program has low relevancy	9.2	85
Participants whose training program has moderate relevancy	10.4	130
Participants whose program has high relevancy	11.8	102

* With 2 degrees of freedom between and 314 within, an F value as small as 7.31 would occur by chance only 1 time out of 1000.

Hypothesis 4

Participants who perceived their United States training as being relevant and purposeful should feel better able to introduce change into their organizations than participants who do not perceive their United States training as relevant.

Based on ungrouped data, the correlation coefficient was .24, which is significant at the .01 level.* Therefore, the hypothesis is supported.

For further information, the data was classified into three groups on the basis of the Subjects' Perception of United States Training Program Relevancy. Although no statistical tests were performed, Table 7 indicates the Mean Change Agent Efficacy scores for the three groups.

TABLE 7. Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes Toward United States Training
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants who feel U. S. training had low relevancy	19.0	85
Participants who feel U. S. training had moderate relevancy	20.5	130
Participants who feel U. S. training had high relevancy	21.7	81

Hypothesis 5

Participants who have been involved in a great deal of change activity in their past roles should feel better able to introduce change into their organizations than those who have not been involved with change activity in the past.

Two groups of subjects were formed on the basis of total score in regard to amount of change activity in the past. A simple analysis of

* See Appendix F for description and results of the variables correlated.

variance was performed resulting in an F value of 13.1,* which is significant at the .001 level. Therefore, the hypothesis is supported.

Table 8 contains a summary of the Mean Change Agent Efficacy scores for two groups classified in terms of past change activity.

TABLE 8. Comparison between the Mean Change Agent Efficacy Scores for Participants with Considerable and Little Change Activity in the Past
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants involved in little change activity in past	19.2	94
Participants involved in considerable change activity in the past	20.8	223

Hypothesis 6

Participants who have been involved in a great deal of change activity in their past roles and have found it to be an easy task should feel better able to introduce change into their organizations than those who found it to be a difficult task.

A simple analysis of variance was performed, resulting in an F value of 1.8,** which is not significant. Therefore, the hypothesis is not supported.

Table 9 contains a summary of the Mean Change Agent Efficacy scores

* With 1 degree of freedom between and 315 within an F value of 11.38 would occur by chance only 1 time out of 1000.

** With 1 degree of freedom between and 221 within an F value as small as 3.92 would occur by chance only 5 times out of 100.

for participants involved in considerable change activity with different attitudes concerning the ease or difficulty involved in the activity.

TABLE 9. Comparison of the Mean Change Agent Efficacy Scores for Participants Involved in Considerable Change Activity with Different Attitudes toward Ease or Difficulty of Task

(N = 223)

Group	Mean Change Agent Efficacy Scores	N
Participants who feel past change activity was difficult to do	21.0	116
Participants who feel past change activity was moderately easy to do	20.3	34
Participants who feel past change activity was easy to do	21.3	73

Hypothesis 7

Participants who have been involved in a great deal of change activity in their past roles and have found it to be satisfying should feel better able to introduce change into their organizations than those who felt it to be unsatisfying.

A simple analysis of variance was performed, resulting in an F value of 16.0,* which is significant at the .001 level.

Table 10 contains a summary of the Mean Change Agent Efficacy scores for participants involved in considerable change activity with different attitudes to relative satisfaction derived from engaging in the activity.

* With 2 degrees of freedom between and 314 within an F value as small as 7.31 would occur by chance only 1 time out of 1000.

TABLE 10. Comparison of the Mean Change Agent Efficacy Scores for Participants Involved in Considerable Change Activity with Different Attitudes toward Task Satisfaction
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants with low satisfaction in regard to change activity	20.6	66
Participants with moderate satisfaction in regard to change activity	19.9	62
Participants with high satisfaction in regard to change activity	22.1	95

Hypothesis 8

Participants who perceive the consequences and effects of past change as being favorable should feel better able to introduce change into their organizations than those who see the implications and effects as unfavorable.

Based on ungrouped data, the correlation coefficient was .14, which is significant at the .05 level.* Therefore, the hypothesis is supported.

For further information, the data was classified into three groups on the basis of the Subjects' Perception of Consequences and Effects of Past Change. Although no statistical tests were performed, Table 11 indicates the Mean Change Agent Efficacy scores for the three groups.

* See Appendix F for description and results of variables correlated.

TABLE 11. Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward the Consequences Resulting from Past Changes
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants with unfavorable attitudes about consequences of past change	19.9	109
Participants with neutral attitudes about consequences of past change	20.5	135
Participants with favorable attitudes about consequences of past change	21.4	73

Hypothesis 9

Participants who feel that physical factors will be obstacles in introducing change should feel less able to introduce change into their organizations than those who do not feel that physical factors will be obstacles.

Based on ungrouped data, the correlation coefficient was .18, which is significant at the .01 level.* Therefore, the hypothesis is supported.

For further information, the data was classified into three groups on the basis of attitude toward Influence of Physical Factors in the Future. Although no statistical tests were performed, Table 12 indicates the Mean Change Agent Efficacy scores for the three groups.

* See Appendix F for description and results of the variables correlated.

TABLE 12. Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes Toward Influence of Physical Factors in the Future
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants who feel that physical factors will be a problem in the future	20.1	109
Participants who are undecided as to whether or not physical factors will be a problem in the future	20.1	121
Participants who feel that physical factors will <u>not</u> be a problem in the future.	21.5	87

Hypothesis 10

Participants who feel that physical factors did not make it difficult to introduce change in the past feel better able to introduce change in their organizations than those who felt that physical factors made change difficult.

Based on ungrouped data, the correlation coefficient was .09, which is not significantly greater than zero.* Therefore, the hypothesis is not supported.

For further information, the data was classified into three groups on the basis of attitude toward Influence of Physical Factors in the Past. Although no statistical tests were performed, Table 13 indicates the Mean Change Agent Efficacy scores for the three groups.

* See Appendix F for description and results of the variables correlated.

TABLE 13. Comparison of the Mean Change Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Past
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants who feel that physical factors made change difficult	20.5	94
Participants who are undecided as to whether or not physical factors made change difficult	20.1	105
Participants who feel that physical factors did <u>not</u> make change difficult	20.8	118

Hypothesis 11

Physical factors will be a greater problem for the participant's future change activity than they were for his change activity in the past.

A t-test was performed which resulted in a t value of -2.43,* which is significant at the .01 level. However, the result was significant in the opposite direction to that hypothesized. Thus, the hypothesis suggested is that physical factors will be a lesser problem for for the participant's future change activity than they were for his change activity in the past.

TABLE 14. Perception of Relation between Influence of Physical Factors in Future and Influence of Physical Factors in Past in regard to Change Activity
(N = 317)

Group	Total Difference in Scores on Scales (Future-Past)	N
Influence of Physical Factors will be <u>greater</u> in Future	328	108
Influence of Physical Factors will be <u>lesser</u> in Future	-478	152
Influence of Physical Factors in Future will be no different than in Past		57

* With 316 degrees of freedom a t value as small as -2.43 would occur only 1 time out of 100.

Hypothesis 12

Participants who feel that their supervisors structure or determine the requirements of the jobs of subordinates should feel less able to introduce change into their organizations than those who feel that their supervisors do not structure or determine the requirements of their subordinates.

Based on ungrouped data, the correlation coefficient was .10, which is not significantly greater than zero.* Therefore, the hypothesis is not supported.

For further information, the data was classified into three groups on the basis of perception of the Initiation of Structure of the Supervisor. Although no statistical tests were performed, Table 15 indicates the Mean Change Agent Efficacy scores for the three groups.

TABLE 15. Comparison of the Mean Change Agent Efficacy Scores for Participants under Three Levels of Described Supervisory Initiation of Structure

(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants with supervisors rated high in initiation of structure	20.4	79
Participants with supervisors rated medium in initiation of structure	20.2	136
Participants with supervisors rated low in initiation of structure	21.1	102

Hypothesis 13

Participants who feel that their supervisors are considerate to subordinates should feel better able to introduce change into their organizations than those who feel that their supervisors are not considerate.

Based on ungrouped data, the correlation coefficient was .11,

* See Appendix F for description and results of variables correlated.

which is not significantly greater than zero.* Therefore, the hypothesis is not supported.

For further information, the data was classified into three groups on the basis of perception of the Consideration of the Supervisor. Although no statistical tests were performed, Table 16 indicates the Mean Change Agent Efficacy scores for the three groups.

TABLE 16. Comparison of the Mean Change Agent Efficacy Scores for Participants under Three Levels of Described Supervisory Consideration
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants with supervisors rated low in consideration	19.9	89
Participants with supervisors rated medium in consideration	20.4	119
Participants with supervisors rated high in consideration	21.1	109

Hypothesis 14

Participants who see their change activity as involving only themselves or a few other people should feel better able to introduce change into their organizations than those who see their change activity as involved more people. However,

Hypothesis 15

those who hold higher positions in the organizational hierarchy should feel better able to introduce change than those who hold lower positions, and

Hypothesis 16

those who supervise relatively fewer people should feel less able to introduce change than those who supervise more people, and

* See Appendix F for description and results of variables correlated.

Hypothesis 17

those who expect to introduce change at or above their positional level in the organizational hierarchy should feel better able to introduce change than those who expect to introduce it above their positional level.

The results of an item analysis indicated that of the four items which were to be used in constructing a general scale to test the above hypotheses, two of the items did not correlate positively. Also, the participants expressed considerable difficulty in interpreting and answering the items concerned with Hypotheses 14 and 16. Therefore, they were deleted from the scale. The remaining two items deal with position in organizational hierarchy, and number of people supervised. As a result of this Hypotheses 15, 16, 17, and 18 were not tested directly. However, the two remaining items were combined to provide an Authority Level Supervision measure.* The following hypothesis was then tested.

Hypothesis 14

Participants who hold higher positions in combination with supervising few people should feel better able to introduce change into their organizations than those who hold lower positions in combination with supervising many people.

A simple analysis of variance was performed, resulting in an F value of 4.5,** which is significant at the .05 level.

Table 17 contains a summary of the Mean Change Agent Efficacy scores for participants according to differing degrees of this measure.

* The Authority Level Supervision index contained the following items: Numbers 84 and 86. (See Appendix A)

** With 2 degrees of freedom between and 314 within an F value as small as 3.07 would occur by chance only 5 times out of 100.

TABLE 17. Comparison between the Mean Change Agent Efficacy Scores for Participants with Different Combinations of Authority Level and Supervision within the Organization
(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants low level in organization, supervising many	20.5	106
Participants middle level in organization, supervising medium group	19.8	116
Participants high level in organization, supervising few	21.4	95

Hypothesis 18

Participants who feel that their supervisors perceive change made within their organizations in the past in a favorable manner should feel better able to introduce change than those who feel their supervisors perceive change in an unfavorable manner.

Based on ungrouped data, the correlation coefficient was .22 which is significant at the .01 level.* Therefore, the hypothesis is supported.

For further information, the data was classified into three groups on the basis of perception of Supervisor's Attitude toward Past Change. Although no statistical tests were performed, Table 18 indicates the Mean Change Agent Efficacy scores for the three groups.

* See Appendix F for description and results of variables correlated.

TABLE 18. Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Perceptions as to Supervisor's Attitudes toward Past Change

(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants with supervisors perceived as being unfavorable toward past change	19.6	67
Participants with supervisors perceived as being neutral toward past change	19.9	124
Participants with supervisors perceived as being favorable toward past change	21.6	126

Hypothesis 19

Participants who feel that their supervisors agree with their favorable attitudes toward past change made within their organization should feel better able to introduce change than those who feel that they agree with their supervisor's unfavorable attitudes.

A simple analysis of variance was performed, resulting in an F value of 16.9,* which is significant at .001. Therefore, the hypothesis is supported.

Table 19 contains a summary of the Mean Change Agent Efficacy scores between the two sub-groups of participants classified as to perceived agreement concerning attitudes toward past change.

* With 1 degree of freedom between and 224 within an F value as small as 3.92 would occur by chance only 5 times in 100.

TABLE 19. Comparison between the Mean Change Agent Efficacy Scores for Participants Agreeing with Perceived Supervisor's Favorable or Unfavorable Attitudes toward Past Change
(N = 177)

Group	Mean Change Agent Efficacy Scores	N
Participants who feel that their supervisors agree with their unfavorable attitudes toward past change	19.0	91
Participants who feel that their supervisors agree with their favorable attitudes toward past change	21.3	86

Hypothesis 20

Participants who feel that their supervisors agree with their favorable attitudes toward past changes made within the organization should feel better able to introduce change than those who feel that they disagree with their supervisor's attitude.

A simple analysis of variance was performed resulting in an F value of less than 1,* which is not significant. Therefore, the hypothesis is not supported.

Table 20 contains a summary of the Mean Change Agent scores between the two sub-groups of participants classified as perceived favorable agreement and perceived disagreement.

* With 1 degree of freedom between and 224 within an F value as small as 3.92 would occur by chance only 5 times in 100.

TABLE 20. Comparison between the Mean Change Agent Efficacy Scores for Participants Agreeing with Perceived Supervisor's Favorable Attitudes and for Participants Disagreeing with Perceived Supervisor's Attitudes toward Past Change

(N = 226)

Group	Mean Change Agent Efficacy Scores	N
Participants who feel that their supervisors agree with their favorable attitudes toward past change	21.3	86
Participants who feel that their supervisors disagree with their attitudes toward past change	21.0	140

Hypothesis 21

In regard to initiation of structure, participants whose supervisory philosophy appears to agree with that of their supervisor's should feel better able to introduce change than those whose philosophy appears to disagree.

Based on ungrouped data, the correlation coefficient was .07, which is not significantly greater than zero.* Therefore, the hypothesis is not supported.

For further information, the data was classified into three groups on the basis of levels of Philosophy of Supervisory Initiation of Structure. Although no statistical tests were performed, Table 21 indicates the Mean Change Agent Efficacy scores for the three groups.

* See Appendix F for description and results of variables correlated.

TABLE 21. Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Degrees of Agreement Between Described Supervisory Behavior and Their Own Supervisory Behavior Philosophy

(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants whose supervisors provide less initiation of structure than participants feel is ideal	20.3	93
Participants who feel that their supervisors initiation of structure behavior is ideal	20.5	123
Participants whose supervisors provide more initiation of structure than participants feel is ideal	20.6	101

Hypothesis 22

In regard to consideration, those participants whose supervisory philosophy appears to agree with that of their supervisor's should feel better able to introduce change than those whose philosophy appears to disagree.

Based on ungrouped data, the correlation coefficient was .02, which is not significantly greater than zero.* Therefore, the hypothesis is not supported.

For further information, the data was classified into three groups on the basis of levels of Philosophy of Supervisory Consideration. Although no statistical tests were performed, Table 22 indicates the Mean Change Agent Efficacy scores for the three groups.

* See Appendix F for description and results of variables correlated.

TABLE 22. Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Degrees of Agreement Between Described Supervisory Behavior and Their Own Supervisory Philosophy

(N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants whose supervisors provide more consideration than participants feel is ideal	20.4	100
Participants who feel that their supervisor's consideration behavior is ideal	20.4	106
Participants whose supervisors provide less consideration than participants feel is ideal	20.6	111

CHAPTER IV

ADDITIONAL ANALYSES

Although the hypotheses suggested in Chapter I were, for the most part, confirmed, they represent only individual relationships. In effect, this results in a situation by which only limited predictions may be made concerning the type of person who feels able to introduce change upon return to his home country. Although these have value, there is still a need to attempt to identify the kind of participant who might best be described as "optimistic" about his future change activity. Conversely, it is also important to attempt to indicate the type of participant who may be described as being "pessimistic" about future change activity.

In order to do this, several relationships between independent variables and the dependent variable Change Agent Efficacy must be examined with certain other variables used as controls. Secondly, a number of relationships confirmed in Chapter III need to be examined further so that more specific predictive statements may be made concerning them. Finally, an attempt must be made to combine related variables in such a way that a broader measure is developed.

There were four general areas in which further analysis under these conditions appeared profitable:

1. Demographic Data Analysis - a descriptive examination of possible relationships between background factors and Change Agent Efficacy.
2. Participant's Attitude toward Past Change - Development of a scale for Participant's Attitude toward

Past Change combining the measures of Consequences of Past Change, Ease of Change in the past, and Satisfaction with Change activity in the past. This combined measure is used in relation with other independent variables to attempt to further analyze Change Agent Efficacy.

3. Discrepancy between Participants' Attitude toward Past Change and Perception of Supervisor's Attitude toward Past Change - Further examination of those hypotheses concerned with perception of attitudes toward change held by participants and supervisors (Hypotheses 19 and 20).
4. Influence of Physical Factors in the Future and Change Agent Efficacy - Utilization of other independent variables to further examine the hypothesized relationship between these two variables.

Demographic Data Analysis

With the possible exception of Authority Level, no specific hypotheses were formulated concerning Change Agent Efficacy utilizing any demographic or background variables. These factors, however, are worthy of consideration for at least two reasons: to provide some predictive ability concerning the type of person who feels most able to introduce change, and for use in combination with attitudinal variables in attempting to develop a more complete description of this type of person.

Of the possible variables which might have been chosen, the following seemed the most important and promising for our purposes: Age, Educational Level, Job Experience, Amount of Time Spent in the United States, Occupational Background of the Participants, and Geographic Origin of the Participants.

Tables 23 and 24 are illustrative of the analyses performed concerning Age, Education, Years of Experience and Time in the United States*

* Tables representing the analyses performed concerning Education and Experience are reported in Appendix G.

TABLE 23. Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Time in the United States.

Time in the United States	Mean Change Agent Efficacy Scores	N
Six months or less	21.3	129
Seven months to one year	20.3	111
Over one year	19.4	77
F ratio	F = 6.1	P = .01

TABLE 24. Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Age

AGE	Mean Change Agent Efficacy Scores	N
22 to 29 years	19.6	78
30 to 40 years	20.6	174
Over 40 years	21.3	65
F ratio	F = 3.1	P = .05

Of these four investigations, only two cases resulted in significant findings: Age and Time in the United States. It appears that older participants feel that they have more ability to introduce change than do younger ones and that those participants who report having been in the United States the longest period of time report the least ability to introduce change upon return to their home country.

A slightly different treatment was given to Occupational and Geographic Background of the participants. Tables 25 and 26 provide a summary of the analyses of these two factors.

TABLE 25. Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Geographic Area

Geographic Area	Mean Change Agent Efficacy Scores	N
Central Asia	22.2	49
South & Central America	20.5	67
Africa	20.4	32
Middle East	20.2	55
Indonesia	20.0	47
Southeast Asia	19.8	49
Others	19.6	18
F ratio F = 2.0 P = N.S.		

It can be seen from the above table that the differences in Change Agent Efficacy for these groups were not great enough to reach significance. A different picture results, however, when we consider Occupational backgrounds.

TABLE 26. Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Occupational Backgrounds

Occupational Areas	Mean Change Agent Efficacy Scores	N
Manufacturing	22.2	25
Communication/Transportation	21.9	32
Natural Resources	21.3	27
Agriculture	21.0	44
Public Health/Medical	20.7	26
Community Development	20.1	15
Government Services	20.1	41
Education	19.7	74
Military/Police	19.3	32
F ratio F = 5.8 P = .001		

Table 26 suggests that people with different occupational backgrounds report different attitudes toward their ability to introduce change. With this significant finding, however, further examination seemed justified. One difficulty arises in regard to these findings. It involves attempting to determine whether each group is significantly different from each other or whether the overall results are primarily due to certain groups. To attempt to answer that question, an analysis was performed in order to identify which specific groups differed from the other groups in their perception of their ability to introduce change.* The results of this examination indicated that not all groups were significantly different from each other but rather that only the extreme groups were different. Three groups, Manufacturing, Communication/Transportation and Natural Resources are significantly higher in reported ability to introduce change than almost all the others. At the other extreme, the Military/Police group is significantly lower in reported ability to introduce change.

To summarize this section, two variables stand out for possible use in attempting to describe participants with high expectations of change agent ability: Time in the United States and Age of the Participants. Although Occupational Background appears to have some value for further use, it would certainly be in a limited sense. It would be possible to use the four occupation groups cited above in further analyses, however, it would necessitate reducing the sample size and the generalizability of the future predictions. In view of this, Time in the United States and Age of the Participant are the only two factors which will be seriously considered later in this study.

* This analysis is reported in its entirety in Appendix H.

Measures related to Attitude toward Change

A tentative conclusion may be reached in regard to participants' attitudes toward change activity based on the hypotheses reported in Chapter III. It appears that, in general, those participants who report favorable attitudes toward change activity feel better able to introduce change than those who report unfavorable attitudes. Five hypotheses were stated in this area, of which three were supported. They related to:

1. Attitude toward Work-Related Change (not supported)
2. Amount of Change Activity in the Past (supported)
3. Ease of Change in Past (not supported)
4. Satisfaction with Change in the Past (supported)
5. Perception of Consequences Resulting from Change (supported)

Despite the general support, it is difficult to make many broad statements from these results without considering the nature and possible relationships between them. From an examination of the nature of variables under consideration, it appeared that one possible differentiation between them was whether they were more closely related to either (a) philosophy of change activity or (b) attitudes concerning specific past change activity. Using this approach, only one hypothesis was specifically concerned with (a) philosophy of change activity. The relationship between Attitude toward Work-Related Change and Change Agent Efficacy is primarily concerned with the participant's generalized view of change. On the other hand, the remaining four hypotheses were primarily directed toward consideration of the relationships between participant attitudes about specific change activity in the past and the participant's belief in his ability to introduce change.

Further consideration of the remaining variables indicated that Amount of Change Activity in the Past appeared to be of a different

nature than those concerning Ease of Change, Satisfaction with Change and Perceived Consequences of Change. Although the question of how much change activity in the past is judgmental, it may be related more closely to physical measurement than can the others. In another respect it differs in terms of value judgment. In the case of amount of past change activity, no request was made of the participant to indicate his feeling concerning the amount of activity in which he was engaged.

In view of these considerations, it seemed that the three variables: Ease of Change, Satisfaction with Change, and Perceived Consequences of Change, could be logically combined as Participant's Attitude toward Past Change.*

A major question, however, is now presented: Is there a relationship between this combined variable and Change Agent Efficacy? Do those participants who report favorable attitudes toward past change also report greater ability to introduce change? Based on the experience resulting from the investigations dealing with the three separate variables making up this measure, it was expected that the answer would be yes.

From an examination of Table 27 it may be concluded that there are significant differences in reported change agent ability among

* The intercorrelations are mixed concerning these three predictor variables, in regard to significant relationships. They are as follows:

	<u>Correlation Coefficient</u>
East of Change and Satisfaction with Change	.18
Satisfaction with Change and Perceived Consequences of Change	.07
Ease of Change and Perceived Consequences of Change	.02

groups classified in terms of how they view past change activity. This suggests a relationship between the two variables.

TABLE 27. Comparison of the Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Past Change Activity

Group	Mean Change Agent Efficacy Scores	N
Participants with unfavorable attitudes toward past change	19.5	84
Participants with neutral attitudes toward past change	20.0	121
Participants with favorable attitudes toward past change	21.8	112
F ratio	F = 9.1	P = .001

Given the significant results indicated in Table 27, it now seems appropriate to investigate the relationship between Attitude toward Past Change and Change Agent Efficacy under more controlled conditions.

One logical area in which investigation should be continued is in regard to the amount of change activity engaged in by the participant in the past. A possible consideration is that those participants reporting favorable attitudes toward past change activity and high perceived ability to introduce change might be concentrated among those participants who had been involved in a great deal of change activity in the past. In order to determine whether or not the general hypothesis needed qualification, an analysis was done dividing the participants into two groups based on past change activity. Table 28 provides the results of this analysis.

TABLE 28. Summary of Mean Change Agent Efficacy Scores for Participants with Three Different Attitudes Toward Past Change Differentiated by Amount of Change

Past Change Activity	Participant Attitude toward Past Change		
	Unfavorable	Neutral	Favorable
	<u>Cell Means</u>		
Little Activity	18.4	19.7	20.2
Very Much Activity	20.6	20.1	22.0
	<u>Cell N's</u>		
Little Activity	37	41	16
Very Much Activity	47	80	96
<hr/>			
F ration		<u>F.</u>	<u>P</u>
Attitude Toward Past Change		5.2	.01
Amount of Change		12.3	.001
Interaction		1.7	N.S.

The relationship between Attitude toward Past Change Activity and Change Agent Efficacy remains even when the participants are grouped according to whether or not they have been involved in much change activity in the past.

Although the relationship between Attitude toward Past Change and the participant's perception of his ability to introduce change might be influenced by a number of factors, one seemed particularly important. The supervisor's perceived attitude toward past change certainly must be taken into account in any consideration about the participant's attitude toward past change. A possible consideration might be, is the relationship between favorable attitude toward past change activity and reported ability to introduce change a function of the participant's perception of his supervisor's attitude toward past change?

A second consideration in regard to this overall relationship is whether or not the participant felt his supervisor would agree with him

concerning past change. In other words, is the participant who reports high ability to introduce change the one who feels that his point of view regarding change is also a reflection of his supervisor's point of view?

Two factors were used as controls in this circumstance: (1) perceived attitude of the supervisor (Table 29), and (2) a discrepancy measure between how the participant feels and how he thinks his supervisor feels (Table 30).

TABLE 29. Summary of Mean Change Agent Efficacy Scores for Participants with Three Different Attitudes toward Past Change Differentiated by Perceived Supervisory Attitude toward Past Change (N=317)

Perceived Supervisory Attitude	Unfavorable	Neutral	Favorable
	<u>Cell Means</u>		
Unfavorable	19.1	19.0	21.1
Neutral	19.4	19.4	21.3
Favorable	20.5	21.5	22.2
Perceived Supervisory Attitude	<u>Cell N's</u>		
	Unfavorable	Neutral	Favorable
Unfavorable	25	28	13
Neutral	36	56	34
Favorable	23	37	65
<u>F ratio</u>			
	<u>F</u>		<u>P</u>
Attitude toward Past Change	5.3		.01
Perceived Attitude of Supervisor	4.1		.05
Interaction	less than 1		N.S.

TABLE 30. Summary of Mean Change Agent Efficacy Scores for Participants with Three Different Attitudes toward Past Change Differentiated by Discrepancy Between Perceived Supervisor Attitude and Participant Attitude toward Past Change (N = 317)

Discrepancy	Participant Attitude Toward Past Change		
	Unfavorable	Neutral <u>Cell Means</u>	Favorable
Disagreement - Participant more favorable	20.0	19.1	21.6
Agreement	18.3	19.7	21.5
Disagreement - Participant less favorable	20.0	21.2	23.2
		<u>Cell N's</u>	
Disagreement- Participant more favorable	2	31	55
Agreement	19	57	43
Disagreement- Participant less favorable	63	33	14
<u>F ratio</u>			
Participant Attitude toward Past Change		<u>F</u> 4.7	<u>P</u> .05
Discrepancy		1.7	N.S.
Interaction		less than 1	N.S.

In both these cases, the differences between groups based on attitudes toward past change were significant. These results suggest that the relationship between attitude toward past change and perceived ability to introduce change remains and is not strictly a function of the perceived attitudes of the supervisors.

There are, however, some further considerations and relationships which should be examined. The results stated thus far do not clearly consider the various relationships between participant-supervisor agreement and perceived attitude of the supervisor.

Perceived Agreement with Supervisor

Favorable attitudes toward past change suggest perception of ability to introduce change. Generally speaking, participant-supervisor agreement also suggests perception of ability to introduce change. However, further qualifications appear necessary.

First, the Discrepancy measure (Table 30) does not reveal specifically what particular combinations of agreement and attitude might predict high Change Agent Efficacy.

Secondly, questions were raised in Chapter III when consideration was given to what the participant felt his supervisor's attitude was concerning past change. It was expected that if a participant's attitude toward past change was favorable and if he felt that his supervisor's attitude was also favorable, then his perception of his ability to introduce change would be higher than if the situation was one where the participant viewed past change as unfavorable and perceived agreement with his supervisor's views. However, the group which perceived that their supervisor would tend to agree with their favorable attitude toward past change did not feel better able to introduce change than the group which indicated disagreement with their supervisors.

The results of these two hypotheses suggested that cumulation of participants on the basis of perceived agreement with their supervisors would not be warranted and that a further breakdown should be considered. Therefore, two factors demanded consideration: Attitude of the Participant and Perception of Agreement with Supervisor. On the basis of the results obtained in this area, it would appear that different combinations of these two variables might suggest different levels of optimism

among the groups. To investigate this further, the following structuring of groups was determined.

TABLE 31. Subgroups of Participants by (1) Perceived Agreement with Supervisor, and (2) Attitude toward Past Change

	Perceived Agreement	Perceived Disagreement
	Group 1	Group 2
Participant's Attitude toward Past Change		
Favorable	1a	2a
Unfavorable	1b	2b

Now it is possible not only to compare agreement and disagreement as well as favorable attitudes and unfavorable attitudes, but also favorable agreement, favorable disagreement, unfavorable agreement and unfavorable disagreement.

In the earlier investigations, no specific comparison was made between those participants who felt that they agreed with their supervisor's attitude toward past change (Group 1) and those who felt that they disagreed (Group 2). Therefore, this analysis was done and reported in Table 32. Thus, it can be seen that although the difference between the two groups does not indicate statistical significance, it does approach it.

TABLE 32. Comparison of the Mean Change Agent Efficacy Scores between Participants who Perceive Agreement or Disagreement with Supervisor's Attitudes toward Past Change (N = 317)

Group	Mean Change Agent Efficacy Scores	N
Participants who perceived agreement with attitude of Supervisor (Group 1)	20.0	177
Participants who perceive disagreement with attitudes of Supervisor (Group 2)	21.0	140
F ratio	<u>Observed F</u> 3.6	<u>F = .05</u> 3.9
		<u>P</u> N.S.

As one part of the agreement group (Group 1a - those holding favorable attitudes) has already been compared to the disagreement group (Group 2), the next logical comparison would be between those participants who held unfavorable attitudes toward change among the agreement group (Group 1b) compared to the disagreement group (Group 2).

The results indicate that a significant difference occurs between these groups.* The comparison indicates that those who disagree feel more able to introduce change than those who feel that they agree with their supervisor's unfavorable attitudes. The mean Change Agent Efficacy scores are 21.0 and 19.0 respectively. This is somewhat understandable when we consider that disagreement indicates that either the supervisor's attitude is perceived as favorable. In the unfavorable agreement group, neither is favorable. It would appear that in terms of expected ability to introduce change, perceived agreement with the supervisor is not as important as a favorable attitude toward past change held by one or the other.

* The results of these analyses are reported in their entirety in Appendix I.

Now another question is raised: Is there a difference in Change Agent Efficacy between the different directions of disagreement? In other words, among the disagreement group, do participants who are more favorable toward past change than their supervisors (Group 2) report greater ability to introduce change than those who report less favorable attitudes than their supervisor's (Group 2a)? The results* indicate that there is a slight difference, but not significant. Those participants who feel that they are less favorable have a mean Change Agent Efficacy of 21.2 in comparison to 20.8 for the group that feels more favorable.

From these analyses, several findings emerge. It appears that one group of participants differs from the others significantly in this area. The major conclusion reached is that those people who hold unfavorable attitudes toward past change and who perceive their supervisor as holding unfavorable attitudes as well feel less able to introduce change than any of the following groups:

<u>Participant's Attitude</u>	<u>Perception of Supervisor's Attitude</u>
Favorable	Favorable
Favorable	Unfavorable
Unfavorable	Favorable

Tentatively it might be stated that Favorable Agreement is slightly better, in terms of Change Agent Efficacy, than is Disagreement. Although Disagreement is better than Unfavorable Agreement, it does not make any difference whether the participant has Favorable or Unfavorable Attitudes toward Past Change in this relationship.

From this series of analyses, it is apparent that different results in terms of reported ability to introduce change occur under different combination of variables of Attitude and Agreement.

* The results of this analysis are reported in their entirety in Appendix I.

Physical Factors in the Future

Another area which appeared to be of general interest, but in which further examination seemed necessary was Influence of Physical Factors in the Future.

There were three hypotheses developed in regard to the general area of Physical Factors, two of which were directly related to Change Agent Efficacy. In general, the results were:

1. Participants who felt physical factors in the future would not be a problem reported greater ability to introduce change.
2. There was no significant difference in ability to introduce change between participants who felt physical factors had been a problem in the past and those who felt that they had not been.
3. Participants felt that physical factors in the future would be less of a problem in the future than in the past.

A general interpretation of these results might very well be a statement of the following nature. Although physical factors appear to have been more of a problem in the past than they will be in the future, those who feel that they will be a problem in the future will report significantly less ability to introduce change than those who feel that they will not be a problem. This difference did not occur in regard to the Influence of Physical Factors in the Past. On the basis of these mixed findings, it appears worthwhile to examine the significant relationships between Influence of Physical Factors in the Future and perceived ability to introduce change.

One concern in this area, obviously, is the effect of the participant's attitude toward past events. To what degree do these attitudes influence the relationship between his perception of physical factors in the future and his ability to introduce change? It would

be important in attempting to answer this question to measure this relationship while taking into account the different attitudes participants have concerning (a) the influence of physical factors in the past, and (b) the different attitudes they hold toward change in the past. Table 33 indicates the result of the examination of the relationship between Influence of Physical Factors in the Future and Change Agent Efficacy when the participants are divided into three groups on the basis of their attitudes toward Physical Factors in the Past. From an examination of this table, it appears that the general relationship holds even with the use of the control factor of Physical Factors in the Past.

TABLE 33. Summary of Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future Differentiated by Attitude toward Influence of Physical Factors in the Past (N - 317)

Influence of Physical Factors in the Past	Influence of Physical Factors in Future		
	Will be a Problem	Undecided	Will not be a Problem
	<u>Cell Means</u>		
Were a problem	20.3	20.4	22.2
Undecided	19.7	19.9	20.9
Were not a problem	20.2	20.1	21.8
	<u>Cell N's</u>		
Were a problem	57	28	9
Undecided	31	45	29
Were not a problem	21	48	49
<u>F ratio</u>	F	P	
Influence of Physical Factors in Future	3.9	.05	
Influence of Physical Factors in Past	1.0	N.S.	
Interaction	less than 1	N.S.	

The significant relationship between Influence of Physical Factors in the Future and perceived ability to introduce change is not retained when the Participant's Attitude toward Past Change is introduced into the analysis. This is indicated in Table 34.

TABLE 34. Summary of Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future Differentiated by Participant's Attitude toward Past Change (N = 317)

Attitude Toward Past Change	Influence of Physical Factors in the Future		
	Will be a Problem	Undecided	Will not be a Problem
	<u>Cell Means</u>		
Unfavorable	19.4	19.3	20.7
Neutral	20.1	19.7	19.9
Favorable	21.1	21.1	23.2
	<u>Cell N's</u>		
Unfavorable	39	29	16
Neutral	41	49	32
Favorable	29	43	32
<u>F ratio</u>	<u>F</u>		<u>P</u>
Influence of Physical Factors in Future	2.6		N.S.
Attitude Toward Past Change Interaction	7.7 less than 1		.001 N.S.

From an examination of this table it appears that whereas the relationship between Physical Factors in the Future and Change Agent Efficacy holds in general in the Unfavorable and Favorable Attitudes group, it does not in the Neutral Attitude group. One group, in particular, draws attention. This is the combination of Favorable Attitude toward Past Change and Physical Factors perceived as not being a problem. In this case, the Mean Change Agent Efficacy score of 23.2 is considerably

higher than any of the other cells. This provides some indication that a combination of these variables may be quite effective in predicting participant optimism concerning the introduction of change.

From the earlier results obtained in Chapter III, it appears that, in general, physical factors will not be such a great problem as they were in the past. Taking this into account and considering it in terms of perceived Influence of Physical Factors in the Future, leads to the conclusion that utilizing sojourn factors as controls may provide additional insight concerning this overall relationship.

Two factors suggest themselves as possible controls in this area: Amount of Time in the United States and Training Relevancy. Tables 35 and 36 provide the results of this analyses.

TABLE 35. Summary of Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future Differentiated by Amount of Time in United States on Current Training Program (N = 317)

Time in U.S.	Will be a Problem	Influence of Physical Factors in Future	
		Undecided	Will not be a Problem
		<u>Cell Means</u>	
Six months or less	20.4	19.0	23.5
Seven months to 1 year	19.8	20.5	20.4
Over 1 year	20.1	19.5	18.8
		<u>Cell N's</u>	
Six months or less	41	49	40
Seven months to 1 year	33	48	30
Over 1 year	35	24	17
<hr/>			
<u>F ratio</u>		<u>F</u>	<u>P</u>
Influence of Physical Factors in Future		2.4	N.S.
Amount of Time Spent in U.S.		3.4	.05
Interaction		5.0	.001

From an examination of this analysis it is evident that the relationship between the Influence of Physical Factors in the Future and Change Agent Efficacy is not retained when time spent in the United States is introduced into the analysis. This finding occurred because the relationship between perceived Influence of Physical Factors in the Future and Change Agent Efficacy is influenced very much by the amount of Time spent in the United States. This is indicated by the significant interaction effect. Participants who have been in the United States for less than one year indicate, in general, a relationship between increased perception of ability to introduce change and decreased concern with the Influence of Physical Factors in the Future. The opposite is true with the "over one year" group. Those participants who report that physical factors will be a problem are the ones who report greater ability to introduce change.

TABLE 36. Summary of Mean Change Agent Efficacy Scores for Participants with Different Attitudes toward Influence of Physical Factors in the Future Differentiated by Relevancy of U.S. Training (N = 317)

Training Relevancy	Influence of Physical Factors in Future		
	Will be a Problem	Undecided	Will not be a Problem
	<u>Cell Means</u>		
Low	19.3	19.2	17.8
Medium	20.4	19.9	21.2
High	20.7	21.2	23.2
	<u>Cell N's</u>		
Low	34	38	13
Medium	48	44	39
High	27	39	35
<u>F ratio</u>	<u>F</u>		<u>P</u>
Influence of Physical Factors in Future	less than 1		N.S.
Training Relevancy	13.3		.001
Interaction	2.4		N.S.

Dividing the group on the basis of their attitudes toward the relevancy of their training brought about similar results. No significant differences occur among groups classified as to attitude toward physical factors in the future under this control situation. However, the group indicating high training relevancy follows the general pattern of the relationship between low Influence of Physical Factors in the Future and high Change Agent Efficacy. This suggests the possibility that the relationship between these two variables is influenced by the differing levels of attitude toward Training Relevancy of the U.S. Program.

Physical Factors in the Future -- Summary

Four control variables were examined in this area: Attitude toward Physical Factors in the Past, Attitude toward Past Change, Time in the United States, and Training Relevancy. With the exception of Influence of Physical Factors in the Past, the relationship between Physical Factors in the Future and Change Agent Efficacy was insignificant in the control situations. Although Influence of Physical Factors in the Future appears to be a moderately successful predictor variable, it should be viewed in combination with these control variables so that the differential effects of the control are fully utilized.

CHAPTER V

GENERAL ANALYSIS AND DESCRIPTION

As suggested earlier, the major purpose of this study was to provide at least a generalized description of those participants who might be considered "optimistic" concerning future change activity. An attempt along this line was made in Chapter IV. From the analyses done in that chapter, certain clusters of variables appeared to provide the means of predicting whether or not a participant sees himself as being able to introduce change. Now, in turn, it seems reasonable to combine these variables so that statements concerning expected ability to introduce change may be more precise and take into account limiting, but needed, qualifications. This will also provide a framework within which different combinations of variables may be viewed on a comparative basis.

Method

Eight variables were considered as possible predictors in regard to the Change Agent Efficacy of participants. The basis for the choosing of the eight variables was primarily statistical, as all eight were significantly related to the dependent variable Change Agent Efficacy. In addition to this, the first six of these variables listed below appear to be valuable in the considerations examined in the analyses in Chapter IV.

The remaining two, Philosophy of Supervisory Consideration and Authority Level, were added to attempt to take into account organizational or work situation influence. Authority Level also has another

advantage. It provides, in a qualified way, another background or descriptive variable in addition to Age and Time in the United States.

<u>Variables Used</u>	<u>F Value*</u>	<u>Correlation Coefficient between the variable and Change Agent Efficacy **</u>
1. United States Training Relevancy		.24
2. Influence of Physical Factors in the future		.18
3. Perception of Supervisor's Attitude toward Past Change		.22
4. Participant's Attitude toward Past Change	9.1	
5. Time Spent in the United States	6.1	
6. Age		.12
7. Philosophy of Supervisor Consideration		.15
8. Authority Level	4.5	

Procedure Followed

Median total score values were determined for each of the above variables. On the basis of this, participants could be designated as either high or low depending on their score on that variable. Then, in view of that, a determination could be made as to whether the score on the variable could be considered as indicating a favorable attitude toward ability to introduce change or an unfavorable attitude. Based on these considerations, the following breakdown occurred:

* With two degrees of freedom between and 314 within, an F as small as 3.04 would occur by chance only 5 in 100 times.

** For an N of 317, a correlation coefficient as small as .11 would occur by chance only 5 in 100 times.

TABLE 37. Favorable and Unfavorable Attitude Groups for Eight Predictor Variables

Variable	Number in Favorable Group	Number in Unfavorable Group
1. U.S. Training Relevancy	162	155
2. Influence of Physical Factors in the Future	162	155
3. Perception of Supervisor's Attitude toward Past Change	162	155
4. Participant's Attitude toward Past Change	154	163
5. Time Spent in United States	161	156
6. Age	140	177
7. Philosophy of Supervisor Consideration	175	142
8. Authority Level	157	160

To analyze the data, two groups were formed on the basis of Training Relevancy: Favorable and Unfavorable Training Relevancy. After this, these two groups were again subdivided. This was done on the basis of the participant's score on Influence of Physical Factors in the Future. There were four groups after this split: (1) Favorable Training Relevancy-Favorable Influence of Physical Factors; (2) Favorable Training Relevancy-Unfavorable Influence of Physical Factors; (3) Unfavorable Training Relevancy-Favorable Influence of Physical Factors; and (4) Unfavorable Training Relevancy-Unfavorable Influence of Physical Factors. This same procedure was followed for the remaining six variables, which resulted in a breakdown of the participants into 256 cells after consideration of all eight variables. Each of these cells was made up of participants of a different combination of favorable and unfavorable scores on each of the eight variables. Examples of the cells are:

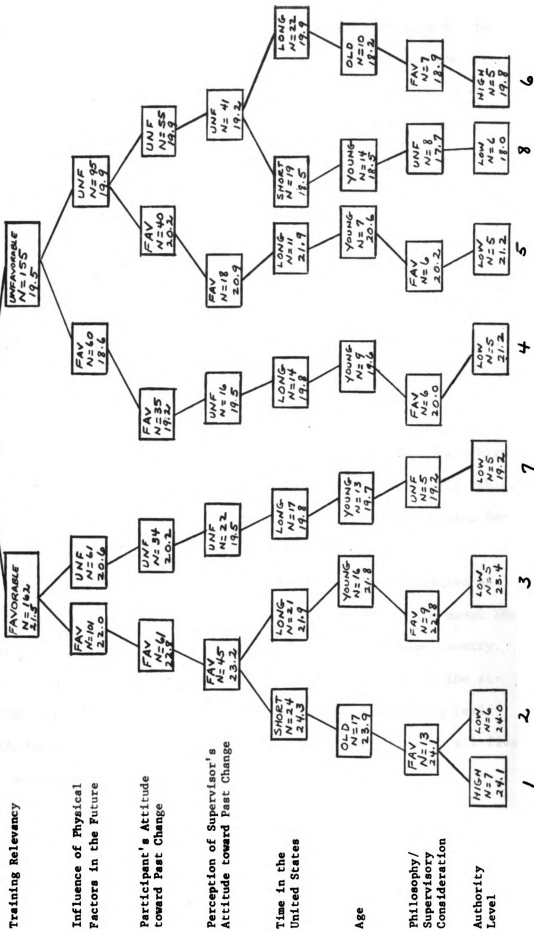
FIGURE 1. Examples of Cell Make-Up

Variable	Cell 1	Cell 77	Cell 256
Training Relevancy	Favorable	Favorable	Unfavorable
Physical Factors	Favorable	Unfavorable	Unfavorable
Perception of Supervisor's Attitude toward Change	Favorable	Favorable	Unfavorable
Participant's Attitude toward Change	Favorable	Favorable	Unfavorable
Time in the U.S.	Favorable	Unfavorable	Unfavorable
Age	Favorable	Unfavorable	Unfavorable
Philosophy of Super- visory Consideration	Favorable	Favorable	Unfavorable
Authority Level	Favorable	Favorable	Unfavorable

With 317 subjects distributed over 256 cells, it is apparent that most cells are made up of very few or no participants. As it would be fruitless to attempt to examine all the various cells, only certain cells were considered. The basis on which this determination was made was size. On an arbitrary basis, those cells which contained five or more participants after consideration of all eight variables were considered for further study.

Figure 2 provides a summary graph of those cells which contained five or more participants. It also indicates how the participants in each of the cells were rated on each of the eight variables (Unfavorable or Favorable), the number of participants in the cell at a particular variable level, and the Mean Change Agent Efficacy Score for the participants in that cell. As can be noted in Figure 2, the eight high frequency cells are ranked in numerical order on the basis of Change Agent Efficacy Scores. These eight cells account for 13 percent of the total sample. However, they account for only 3 percent of the total 256 cells.

FIGURE 2 - Analysis and Breakdown of High Frequency Cells



Certain patterns develop and can be detected in Figure 2. To analyze the cells in more detail, it will be helpful to consider the eight variables as representing two different groups: one group which includes those variables classified as attitudinal, and a second group which contains background or demographic variables. The two groups are as follows:

Attitudinal Variables

United States Training Relevancy
Influence of Physical Factors in the Future
Participant's Attitude toward Past Change
Perception of Supervisor's Attitude toward Past Change
Supervisory Consideration Philosophy

Descriptive Variables

Time Spent in the United States
Age
Authority Level

To help in detecting patterns, a rearrangement of the variables was made and is presented in tabular form in Table 38. In this table, the order of the variables are changed to reflect the distinction between the attitudinal and the descriptive variables.

The first group of cells (1, 2, and 3) might be considered as representing those participants who are generally optimistic about the possibility of introducing change upon return to their home country. This would be particularly true in regard to their scores on the attitudinal variables. As can be seen in Table 38, these three cells are made up of those participants who had favorable scores on all five of the attitudinal variables.

TABLE 38. Favorable and Unfavorable Scores of Variables for Eight High Frequency Cells

Variable	1	2	3	4	5	6	7	8
Philosophy of Supervisory Consideration	F	F	F	F	F	F	U	U
Perception of Supervisor's Attitude toward Past Change	F	F	F	F	F	U	U	U
Influence of Physical Factors in Future	F	F	F	F	U	U	U	U
Participant's Attitude toward Past Change	F	F	F	U	F	U	U	U
Training Relevancy	F	F	F	U	U	U	F	U
Time Spent in United States (Short stay-Favorable)	F	F	U	U	U	U	U	F
Age (Older age - Favorable)	F	F	U	U	U	F	U	U
Authority Level (High-Favorable)	F	U	U	U	U	F	U	U
Number in Cell	7	6	5	5	5	5	5	6
Mean Change Agent Efficacy Score	24.1	24.0	23.4	21.2	21.2	19.8	19.2	18.0

Optimistic GroupCell 1

This cell not only has the highest frequency but also the highest mean Change Agent Efficacy Score (24.1). On the basis of the hypotheses made in Chapter I, it would be expected that this cell should have the highest Change Agent Efficacy Score. On each variable considered, participants making up this cell had scores which would indicate that they would also have high expectations about their ability to introduce change upon their return home.

This group represents participants who felt their training to be relevant, whose attitude toward past change was favorable, and who felt that their supervisor's attitude toward past change was favorable. They did not feel that such things as time, money, and manpower would hinder them in their efforts to introduce change in the future. They also felt that "ideal" supervision was made up, in part, of high consideration toward the subordinate. In terms of the background variables studied, they were older, higher in the organizational hierarchy, and had been in the United States a relatively shorter period of time.

Cell 2

This cell represents the same make-up as Cell 1 above, with the exception that this group reported being lower in the organizational hierarchy and, thereby, had a lower authority level. In all other respects, they are similar. It can be seen that this was the second largest grouping and was about the same as Cell 1 in optimism toward future change activity. This mean Change Agent Efficacy score was 24.0. This suggests that authority had little influence on efficacy if these other variables are taken into account first.

Cell 3

This cell is the third of the general group of participants which had favorable scores on all five of the attitudinal variables. Although all three background variables scores were unfavorable, the mean Change Efficacy score was still 23.4 which is considerably above the general mean for the total sample. The major difference between this group and the high optimistic group (Cell 1) is that this group is younger, lower in terms of authority, and has spent a considerable amount of time in the United States on this training program. In all other respects, they are the same.

Moderate Optimism Group

Two cells might well represent "average" optimism in regard to change. Both of these cells were made up of participants who had favorable scores on only three of the five attitudinal variables. In neither case were there any favorable scores on the background variables. The mean Change Agent Efficacy score of 21.2 in both cases is just slightly above the overall average for the entire sample.

Cell 4

The participants making up this cell felt that their program was not highly relevant for their purpose. They also held unfavorable attitudes toward past change. On the other hand, physical factors, such as time, money, and manpower were not perceived as being problems, and their supervisors are perceived as being generally favorable toward past change. High consideration in terms of supervisory behavior is seen as being desirable as far as their personal behavior is concerned. They are young, low in authority level, and have been in the United States for some time.

Cell 5

The participants making up this cell are similar to the above group in all respects except those concerning their attitudes toward past change and the effect of physical factors in the future. This group perceives past change in a positive manner. However, they do expect that physical factors will make it difficult for them to introduce change in the future.

Pessimistic Group

The third major grouping might be considered as those participants who are relatively pessimistic about the possibility of introducing change upon return home. The three cells represented within this grouping indicate either one or no favorable scores on any of the five attitudinal variables.

Cell 6

This cell had the highest mean Change Agent Efficacy score of this group (19.8). This was expected. In addition to a favorable score on an attitudinal variable, Philosophy of Supervisory Consideration, there were also two background variables which resulted in favorable scores: Age, and Authority Level.

This group may best be described as older and higher in authority level. They have also been in the United States a relatively short time. Their general attitude of "ideal" supervisory behavior is high consideration. On the other hand, past change is not viewed by them as having been favorable and they feel that their supervisors would agree with this attitude. Expectations about the influence of physical factors in the future are negative, in that they expect money,

manpower, materials, etc., to be a problem in introducing change. In connection with this, it would appear that possibly their United States training helped them little in this respect as they indicate an unfavorable rating in terms of relevance and purposefulness of their U.S. training program.

Cell 7

This group had only one favorable score on any of the variables. These participants feel that their training was relevant. However, they feel that the factors of money, manpower, and material will be a problem in the future. In regard to past change activity, they generally hold unfavorable attitudes toward past change. They also feel that their supervisors feel this way as well. Their philosophy as to supervisory behavior tends to be one of low consideration toward the subordinates. In general, they are younger participants, low in their organizational structures, and have been in the United States on this training program for some time. The mean Change Agent Efficacy score for this group is 19.2

Cell 8

This cell might be labelled the "pessimistic" group in regard to future change. The mean of 18.0 is, by far, the lowest of the clusters discussed.

On the basis of the hypotheses and results of the earlier chapters, the result of a low change agent efficacy score might be expected. In fact, with the one exception of Time in the United States, this group would follow the unfavorable pattern in all respects.

This group may be described as younger, low in the organizational structure, but with a short time in the United States on this training

program. The participants do not see past change as favorable and feel that their supervisors would agree. They do expect problems in introducing change because of lack of money, manpower, equipment and other physical factors. They indicate that their training program has not been particularly relevant. For them, ideal supervisory behavior involves little or low consideration toward the subordinate.

Summary and Discussion

In general, a number of factors are suggested on the basis of the analysis of the eight cells considered. One noticeable influence in the make-up of high frequency cells supports conclusions reached in Chapter IV concerning attitudes toward past change experiences. It was noted earlier that a higher Change Agent Efficacy score might be expected if the participant perceived his supervisor agreeing with his favorable attitude toward past change. Secondly, higher Change Agent Efficacy scores were associated more with perceived participant-supervisor disagreement than with perceived agreement of unfavorable attitudes toward past change. From an examination of the eight-cells mentioned in Figure 2, a pattern develops which supports these findings. Of the three groups, the optimistic group (high mean Change Agent Efficacy scores) shows that there was agreement between Attitude toward Past Change and Perception of Supervisor's Attitude toward Past Change. In this case, participants were scored as having favorable attitudes on both variables. The second group indicates a difference between these two variables in one cell and favorable agreement in the other. Finally, the low or "pessimistic" group is made up of three cases where agreement in regard to unfavorable attitudes toward past change is indicated.

The variable, Influence of Physical Factors in the Future, appears

to discriminate between cells in a manner independent of the other variables. The four highest cells are made up of participants with Favorable scores on this variable, whereas the four lowest are all Unfavorable on this particular variable.

It is also interesting to note that had the cells been ranked on total number of variables considered favorable, a similar order of ranking in terms of mean Change Agent Efficacy Scores would have resulted. In other words, ranking in terms of number of Favorable variables would have resulted in a consistently lower mean Change Agent Efficacy score as the number of Favorable variables decreased. However, it appears to make little difference whether the participant has favorable scores on the descriptive or background variables. In all three groups, the major difference in the degree of optimism about the participant's ability to introduce change occurs as a result of differences in the attitudinal variables.

Because of the apparent strength of the attitudinal variables, further investigation seemed warranted.

Analysis of Attitudinal Variable Relationship

Table 39 below provides the relationships between the five attitudinal variables in terms of whether or not the group, which would be expected to have a higher mean Change Agent Efficacy score, did indeed have the higher scores.

It can be seen from Table 39 that ten of the possible thirty-one relationships are not as expected. The majority of these occur in the fifth level or in regard to Philosophy of Supervisory Consideration. One-half of these relationships were not as expected. In two other situations, however, the expected relationship did not occur. These are considered in detail below.

TABLE 39. Expected Relationships between Attitudinal Variables

Training Relevancy	Influence of Physical Factors in the Future	Participant's Attitude Toward Past Change	Perception of Supervisor's Attitude	Philosophy of Supervisory Consideration
YES	YES	YES	YES	YES
				NO
			YES	NO
				NO
		YES	NO	NO
				YES
			YES	NO
				YES
	NO	YES	YES	YES
				YES
			YES	NO
				YES
		YES	YES	NO
				NO
			YES	YES
				YES

Yes - indicates the Mean Change Agent Efficacy Score for one group was expected to be higher than the other. The yes indicates that the results confirmed the expectation.

Influence of Physical Factors Level: On the basis of limited analyses, participants who feel that physical factors will be a problem in the future would have less optimism about their ability to introduce change than those who do not feel that way. However, the opposite occurs under the Unfavorable Training Relevancy group. A possible explanation of this might be that those who see physical factors as being a problem in the future received little help from their training program in solving some of these problems. In essence, they expected to receive some ideas about how to go about obtaining more money, materials, etc., and did not. However, they may have been confident about being able to solve these physical problems, in a limited way, before their arrival. Therefore, although the physical factors are still a problem, and their training program did not help them particularly, they still feel able to cope with the introduction of change.

Perception of Supervisor's Attitude toward Past Change Level: One situation occurred where participants who perceived unfavorable attitudes toward past change on their supervisor's part had a higher mean Change Agent Efficacy score than where they perceived a favorable attitude. This would not be completely unexpected. In view of the findings concerning attitudes toward past change, favorable agreement was not significantly different from disagreement in terms of Change Agent Efficacy.

Philosophy of Supervisory Consideration Level: An analysis of the relationships considered at the fifth level was made. At this level, eight of the sixteen possible relationships were not as expected. An explanation of this is fairly difficult as there appear to be no consistent patterns which occur and from which predictions

may be made. A possible suggestion is that the variable, Philosophy of Supervisory Consideration, is not a particularly strong predictor of Change Agent Efficacy when used in combination with these other variables.

Summary - Attitudinal Variables

The analysis of the five attitudinal variables results in a consistent and expected pattern in regard to those participants who have favorable scores on the variables. However, there is a different pattern among those who are generally unfavorable. The lowest of the mean Change Agent Efficacy scores occur under the following three circumstances:

U.S. Training Relevancy	Unf.	Unf.	Unf.
Influence of Physical Factors in the Future	Fav.	Fav.	Fav.
Participants Attitude toward past change	Unf.	Unf.	Fav.
Perception of Supervisor's Attitude toward past change	Unf.	Unf.	Unf.
Philosophy of Supervisory Consideration	Fav.	Fav.	Fav.
Mean Change Agent Efficacy Score	16.8	16.2	15.8

The general pattern that evolves in regard to these three cases occurs through the combination of Training Relevancy, Physical Factors, and Perceived Supervisor's Attitude toward Past Change. The Influence of Physical Factors appears to warrant particular consideration.

Although the participants in all three groups report that physical factors will not be a problem in the future, they are still generally pessimistic about their ability to introduce change. Part of this may be due to the fact that their training program was not very relevant. Also, none of the groups perceived their supervisors as being favorable toward past change activity. It may be that the changes they have in

mind are not related to physical factors; that is, requiring a great deal more money or manpower. It may be that these participants are primarily concerned with activities which directly involve their supervisor's approval and sanction. If these activities are similar to ones which occurred in the past, and the training program has not supplied additional materials or ideas for solving these past problems, then supervisory attitude may take on major importance.

To summarize the discussion in regard to the five attitudinal variables and their influence in regard to Change Agent Efficacy, we may consider the scores between two major groups. Comparing those participants who were Favorable on all variables with those who were Unfavorable on all variables, we find that the Favorable Group had a mean Change Agent Efficacy score of 23.5 as compared to 18.2 for the Unfavorable Group.

CHAPTER VI

CONCLUSIONS, DISCUSSION AND SUGGESTIONS FOR FURTHER RESEARCH

In an exploratory field study such as this, the possibility of reaching unqualified conclusions and generalizations is obviously limited by the lack of adequate control and refinement of data-gathering instruments. In relation to this particular study another major consideration to be kept in mind is the lack of behavioral measurements in connection with the attitudinal data. In view of these factors, any conclusions reached in connection with this study must be viewed merely as hypotheses supported by this particular study in relationship to the group studied. Therefore, the major value of this study is the tentative conclusions reached which may provide a basis for future research of those factors which are felt to be of interest and value in attempting to understand the influences and patterns related to the introduction of change following cross-cultural education.

Conclusions and Discussion

The specific hypotheses measured in this study, as well as those additional analyses related to them, are summarized in terms of the general areas described below.

Measures in Relation to Attitude toward Change of the Participant

Two separate areas of change activity were considered in this study; (a) philosophy of change activity and (b) attitudes concerning specific past change activity.

Philosophy of Change Activity

Specifically, only one hypothesis was concerned with (a) above. The relationship between Attitude toward Work-Related Change and Change Agent Efficacy was concerned with the participant's generalized view of change. The lack of significance of the predicted relationship between the participant's attitude toward work-related change and his reported ability to introduce change may be, in part, due to the ambiguity of the questions in this scale. To some degree, the lack of specificity and direction toward a particular identified set of activities might very well have been too unstructured for this group. For the most part the subjects were using a secondary language. This may have proved to be too great a handicap in their conceptualization of this variable. The difficulty in dealing with these questions expressed by participants while completing the questionnaire provides some support for this interpretation. These particular points are covered in more detail in a later section regarding suggestions for further research.

Attitudes Concerning Specific Past Change Activities

In general, the results of the analyses in this area support the position that participants who hold favorable attitudes toward past change have high expectations about their ability to introduce change.

Of the four variables considered in this area, only Ease of Change was not useful in predicting reported ability to introduce change. The other three, Satisfaction with Change, Consequences of Change, and Amount of Change Activity were effective in predicting reported ability to introduce change. However, when Ease of Change

was combined with Satisfaction with Change and Perceived Consequences of Change, the combined measure was an effective predictor variable. Possibly the distinction between difficult and easy, in relation to change activity, was not established through an adequate scale, thus rendering it ineffective when used alone.

Further investigation of this generalized attitude toward change activity results in some qualifications. Certain patterns emerge when the relationship between Attitude toward Past Change and ability to introduce change is studied in combination with other variables.

Although a significant difference in perceived ability to introduce change between participants reporting favorable and unfavorable attitudes toward past change still occurs, the size of the relationship was reduced when the following conditions were taken into account:

(a) Amount of Past Change Activity reported by the participant, (b) Perception of Supervisor's Attitude toward Past Change, and (c) Perception of Agreement in Attitudes toward Past Change between the Supervisor and Participant.

Despite this, the relationship between Attitude toward Past Change and ability to introduce change was significant in all three controlled conditions. In view of these analyses, the general conclusion specifying this relationship seems warranted.

Perception about Supervisory Behavior and Attitudes

One of the major concerns of this study was to attempt to better understand the influence of the participant's perception of his supervisor. Three major hypotheses were proposed in this area; two in regard to a description of the behavior of the supervisor, and one concerning the participant's assumptions about attitudes held by the supervisor.

Neither of the hypotheses concerning described supervisory behavior-- Consideration or Initiation of Structure--were confirmed. No support was given to the hypothesis that participants who report more considerate supervisory behavior are better able to introduce change than those who report less. Also, participants who reported low initiation of structure on the part of their supervisors did not report feeling better able to introduce change than those who reported that their supervisors did initiate or determine the structure of their jobs.

Perception of Supervisor's Attitude toward Past Change

Support was given to the hypothesis that participants who perceive their supervisors as having favorable attitudes toward past change will feel better able to introduce change than those who perceive their supervisor's attitude as being unfavorable. However, a more meaningful conceptualization occurs when it is taken into account with other factors. Primarily, when perceived supervisory attitude toward past change is combined with the participant's attitude, higher predictability of Change Agent Efficacy occurs.

One observation should be stated before considering this factor further. The participants reported considerable uncertainty in answering the questions in this scale. Participants stated, on an informal basis during the administration of the questionnaire, that it was difficult to answer question as they thought their supervisors would. Therefore the relationship between perceived supervisory attitudes and ability to introduce change should be viewed with this in mind.

Perception of Agreement with Supervisor

Another major concern of this study was an attempt to determine whether perceived agreement between the participant and his supervisor

made a difference in terms of the participant's perceived ability to introduce change. In all, there were four major hypotheses which dealt with perceived agreement with supervisors.

In general, higher perception of ability to introduce change occurs with:

1. Participants perceiving the supervisor's agreement with their favorable attitude toward past change than those perceiving supervisor's agreement with their unfavorable attitude toward past change.
2. Participants perceiving the supervisor's agreement with their favorable attitude toward past change than those perceiving disagreement between themselves and their supervisors.
3. Participants whose philosophy of supervisory consideration agrees with their description of their supervisor's behavior than those whose philosophy disagrees.
4. Participants whose philosophy of supervisory initiation of structure agrees with their description of their supervisor's behavior than those whose philosophy disagrees.

The overall results are not particularly strong. In only one case (1 above) was there a significant result.

Attitude toward Past Change

In further considering 1 and 2 above, several analyses were made. It appears that one group of participants differs from the others significantly in this area. The major conclusion reached is that those people who hold unfavorable attitudes toward past change who perceive their supervisor as agreeing, feel less able to introduce change than other groups. In terms of predictive ability concerning Change Agent Efficacy, the following tentative order could be established:

- a. Perceived Favorable Agreement
- b. Perceived Disagreement
- c. Perceived Unfavorable Agreement

Supervisory Behavior

Neither of the hypotheses stated above (Hypotheses 3 and 4 stated under the section on Perception of Agreement with a Supervisor) were supported. In fact, due to the low correlations, no further analysis using either of these measures was utilized. In general, the discrepancy measures in relation to supervisory behavior led to no positive conclusions about ability to introduce change.

Measures Related to the Influence of Physical Factors

An attempt was made in this study to measure the influence of physical factors in expected future change activity. Therefore, hypotheses were developed in order to examine: (1) the relationship between a participant's perceived ability to introduce change and (a) his perception of how physical factors will influence this future change activity, and (b) his perception of how they have influenced his past change activity; and (2) the relative increase or decrease of the influence of physical factors in the future over the influence in the past. In terms of hypothesized relationships, the findings are far from conclusive.

As predicted, participants reporting that physical factors will not be a problem in the future reported more ability to introduce change than those reporting that factors of this nature will be a problem. However, the hypothesized relationship between influence of physical factors in the past and perceived ability to introduce change was not supported.

Finally, the prediction that physical factors would be more of a problem in the future than in the past was not only unconfirmed, but reached significance in a direction opposite to that predicted.

Further analysis tends to limit any generalized conclusion in this area as well. In only one instance did the significant relationship cited in (1a) above occur when other variables were introduced as controls. When Influence of Physical Factors in the Past was taken into account, those participants reporting that physical factors would not be a problem in the future report higher ability to introduce change.

Another approach toward attempting to understand the possible influence of attitude toward physical factors in the future may be one in which Time in the United States is considered. In this case, no significant difference occurred as a result of differentiation of participants classified as to attitudes toward physical factors in the future. The interaction effect might be looked at more closely. Participants who had been in the United States less than a year reported ability to introduce change when no problems with physical factors were reported. However, for the group of participants who had been here over a year, the opposite was true. One possible consideration is that those in this country longer may not see physical factors as problems but may see other factors having an influence. Despite the lack of physical problems there may be other factors which make them feel less able to introduce change. Another possible factor in this case might very well be the participant's attitude toward past change activity. Again, the relationship between Influence of Physical Factors in the Future and Change Agent Efficacy, taking account of Attitude toward Past Change, results in non-significance.

Any attempt to explain the results in regard to whether physical factors will be more of a problem in the future than in the past is merely tentative. It appears that either the pre-test data, on which this prediction was based, was indeed one of those results which would occur less than five times by chance, or that the results in the analysis occurred by chance only. Considering the size of the N involved in the latter case and the subsequent refinement of questions involved in the final questionnaire, the conclusion must be reached that the safer approach is to accept the latter finding and reject the pre-test data. Following this, physical factors appear to be less of a problem in the future than in the past for these respondents.

In effect, a highly qualified conclusion might be reached concerning the Influence of Physical Factors in the Future. In general, there appears to be some degree of relationship between whether or not a person considers physical factors as being a problem in the future and his feeling as to whether he can introduce change in the future.

Training Relevancy

Both major hypotheses were supported when Training Relevancy was used as an independent variable. Those participants who report that their United States Training Program was relevant also report the highest ability to introduce change upon return home. The major hypothesized relationship between Training Relevancy and U.S. Trip Satisfaction was also supported. Those participants who reported high Training Relevancy also reported high Trip Satisfaction.

Demographic Variables

Although no specific hypotheses were formulated concerning personal background variables, a number of analyses provided some preliminary exploratory concepts which may be considered.

The participant's ability to introduce change appears to be affected in terms of some of these variables. Two in particular, Age and Time in the United States, appear to be of value in attempting to understand some of the factors relative to Change Agent Efficacy. A tentative conclusion, based on an admittedly preliminary basis, is that older participants do report more ability to introduce change than do younger ones. Also, those participants who have been in the United States the longest report the least ability to introduce change.

A possible interpretation of this last result might be that as the participant extends his stay in the United States, he may begin to realize the cultural differences he has been exposed to, and possibly adopted, while in the United States. He may also have become more aware of some of the additional problems of change than the participant on a shorter program. Another factor involved may be the nature of the program. In many cases, participants who were on short sojourns, were engaged in specific learning or training programs. They had been sent to the United States to learn specifically designed skills in order to solve a problem which had been previously identified, and the existence of which was considered to be detrimental. On the other hand, many participants were engaged in longer programs designed so that the participant could earn a college degree. In these situations there was probably no stated relationship between the training program and the solutions to problems in the home culture. On this basis, the nature of the program may be of more concern than the length.

Another relationship to be considered in this area is a combination of Age, Time spent in the United States and Relevancy of

the U.S. Training Program. Figure 2 indicates that under favorable attitudes concerning training relevancy, the combination of a short stay in the United States and older participants results in a mean Change Agent Efficacy score of 23.9. This is compared with a mean Change Agent Efficacy score of 21.8 for younger participants who have been in the United States for longer periods of time. However, when these combinations are considered under the unfavorable training relevancy situation, a different result is obtained. The combination of younger participants who have been in the United States for shorter periods of time results in a more optimistic outlook toward their ability to introduce change than older participants who have been in the United States for longer periods of time. This suggests the possibility that the older participants reported ability to introduce change is substantially reduced when they see their training program as being irrelevant, particularly when the program has been of some length. However, considerably more investigation of this particular result appears warranted in light of results obtained in this study.

A moderately brief investigation was conducted concerning Country of Origin and the stated occupation of the participant. On the basis of Change Agent Efficacy no significant difference appears between geographic areas of the participants.

However, when occupational areas are compared, significant differences result in Change Agent Efficacy. These tend to be concentrated in one particular area, among three groups: Manufacturing, Communication/Transportation, and Natural Resources. These groups differed significantly from the rest. It may be that their programs are more concerned with implementation of accepted practices. In

this case, the participant's change activity may very well be ordained and established so that the participant feels that his change activity will encounter no serious opposition.

CONCLUSIONS AND DISCUSSION OF GENERAL DESCRIPTIVE ANALYSIS

The major purpose of this study was to enumerate and describe the differences between participants classified in terms of their reported ability to introduce change upon return to their home country after completion of their technical assistance programs. Through the combination of eight variables it was possible to describe participants reporting high, moderate, and low ability to introduce change.

High Expectations about Change Ability

A general description of the type of participant who feels confident in his ability to introduce change was made in Chapter V. It appears that the best prediction of participants with high expectations about their ability to introduce change would be as follows:

Primarily, these participants would be people who consider that their training program in the United States was relevant to them. They not only feel that their program was purposeful in terms of future change activity, but also that their change activity will not be adversely affected by the lack of money or physical resources. This might be due to the fact that their proposed changes do not necessarily require large amounts of these factors. It may also be due to the fact that adequate resources are available for their purposes.

Part of the confidence expressed by these participants may be due to their feeling that past changes made in their organizations have been favorable. It may also be due to their perception of their

supervisor's favorable attitude concerning past change. Given these conditions, if resources were needed, the participant may feel that he could expect cooperation and support from his supervisor in regard to his change activity. This, combined with the fact that the participant views past change activity in a favorable manner, would increase the participant's confidence in his ability to introduce further change.

A further aspect in regard to perceived ease of change ability was the position of the participant within the organization. The optimistic participants tended to be higher in the organizational structure and to supervise less people than those who were more pessimistic about their ability to introduce change. In effect, these participants not only felt that they had supervisory support in regard to change activity, but possibly felt confident that change could easily be made through the formal authority system because of their positions. Not only is this possible, but the participants may also feel able to bring about change in ways other than through reliance on the formal system. Highly optimistic participants also suggested that a good supervisor is one who is considerate to his people. Given this attitude about supervisory behavior, they may expect cooperation of people under them because of their expressed concern about them.

Because of the generally higher position within the organization of these participants, it is not surprising that, in general, they are older. However, one consideration should be taken into account. Within this sample the participants are relatively young. Therefore, the "older" participants would be generally in their late thirties or early forties.

The highly optimistic participants have been in the United States

a shorter period of time than those less optimistic ones. Possibly part of the relevancy of the training program may be due to the fact that the U.S. Training Program is not overly long. In any event, it appears that this group was made up of those participants who had been in the United States on their training program for a shorter period of time.

In summary, a better prediction about a participant's confidence in his ability to introduce change occurs with the inclusion of all eight of the variables utilized. Of these, however, Age, Authority Level, and Time in the United States are of less importance than the others.

Moderate Expectations about Change Ability

From the examination of the general analysis performed in Chapter V, one group could be designated as typical of most of the participants making up the sample. (Mean Change Agent Efficacy score of 21.2 as compared to 20.5 for the entire sample.)

This group could be designated as younger, lower in the organization, and having been in the United States a relatively long period of time. In essence, they did not score high on any of the background variables. This is quite in contrast to the optimistic group.

In general, there were mixed reactions concerning attitudinal variables. The group felt that their training program was primarily low in relevance for them. Possibly lacking in experience due to age and position, they may have expected more or felt that specific problems would be solved. Also, the fact that they had been in the United States for a considerable length of time may also be related to low Training Relevancy.

The participants saw their supervisors as holding favorable at-

titudes toward past change. However, their attitudes toward past change are mixed. This might also be said of Influence of Physical Factors in the Future. Here again, there is no clearcut indication of relationship between this factor and Change Agent Efficacy.

In one respect, this group is similar to the optimistic group. They feel that considerate behavior toward subordinates is desirable.

A general summary statement is difficult to make concerning this group. Their perception of their ability to introduce change is influenced by the fact that change in the past was not necessarily favorable from their point of view. This, combined with the fact that their training program was not relevant, suggests that possibly future change may be of a similar nature with no prospects of solution coming from the training program. The plus value of perceived favorable supervisory attitude is possibly offset by some concern over the adverse Influence of Physical Factors in the Future.

These various factors, coupled with the generally negative scores on the background variables, keeps this group of participants from being overly optimistic about their success in introducing change.

Low Expectations about Change Activity

To describe this group on the basis of the combination of variables is also more difficult than in the case of those participants with high expectations.

There are two areas in which a fairly consistent pattern develops: Influence of Physical Factors in the Future and Attitude toward Past Change Activity. It appears that those participants best described as having little confidence in their ability to introduce change expect considerable problems to occur because of the lack of

money, men, equipment, and time. Probably money would be the major concern in this case. This group may perceive their future change activity related to areas in which adequate resources are not available and possibly may not feel that they will be able to acquire them. Related to this is their perception of their supervisor's unfavorable attitudes toward past change. As they feel that their supervisors do not consider change activity in the past as being beneficial, they may also feel that they will receive little support from them in obtaining physical factors in regard to their change activity. The fact that the participants have unfavorable attitudes toward past change also adds to this general lack of confidence in future change activity. If the past change activity is not seen as being of a favorable nature, the probability of future change activity following similar lines is higher than if the past change activity was seen as being favorable.

These considerations appear to be the strongest basis on which to make predictions about those participants who have low expectations about their future change activity. However, the attitudes of the participants concerning training program relevancy and their philosophy about supervisor consideration will increase the predictability slightly.

Generally speaking, if the participant felt that this training program was not highly relevant to the purposes he had for engaging in it, then it might be expected that he would have lower expectations about his ability to introduce change. This, however, is not as strong a predictor as the above-mentioned relationships.

Also, these participants feel that ideal supervisory behavior is not necessarily dependent on consideration toward the subordinate.

In relation to this, the fact that this group of participants is generally lower in the organizational structure may suggest that they have not had as much experience in work activity which is dependent upon a non-authoritarian approach. In effect, their activity may be primarily involved with highly programmed and structured work patterns, and, therefore, is not as dependent on cooperation of subordinates.

Directly related to the authority position consideration is the fact that this group is composed of younger participants. This may also suggest that there is a general lack of experience among them in terms of work situations. Finally, they have been in this country on their training program longer than those who have higher expectations about their ability to introduce change.

To summarize about the predictions to be made concerning these participants with low expectations about their ability to introduce change, the following considerations may be taken into account.

The participant is concerned about the problems which money, manpower, equipment, and time will cause in regard to his making changes in the future. He sees these factors as being problems. He holds a negative attitude about the general value of past change activity. More specifically, he reports that the results of this activity have not been beneficial to the organization nor valuable to the people who initiated this change. In regard to this change activity, he feels confident that his supervisor agrees with him. In other words, he perceives his negative attitude toward past change as being supported and agreed to by his supervisor.

Although not as important, the participant is younger and lower in his organizational structure. However, these factors are

important only in relationship to how the participant feels in regard to the attitudinal factors stated above. The same situation exists in regard to the Time in the United States. This factor does not necessarily add to the ability to predict the kind of participant who will have relatively low expectations about his ability to introduce change in the future, unless considered in regard to the attitudinal factors.

Primarily, prediction concerning those participants who have low confidence in their ability to introduce change may best be based on unfavorable scores on those variables primarily concerned with their attitudes about change and supervision.

If the participant sees physical factors as a problem, holds unfavorable attitudes toward past change, feels that his supervisor agrees with him, does not feel it is necessary to be considerate to subordinates, and reports low training relevancy for his training program, then it may be expected that he will perceive himself as having low change agent efficacy. If, in addition to these factors, he also is younger, low in authority, and has been on this training program a fairly long period of time, then the ability to predict low expectations about change ability is increased to some degree.

In regard to summarizing the different types of participants, it might be of some value to mention the factor of "generosity." In effect, among those participants scoring high on Change Agent Efficacy, there may be a tendency to evaluate all situations in a favorable manner. Therefore, they would tend to generally score higher on all the variables used.

Although general predictions may be made concerning participants who report low ability to introduce change, the results are not as

clear cut. One possible consideration in regard to this may be suggested. The possibility arises that, although high scores on certain variables may be usable in predicting high Change Agent ability, low scores on these do not necessarily indicate low change agent ability. This consideration suggests that a different set of variables may be more useful and meaningful in predicting those participants who have a low perception of their ability to introduce change.

Suggestions for Further Research

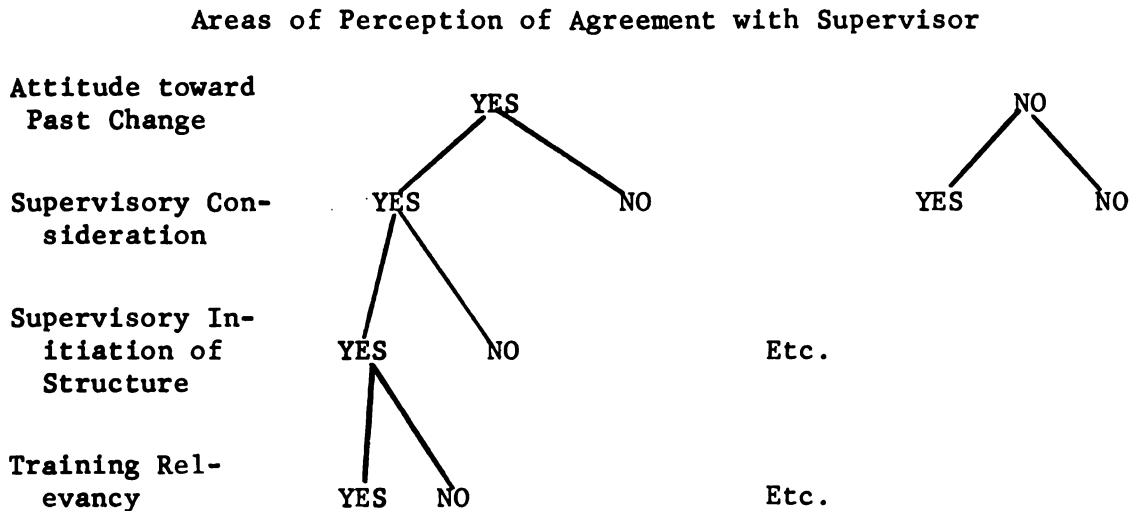
The discussion of other possible research areas and interests has been categorized into three major classifications: (a) further investigation of different combinations of variables used in this study, (b) other variables not analyzed in this study, and (c) further refinement and construction of data-gathering techniques related to this general area.

(a) Variables Used in This Study

Discrepancy measures among participants and supervisors: Although three different discrepancy measures were investigated in this study, no combination of these measures was attempted. A possible research area which would provide further information about perceived ability to introduce change would be a combined measure concerning generalized agreement with supervisor. Thus possibly combining the Discrepancy measures for Attitude toward Past Change, Supervisory Consideration, and Initiation of Structure as well as one on Training Relevancy (See Appendix F) might provide a useful scale for Perceived Agreement with Supervisor's Attitude.

A possible analysis, similar to Figure 2 in Chapter V might be

done concerning these discrepancy measures. The diagram below illustrates one type of approach for considering these variables.



By following this approach, sixteen different combinations of agreement-disagreement categories could be developed and considered in relation to the participant's confidence in his ability to introduce change.

Obviously, a highly desired comparison could be made by actually measuring the participants' supervisors in regard to the areas investigated among the participants. If the research area could be expanded, a more logical and meaningful comparison might be made between the supervisor and subordinate. Under other conditions, actual comparison between the supervisor's responses and the subordinate's responses could be made. This, of course, would eliminate the dependence upon the subordinate's perception of the supervisor's attitude.

Influence of Physical Factors: A further examination is needed of the results which indicated that physical factors will be less of a problem in the future than in the past. Further consideration should

be given to a differentiation among groups based on direction and degree of change. An analysis could then be done in regard to Change Agent Efficacy.

The illustration below suggests a possible scheme for analysis purposes.

		Influence of Physical Factors in the Future	
		Will be a problem	Will not be a problem
Influence of Physical Factors in the Past	Were a Problem	B	B
	Were not a problem	C	D

These four cells could then be examined in terms of Ability to introduce change. They could also be combined and a comparison made between the two change cells and the two no change cells. An even more interesting and meaningful analysis could take place by introducing other variables as control factors. The four most promising variables for use under these circumstances would be:

1. Relevancy of U.S Training Program
2. Perceived Supervisory Attitude toward Past Change
3. Time Spent in the United States
4. Participant's Attitude toward Past Change.

Geographic and Occupational areas: Further investigation should take place utilizing a breakdown of a number of independent variables into groups differentiated by Geographic and Occupational areas. Primarily, this would be meaningful if used in relation to Training Relevancy, Attitude toward Past Change, Amount of Change Activity, Supervisory

Behavior and particularly Time in the United States.

One fruitful area of investigation would be a combination of demographic variables and groups differentiated by geographic and occupational areas. An analysis similar to that presented in Figure 2 in Chapter V could be done utilizing the primary demographic variables in order to determine if any pattern existed in relation to perceived ability to introduce change. Based on these results, an analysis of the different high frequency cells could be examined in terms of Geographic and Occupational backgrounds.

Training Relevancy: A further examination of the hypothesis regarding Training Relevancy and Change Agent Efficacy should be made. This factor should be examined in further detail in relationship with other variables, primarily those of a demographic nature and those specifying supervisory discrepancy relationships.

(b) Variables Not Analyzed in Study

There are a number of factors which might be considered in relation to Change Agent Efficacy. These, in turn, could be further analyzed on the basis of the results obtained on the basic or primary analysis.

Target of Change

One major interest area exists in regard to whether or not a participant sees his major change activity as being primarily concerned with social or physical factors. (See Appendix F.) In essence, do those people who see their activity as being primarily concerned with social change feel better able to introduce change than those who see theirs primarily concerned with physical activities? Control factors such as Influence of Physical Factors in the Past, Influence of Physical

Factors in the Future, Philosophy of Supervisory Consideration and Initiation of Structure, Authority Level and Occupational Background would be the primary considerations to take into account in this general analysis.

Change in Supervisor and Job

Possible further exploration of factors influencing Change Agent Efficacy might be in regard to whether or not the participant will be changing supervisors and/or jobs upon his return home. To analyze this further, it would also be possible and important to take into account the participants personal feelings in regard to these changes or to the absence of them. In utilizing these concepts, such factors as position within the organization, Age, Time in the United States would also be important. Another consideration to be used in connection with this might be those discrepancy measures mentioned in Section (a) above.

Expectations of Others about Change Activity

One research question not examined specifically is: Do people who were expected to introduce change in the past feel better able to introduce change in the future? Although this data was collected (See Appendix F) no analysis was performed in regard to it. The possibility exists that this factor may provide additional insight in regard to prediction of ability to introduce change. It should also be investigated in terms of Amount of Past Change Activity, and the variables making up Participant's Attitude toward Past Change. This would possibly provide a fuller explanation of Influence of Past Change Activity on future change activity.

Attitude toward Change in General

Although an attempt was made in this study to investigate the participant's attitude toward change in general, no significant results were obtained. Further consideration should be given toward development of a scale which could be used to measure such an attitude. In turn, this variable might logically be used in further analysis with the other change measures suggested and used in this study.

An approach which might prove meaningful in this area would be one based on statements about change made by participants. In essence, the items used in a scale of this nature should be drawn from a group of statements made by the participants themselves. In this way, it might be possible to avoid some of the problems associated with the Attitude toward Change Scale used in this study.

(c) Refinement and Construction of Techniques

Attitude toward Work-Related Change

The possibility of constructing a different technique for examining this variable appears warranted. Useful information might be obtained through a series of situations describing various behaviors and requesting opinions from the participants in regard to the situations. This would require the construction of situations designed to tap each area raised by each question in the scale. The alternatives or choices provided to the participant would be designed to provide different measures of the participant's attitude toward change.

Instead of making the statement:

I like a job where I know that my work will not
be the same from week to week.

and requesting agreement or disagreement, a generalized job description explaining the general repetitiveness of job tasks, the range of activities, the cyclical nature of duties and requirements, etc., could be developed. Then the respondent could indicate whether this type of job would be agreeable or disagreeable to him.

Supervisory Consideration

Research involving the full scale as suggested by Fleishman (1961) should be attempted in regard to adequate supervisory description in this area. Also, in connection with this, more investigation should be conducted concerning the supervisory philosophy of the participant or the extent of agreement or disagreement between the supervisor and the participant.

Supervisory Initiation of Structure

Similar research might very well be done along the same lines as stated above. The full Initiation of Structure scale could be administered to participants to determine what differences might exist in regard to perceived ability to introduce change among groups classified as to described supervisory behavior. Use of the full scale would also provide a more meaningful measure of discrepancy between described and ideal behavior.

There is still another factor to consider here. Some measure concerning interaction between supervisor and subordinate should be developed to determine the informal or social relationship between the two. This measure, examined in relation to a formal relationship, would provide further insight into understanding the effect of supervisory climate on the individual's perceived ability to introduce change.

Behavioral Measures

Further research in this area should be concerned with whether or not actual introduction of change occurs upon return of the participant to the organization to which he belongs in his home country. Although obviously difficult to do, the results of this type of study would be of great benefit.

This type of research study would, by necessity, be of a longitudinal nature. To investigate it adequately, it would be necessary to study the participant in three separate phases: before sojourn, during sojourn and after sojourn. In this way a determination could be made concerning his change activity prior to the United States trip. A comparison could then be made as to what his change activity was like after return from the United States. However, the type or nature of his program could also be analyzed in terms of understanding any pre-post sojourn differences. Obviously, this could not be done on a large scale, but rather on a selected basis. One possible approach would be to use a group of participants from one country. An even more likely probability would be to use participants within one particular organization.

Sample-Sojourn Length

This questionnaire was given to participants who, for the most part, were nearing the completion of their sojourn. Further research should be conducted with Time in the United States considered to a greater degree. The amount of Time in the United States and person's ability to introduce change should be looked at further, not only in terms of actual time spent in the United States, but also in relation to the ratio between time spent prior to completion of the questionnaire and total length of the program. In effect, research based on

considerations about Lysgaard's U-Curve Hypothesis (Lysgaard, 1955) should be done. It would then be possible to explore various combinations of actual time spent in the United States and percentages of completed sojourn time at the time of questionnaire completion. Certainly, a meaningful measure would be the administration of the questionnaire both upon arrival and departure of the participants.

Sample-Difference

A broader sample, not restricted to those participants sent to the Communication Seminar by particular project managers would be worthy of consideration. Possibly a comparison might also be made among participants of other programs.

An even more meaningful study could be developed by taking into account the selection process for participants engaged in cross-cultural education programs. It would then be possible to separate groups on the basis of the purpose of the trip, the type of program, the criteria for selection of the participant, and, possibly, the expectations of the people who are responsible for the selection. This might provide better insight regarding the Age-Time in the United States combinations explored in Chapter V. In effect, the purpose of this analysis could be centered around the physical aspects of the sojourn itself. Then an attempt could be made to determine under what conditions of program planning does a high relationship to perceived ability to introduce change come about.

As a general statement, continued effort should be directed toward more analyses of the type utilized in Chapter V. These should be constructed in such a way that different combination of variables

might be examined. On this basis it would be possible to provide overall combination measures which might very well increase the ability to predict the different levels of Change Agent Efficacy among participants engaged in cross-cultural education.

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APPENDIX A

Michigan State University
DEPARTMENT OF COMMUNICATION
East Lansing, Michigan

TO: Communication Seminar Participants

The Department of Communication at Michigan State University, under contract arrangements with the Agency for International Development, is developing a broad program of evaluation of factors that are related to training program effectiveness. The questionnaire that you are going to complete is a necessary and important part of attempting to answer some vital questions concerning training effectiveness.

The value of this study depends upon your frankness and care with which you answer the questions. The answers that you give will be made available only to the research team in the Department of Communication. No one connected in any way with your Government or with AID will see or use any of the individual questionnaires or be able in any way to find out what kind of answers you have given.

A handwritten signature in cursive script, reading "David K. Berlo".

David K. Berlo
Chairman
Department of Communication
Michigan State University

There are no right or wrong answers to the following questions. All of the questions have to do with your attitudes and opinions. Go through these questions quickly. Choose the one answer that comes closest to the way that you feel. Place a check mark (✓) in the space in front of your choice. Please try to answer every question.

Thank you for your cooperation.

Section 1

1. I would much rather work on the technical problems in introducing change than on the social ones.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 1

2. I made many close personal friends in the United States.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 2

3. Unless there is an extremely good reason for changing, I think we should continue to do things the way they are being done now.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 3

4. Modern ways of living are much better than traditional or older ways.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 4

5. I distrust people who always want to have the latest in everything.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 5

Section 1 (continued)

6. The length of my training program in the United States was right for me.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

6

7. I feel that technical change is more important than social change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

7

8. The ideal job for me would be one where the way I do my work --

☐ is always the same
☐ changes very little
☐ changes somewhat
☐ changes quite a bit
☐ changes a great deal

8

9. I was very satisfied about the amount of time I had available to do some of the things I wanted to do in the United States.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

9

10. My training program in the United States was not worth the cost and difficulty it caused in my organization in my home country.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

10

11. I was expected to introduce change as part of my job.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

11

Section 1 (continued)

12. I would rather try to change people's ideas than to improve equipment or machinery.

_____ I strongly agree
_____ I agree a little
_____ I neither agree nor disagree
_____ I disagree a little
_____ I strongly disagree 12

13. The trouble with most jobs is that when you just get used to doing things one way, someone wants you to change.

_____ I strongly agree
_____ I agree a little
_____ I neither agree nor disagree
_____ I disagree a little
_____ I strongly disagree 13

14. People who have introduced changes within my organization in the past have received recognition for their efforts.

_____ I strongly agree
_____ I agree a little
_____ I neither agree nor disagree
_____ I disagree a little
_____ I strongly disagree 14

15. It is more important for me to develop positive attitudes toward work among those who work for me than to try to change production systems.

_____ I strongly agree
_____ I agree a little
_____ I neither agree nor disagree
_____ I disagree a little
_____ I strongly disagree 15

16. My job required me to make many changes.

_____ I strongly agree
_____ I agree a little
_____ I neither agree nor disagree
_____ I disagree a little
_____ I strongly disagree 16

Section 1 (continued)

17. I did not enjoy the food in the United States.

- ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree
- 17

18. My training program has been very important in preparing me for the job I am returning to.

- ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree
- 18

19. I like a job where I know that my work will not be the same from week to week.

- ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree
- 19

20. I was very lonely during my United States trip.

- ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree
- 20

21. The results and effects of changes made within my organization by others in the past have been generally valuable.

- ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree
- 21

22. It would take a sizable raise in pay to get me to accept a different job.

- ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree
- 22

Section 1 (continued)

23. My training program in the United States was far too difficult for me.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 23

24. I have more ability to introduce change than to carry out pre-planned activities.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 24

25. Even after I get used to doing things one way, it does not bother me to have to change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 25

26. I feel that I need to have more training in order to bring about change within my organization.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 26

27. The goal of changing the relationships between people has more value for me than that of changing the work system itself.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 27

28. It has been hard for me to make changes within my organization in the past.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 28

Section 1 (continued)

29. I would rather stay with a job I know I can handle than to change to one where most things would be new to me.

___ I strongly agree
___ I agree a little
___ I neither agree nor disagree
___ I disagree a little
___ I strongly disagree 29

30. My position within my organization will change upon my return home.

___ Yes, it will
___ It probably will change
___ I do not know at this time
___ It probably will not change
___ No, it will not 30

31. I feel very satisfied about this.

___ I strong agree
___ I agree a little
___ I neither agree nor disagree
___ I disagree a little
___ I strongly disagree 31

Section 2

Briefly describe what you feel was the most important change you introduced within your organization during the year before you came to the United States. _____

Please answer the questions in this section with this change in mind.

There are a number of things which have made it difficult for people to introduce change within their organizations. How did the following things affect the introduction of your particular change?

1. It was very difficult to obtain the materials, equipment and tools needed to bring this change about.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

32

2. It was not difficult to get the money needed to introduce this change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

33

3. The manpower or labor available for use in introducing this change made it difficult to bring about this change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

34

4. Distance and travel required by me in making this change was not a problem in introducing this change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

35

5. A problem I had in introducing this change was the lack of time I was allowed to make this change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

36

Section 2 (continued)

Keeping in mind the change you described on the page before, please answer the following six questions.

1. I did very little of this kind of thing in my job.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 37

2. It was very satisfying for me to be able to do this kind of thing.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 38

3. Difficulties in bringing about this change occurred more often because of my lack of ability and skill than for other reasons.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 39

4. My background and training in my particular field was very helpful to me in attempting to bring this change about.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 40

5. I feel that the energy and effort required by me in introducing this change was so great that it was a major obstacle.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 41

6. I did not encounter many problems in making this change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 42

Section 3

This next section contains a number of questions about your supervisor or superior or "boss." Please answer them in relation to the man to whom you were directly responsible--that is--the person who would be considered your immediate superior.

1. How long have you been working for this man?

☐ Less than six months
☐ Six months to one year
☐ One year to two years
☐ Two years to four years
☐ More than four years

43

2. Will you be working directly under this man when you return home?

☐ Yes, I will be
☐ I probably will be
☐ I do not know at this time
☐ I probably will not be
☐ No, I will not be

44

3. Compared to other people with whom I work, the amount of time I spent talking about my work with my supervisor was--

☐ Much more than others
☐ Somewhat more than others
☐ About the same as others
☐ Somewhat less than others
☐ Much less than others

45

4. My supervisor seemed to depend most on his knowledge of organizational policies and his technical knowledge.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

46

5. My supervisor seemed to feel that the "ideal" supervisor should respect the opinions of his subordinates and give them praise and personal attention.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

47

6. My supervisor tried to get the work out by carefully directing and disciplining those under him.

<input type="checkbox"/> I strongly agree	<input type="checkbox"/> I neither agree nor disagree
<input type="checkbox"/> I agree a little	<input type="checkbox"/> I disagree a little
	<input type="checkbox"/> I strongly disagree

48

Section 3 (continued)

7. My supervisor expected me to introduce change or changes within the organization.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 49

8. My supervisor will not agree with me about how valuable my U.S. training has been.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 50

The statements following describe some of the ways different supervisors act. Please check the answer which best tells how your immediate superior acted as a supervisor.

1. He was friendly and could be easily approached.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 51

2. He insisted that people under him follow standard ways of doing things in every detail.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 52

3. He tried out new ideas.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 53

4. He refused to explain his actions.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree 54

Section 3 (continued)

5. He offered new approaches to problems.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

55

6. He decided in detail what would be done and how it would be done.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

56

7. He made those under him feel at ease when talking with him.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

57

8. He changed the duties of people under him without first talking it over with them.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

58

9. He let others do their work the way they thought best.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

59

10. He very seldom expressed appreciation when someone did a good job.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

60

11. He insisted that he be informed on decisions made by people under him.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree

☐ I disagree a little
☐ I strongly disagree

61

Section 3 (continued)

12. He was easy to understand.

- ☐ I strongly agree
- ☐ I agree a little
- ☐ I neither agree nor disagree
- ☐ I disagree a little
- ☐ I strongly disagree

62

Section 4

In this section would you please answer the following four questions in the way that you think your immediate superior would answer them.

1. It has been hard for supervisors to make changes in this organization in the past.

- ☐ My supervisor would strongly agree
- ☐ My supervisor would agree a little
- ☐ My supervisor would neither agree nor disagree
- ☐ My supervisor would disagree a little
- ☐ My supervisor would strongly disagree

63

2. People who have introduced changes within my organization in the past have received recognition for their efforts.

- ☐ My supervisor would strongly agree
- ☐ My supervisor would agree a little
- ☐ My supervisor would neither agree nor disagree
- ☐ My supervisor would disagree a little
- ☐ My supervisor would strongly disagree

64

3. The results and effects of changes made within my organization by others in the past have been generally valuable.

- ☐ My supervisor would strongly agree
- ☐ My supervisor would agree a little
- ☐ My supervisor would neither agree nor disagree
- ☐ My supervisor would disagree a little
- ☐ My supervisor would strongly disagree

65

4. Introducing change is a very satisfying experience.

- ☐ My supervisor would strongly agree
- ☐ My supervisor would agree a little
- ☐ My supervisor would neither agree nor disagree
- ☐ My supervisor would disagree a little
- ☐ My supervisor would strongly disagree

66

Section 5

Briefly describe below what you consider to be the most important change which you wish to introduce in your organization upon your return home.

Please answer the questions in this section with this change in mind.

There are a number of things which may make it difficult for people to introduce a change within their organizations. How will the following things affect the introduction of the particular change you wish to make?

1. It will be very difficult to obtain the materials, equipment and tools needed to bring this change about.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

67

2. It will not be difficult to get the money needed to introduce this change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

68

3. The manpower or labor available for use in introducing this change will make it difficult to bring this change about.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

69

4. Distance and travel required by me in making this change will not be a problem in introducing this change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

70

5. A problem I will have in introducing this change will be the lack of time I will be allowed to make this change.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

71

Section 5 (continued)

In relation to the change you described on the page before, please answer the following seven questions.

1. My background and training in my particular field should be very helpful in the future in attempting to bring about this change within my organization.
 - ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree

72
2. I expect to encounter a good many problems in bringing about this change upon my return home.
 - ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree

73
3. Upon my return home, when I discuss this change with a friend or fellow worker, whose views differ from mine, I feel that I will be able to get him to accept my views.
 - ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree

74
4. Difficulties in introducing this change upon my return home will probably occur more often because of my lack of ability and skill than for other reasons.
 - ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree

75
5. I feel that in the future I will be generally regarded by my fellow workers as a good source of advice on the introduction and effects of this change.
 - ☐ I strongly agree
 - ☐ I agree a little
 - ☐ I neither agree nor disagree
 - ☐ I disagree a little
 - ☐ I strongly disagree

76

Section 5 (continued)

6. I feel that the energy and effort required by me to bring about this change will be so great that it will be a major obstacle.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

77

7. I expect that most of the ideas I developed during my U.S. trip, concerning this change, will be accepted by the people in my organization upon my return home.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

78

Section 6

Listed below are different kinds of change activities. Indicate to what extent you will personally be involved with these kinds of activities upon return home.

1. I will be changing the attitude or attitudes of people.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

79

2. I will be changing the relationships between people.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

80

3. I will be changing a system or general procedure.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

81

4. I will be changing the methods or techniques of some operation.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

82

Section 6 (continued)

5. I will be changing equipment or introducing new equipment.

- ☐ I strongly agree
- ☐ I agree a little
- ☐ I neither agree nor disagree
- ☐ I disagree a little
- ☐ I strongly disagree

83

Section 7

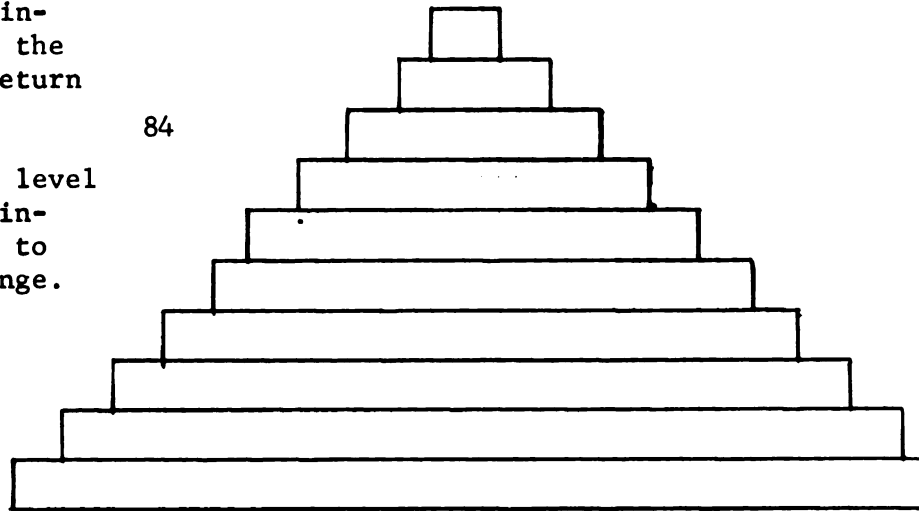
At the right is a chart which represents levels of an organization. Assume that this represents your organization. Please do the following:

1. Please an "X" on the level of the chart which best indicates your position in the organization upon your return home.

84

2. Please an "O" on the level of the chart which best indicates where you expect to introduce your major change.

85



3. How many people will you supervise or how many people will be accountable to you?

- ☐ None
- ☐ 1 to 5 people
- ☐ 6 to 25 people
- ☐ 26 to 50 people
- ☐ More than 50 people

86

4. How many people will be generally affected by this change or these changes you expect to introduce upon your return home?

- ☐ No one other than myself
- ☐ 1 to 5 people
- ☐ 6 to 25 people
- ☐ 26 to 100 people
- ☐ More than 100 people

87

Section 8

Please think about the following questions when you state your agreement of disagreement with the statements listed below:

"How should a supervisor act?"

or

"How would an ideal supervisor act?"

1. An ideal supervisor should insist that people under him follow standard ways of doing things in every detail.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

88

2. An ideal supervisor should make those under him feel at ease when talking to him.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

89

3. An ideal supervisor should not feel that he needs to express appreciation when someone does a good job.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

90

4. An ideal supervisor should let others do their work the way they think best.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

91

5. An ideal supervisor should insist that he be informed on decisions made by people under him.

☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree

92

Section 8 (continued)

6. An ideal supervisor should be friendly and easy to approach.
- ☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree
- 93
7. When changing the duties of people under him, an ideal supervisor should not feel that it is necessary to talk it over with them first.
- ☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree
- 94
8. An ideal supervisor should try out new ideas.
- ☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree
- 95
9. An ideal supervisor should decide in detail what should be done and how it should be done.
- ☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree
- 96
10. An ideal supervisor should be easy to understand.
- ☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree
- 97
11. An ideal supervisor should not feel that it is necessary to explain his actions.
- ☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree
- 98
12. An ideal supervisor should offer new approaches to problems.
- ☐ I strongly agree
☐ I agree a little
☐ I neither agree nor disagree
☐ I disagree a little
☐ I strongly disagree
- 99

Section 9

1. What country are you from? _____
2. How many months have you been in the United States on this visit? _____
3. How many weeks do you have left before you go home? _____
4. What is your age? _____ 5. Sex: Male _____ Female _____
6. Education or Schooling (check the highest completed)
 - _____ Secondary school graduate
 - _____ Post-Secondary-University
 - _____ Post-Secondary-Other (Specify) _____
7. Highest degree earned:

Name of Institute	Country	Degree	Date	Field
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
8. What is the name of your organization or Agency? _____

9. What is the name of your position within this organization? _____

10. What kind of work do you do? _____

11. How many years of experience do you have in your field of work? _____
12. How much time have you spent in any foreign country before this U.S. Visit?
 - _____ None
 - _____ Less than two months
 - _____ Two months to one year
 - _____ One year to two years
 - _____ Two years or over
13. How many different countries had you visited before this U.S. Trip?

In closing, we would like you to make a few short general statements about the following questions.

In your judgment, what were the most valuable and important parts of your training program? Please explain why you feel this way.

In your judgment, what things should have been included in your program, but were not? Please explain why you feel this way.

In your judgment, what are the things which will make it easy for you to introduce change? Please explain why you feel this way.

In your judgment, what are the things which will make it difficult for you to introduce change? Please explain why you feel this way.

APPENDIX B

Item Analysis and Scale Construction

Several considerations were taken into account in attempting to develop scales which could be used in this general area of attitudes and perceptions of ability to introduce change as well as in regard to the independent variables used.

Primarily, a major consideration made concerning the research was the decision to follow a "trait" approach in constructing the items for the individual scales in contrast to the use of a "type" method. In the instances where scales were used in this research, the concern of measurement along a single continuum was obviously central to any consideration. In view of the fact that the research, and in particular the instrument utilized within the research, was very definitely of an exploratory nature, the decision to follow a trait approach seemed wise. In effect, then, the development of a scale was contingent on attempting to construct as many items of a synonomous nature as possible. It thus created a situation whereby an attempt to develop a scale based on internal consistency seemed to be more appropriate than one based on an assumption that the addition of dissimilar parts provided a meaningful whole.

In view of this and because of the exploratory nature of this research, it seemed justifiable to analyze the items, after the recording of responses to determine those items which did not correlate well with the other items and subsequently to remove those items so that the internal consistency of the scale was strengthened. Although this might raise other methodological problems, the value increased by item correlation seemed to warrant a decision of this nature.

APPENDIX C

Pre-Test Results and Development of the Change Agent Efficacy Scale

The fifteen items considered for use in the Change Agent Efficacy Scale are listed below with an indication of the results of the pre-tests and the final outcome in regard to the use of the item.

Item 1. I feel that my chances of being successful in introducing new ideas when I return home are good.

	<u>Mean Item Scores</u>	
	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-Test 1	4.3	4.2
Pre-Test 2	4.2	3.9

This item was not used in the final form of the questionnaire.

Item 2. One of the major activities upon return to my country will be to introduce change within my agency or organization.

	<u>Mean Item Scores</u>	
	<u>Above Median Group</u>	<u>Below Median Group</u>
Pres-Test 1	3.6	3.4

This item was not included in the Second Pre-test due to the fact that it emphasized involvement in change activity rather than expectations of ability to introduce change. In essence, it appeared to be more of a statement concerning job description than of ability expectations.

Item 3. I expect to be asked for advice about the ways of doing things upon my return.

	<u>Mean Item Scores</u>	
	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	4.4	4.0
Pre-test 2	4.2	4.2

This item was changed to some extent on the second pre-test to focus

the participant's attention toward change within his own organization. This item was not included in the final form of the questionnaire because of the lack of discrimination between the high and low groups.

Item 4. There are a number of factors which may make the introduction of change not only difficult but actually impossible.

	<u>Mean Item Scores</u>	
	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	3.4	3.3

Although this item failed to discriminate, it was dropped from the second pre-test primarily because it could be answered in terms of factors which would be beyond the personal control of the respondent.

Item 5. I feel that I have been fairly successful in introducing change in the past.

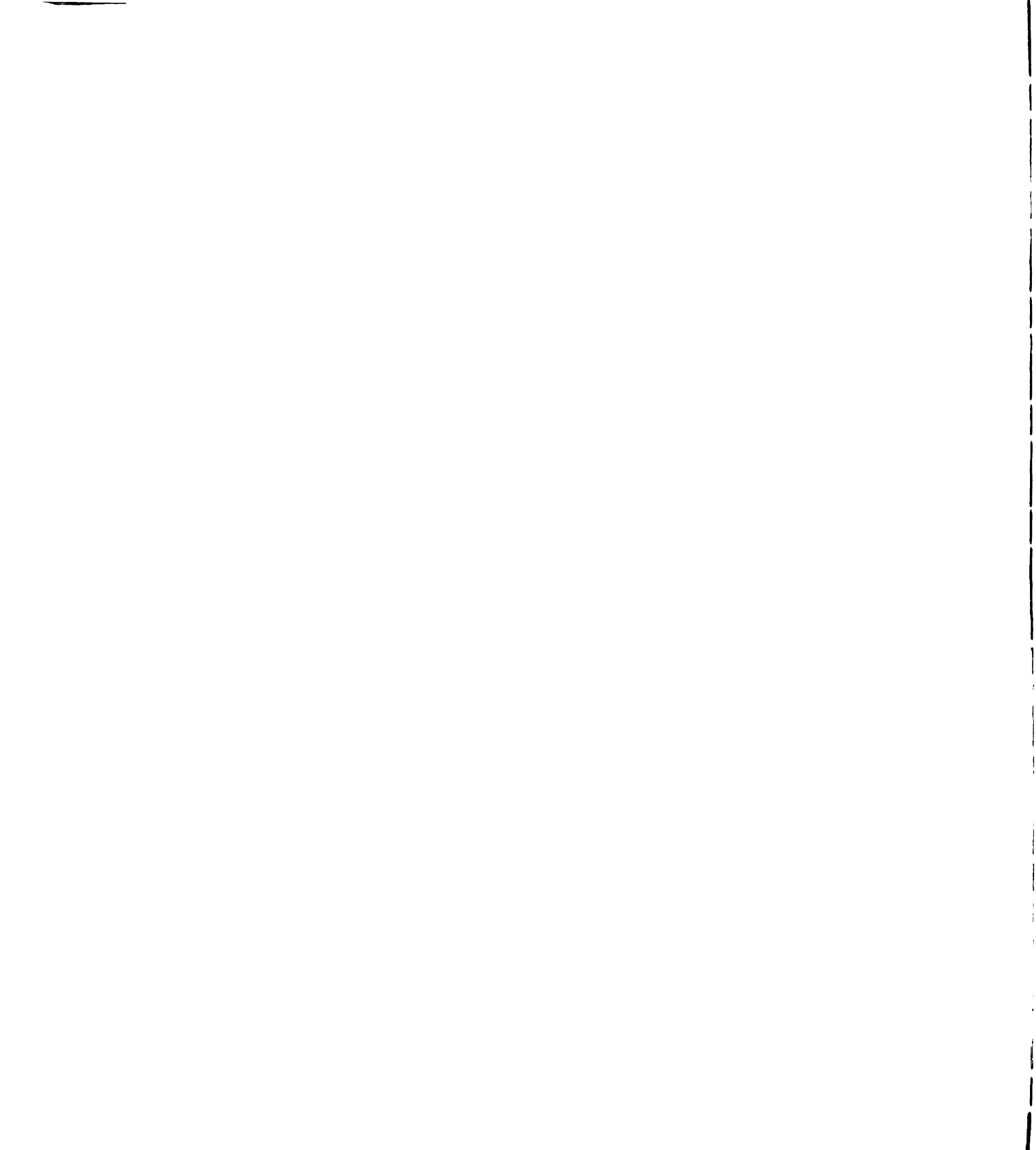
	<u>Mean Item Scores</u>	
	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	4.0	3.4

Although this item had some power in discrimination, after further consideration, it was felt that it did not concern future change activity and expectations about it in a direct sense. As a result of this consideration, the item was not included in the second pre-test.

Item 6. I see some major problems in how I will go about introducing change in my home country.

	<u>Mean Item Scores</u>	
	<u>Above Median Group</u>	<u>Below Median Group</u>
Pretest 1	2.7	2.3

This item was not used on the second pre-test because of the similarity to Item 7 below. It was felt that this latter item was a better one for inclusion in the scale.



Item 7. I expect to encounter a good many problems in changing the ways of doing things when I return to my job in my country.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	2.6	2.1

I expect to encounter a good many problems in changing the ways of doing things upon my return home.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 2	2.7	1.9

This item was used on the final form of the questionnaire as Item number 73. However, it was not included in the analysis of Change Agent Efficacy due to the results of the inter-correlational item analysis.

Seven items were retained throughout the analysis. They were developed as indicated below.

Item 8. I have greater abilities in introducing change than in carrying out pre-planned activities.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	3.7	3.0
Pre-test 2	3.6	2.6

Final form used for analysis purposes (Questionnaire Number 24)

I have more ability to introduce change than to carry out pre-planned activities.

Item 9. My background and training in my particular field should be very helpful in attempting to bring about change in my country.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	4.3	4.0

Item 9. My background and training in my particular field should be very helpful in attempting to bring about change in my organization.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
--	---------------------------	---------------------------

Pre-test 2	4.7	3.9
------------	-----	-----

Final form used for analysis purposes. (Questionnaire Number 72)

My background and training in my particular field should be very helpful in attempting to bring about this change in my organization.

Item 10. When I discuss an issue or a problem with a friend or co-worker, whose views differ from mine, I usually can get him to accept my views.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
--	---------------------------	---------------------------

Pre-test 1	3.8	3.4
------------	-----	-----

When I discuss an issue or a problem with a friend or co-worker whose views differ from mine, I usually can get him to accept my view.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
--	---------------------------	---------------------------

Pre-test 2	3.8	3.0
------------	-----	-----

Final form used for analysis purposes. (Questionnaire Number 74)

Upon my return home, when I discuss this change with a friend of fellow worker, whose views differ from mine, I feel that I will be able to get him to accept my views.

Item 11. Difficulties in introducing change will occur more often because of my ability or skill than for other reasons.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
--	---------------------------	---------------------------

Pre-test 1	4.1	3.1
Pre-test 2	4.5	3.7

Final form used for analysis purposes. (Questionnaire Number 75)

Difficulties in introducing this change upon my return home will probably occur more often because of my lack of ability and skill than for other reasons.

Item 12. I feel that I am generally regarded by my fellow workers as a good source of advice on the introduction and effects of change.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	Not used	
Pre-test 2	4.4	3.5

Final form used for analysis purposes. (Questionnaire Number 76)

I feel that in the future I will be generally regarded by my fellow workers as a good source of advice on the introduction and effects of this change.

Item 13. There will be a great deal of effort and energy required in order to bring about changes within my organization.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	2.3	2.3

Item 14. I feel that this energy required could be an obstacle to my success in bringing about this change.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	4.0	3.3

Combined in this manner for the second Pre-test:

I feel that the energy and effort required by me to introduce change in my organization will be so great that it will be a major obstacle.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 2	4.1	3.3

Final form used for analysis purposes. (Questionnaire Number 77)

I feel that the energy and effort required by me to bring about this change will be so great that it will be a major obstacle.

Item 15. I expect that most of the ideas I have developed during my U.S. trip will be accepted by my people in my organization.

Mean Item Scores

	<u>Above Median Group</u>	<u>Below Median Group</u>
Pre-test 1	4.2	3.4
Pre-test 2	4.2	3.4

Final form used for analysis purposes. (Questionnaire Number 78)

I expect that most of the ideas I developed during my U.S. trip concerning this change, will be accepted by the people in my organization upon my return home.

APPENDIX D

Countries Represented by Participants Completing Questionnaire

<u>Country</u>	<u>Number of Participants</u>
Afhganistan	7
Argentina	9
Bolivia	3
Brazil	6
British Guiana	1
Chile	2
China, Formosa, Taiwan	2
Colombia	5
Congo	2
Costa Rica	3
Dominican Republic	7
El Salvador	1
Ethiopia	6
Ghana	1
Guinea	1
Honduras	2
India	29
Indonesia	47
Iran	5
Iraq	4
Jamaica	2
Jordan	7
Kenya	1
Korea	5
Laos	1
Liberia	9
Mali	1
Nepal	8
Nicaragua	1
Nigeria	3
Northern Rhodesia	1
Pakistan	13
Panama	1
Paraguay	2
Peru	5
Philippines	17
Sierra Leone	1
Somali Republic	2
Southern Rhodesia	7
Sudan	6
Syria	1
Thailand	19
Togo	1
Turkey	18
Uganda	4
United Arab Republic	5

<u>Country</u>	<u>Number of Participants</u>
Venezuela	16
Viet Nam	5
West Indies	1
Yugoslavia	7
Zanzibar	1
Unanswered	3

APPENDIX E

Occupational Areas Represented by Participants Completing Questionnaires

<u>Occupation Area</u>	<u>Number of Participants</u>
<u>Education</u>	74
<u>Agriculture</u>	
Agriculture-General	37
Forestry	4
Veterinary Service	3
<u>Military or Police</u>	
Military	29
Police	3
<u>Health or Medical</u>	
Hospital or Medical	15
Public Health	11
<u>Government Services</u>	
Clerk Typist	1
Government General	13
Government Accounting	2
Government Judicial	3
Foreign Affairs	2
Treasury or Finance	10
Public Administration	10
<u>Communication and Transportation</u>	
Air Traffic	24
Railroads	6
Communications	3
<u>Natural Resources</u>	
Electricity	10
Gas-Oil	4
Mining	3
Water Resources	10
<u>Manufacturing</u>	
Engineering	3
Manufacturing-General	29

APPENDIX F

Correlation Coefficients for Independent Variables and

- (1) Change Agent Efficacy, and
(2) U.S. Trip Satisfaction

<u>Variable Description</u>	<u>Correlations</u>	
	<u>Change Agent Efficacy</u>	<u>U.S. Trip Satisfaction</u>
Target of Change-Activity	.04	.00
Training Relevancy	.24	.33
Attitude toward Work-Related Change	.05	.02
Expectations of Others	.20	.06
Consequences of Change	.14	.13
Influence of Physical Factors-Past	.08	.09
Change Agent Efficacy-Past	.33	.20
Supervisory Interaction	.04	.09
Supervisory Consideration	.11	.14
Supervisory Initiation of Structure	.10	.04
Supervisory Attitude toward Past Change	.22	.10
Influence of Physical Factors-Future	.18	.14
Target of Change-People	.21	.03
Target of Change-Things	.23	.01
Authority Level	.12	.02
Philosophy of Supervisory Initiation of Structure	.02	.09
Philosophy of Supervisory Consideration	.15	.04
Discrepancy between Philosophy and Description of Supervisory Consideration	.02	.11
Discrepancy between Philosophy and Description of Supervisory Initiation of Structure	.07	-.03
Work Experience under Supervisor	.04	.03
Satisfaction with Past Change Activity	.17	.06
Amount of Change Activity in Past	.11	.05
Ease of Change in Past	.07	.06
Supervisor Agreement about Training Relevancy	.32	.16
Satisfaction with Position Change	-.01	.10
Months in United States	-.16	.03
Weeks left before Returning Home	-.06	-.05
Age	.11	.03
Education	.03	.05
Experience	.08	.07
Time in other Countries	-.01	-.07
Number of other Countries Visited	-.06	-.05
Participant Attitude toward Past Change	.19	.11
Discrepancy-Supervisor and Participant Attitude toward Past Change	.01	-.01

APPENDIX G

Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to

(1) Education Level

(2) Job Experience

1. Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Education Level.

Education Level	Change Agent Efficacy	N
High School	19.6	32
Bachelor Degree	20.8	238
Post-Graduate	19.8	47
F ratio	F = 2.0	P = N.S.

2. Comparison of the Mean Change Agent Efficacy Scores for Participants Differentiated as to Job Experience

Years of Experience	Change Agent Efficacy	N
0 to 4 years	20.1	103
5 to 10 years	20.4	116
Over 10 years	21.0	98
F ratio	F = 1.3	P = N.S.

Occupation Area	Manu- facturing	Communication/ Transportation	Natural Resources	Agric- culture	Public Health	Commun- ity De- velopment	Govern- ment Service	Edu- cation	Mili- tary/ Police
Manufacturing	--	.3	.9	1.2*	1.5*	2.1*	2.1*	2.5*	2.9*
Communication/ Transportation	--	--	.6	.9	1.2*	1.8*	1.8*	2.2*	2.6*
Natural Resources			--	.3	.6	1.2*	1.2*	1.6*	2.0*
Agriculture				--	.3	.9	.9	1.3*	1.7*
Public Health/ Medical					--	.6	.6	1.0	1.4*
Community Development						--	.6	.4	.8
Government Services							--	.4	.8
Education								--	.8
Military/Police									--

* Significant at .06 level two tail.

APPENDIX H

Duncan Multiple Range Test between Change Agent Efficacy Means by Occupation Area

APPENDIX I

Comparison of Mean Change Agent Efficacy Scores between Participants Who Perceive Agreement with Unfavorable Attitudes and Those Who Perceive Disagreement

(N = 231)

Group	Mean Change Agent Efficacy Scores	N
Participants who agree with perceived unfavorable attitudes of Supervisor (Group 1b)	19.0	91
Participants who perceive disagreement with attitudes of Supervisor (Group 2)	21.0	140
F ratio	F = 13.1	P = .001

Comparison of Mean Change Agent Scores between Participants Who Perceived Disagreement with Supervisor's Attitude Classified as to Participant's Attitude toward Past Change

(N = 140)

Nature of Disagreement	Mean Change Agent Efficacy Scores	N
Participants less favorable than supervisor (Group 2a)	21.2	79
Participants more favorable than supervisor (Group 2b)	20.8	61
F ratio	F = Less than 1	P = N.S.

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