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ENTREPRENEURSHIP AND SMALL-ENTERPRISE DEVELOPMENT  
FIRST ANNUAL REPORT

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## INTRODUCTION

The Entrepreneurship and Small Enterprise Development Project, financed by the United States Agency for International Development (USAID), is a three-year effort to develop rigorous methods for selecting entrepreneurs with high-success potential, and for developing improved methods of training existing and potential entrepreneurs. The project is intended to be definitive and to improve the state of the art in selecting and training entrepreneurs. The project is assisted by collaboration from the ILO and UNIDO, and by the advice of a Technical Review Committee organized by the National Science Foundation (NSF). On-site experimentation is taking place in a minimum of four countries in Asia, Africa, and Latin America.

The basic strategy of this project is to investigate the personal entrepreneurial characteristics (PECs) that facilitate entrepreneurial success, using the resulting knowledge to develop better ways to select and train entrepreneurs in developing countries. The project encompasses four main tasks:

- Task I: Conduct research to identify and validate PECs that facilitate entrepreneurial success in developing countries.
- Task II: Use the PECs to identify and develop selection instruments (surveys, tests, interview procedures, application forms) that can be used to screen potential entrepreneurs.
- Task III: Identify and assess behavioral training approaches that can be used to improve entrepreneurial effectiveness.
- Task IV: Disseminate the project's findings to interested groups around the world, through publications and annual network meetings.

The project is being implemented collaboratively by McBer and Company, of Boston, Massachusetts, and Management Systems International, of Washington, D.C. (hereafter referred to in this report as McBer and MSI, respectively). McBer is responsible for Tasks I and II, and MSI, for Task III. Task IV is a joint responsibility.

Because of the broad scope and complexity of this project, a general overview of the methodology of the four main tasks is first provided. This is followed by a detailed outline of all

project tasks. The remaining sections contain a description of progress to date; and a description of activities planned for the coming year (October 1, 1984-September 30, 1985).

### Overview of Main Tasks

#### Task I: Identify and Validate PECs

This task includes two main activities: a literature review of the prior research on PECs and new research undertaken to identify and validate PECs. The literature review covers studies relating entrepreneurial behavior and success to three types of personal variables: (1) background and demographic variables; (2) personality variables; and (3) social-support variables, such as access to capital.

The new research, conducted to identify and validate PECs, uses a methodology developed by McBer and Company to identify the personal characteristics that facilitate outstanding performance in a wide variety of jobs. As applied to the study of entrepreneurs, this methodology--known as Job Competence Assessment--involves five main steps:

1. Identify samples of highly successful and average-performing entrepreneurs.
2. Interview them in depth to obtain detailed accounts of how they started their businesses and of critical situations they encountered in running their businesses.
3. Analyze half of the interview transcripts to identify patterns of behavior and thought that occur more frequently in the highly successful than in the average-performing entrepreneurs.
4. Organize and categorize the themes, to form a competency model for entrepreneurs.
5. Validate the model by systematically coding the other half of the interview transcripts to determine which competencies occur more often in the superior than in the average entrepreneurs.

The Job Competence Assessment methodology is described in detail in the technical proposal prepared by McBer and Company for this project.

The sampling plan for Task I is included in Exhibit 1 on the following page. Notice that this plan is replicated in each country site (India, Ecuador, and Malawi), and that, in each site, the entrepreneurs sampled are equally divided among

EXHIBIT 1

SAMPLING PLAN FOR EACH COUNTRY FOR TASKS I AND II

<u>Group</u>	<u>Type of Business</u>			
	<u>Mfg.</u>	<u>Mktg.</u>	<u>Svce.</u>	<u>Total</u>
Superior Existing Entrepreneurs for Initial Research Interviews	12	12	12	36
Average Existing Entrepreneurs for Initial Research Interviews	12	12	12	36
Superior Existing Entrepreneurs for Validation of Selection Instruments	15	15	15	45
Average Existing Entrepreneurs for Validation of Selection Instruments	15	15	15	45
Start-up Entrepreneurs for Validation of Selection Instruments	10	10	10	30
Potential Entrepreneurs for Validation of Selection Instruments	10	10	10	30
	<hr/>	<hr/>	<hr/>	<hr/>
Totals	74	74	74	222

manufacturing, marketing/trading, and service types of businesses. Within each type of business, equal numbers of superior and average entrepreneurs are sampled.

Task II: Develop and Validate Selection Instruments Based Upon PECs

This task involves two major activities: (1) identifying or developing selection instruments based upon the PECs; and (2) validating these instruments by administering them to existing, start-up, and potential entrepreneurs, then tracking the entrepreneurial success of these persons over time.

A package of selection instruments will be developed to assess the PECs identified in Task I. An effort will be made to include measures of core PECs differentiating superior from average entrepreneurs across country sites, as well as measures of PECs that characterize most entrepreneurs, whether superior or average, but distinguish both groups from the general population.

Possible types of selection instruments include surveys, tests, application forms, and interview guides. The selection instruments must be of practical value to such potential users as banks and entrepreneurial training institutes. This means that the instruments must be easy to administer and score, in addition to reliably measuring the PECs.

The selection instruments will be validated by trying them out with three sample groups in each country site. The samples will consist of: (1) 45 superior and 45 less-effective existing entrepreneurs who have been in business for at least two years; (2) 30 start-up entrepreneurs who have been in business for six months or less; and (3) 30 potential entrepreneurs--applicants to entrepreneurial institutes or students in entrepreneur-development programs.

An initial concurrent-validity analysis will be conducted with the existing entrepreneurs to determine the power of the selection-instrument package to distinguish the superior from the less-effective members of the sample. Longitudinal-predictive validity of the selection instruments will be determined for all three samples a year later, to determine the power of the selection instruments to predict: (1) whether the successful existing entrepreneurs continue to be successful relative to those identified as less effective; (2) which of the start-up entrepreneurs in fact grow or expand their businesses, as opposed to fail to grow or fail; and (3) which of the potential entrepreneurs do in fact establish businesses successfully, as opposed to those who do not attempt to go into business or who fail.

### Task III: Identify and Assess Behavioral Approaches to Entrepreneurship Training

Task III is an identification and assessment of behavioral training approaches used to improve entrepreneurial effectiveness. It is intended to test the utility of applied behavioral training in improving the practical performance of entrepreneurs. This task is expected to be definitive and to result in the validation of training approaches that can be applied in a variety of LDC settings.

During the course of the first year of the project, there was a significant shift in the methodology to be utilized in accomplishing this task. The original proposal called for the contractor to assess the impact of existing entrepreneurship training programs. This approach was subsequently modified, after discussion, for two reasons. First, two of the three countries selected by USAID were found to have no existing program or institution offering relevant entrepreneurship training programs. This observation was contrary to USAID's expectations and made it unfeasible to base research upon an assessment of ongoing training activities in those countries. When this difficulty was realized, two options were considered: (a) changing countries; or (b) accepting the need to expend considerable effort in identifying suitable institutions, developing curricula, and training trainers. It was agreed at that time to pursue the second of these options, and also, to the extent possible, to incorporate low-cost assessments of currently successful programs in other countries.

The second reason for modifying the initial emphasis on evaluating existing training programs was the strong preference of the NSF Technical Review Committee, the host institutions, and many others, for designing a new training program based upon the results of the research being undertaken in Tasks I and II, rather than merely evaluating the impact of existing, but soon-to-be-obsolete training programs. This revised approach, it was felt, linked the various parts of the project more closely together and improved considerably the usefulness of the project in enhancing future training programs.

As currently conceived, Task III includes three main areas of activity:

1. An investigation of what is currently known about entrepreneurship development and training
2. Development and field-testing of a new entrepreneurship training program, utilizing the most effective features of existing programs as well as research findings on the PECs from Task I
3. Implementation and evaluation of the new program

The first area--investigation of current knowledge on entrepreneurship development and training--will begin with a review and synthesis of prior research and operational literature concerning the nature of entrepreneurship and entrepreneurship development, the structure and content of existing programs, and the impact of existing programs.

The next step will involve investigating three to five "successful" existing programs; gathering detailed information on the structure and materials used in these programs; obtaining whatever secondary data and anecdotal evidence are available on program impact; and, if possible, initiating additional, comparable local research on the impact of these programs.

A final part of this investigation of current knowledge will be to review the PECs identified by McBer in Task I and to conduct secondary research to identify prior experience in using training to stimulate any or all of these characteristics.

The second main area of activity--developing and field-testing a new entrepreneurship training program--will begin with preparation of a list of components and a preliminary design for experimental behavioral training programs to be undertaken and validated in the pilot countries. Attitudinal components of the training will be based upon the results of what has been established on training for the PECs; while the structure of the overall course and the design of the nonattitudinal components will be based upon the results of the initial literature review, and the investigation of the successful existing training programs.

The next step will be to select competent training institutions and trainers in the pilot countries. MSI will then design and conduct a participatory curriculum and a training-of-trainers program, which will enable selected trainers from pilot countries to finalize a draft curriculum, prepare necessary materials and manuals, and develop the skills and confidence needed to conduct in-country training sessions for entrepreneurs. These individuals will then field-test the entrepreneurship training program in their respective countries with MSI's assistance, and participate in its redesign and revision, based upon these field-tests and assessments of the program's impact.

For the third area of activity--implementing and evaluating the new training program--the first step will be to determine a quasi-experimental research design. Control groups will then be selected and baseline data will be collected. The entrepreneurship training programs will be delivered and impact-assessment data collected, in order to evaluate the effects of the training.

#### Task IV: Disseminate Findings

This task will be accomplished in three ways:

1. By preparing and distributing three annual reports summarizing the project's findings to date
2. By preparing and publishing articles based upon these findings
3. By holding annual network meetings, to include representatives of the contractor; McBer; MSI; the in-country research-and-training organizations; and other interested groups

## DETAILED OUTLINE OF PROJECT TASKS

### TASK I. IDENTIFY AND VALIDATE PERSONAL ENTREPRENEURIAL CHARACTERISTICS (PECS)

#### A. Plan Project and Select Sites

1. Meet with contractor personnel and with representatives of MSI to plan the project.
2. Meet with the NSF Technical Review Committee to review and revise the project design.
3. Visit country sites to assess the feasibility of conducting the research and to identify qualified, in-country research organizations with whom to contract for data collection.
4. Negotiate contracts for data collection for the initial research with qualified in-country research organizations possessing staff with fluency in all languages needed to interview the target population of entrepreneurs.

#### B. Review the Literature on PECs

Conduct a literature review of entrepreneurial selection variables and instruments, including an analysis of the place of such variables in economic theories of entrepreneurial development.

#### C. Identify Entrepreneurs in the Three Research-Site Countries

1. Meet with in-country contracting research organizations to plan the sample selection, in order to achieve geographical and cultural representativeness.
2. For each research-site country, identify:
  - a. Government councils
  - b. Trade organizations
  - c. Chambers of commerce

- d. Ministries of industry
  - e. Banks
  - f. Other organizations capable of identifying superior-performing entrepreneurs in manufacturing, marketing, and service industries
3. For each research-site country, identify a pool of 72 entrepreneurs, equally divided among manufacturing, marketing, and service industries, including 36 clearly superior performers and 36 average performers.
- D. Train Native-Language-Speaking, In-country Interviewers in the Behavioral Event Interview (BEI) Method
1. Prepare interview outlines and training guides, including one version in Spanish for use in Ecuador.
  2. Conduct a four-day training session in each research-site country for the Project Manager and four to six interviewers from the contracting, in-country research organization.
  3. Review the initial interviews conducted by each interviewer and provide constructive feedback on interviewing skills.
- E. Interview Entrepreneurs; Transcribe and Translate Interviews
1. In-country contracting research organization in each country: conduct tape-recorded interviews with the 72 entrepreneurs in the initial research sample.
  2. In-country contractor: transcribe, and if necessary, translate the interviews.
  3. McBer staff members review the quality of the interview transcripts and notify in-country contractors of any improvements needed in interviewing techniques.
- F. Analyze Interview Transcripts to Identify Personal Entrepreneurial Characteristics (PECs)
1. Read half of the interview transcripts from each country to identify PECs that:

- a. Distinguish superior from average performers
  - b. Are required for all entrepreneurs
2. Hold two-day "concept-formation" meetings to identify, define, and organize the PECs for each country.
3. Use the PECs with behaviorally specific indicators to code the remaining transcripts (36 from each country) and thereby determine which PECs distinguish superior from average performers.
4. Integrate the findings for each country to identify a core set of PECs applicable to less-developed countries.

**TASK II. DEVELOP AND VALIDATE SELECTION INSTRUMENTS BASED UPON PECS**

Develop Selection Instruments

1. Review the core PECs found in the interviews and the PECs from the literature review to determine which ones to use in developing selection instruments.
2. Develop or identify entrepreneur-selection instruments to assess PECs.

Identify the Validation Samples

1. Plan cross-validation sample selection in each country with in-country research contractors.
2. For each country, identify:
  - a. 45 superior and 45 less-effective entrepreneurs who were not interviewed in Task I
  - b. 30 start-up entrepreneurs who have been in business less than six months
  - c. 30 potential entrepreneurs--applicants to entrepreneurial institutes or students in entrepreneur-development programs

Within each each group, the sample should be divided equally among persons in manufacturing, marketing/trading, and retail types of businesses.

- C. Administer the Selection Instruments
  - 1. Train in-country research staff in each country to administer the selection instruments.
  - 2. Administer the selection instruments to the validation samples.
  - 3. Translate the data from the selection instruments into English if necessary.
  - 4. Review the initial data obtained using the selection instruments, and advise in-country research contractors of any modifications needed in the administration of these instruments.
- D. Conduct a Concurrent-Validation Analysis
  - 1. Analyze the data obtained in Task IIC to determine the power of the selection instruments to differentiate superior from average entrepreneurs.
- E. Conduct a Longitudinal-Validation Analysis
  - 1. Develop a follow-up instrument to measure entrepreneurial success.
  - 2. Train in-country research staff to administer the follow-up measure.
  - 3. One year from the time of administration of the selection instruments, locate as many people as possible from the validation samples and administer the follow-up instrument to all of those who have businesses.
  - 4. Analyze the data obtained in Task IIE2, to determine the power of the selection instruments to predict:
    - a. Whether the existing superior entrepreneurs have continued to be as successful as the average ones
    - b. Which of the start-up entrepreneurs are most successful

- c. Which of the potential entrepreneurs actually establish businesses successfully
- F. Prepare Manuals and Scoring Keys for Selection Instruments

**TASK III. IDENTIFY AND ASSESS BEHAVIORAL APPROACHES TO ENTREPRENEURSHIP TRAINING**

- A. Review and Synthesize Prior Research and Operational Literature
- B. Identify and Investigate Existing "Successful" Training Programs
  - 1. Identify three to five "successful" existing training programs.
  - 2. Gather detailed information on the structure and materials used in these programs and on the impact of the programs.
  - 3. Initiate (if possible) additional, comparable local research on the impact of these programs.
- C. Investigate Key PECs
  - 1. Determine from Task I key PECs associated with successful entrepreneurial performance.
  - 2. Conduct research to identify prior experience in using training to stimulate these PECs.
- D. Prepare Preliminary Design of the Training Program
  - 1. Prepare a list of attitudinal components based upon the results of Task IIIC.
  - 2. Develop the overall course structure and nonattitudinal components based upon the results of Tasks IIIA and B.
- E. Select Training Institutions and Trainers in Pilot Countries
- F. Design and Conduct a Training-of-Trainers and Curriculum-Development Workshop
  - 1. Design the training-of-trainers program.

2. Conduct the program.
  3. Finalize a draft curriculum.
  4. Prepare materials and manuals.
- G. Develop Objective Measures of Program Impact
  - H. Field-test and Revise the Entrepreneurship Training Program
  - I. Develop a Quasi-Experimental Research Design
    1. Determine the research design to be used.
    2. Select control groups.
    3. Supervise the collection of baseline data.
  - J. Supervise the Delivery of Entrepreneurship Training Programs
  - K. Finalize Training-Program Materials and Manuals
  - L. Supervise the Collection of Impact-Evaluation Data on Treatment and Control Groups
  - M. Analyze Impact-Evaluation Data

**TASK IV. DISSEMINATE FINDINGS**

- A. Develop a Network for Disseminating Results
- B. Prepare Year-One Interim Report
- C. Hold First Annual Network Meeting
  1. Plan a meeting involving representatives of the contractor; McBer; MSI; and each of the participating in-country, research-and-training teams. Other interested individuals and groups may also be invited.
  2. Hold the meeting.
- D. Prepare Year-Two Interim Report
- E. Hold Second Annual Network Meeting
  1. Plan the meeting as in Task IVC.
  2. Hold the meeting.

- F. Publish Articles Based Upon the Project's Findings
  - 1. Prepare articles based upon the project's findings.
  - 2. Publish these articles in appropriate journals or distribute them directly to interested groups.
- G. Prepare Final Report
- H. Hold Third Annual Network Meeting
  - 1. Plan the meeting as in Tasks IVC and E.
  - 2. Hold the meeting.

## PROGRESS TO DATE

This section begins with an overview of progress in the first year of the project. The overview is followed by detailed descriptions of progress on Tasks I and III, the two main tasks on which there has been significant progress.

### Overview of Progress to Date

The activities to date fall into four categories: (1) planning and coordination; (2) new research to identify personal entrepreneurial characteristics; (3) identification and assessment of behavioral approaches to entrepreneurship training; and (4) initiation of a network for disseminating results.

With regard to planning and coordination, there have been three major meetings involving AID and the two contracting agencies, McBer and MSI. The activities of these meetings are summarized below, since they dealt with the project as a whole and were not limited to any single area or task.

An initial planning meeting was held on September 26, 1983, to plan the main activities and begin the process of coordination between McBer and MSI.

Then, on February 10, 1984, the contractor and representatives of McBer and MSI met with the Technical Review Committee organized by the National Science Foundation. The plans for conducting research on PECs, developing and validating selection instruments, and developing entrepreneurial training were presented and discussed in detail. There were many helpful suggestions, which are incorporated into the Detailed Outline of Project Tasks and Work Plan of this report.

On October 2, 1984, another meeting was held with representatives of the contractor, McBer, MSI, and the NSF Technical Review Committee. Following reports on progress to date, the discussion focused on the design and evaluation of model entrepreneurial training programs. It was agreed to design both the training programs and their evaluation so as to be able to demonstrate: (1) the effectiveness of an entrepreneurial training program with all the components deemed desirable on the basis of previous research; and (2) the added value of training in the PECs identified in Task I.

In addition to these formal meetings, numerous informal meetings and telephone conversations have taken place between representatives of McBer, MSI, and USAID, in order to coordinate activities. Many of these discussions have involved

visits to the targeted project sites in developing countries. Since each project site had to be feasible both from the standpoints of conducting the research with entrepreneurs and of implementing entrepreneurial training programs, joint site visits involving both McBer and MSI representatives were made to Ecuador, India, and Malawi, as well as to Zimbabwe, which for a time was under consideration as a possible project site.

Additional discussions between representatives of McBer and MSI have centered on how to incorporate the findings on PECs into entrepreneurial training programs.

A second major area of project activity concerns new research on PECs. The research program as described in Task I is well underway. A review of research on PECs has been completed, and additional theoretical articles are being prepared on the role of entrepreneurship in economic development and on criteria for assessing entrepreneurial success. Research projects are in progress in India, Ecuador, and Malawi. In all three countries researchers have been trained in interviewing and have begun to conduct and transcribe interviews. As of October 31, 1984, 50 interview transcripts had been received from India and 31 from Ecuador. The thematic analysis of the transcripts from India has been completed, and an initial set of PECs has been identified. Systematic coding of the transcripts from India is underway. The initial thematic analysis of the transcripts from Ecuador is also in progress.

With regard to the third main area of project activity-- identification and assessment of behavioral approaches to entrepreneurship training--it was decided to delay various activities until the completion of key elements of Tasks I and II; in particular, the development of the list of core competencies, and the development of draft-selection instruments. Progress on Task III during the first year thus centered on Subtasks A, B, E, G, and I: review and synthesis of prior work; identification and preliminary investigation of existing "successful" training programs; selection of potential training institutions and trainers in pilot countries; development of measures of program impact; and development of a research design.

The fourth main area of project activity involved initiation of a network for disseminating results. The underlying goal of this project is the application of its findings in future efforts by USAID, other international donors, host governments, nongovernmental organizations, and private firms, to stimulate entrepreneurship and private-sector growth. The achievement of this goal requires that the project undertake explicit dissemination efforts on both a formal and an informal basis.

During Year One, several activities were undertaken to expand the network of organizations and individuals knowledgeable about the project and eager to apply its findings. A visit was

made to the ILO in Geneva, and discussions were held with a visiting delegation from UNIDO. Numerous presentations and discussions were held with interested officials of USAID, the World Bank, and UNDP; plans were advanced for two international conferences to be held during 1985; and an informal network of interested researchers and practitioners was initiated through extensive correspondence and telephone inquiry associated with the initial aspects of the project. Virtually all of the individuals who were contacted asked to be kept informed of future developments and to receive notification of future publications and meetings.

### Task I: Identify and Validate PECs

#### Task IA: Plan Project and Select Sites

This task is completed. The first step was a meeting on September 26, 1983, of representatives of the contractor, McBer, and MSI, to plan visits to potential country sites. The three countries initially selected as potential project sites were India, Ecuador, and Malawi. In order to carry out the project in a country, it was necessary to find in-country organizations with the capability of identifying entrepreneurs, conducting interviews, and implementing entrepreneurial training programs. It was unclear initially whether such cooperating organizations could be found in each of the originally targeted countries. It was therefore decided to make site visits to a fourth country, Zimbabwe, where the local USAID Mission had also expressed interest in the project.

A joint visit to Ecuador by McBer and MSI staff members established the feasibility of carrying out the project in that country. The Foundation for Educational, Economic, and Social Development (Fundacion para el Desarrollo Educativo, Economico y Social--referred to as FUNDEC in the rest of this report) was identified as an organization with the required capability and interest to conduct the initial research interviews with entrepreneurs. Preliminary negotiations between McBer and FUNDEC during this initial visit eventually led to a contract for this work.

A similar joint visit by McBer and MSI staff members was planned for Malawi and Zimbabwe. In Zimbabwe, the McBer and MSI staff members met with staff members from the local USAID Mission and with representatives from a wide number of interested groups. The University of Zimbabwe was identified as an organization capable of conducting the research; however, an in-country organization capable of implementing entrepreneurial training programs was not identified during this initial trip. Unfortunately, the McBer and MSI representatives were not granted permission to enter Malawi during this trip, although they did talk by telephone with representatives of the USAID Mission in Lilongwe.

On a second trip three months later, a McBer representative was able to visit both Zimbabwe and Malawi. In Zimbabwe, preliminary negotiations were carried out with the local USAID Mission, the University of Zimbabwe, and the Small Enterprise Development Corporation (SEDCO) regarding the initial research with entrepreneurs.

In Malawi, the McBer representative met with representatives from the USAID Mission, the University of Malawi's Centre for Social Research, the ILO, and other groups interested in small-business development. A preliminary agreement regarding the initial interviews with entrepreneurs was reached with the Centre for Social Research, which had already carried out an extensive study of entrepreneurs in Malawi.

Shortly after this visit, McBer and the Centre for Social Research signed a contract for the initial research interviews with entrepreneurs.

In Zimbabwe, due to problems in meeting the requirements of the different organizations to be involved, no satisfactory agreement could be reached for conducting the initial research. Therefore, several months after the second site visit, it was reluctantly decided to abandon Zimbabwe as a potential project site.

In India, an initial site visit by representatives of McBer and MSI established the feasibility of using the Entrepreneurship Development Institute of India (EDII) both to conduct the initial research and to implement entrepreneurial training programs. McBer and EDII soon afterward agreed to a contract for the initial research.

#### Task IB: Review the Literature on PECs

A literature of PECs that have been found to predict successful entrepreneurial behavior has been completed. Previous research has suggested a large number of PECs, which can be grouped into three categories: (1) background demographic variables (e.g., parental occupation; previous experience in a similar business); (2) personality variables, (e.g., self-confidence; perseverance; achievement motivation); and (3) sociological supports (e.g., family supportiveness; access to capital). Since the entrepreneurs in the different studies represented a wide variety of businesses, countries, and cultures, it is not clear which of the PECs are most applicable to entrepreneurs in developing countries. Among the personality characteristics, those most consistently found included self-confidence, a high energy level, and the ability to take calculated risks.

### Task IC: Identify Entrepreneurs for Initial Research Interviews

This task has been completed by the in-country research organizations in each of the three country sites. The in-country researchers were instructed to solicit nominations of superior-performing entrepreneurs from knowledgeable persons in governmental councils, trade organizations, chambers of commerce, ministries of industry, banks, and other organizations with exposure to entrepreneurs. To be selected as a superior performer, an entrepreneur had to be nominated by at least two different sources. Once the superior entrepreneurs were selected, average entrepreneurs were selected who were known to at least one of the nominating organizations, but who had not been nominated as superior performers.

All of the entrepreneurs had to have been in business from three to ten years, and all had to have been involved in starting their businesses. To the extent that it was practically possible, the selection strategy in each country was designed to sample a variety of geographical areas and cultural groups.

### Task ID: Train Native-Language-Speaking, In-country Interviewers in the Behavioral Event Interview (BEI) Method

This task has been completed. Special interview-training materials were developed, including a workbook and a detailed interview guide. (The interview guide is included in Appendix A of this report.) For the work in Ecuador, these materials were translated into Spanish. McBer staff members visited each research site and trained from five to nine interviewers in four-day interview-training workshops. At each site, entrepreneurs were brought in to be interviewed as part of the training. Following the workshops, the McBer staff members sat in on the interviewers' initial interviews, or reviewed tapes of these interviews, and provided feedback and coaching to the interviewers.

### Task IE: Interview Entrepreneurs; Transcribe and Translate the Interviews

This process is well underway. All interviews have been completed in India, and more than half of the interviews have been completed in Ecuador and Malawi. As of October 31, 1984, 50 transcripts had been received from India and 31 from Ecuador. McBer staff members reviewed the quality of the initial transcripts received from India and Ecuador and provided constructive feedback as necessary.

Two problems encountered in this task should be mentioned. First, transcription has proved to be a difficult, time-consuming process. Because of a lack of available transcription ser-

vinces, the in-country research organizations had to undertake transcription themselves, sometimes without optimal equipment. The in-country research organizations in Ecuador and Malawi borrowed transcribing equipment from McBer; however, with only one or two persons to perform transcription, and with each interview taking one to three days to transcribe, the process has taken much longer than was planned. Because of the delays in transcription, the analysis of interview transcripts has also been delayed.

A second problem concerns the quality of the interviews. Although many of the transcripts received thus far have contained detailed descriptions of critical events experienced by the entrepreneur, a significant number of transcripts have been brief, and lacking an adequate level of detail in their accounts of critical events.

There are several likely reasons for this problem. First, if the interview is not conducted in the primary language of both the interviewer and the interviewee, as is often the case in India and Malawi, there may be gaps in the interviewer's understanding of what has been said and in the interviewee's ability to communicate details. Second, cultural norms may keep the interviewer from interrupting when necessary to probe for details, causing some interviewees to feel uncomfortable describing their thoughts and actions in great detail. Third, BEI interviewing skills are difficult to master, and even when mastered during training, tend to fade without continuous practice and feedback.

The problem of interview quality should not affect the identification of PECs, since there should be a sufficient number of high-quality interviews from each country and within each business type to identify recurring themes leading to effective outcomes. But the unevenness of data quality may create problems for the coding analysis planned in Task IF3. The frequency of competencies coded may in some cases be as much a function of interview quality as of the entrepreneur's capacity. To deal with this problem it will be necessary to eliminate from the coding analysis any transcripts with a clearly insufficient level of behavioral detail.

#### Task IF: Analyze the Interviews to Identify the PECs

This task is in progress for the data from India and Ecuador. Of the transcripts from India, 36 were selected that had sufficient behavioral detail to be useful in identifying PECs. A team from McBer read the transcripts individually, looking for evidence of abilities, skills, motives, traits, and themes that seemed to facilitate effectiveness in the entrepreneurs.

Next, a concept-formation meeting was held to discuss and organize the themes, and to determine those which occurred with sufficient frequency to warrant inclusion in the preliminary competency model. (The preliminary competency model is included in Appendix B of this report.)

The transcripts from India are currently being coded to obtain counts of the frequency of each competency and its corresponding behavioral indicators. This process may lead to the dropping of some indicators and competencies that occur with insufficient frequency to be of use in the competency model. In addition, the process will permit determination of those competencies that differentiate superior from average entrepreneurs, as well as those that characterize most entrepreneurs without regard to their entrepreneurial success.

To analyze the transcripts from Ecuador, a team of three Spanish-speaking analysts has been assembled under the direction of Jose Santiago, who conducted the interview training in Ecuador. This team is individually analyzing 30 of the transcripts that are best from the standpoint of behavioral detail, to determine which of the PECs found in the transcripts from India are also present in those from Ecuador, and to identify any additional PECs present in the entrepreneurs from Ecuador.

### Task III: Identify and Assess Behavioral Approaches to Entrepreneurship

#### Task IIIA: Review and Synthesize Prior Research and Operational Literature

MSI conducted a thorough search of the published and "grey" literature, which yielded a considerable number of texts and monographs on the nature and origins of entrepreneurship; descriptions and syllabi of several existing training programs; and a limited number of prior evaluations of entrepreneurship training. A bibliography was prepared, as was a brief analysis and synthesis of these materials ("Entrepreneurship Training: What Research to Date Tells Us") in order to consolidate prior work and refine a number of substantive and methodological features of the current research effort. This review revealed no previous impact evaluations comparable to the current research, either in scope or rigor; it did, however, generate a number of useful insights and hypotheses, and a list of interested researchers, donors, and practitioners.

#### Task IIIB: Identify and Investigate Existing "Successful" Training Programs

No comparative analysis of entrepreneurship training programs has ever been undertaken. Malcolm Harper's prior re-

search indicated more than 50 active programs and collected a substantial amount of descriptive information on these programs, but made no effort to characterize or compare their effectiveness.

Despite the absence of any authoritative research, there appears to be considerable agreement among practitioners that several behavioral training programs stand apart from all others in terms of their longevity, quality, and rigor. Although less-than-fully scientific, this informal peer-nomination process was deemed adequate for the purpose of identifying illustrative cases for further investigation.

The purpose of the investigation of nominated institutions is to collect more detailed information on the structure and content of these "successful" programs; to interview their directors and staffs concerning the determinants of success; to collect materials and ideas to be used in experimental programs; to collect whatever research or anecdotal evidence is available on program impact; to initiate additional research on impact, if possible; and to stimulate interest, through these programs, in the current research.

Based upon discussion with five prominent experts in the field and a review of the literature, seven institutions were consistently mentioned as being "successful." These nominations were subsequently presented in an informal Delphi procedure to a number of other experts who, in almost all cases, reaffirmed the initial choices. The institutions nominated were:

<u>Institution</u>	<u>Country</u>
NPC	Indonesia
MARA	Malaysia
UP/ISSI	Philippines
EDI	India
XISS	India
IIDA	Ireland
Hetadi	USA

A process was initiated for obtaining more detailed information on these programs, both as a component of the final evaluation and as an input into the design of new training programs. As a first element in this process, MSI attended and documented a special one-week course on achievement motivation, provided by a senior lecturer of EDII from India to a group of small-scale industry promoters from various LDCs assembled at England's Cranfield School of Management. Considerable information was also collected and analyzed on the ten most popular entrepreneurship training programs for "mainstream" businesspeople in the USA, and syllabi were obtained on several of the model programs listed above. An interesting parenthetical observation is that each of the overseas programs

investigated to date included a variation on David McClelland's original achievement-motivation training as a centerpiece of its attitudinal component.

Task IIIE: Select Training Institutions and Trainers in Pilot Countries

Early in the project it was decided that the preferred strategy for collecting meaningful and comparative data on the impact of behavioral training programs was to design a standard program to be run in the pilot countries by local trainers. This emphasis on the use of local institutions and trainers stemmed from both a desire to approximate realistic, replicable conditions, and an effort to incorporate into the project the objective of strengthening local capacity in the pilot countries.

A further decision was made to enlist the active involvement of the selected local institutions and trainers in the design of the training program to be offered. This decision was based upon a recognition of the knowledge and experience possessed by many of these organizations and individuals; their familiarity with the special conditions and constraints operative in their respective countries and cultures; and the motivational value to be derived from participating in the design of such programs.

Given these decisions, considerable priority was devoted to the selection of suitable institutions and individuals. The criteria for the selection of institutions were: (1) experience with similar programs; (2) credibility with the small-business and financial communities; (3) ability and interest to mount, finance, and sustain the training program; (4) availability of high-quality training personnel; and (5) ability and interest to participate in the research aspects of the project. In some countries (e.g., India), the above criteria could be fully applied. In other countries (e.g., Malawi), it proved difficult to apply any of the criteria, and it was necessary to develop innovative methods for meeting these requirements.

During the first year of the project, brief site visits were made to all of the pilot countries. In each case, the visit resulted in the identification of several potential training institutions and potential trainers. It is expected that final selections will be made by early 1985.

In addition to the site visits to the three pilot countries, a special visit was made to Zimbabwe at the request of the USAID Mission to explore the feasibility of adding Zimbabwe, at Mission expense, as a fourth pilot country. After a series of discussions on the subject, the Zimbabwe Mission was apparently overtaken by events that resulted in the need to table further consideration of this project until some later date. Several

other countries subsequently expressed their interest in joining the project, and as of this writing, it appears likely that Morocco will be added to the project as a fourth pilot country.

#### Task IIIG: Develop Objective Measures of Program Impact

A number of interviews were conducted with researchers actively involved in evaluating the impact of small-enterprise promotion programs, in order to determine the most feasible, useful measures of impact. A review of the published evaluation studies and scholarly articles was also undertaken. This investigation revealed that data on personal income and corporate profits are notoriously unreliable and difficult to obtain, while data on sales and investments are often available but are typically not comparable across industries or sectors.

A tentative decision was made to employ three basic impact measures, to be complemented by other data, as available. The indicators selected were establishment (or continuation) in business, full-time-equivalent employment generated, and value added. Work was initiated on the development of instruments and techniques for collecting any necessary data. This aspect of the research, and the subsequent selection and training of data collectors, are being conducted jointly by MSI and McBer.

#### Task III-I: Develop a Quasi-Experimental Research Design

Substantial thought was given during the first year of the project to developing a research design capable of providing rigorous answers to the following questions:

- Can behavioral training produce a significant positive impact on entrepreneurial performance?
- If so--what exogenous and endogenous variables influence the impact of such training programs?

Ultimately it was decided to focus the majority of Task-III resources on the design and rigorous testing of a training program, to be based upon research conducted in connection with Task I--prior research on entrepreneurship and behavioral training, and the wisdom and experience gained from existing "successful" programs. The program will be implemented by local trainers and training institutions in the pilot countries, who will, in turn, be trained and supervised by MSI professionals. Impact evaluation will be based upon a quasi-experimental research design, developed during the first year of the project and described in the following paragraphs. This approach was discussed in some detail with the NSF Advisory Panel in February of 1984, and considerable benefit was gained from the panel's input.

Behavioral training programs will be defined to encompass those entrepreneurship training programs having operational (as opposed to cognitive) objectives, and experiential (as opposed to academic) training methods; as well as those including an explicit effort to modify attitudes (as opposed to only skills or knowledge). Impact will be determined with respect to objective business-performance criteria, such as the establishment of new enterprises (if appropriate); the continuity of enterprises over time; employment generated; and value added. Exogenous variables will include such factors as culture, type of business, and the socioeconomic backgrounds of participants. Endogenous variables will include such factors as selection methods, course content, and follow-up activities.

The basic hypothesis of this research is that it is feasible to augment significantly the performance of existing and potential entrepreneurs through the provision of appropriately designed behavioral training. Subordinate and related hypotheses include the following:

- Individuals with moderate entrepreneurial aptitude will profit more from the training than will those with either high or low aptitude.
- Individuals currently in business will profit more (in absolute terms) from the training than will potential entrepreneurs.
- More educated individuals, and those with greater access to capital, will profit more from the training than will individuals lacking these advantages.
- Participants between 30 and 45 years of age will profit more from the program than will either older or younger individuals.
- The following factors will contribute significantly to the success of entrepreneurship training programs:
  - (1) appropriate selection methods for participants;
  - (2) training programs that include skill training, attitude formation, the fostering of suitable contacts (networking), and exposure to suitable role models; and
  - (3) carefully designed follow-up programs.
- If programs demonstrate significant results, there will be a large demand for their institutionalization, expansion, and replication.

In the proposed research, specially designed entrepreneurship training programs will be conducted in three or four countries with very different cultures (India, Malawi, Ecuador, and possibly Morocco); and, through the use of well-designed control groups and careful data collection, it will be ascertained

whether these training programs have any significant effect on the attitudes, skills, and performance of entrepreneurs. Various special measures, such as the use of local trainers and existing institutions, will be employed to minimize the Hawthorne effect that might otherwise characterize such research.

Methodologically less rigorous, but operationally more innovative and interesting, is the research process to be employed in designing the training program to be delivered. Parallel research is being undertaken in Task I, to identify the personal entrepreneurial and behavioral profiles of successful entrepreneurs in the selected pilot countries. Part of the research proposed for Task III will include the "translation" of these findings into the attitudinal component of a training curriculum through the application of documented methods of "trait acquisition." This translation will be preceded by secondary research and the collection of expert opinion concerning which of the identified PECs can be strengthened by training, and how to carry out such training.

The research on PECs is not expected to identify the skills or contacts needed for successful entrepreneurship. These components, and other program-design elements--such as the proper selection of candidates and the design of appropriate follow-up activities--will be determined through careful analysis of the three to five existing entrepreneurship training programs generally acknowledged to be among the most effective in enhancing entrepreneurial performance. To the extent possible, this analysis will include the collection of comparable descriptive information on each of these programs, and an assessment of the impact of each program (see Task IIIB). Despite these rigorous efforts, however, the small number of cases involved and the limited variance among them suggest that the information obtained in this portion of the research will draw extensively on case-study methodology, and will be more likely to yield specific insights rather than a systematic model or set of coefficients.

It is tentatively intended that similar training programs be delivered in each pilot country to relatively homogeneous groups of participants with the following characteristics:

- Groups composed entirely of existing or potential entrepreneurs
- Individuals of moderate socioeconomic and educational status
- Individuals disposed toward engaging in nonagricultural production enterprises
- Individuals spanning a range of scores with respect to McBer's PEC index

Training will be provided to at least one group of 15 to 25 participants per country. If possible, the training will be administered to more than one group per country. Ideally, the control group will be composed of additional applicants to the program, with actual program selection based upon random assignment. If this proves to be unfeasible, considerable attention will be devoted to the selection of suitably matched control groups.

The incremental impact of deliberate attitudinal training and trait modification will be investigated as part of this research effort. It is tentatively planned to employ a "subtractive design" to address this issue. In one or more of the pilot countries, the treatment group will be randomly divided into two subgroups. One of these subgroups will receive the full training program, and the other will also receive this training, but excluding the attitudinal component(s). By comparing these subgroups to one another, as well as to a separate control group, it should be possible to establish both the impact of the overall program and the incremental impact of the attitudinal component(s).

Prior to the training, both the treatment and control groups will be interviewed to obtain data on their:

- Relevant background and experience
- PEC index
- Level of business knowledge and skill
- Current level of business activity

The PEC index, and the level of knowledge and skill of the treatment group, will be measured a second time immediately after the course, in an effort to ascertain the direct consequences of the course. The level of business activity of both the treatment and the control groups will be measured 12 to 18 months after the training, in an effort to detect any performance impact that might be attributable to the course.

If possible, PEC indexes will be remeasured at the end of the 12-to-18-month period, to ascertain the effects of the elapsed time on the PECs of both groups. Those who participated in the course will also be interviewed, to determine their current level of knowledge and skill and their impressions concerning the course and its impact.

## WORK PLAN FOR YEAR TWO

In the second year of the project, substantial progress is expected on all four main tasks. The work plan will follow the Detailed Outline of Project Tasks presented earlier. The progress expected on each of the main tasks is indicated below, together with discussion of specific subtasks where appropriate.

### Task I: Research to Identify and Validate PECs

Task I should be completed by January of 1985 or earlier, depending upon receipt of the remaining interview transcripts. The remaining work involves Task IF, Analyzing Interview Transcripts to Identify PECs. When the transcripts from each country have been analyzed, they will be integrated to form a core set of PECs that can guide the development of selection instruments in Task II and of an entrepreneurship training program in Task III.

### Task II: Develop and Validate Selection Instruments Based Upon PECs

Year Two should see the completion of Tasks IIA through D. Work on the development of selection instruments (Task IIA) will begin as soon as the core PECs are established in Task I. Several different selection instruments will be developed or used. An application form or oral-interview protocol will be used to assess PECs related to background experience, such as parental entrepreneurial activity and prior business or technical experience. Another planned selection instrument is a simplified and structured Behavioral Event Interview, in which the interviewee is given several open-ended probes (e.g., "Tell me about a time when you accomplished something you were proud of."). Responses to these questions are coded or rated for evidence of specific PECs. Each probe is designed to elicit potential evidence for a different set of PECs. The interview questions and coding procedures are sufficiently simplified so that only minimal instruction or training is needed.

Personality inventories constitute a third type of selection instrument under consideration. Existing personality inventories will be reviewed to identify those that assess constructs similar to a number of the PECs.

Finally, a projective test, such as the Picture-Story Exercise, may be used with a subset of the validation sample to assess achievement motivation, which has been related to entre-

preneurial success in a large number of studies. This test requires expert scoring, and thus will be of limited practical use as a selection tool. But the test can help to provide construct validation for the other selection instruments used.

### Task III: Identify and Assess Behavioral Approaches to Training

As noted in the initial pages of this document, the methodology and terms of reference for carrying out Task III have evolved significantly from those foreseen in MSI's original proposal. In particular, the need to develop rather than merely to observe effective behavioral training programs; to train and work closely with a cadre of trainers in each of the pilot countries; and--in two cases out of three--to work with local training institutions that have not previously offered similar training programs, will entail an expenditure of effort appreciably beyond that originally anticipated. The implications of these changes have been discussed in detail with the USAID Project Officer, who agrees with the need to make corresponding amendments to the project budget and schedule. The Work Plan presented below for Task III presumes these changes.

USAID is now in the process of determining whether the necessary supplementary resources are available for this project. If these resources are not available, then radical revision of the Work Plan will be required.

### Task IIIB: Identify and Investigate Existing "Successful" Training Programs

During Year Two, it is planned to conduct a thorough investigation of three to five of the seven programs nominated as examples of "successful" existing programs. The purpose of this investigation will be to collect information on the structure and content of these programs; to obtain copies of relevant materials and session summary sheets; to solicit impressions from trainers and participants; to assemble previous impact-evaluation data; to initiate additional impact-evaluation activities, if possible; and to increase interest in the current research.

It is proposed to employ two separate methods of investigating the selected programs. First, professionals from these programs will be invited to attend the first of two international conferences planned for 1985. As a condition of their participation, they will be expected to compile the above-mentioned information in a format to be determined by MSI, and to bring that information to the conference, where they should be prepared to discuss it.

A second method for gathering the desired information will entail visits by MSI to the various programs. Each visit will be of two to three days duration and will, ideally, be timed to coincide with other travel.

All data collection on existing programs should be completed prior to and/or in conjunction with the first international conference in April or June of 1985.

#### Task IIIC: Investigate Key PECs

Research on Task I is intended to identify a set of PECs associated with entrepreneurial success. Certain of these PECs are expected to be common to all pilot countries, while others are expected to differ among countries. In addition, certain PECs are likely to show a stronger, more direct linkage to entrepreneurial performance than others.

PECs identified by the Task-I research will form the basis for the attitudinal components of the curriculum to be developed. It will probably be possible to include training in three or four PECs as part of the curriculum.

A PEC will be selected for inclusion in the training program based upon three criteria: (1) the strength of its linkage to performance; (2) its commonality across the three-to-four pilot countries; and (3) its "trainability." Information on the first two of these criteria should be forthcoming from the Task-I research. Research on the third criterion, "trainability," will be undertaken as part of Task III during the second year of the project.

Secondary research on the core competencies identified by the Task-I research will be conducted by MSI with the assistance of McBer between January and April of 1985. The purpose of this research will be to identify past efforts to train individuals in each of these traits, and to assess the effectiveness of these training efforts. Materials and curricula for successful past training activities will be assembled. At the same time, expert opinion will be solicited on the feasibility and nature of possible training programs for those key traits that have not been the subject of prior training efforts. Based upon the results of these inquiries, a final list of PECs will be selected for inclusion in the program, individual modules will be planned for each of these PECs, and materials will be assembled.

#### Task IIID: Prepare Preliminary Design of Training Program

Preliminary preparation of the experimental training program will take place between the completion of Task I (around January

of 1985) and the first international conference (in April or June of 1985). The design and content of the program will be based upon the PECs identified in Task I and investigated in Task IIIC, and upon the results of the investigation of existing successful programs (Task IIIB).

Investigations conducted during Year One yielded several tentative parameters for the new program. While continuing to be subject to change, these factors are indicative of the types of considerations likely to influence the final design. Informed opinion suggests that two weeks is the maximum feasible duration for a full-time entrepreneurship training program, if such a program is expected to enroll any significant number of existing entrepreneurs. The same experience suggests that a one-week program would be preferable, and that intermittent courses are more desirable than continuous ones.

For practical reasons of course supervision, it is not considered feasible to employ intermittent courses during the experimental period. Course duration will, therefore, probably be limited to one or possibly two weeks.

The experience of the most successful programs and the preponderance of expert opinion suggest that entrepreneurship training programs should, ideally, contain six basic elements. These elements are: (1) an effective method of participant selection and orientation; (2) attitude formation; (3) skill development; (4) linking of entrepreneurs with potential markets and sources of capital; (5) presentation of appropriate role models; and (6) a follow-up program after the completion of the initial course. Given the nature of the research project, the final design will prominently feature the second of these elements (attitude formation) and will incorporate the other elements to the greatest feasible extent.

Although it is intended that the curriculum be finalized as part of the participatory workshop scheduled for April or June (see Task IIIF below), major "pieces" of the program will be developed in draft prior to that time, and will form the basis of discussion at that workshop.

#### Task IIIE: Select Training Institutions and Trainers in Pilot Countries

The process of selection initiated during Year One will be continued during Year Two, and final selections will be made by February of 1985. This will enable the appropriate individuals to participate in the first annual conference and in the training-of-trainers session scheduled to commence immediately following that conference.

Task IIIF: Design and Conduct a Training-of-Trainers and Curriculum-Development Workshop

In conjunction with and immediately following the first annual conference, MSI plans to assemble two designated trainers from each of the pilot countries for a participatory, four-week, training-of-trainers and curriculum-development workshop. Representatives of McBer will participate in the early part of this workshop to ensure a smooth transition from and appropriate use of the Task-I and Task-II research. A few selected individuals from ILO, USAID, and the existing successful programs noted above will also be requested to participate as expert advisors in the first portion of this workshop.

This intensive workshop will be based upon an approach developed and practiced by MSI in previous projects, and will have as its objective the development of a coherent syllabus, a full set of materials, trainers' notes, and a faculty possessing the competence and confidence necessary to present the course. The major prerequisites are careful preparatory work and a team of highly competent and experienced trainers from each of the several host-country institutions.

The workshop will make extensive use of small task groups, an iterative design of key elements of the curriculum, micro teaching, and process documentation. Successful components from past programs will, where feasible, be retained intact. The session will be conducted in English, but the MSI staff present will include individuals fluent in French and Spanish to minimize any linguistic difficulties and to assist in translating essential training materials into those languages.

Task IIIG: Develop Objective Measures of Program Impact

During Year One, tentative decisions were reached concerning the principal indicators to be used in assessing impact: continued existence of the enterprise, employment generated, and value added. During Year Two, detailed instruments and interview guides will be developed for collecting the necessary baseline and follow-up data, individuals will be selected and trained to conduct the interviews, and the instruments and procedures will be field-tested in all of the pilot countries.

The design of the necessary instruments and protocols, and the selection and training of interviewers, will be undertaken collaboratively by MSI and McBer. Preliminary design will take place prior to and in conjunction with the first international meeting in April or June. Following that meeting, McBer will be responsible for training data collectors in each of the pilot countries and for initiating field-testing. It is hoped that these local researchers will be able to attend the second international meeting scheduled for early in Year Three of the proj-

ect (November 1985) to discuss any problems that may have arisen in the field-test and to make necessary revisions to the instruments and procedures.

Task IIIH: Field-test and Revise the Entrepreneurship Training Program

Following the training-of-trainers workshop scheduled for April or June of 1985, national trainers are expected to return to their respective countries and to initiate preparatory work for the first round of training programs. In some cases this may involve provision of the new course to one or more groups of their existing "clients." The purpose of this phase is to discover any unexpected difficulties or unanticipated opportunities that might arise regarding the provision of the course. MSI will be in close touch with the trainers during this period and will provide on-site supervision if necessary.

It is intended that trainers from the pilot countries attend the second international meeting in late November, and be prepared to discuss any problems that might have arisen or propose needed modifications to the course. The product of this second-iteration design effort will be the experimental program (or programs) to be offered in the pilot countries and to be rigorously evaluated.

Task III-I: Develop a Quasi-Experimental Research Design

The nature of the tentative research design planned for the project is described above (Year One, Task III-I). Action to be undertaken during Year Two on this task will focus on the actual designation of control groups in each of the pilot countries.

As noted, control groups would, ideally, be drawn randomly from the pool of individuals who apply to participate in the new entrepreneurship training programs. If this selection method proves to be untenable, considerable effort will be devoted to the identification of suitably matched control groups. The criteria for matching have not yet been fully elaborated, but would include such factors as PEC index; age; sex; education; location; and business level (potential vs. existing; size of enterprise). If possible, type of industry will also be used as a criterion for matching. Cooperation of banks and other assistance agencies could be used to ensure access to respondents. Preferably, participation will be induced by offering to provide individuals with a comparative assessment of their PEC index or with other interpretive information of interest to them. Cash payments and/or tuition credits for future programs may also be considered.

If a "subtractive design" is used to assess the incremental effects of attitudinal training, the two treatment groups would also serve as partial control groups for one another.

Selection and interviewing of control groups may take place during Year Two of the project, but are more likely to take place early in Year Three, following the second international meeting.

### Alternative Work Plan for Task III

Tasks IIIJ through M will be undertaken during Year Three of the project. These tasks include supervising the delivery of entrepreneurship training programs in the pilot countries; finalizing the training-program materials and manuals for use in other countries; supervising the collection of impact-evaluation data on treatment and control groups; and analyzing impact-evaluation data.

#### Task IV: Disseminate the Project's Findings

The process of dissemination initiated in Year One will be continued and intensified during Year Two. The first annual network meeting is tentatively planned to be held in April or June of 1985. The second annual report should be completed by October 1, 1985. The second annual network meeting is planned for November 1985, and thus will fall into Year Three of the project.

Additional dissemination efforts will focus on the preparation and distribution of papers. In the area of research on PECs, McBer plans to prepare a paper describing the research project and presenting the core PECs. A second paper will discuss the role of the PECs on entrepreneurship, from the standpoint of economic theory.

In the area of entrepreneurship development and training, two papers are planned. The first paper will summarize the results of secondary research conducted by MSI on the origins of entrepreneurship, the nature of existing entrepreneurship training programs, and the evaluation of entrepreneurship training efforts. The second paper will describe the structure and content of the proposed curriculum, the theory implicit in the curriculum, and the process by which the curriculum was developed. It is tentatively planned to present one or both of these papers at the April meeting of an international symposium on entrepreneurship, to be held at the Wharton School of the University of Pennsylvania.

In terms of the Detailed Outline of Project Tasks, Tasks IVA-D are scheduled for completion in Year Two, and there should be substantial progress on Task IVE.

**APPENDIX A**  
**DETAILED OUTLINE OF INTERVIEW FOR ENTREPRENEURS**

## APPENDIX A

### DETAILED OUTLINE OF INTERVIEW FOR ENTREPRENEURS

#### I. Introduction

- A. Begin with small talk to relax the interviewee and set a pleasant tone for the interview.
- B. Explain the purpose of the interview, by providing background on the study:
  - 1. "We are conducting a study to learn what it takes to be effective as an entrepreneur in this country."
  - 2. "We want to talk to the real experts--people who own their own businesses."
  - 3. "By interviewing people in depth, we hope to develop a detailed understanding of what they do that helps them to be successful."
  - 4. "We are interviewing 72 entrepreneurs in a wide variety of businesses in this country."
  - 5. "We are trying to identify skills, abilities, and ways of approaching problems that are demonstrated by many entrepreneurs in a variety of situations."
  - 6. "The skills and abilities that we observe will be emphasized in training programs for new entrepreneurs."
- C. Explain that the format of the two-and-a-half-hour interview will include:
  - 1. Background questions on the business
  - 2. Background questions on the interviewee (education, work history)
  - 3. A question on his or her regular activities in the business (how he/she spends a typical week)
  - 4. A question on how he/she got started in the business
  - 5. Descriptions of specific situations he/she has encountered in the business

- a. Two situations where he/she felt effective or pleased with the way he/she was running the business
- b. Two situations where things did not go smoothly, where he/she experienced some problem or frustration

"For each situation, I will ask:

- How you first got involved
- What you were thinking in the beginning
- The sequence of things you did
- What happened in key discussions or meetings, as fully as you can remember
- What you were thinking as the situation developed
- How the situation turned out"

6. Questions on what the interviewee considers to be the personal characteristics and abilities needed for success as an entrepreneur

- D. Assure confidentiality and ask for permission to tape-record the interview:

"In order to conduct our analyses, we need to have a record of the interview. That is why the tape recorder is here--with people's permission, we are tape-recording the interviews. Everything you say will be completely confidential; but if at any time you feel uncomfortable saying something on tape, just tell me, and I will turn the tape recorder off."

## II. Background Information on the Business

- A. "What does your business produce or sell?"
- B. "How long have you owned this business?"
- C. "What was your sales volume in the past year?"
- D. "How has your sales volume changed over the past three years/since you have been in business?"
- E. "What did the business earn in the past year--how much income was there, after expenses and the cost of goods sold?"

- F. "How have your business's earnings changed over the past year?"
- G. "Have your products or services changed over the past three years? If so, how?"
- H. "Where is your business based? Do you have other locations (offices, plants, shops)?"
- I. "What major equipment does your business own or lease (machinery, vehicles, tools)?"
- J. "How many people work for you? What are their jobs?"
- K. "Where have you gotten financing for this business (banks, family, friends, personal funds)?"

### III. Personal Background Information

- A. "What education have you had?"
- B. "Please give a brief history of the jobs you have held since completing your education."  
(For each job): "What did you do in that job?"
- C. "Tell me about any other experiences you have had that are relevant to your present business."
- D. "Have you started any other business(es) previously? If so how successful was each business?"
- E. "What is your father's occupation? Your mother's?"
- F. "Are there any other people in your family who own their own businesses? If so please give me some details."

### IV. Entrepreneur's Regular Activities in the Business

- A. "If I were to watch you for a week in this business, what things would I see you doing?"  
  
(Probe for moderate detail by getting the person to give general descriptions; for example): "What do you mean by 'supervising?'" "What does developing a sales plan involve?" "What do you do when you visit a client?"
- B. "Are there any other things you do as a regular part of your work in this business?"

- C. "How many hours do you work in a typical week? Is this number more or less than the hours you worked in previous jobs you have held, in which you were an employee in someone else's business?"

## V. Starting the Business

- A. "What led up to your starting this business?"
- B. (If not answered above): "What were your thoughts at that time?"
- C. "What exactly was the sequence of things you did in starting this business? Be sure to mention any problems you encountered and how you dealt with them. Please give me a brief overview of the whole sequence of events. Then I will want to walk through the sequence of events with you in more detail."
  - 1. First obtain the overview, which might include events such as individual planning, talks with others knowledgeable about the business, an attempt to gain financing, etc.
  - 2. Probe each key event mentioned in the overview, to find out what the entrepreneur actually thought, said, and did, as in the examples below:
    - a. "You mentioned planning what you wanted to accomplish in the first year. Tell me how you did that planning. What were your thoughts?"
    - b. "You mentioned the meeting with your uncle. Just before that meeting, what were you thinking? What exactly did you say? What did he say? What were you thinking at that point? What did you do after that meeting?"
    - c. "You mentioned going to the bank and persuading them to lend you the money. Tell me what you were thinking as you walked into the bank. What did you actually say? What did they say? What did you do next?"

## C. Transition to Situations Encountered in the Business

"Thank you. That gives me a good picture of how you got started in this business. Now I would like to move to some key situations you have encountered in the last year or two in this business."

## VI. Specific Situations Encountered in the Business

### A. First High Point

1. "I would like you to tell me about a time in the last year or two when you felt pleased with something you did as part of your work in this business. This could be something that happened in the course of a day, or over a longer period, of weeks or months--sort of a high point in terms of your own involvement in the business. I would like you first to give me an overview of the situation. Then I will want to go back through it in more detail."
2. (After the overview): "That gives me a helpful overview of the situation. Now I would like to walk back through it with you in more detail. Let's go back to the point where you first got involved. What were you thinking at that point? What was the first thing you did?"

(Try to obtain a complete picture of what the entrepreneur did, said, thought, and felt throughout the situation. Listed below are some questions you may want to ask.)

- a. "What exactly did you do?"
- b. "Tell me about one of those discussions that stands out in your mind."
- c. "Tell me what you were thinking just before that discussion."
- d. "What exactly did you say?"
- e. "What were you feeling at that point?" (to be asked if the entrepreneur seems to be describing a situation where there was some strong feeling--of happiness, anger, confusion, etc.).
- f. "What did you do next?"
- g. "What finally happened?"

### B. Second High Point

"I like the way you were remembering the details of what you said and did in that situation. Can we talk now about another situation where you were pleased with the way things turned out--another high point in

terms of your own involvement in this business? And again, if you will first give me an overview, we can then go back through it in more detail."

(After the overview, follow up with specific probes, as before.)

C. First Low Point

"Now I would like you to tell me about a situation in this business where you were involved and things did not go the way you wanted, where you experienced some frustrations or problems. First, please give me an overview, and then we will go back through the situation in detail."

(Follow up with specific probes, as before.)

D. Second Low Point

"Could we talk about one more situation that was a low point for you in this business--another time when you encountered problems or frustrations?"

(Follow up with specific probes, as before.)

VII. The Entrepreneur's Views of the Personal Characteristics Required for Effectiveness

"I think we have a good selection of specific situations that will be very helpful. To complete the interview, I would like to get your views on what it takes to be successful as an entrepreneur. What personal characteristics, skills, or abilities do you think are most important?"

(After you obtain a list of the qualities the entrepreneur thinks are most important, select one for which you have not heard much evidence, and try to get a specific example from the entrepreneur's experience. A sample probe is provided below.)

"You mentioned persistence. Can you give me a quick example of a time when persistence was helpful to you?"

(Follow up with probes, as in the high points and low points.)

VIII. Closing the Interview

"We have covered all the points I wanted to cover. I want to thank you very much for your time and your help with this project. Do you have any questions for me?"

**APPENDIX B**  
**PRELIMINARY COMPETENCY MODEL FOR DATA FROM INDIA**

## APPENDIX B

### PRELIMINARY COMPETENCY MODEL FOR DATA FROM INDIA

1. Initiative
  - a. Does things before being asked or forced to by events
  - b. Acts to extend business into new areas, products, services
2. Sees and Acts on Opportunities
  - a. Sees and acts on new business opportunities
  - b. Seizes unusual opportunities to obtain financing, equipment, land, work space, or assistance
3. Persistence
  - a. Takes repeated or different actions to overcome an obstacle
  - b. Takes action in the face of a significant obstacle
4. Information Seeking
  - a. Does personal research on how to provide a product or service
  - b. Consults experts for business or technical advice
  - c. Seeks information or asks questions to clarify client's or supplier's needs
  - d. Personally undertakes market research, analysis, or investigation
  - e. Uses contacts or information networks to obtain useful information
5. Concern for High Quality of Work
  - a. States a desire to produce or sell a top or better-quality product or service

- b. Compares his or her own work or own company's work favorably to that of others

6. Commitment to Work Contract

- a. Makes a personal sacrifice or expends extraordinary effort to complete a job
- b. Accepts full responsibility for problems in completing a job for customers
- c. Pitches in with workers, or in their place, to get the job done
- d. Expresses concern for satisfying the customer

7. Efficiency Orientation

- a. Looks for or finds ways to do things faster or at less cost
- b. Uses information or business tools to improve efficiency
- c. Expresses concern about costs versus benefits of an improvement, change, or course of action

8. Systematic Planning

- a. Plans by breaking a large task down into subtasks
- b. Develops plans that anticipate obstacles
- c. Evaluates alternatives
- d. Takes a logical, systematic approach to activities

9. Problem Solving

- a. Switches to an alternative strategy to reach a goal
- b. Generates new ideas or innovative solutions

10. Self-confidence

- a. Expresses confidence in his or her own ability to complete a task or meet a challenge

- b. Sticks with his or her own judgment in the face of opposition or early lack of success
- c. Does something that he or she says is risky

11. Expertise

- a. Had experience in the same area of business before starting the business
- b. Had strong technical expertise in the same area of business before starting the business
- c. Had skill in finance before starting the business
- d. Had skill in accounting before starting the business
- e. Had skill in production before starting the business
- f. Had skill in marketing/selling before starting the business
- g. Had skill in another relevant business area before starting the business

12. Recognizing Own Limitations

- a. Explicitly states a personal limitation
- b. Engages in activities to improve his or her own abilities
- c. States learning from a past mistake

13. Persuasion

- a. Convinces someone to buy a product or service
- b. Convinces someone to provide financing
- c. Convinces someone to do something else that he or she would like that person to do
- d. Asserts own competence, reliability, or other personal or company qualities
- e. Asserts strong confidence in his or her own company's products or services

14. Use of Influence Strategies
  - a. Acts to develop business contacts
  - b. Uses influential people as agents to accomplish his or her own objectives
  - c. Selectively limits the information given to others
  - d. Uses a strategy to influence or persuade others
  
15. Assertiveness
  - a. Confronts problems with others directly
  - b. Tells others what they have to do
  - c. Reprimands or disciplines those who fail to perform as expected
  
16. Monitoring
  - a. Develops or uses procedures to ensure that work is completed or meets standards of quality
  - b. Personally supervises all aspects of a project
  
17. Credibility, Integrity, Sincerity
  - a. Emphasizes his or her own honesty to others (e.g., in selling)
  - b. Acts to ensure honesty or fairness in dealing with others
  - c. Follows through on rewards and sanctions (to employees, suppliers)
  - d. Tells customer that he or she cannot do something (e.g., complete a task) even if it means a loss of business
  
18. Concern for Employee Welfare
  - a. Takes action to improve the welfare of employees
  - b. Takes positive action in response to employees' personal concerns
  - c. Expresses concern about the welfare of employees

19. Recognizing the Importance of Business Relationships

- a. Sees interpersonal relationships as a fundamental business resource
- b. Places long-term goodwill over short-term gain in a business relationship