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FINAL REPORT

ENTREPRENEURSHIP TRAINING AND THE STRENGTHENING OF ENTREPRENEURIAL PERFORMANCE

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Robert Young
Bureau for Asia and Private Enterprise
Office for Small, Micro, and Informal Enterprise
Agency for International Development
Washington, D.C. 20523



MANAGEMENT SYSTEMS INTERNATIONAL

600 Water Street S.W., NBU 7-7
Washington, D.C. 20024

telephone: (202) 484-7170
telex: 4990821MANSY fax: (202) 488-0754

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PREFACE

Entrepreneurship is a growth industry. Faced with declining productivity and innovation, and with the loss of key markets to the Japanese, Western economists have looked to entrepreneurship for salvation. Silicon Valley and Route 128 in Boston have largely replaced Detroit and Pittsburgh as America's business Meccas. Magazines like Venture and Inc. which write about and to young entrepreneurs have seen their circulation rise geometrically over the past decade. Paradoxically, these magazines are now themselves witnessing a reduction in their market share due to the birth of innovative new publications for entrepreneurs.

Research on entrepreneurship has been growing rapidly as well. For example, the Babson Entrepreneurship Research Conference, begun in 1981 with only a handful of participants and publications, attracted over 300 researchers and 60 scholarly monographs in 1985. Both academic and popular books on entrepreneurship flood into the marketplace at a dizzying pace, including several which have gone on to become best sellers in the United States and abroad. A review of entrepreneurship or new venture courses in American business schools identified less than a score of such programs in 1976. In 1984, a similar count identified over 250 such programs. And the number continues to grow.

The dramatic expansion of interest in entrepreneurship among the academic and scholarly community mirrors a fundamental shift in Western culture and social structure. Recent polls indicate profound shifts in the employment preferences of young people in the West. For example, the percentage of young people expressing a preference for being self employed or starting their own businesses has increased by more than 50% during the past decade in the United States. Surveys of business school students indicate similar shifts in preferences. Perhaps more importantly, people appear to be acting on these preferences. In 1984, the U.S. Small Business Administration recorded 650,000 new business starts, by far the highest figure in American history. Twenty-five percent of these new enterprises were headed by women; and a large portion were "first ventures" for the entrepreneurs who started them.

The entrepreneur as "hero" has become a popular theme in the United States and Great Britain, harkening back to the ideas of Joseph Schumpeter

more than 70 years ago. Articles on entrepreneurship appear regularly not only in publications like The Wall Street Journal and Financial Times, but also in publications like Playboy, Time, and Self.

The term "entrepreneur" has replaced "small businessperson" in much of common parlance and is worn with pride where once people looked upon "commerce" as the domain of those unsuited for professional or administrative careers. Weekend seminars and training programs on entrepreneurship have flourished as well, and a recent count identified 10 major institutes in the United States offering such programs to overflow national or regional audiences of aspiring entrepreneurs. These programs are emphatic in the distinction they draw between entrepreneurship (which they teach) and business management skills (which they don't). While none of these programs appears to be based on any solid base of research and few take the trouble to measure their impact in any systematic way, each boasts a number of successful accomplishments and cites lavish testimonial from prior participants.

Nor is this entrepreneurship revolution lost on the governments and people of the developing world. Frustrated by disappointing economic performance, distressed by the apparently increasing size and decreasing performance of public sector organizations, concerned by alarmingly high rates of unemployment and impressed by the "economic miracle" of places like Singapore, Hong Kong and Korea, many countries are now looking to entrepreneurship and self-employment for answers. Small enterprise and other income generating projects have grown substantially in relation to infrastructure and welfare projects in the portfolios of most donor agencies and many governments of less developed countries (LDCs). In conference after conference, homage is paid to the importance of the "intangible" commodity of entrepreneurship, and to the facilitative conditions and direct interventions which can assist its successful emergence. Unlike the concern in developed countries which focuses on "second generation" entrepreneurial concerns such as innovation, attention in LDCs tends to focus on the more basic issues of willingness to incur risk, to assemble resources and to engage in market transactions, i.e., the issues associated with creating a culture of private enterprise.

The research which forms the basis of this study represents the most comprehensive research to date on the personal characteristics associated

with successful entrepreneurship, on the feasibility of enhancing these characteristics in individuals through behavioral training and on the impact associated with such enhancement. Somewhat ironically, this research was undertaken in the developing world where, with the exception of commercial activity among selected sub-groups, entrepreneurship has received little cultural and infrastructural reinforcement. At issue is more than the feasibility of planting seeds on richly fertilized fields, but the creation of business life on rather inhospitable terrain.

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EXECUTIVE SUMMARY

The Entrepreneurship and Small Enterprise Development Project was a five-year research and development effort funded by the Bureau for Science and Technology of the United States Agency for International Development. The project was divided into three major tasks including: the identification of the personal characteristics or "PECs" associated with successful entrepreneurship in different developing country contexts (Task 1); the development of instruments able to predict those entrepreneurs most likely to succeed in business (Task 2); and the identification and assessment of behavioral training programs intended to improve the business performance of entrepreneurs and potential entrepreneurs (Task 3). Through a competitive process, McBer and Co. of Boston, Massachusetts was selected to implement Tasks 1 and 2. Management Systems International (MSI) of Washington, D.C. was separately contracted and assigned responsibility for all facets of Task 3. This report focuses on the research, methods and analyses conducted in Task 3.

Initial investigation indicated only one prominent approach to behavioral training (Achievement Motivation Training), and that approach had already been extensively evaluated. This same investigation indicated a strong preference by practitioners to advance the state-of-the-art of behavioral training in entrepreneurship. Thus the MSI project was amended to include the development of a new behavioral training program based on secondary research, a review of existing programs and the McBer research; the delivery of this program in a developing country context; and the conduct of an assessment of its impact. Malawi was the country selected for the implementation of the newly designed training program.

A review of past research conducted on entrepreneurship worldwide indicates that entrepreneurship is a complex phenomenon influenced not only by skills, attitudes and personal considerations, but also by the institutional environment and the prevailing pattern of opportunities. Structural factors affect the emergence of entrepreneurship directly through

their influence on institutions and incentives, as well as indirectly through their influence on the socialization of individuals. A wide variety of researchers, from McClelland in the 60's to Robert Brockhaus in the 80's, agree, however, that there are personal entrepreneurial characteristics (PECs) and behaviors which can distinguish successful entrepreneurs from others. Although there is no clear consensus concerning the specific PECs of successful entrepreneurs, research suggests that need for achievement, creative problem solving, internal locus of control, goal setting and opportunity scanning are among this set of common PECs.

The findings of the secondary research of entrepreneurship have several implications for the development of a new behavioral training program. Firstly, the findings suggest that there are certain personal characteristics and individual behaviors which, if they could be strengthened, might well contribute to expanded and improved entrepreneurial ability. This same data also suggests that training impact is enhanced if the training can address constraints such as lack of suitable role models, support groups and capital.

Over 100 training programs around the world were reviewed to identify the most successful elements of each. These programs ranged from weekend seminars for high technology entrepreneurs to year-long programs for secondary school drop-outs. Some programs concentrated on skills training while others stressed motivation or the "brokering" of potential funding sources and markets. It was found that the achievement motivation training developed by David McClelland in the 1960s is still practiced, virtually unchanged, in most of the best established entrepreneurship training programs in the Third World. Common to most of the U.S. and European programs is a focus on the non-behavioral aspects of entrepreneurship and small business development, particularly finance mobilization, market analysis, business plan preparation and management. Information dissemination is also stressed and significant attempts at "networking" are included. While certain of these programs include attitudinal or behavioral components, those elements are typically secondary rather than primary.

Careful participant selection is incorporated in many programs and was felt by many to largely determine a program's success. Most selection criteria rely heavily on indicators related to participants' backgrounds, especially previous business experience and/or family business experience. Many selection procedures also include trait or attitudinal-based indicators, frequently focused on motivation and commitment. A number of other instruments and procedures for testing entrepreneurial potential have been developed, but continue to be used primarily for academic and research purposes.

The experience of the most successful programs suggests that entrepreneurship training should ideally contain six basic elements: 1) an effective means of participant selection and orientation; a program which contains 2) attitude and behavior modification, 3) skill development, 4) linking of entrepreneurs with potential markets and sources of capital, and 5) presentation of appropriate role models; and 6) a follow-up program after the completion of the course. Given the nature of the hypotheses to be tested as part of the current research, only the second element (attitude and behavior modification) was incorporated into the program to be tested.

In early 1985, a comprehensive behavioral training program was designed based on fifteen PECs. The program was designed to be 80 contact hours in length and to build on the lessons learned during the initial part of the research. The learning method and module structure employed in the program were based heavily on available research on trait acquisition, competency-based training, cross-cultural training and adult learning, while program structure and duration drew heavily on the experience amassed by other ostensibly successful entrepreneurship training programs.

The program was tested during 1985 in a workshop attended by trainers from Malawi, India, Ecuador, Kenya, the Philippines, Malaysia, England and the U.S. The course was modified based on that experience and the number of PECs was reduced to 10. The resulting course was subsequently field tested by incorporating specific modules into existing training programs in Kenya,

Senegal, England and the U.S. Further revisions were made in light of this experience and the revised course was implemented in Malawi in July and October of 1986 in two course offerings that involved a total of 45 participants.

The primary questions addressed in examining the impact of this training program were: 1) can behavioral approaches to entrepreneurship training produce a significant positive impact on entrepreneurial performance; and 2) if so, what exogenous and endogenous variables influence the impact of such training? Related questions addressed were the nature of the relationships between changes in PECs and changes in entrepreneurial performance, and the nature of changes in PECs over the two-year course of the study period.

Using a quasi-experimental design, the research features a comparison of changes in economic activities/entrepreneurial success for two experimental groups: 1) a treatment group that received the entrepreneurship training program and 2) a randomly assigned control group of 45 individuals that did not participate in the training program. Detailed baseline interviews were conducted with 90 individuals, 45 trainees and 45 control group members, who had expressed interest in the program. These interviews averaged 2 1/2 hours and included detailed background information on the individual and his or her family, a profile of the interviewee's current and past economic activities, an assessment of each individual's current level of income, and a profile of each individual's current level with regard to each of the 10 PECs included in the training program. This latter portion of the interview was based on the use of a one hour procedure called the Focused Interview Technique (FIT) developed by McBer and Co. as a selection instrument for identifying entrepreneurial potential.

In August and September of 1988, a final round of data collection was completed with workshop trainees and control group members. Analysis of the resulting data involved comparison of changes in PECs and selected measures of entrepreneurial performance for the treatment and control groups, with

personal and business background data characteristics used as statistical controls and in the assessment of interactions.

Multiple regression was the basic tool used to analyze the data with analysis of covariance techniques used to assess the extent of differential program effects (i.e., interactions for different subgroups of participants). The following is a summary of basic findings:

- Increases in total PEC scores were observed in both treatment and control groups, although substantially larger increases were observed for treatment group subjects. There was some ambiguity, however, as to the extent to which these improvements can be attributed directly to the training.
- 72% of trainees reported having made substantial changes in either products or services, production processes, marketing, and/or advertising in the six months prior to data collection.
- Despite a general decline in the economy of Malawi during the study period, 52% of trainees reported an increase in employment in their businesses compared to 18% in the control group.
- 80% of trainees as compared to 10% of the control group reported growth in sales which exceeded the median for the study participants as a whole.

The findings of the study suggest that performance improvements could be related to having participated in the training program. There are, however, several caveats to bear in mind when considering these findings. First, the findings are based upon a single case study and a relatively small sample. Secondly, the study includes no means of fully compensating for sample attrition. Thirdly, further and comparable research would be necessary to assess whether such training is any more efficient than other forms of enterprise support, such as other entrepreneurship or skill training programs, credit or disseminating information on new products, markets or technologies. Finally, the direct linkage between behavioral training and changes in PECs remains only tenuously validated, in part due to over-representation of well-educated individuals within the treatment group.

The report concludes with a discussion of the principal findings and limitations of the current research and its implications for future research.

1. INTRODUCTION

A. Rationale for the Research

The Entrepreneurship and Small Enterprise Development Project was a five-year research and development effort funded by the Bureau for Science and Technology of the United States Agency for International Development (A.I.D.). Over the years A.I.D. and other donor agencies had made substantial efforts to stimulate small enterprise development in less developed countries (LDCs). Some of the approaches included:

a) financing, usually through NGOs or local development banks, for use by indigenous entrepreneurs; b) training, usually in business skills and usually through generic programs offered by local training organizations; c) business advisory services or some other form of outreach usually attached to local NGOs or government ministries; d) feasibility studies to indicate enterprises needed locally; e) infrastructure development; and f) reform of government policies and procedures.

Missing from virtually all of these conventional approaches to small enterprise development was any explicit effort to identify or cultivate individual entrepreneurs. Recognizing this fact, the principal funding document for this research effort indicated:

A basic premise of this project is that there is a missing link in the process of small enterprise development which must be present in order for development efforts to succeed. Donor agencies, while providing important components for stimulating small enterprise development, have not focused on the entrepreneur himself -- the person we look to to obtain resources, risk them, and manage them in such a way that a viable, sustained, employment-generating entity is established. We have not yet found reliable ways to identify such persons and we do not yet know enough about how to support their efforts. This is a serious deficiency which often negates the effective implementation of existing activities for the development of small businesses in LDCs. Helping to provide this missing element is the basic function of this project.¹

The project was divided into three major tasks. Task 1 involved the identification of the personal characteristics or "profile" associated with successful entrepreneurship in different LDC cultures, settings and sectors. Task 2 was to proceed, in turn, from the results of Task 1 and generate instruments able to predict those entrepreneurs most likely to succeed in

business. And Task 3 was to result in the identification and assessment of behavioral training programs intended to improve the business performance of entrepreneurs and potential entrepreneurs.

Through a competitive process, McBer and Co. (McBer) of Boston, Massachusetts was selected to implement Tasks 1 and 2 and Management Systems International (MSI) of Washington, D.C. was separately contracted and assigned responsibility for all facets of Task 3. This report focuses on the research, methods, and analyses conducted in Task 3.

The original project concept called for MSI to assess the impact of existing entrepreneurship training programs. This approach was subsequently modified, after extensive discussion, for two reasons. First, initial investigations indicated only one prominent approach to behavioral training, and that approach had been the subject of many previous evaluation efforts. Second, this same investigation indicated a strong preference by practitioners to advance the state-of-the-art rather than simply study it. It was thus decided to develop a new behavioral training program based on extensive secondary research, review of existing programs and the McBer research; to deliver this program in an LDC context; and to conduct a rigorous assessment of its impact. The project was amended to reflect this change in approach. The country selected for the implementation of the newly designed training program was the Southern African country of Malawi.

B. Overview of Project Activities

The overall project was divided into 13 separate Sub-Tasks. They are presented here in brief.

Sub-Task 1: Review Prior Research and Operational Literature

A thorough search was undertaken of literature concerning the nature of entrepreneurship and entrepreneurship development, the structure and content of existing training programs, and the impact of those programs. This review revealed no previous impact evaluations comparable in their scope and rigor to the current research but did, nonetheless, generate a number of useful insights and hypotheses and a list of interested researchers, donors, and practitioners.

Sub-Task 2: Investigation of Existing "Successful" Training Programs

A limited review of 72 entrepreneurship programs and detailed investigations of five "successful" training programs were conducted to gather detailed information on the structure and materials used in these programs, to obtain whatever secondary data and anecdotal evidence was available on program impact, and to increase interest in the ongoing research. Selection of the training programs to be analyzed in depth was based on a modified Delphi inquiry with prominent experts in the field. In addition, information on the 10 most popular entrepreneurship training programs in the U.S. was collected.

Sub-Task 3: Investigation of Key Personal Entrepreneurial Characteristics

Based on the results of the McBer research and extensive secondary research, a preliminary list of key Personal Entrepreneurial Characteristics (PECs) associated with successful entrepreneurial performance were developed. Additional research was conducted to identify prior experience in using training to stimulate any or all of these characteristics. PECs were selected for inclusion in the training program based on two criteria: 1) apparent strength of their linkage to performance, and 2) "trainability."

Sub-Task 4: Preliminary Preparation of Training Program

A list of components and a preliminary design for an experimental behavioral training program to be undertaken and validated in the pilot country were prepared. Attitudinal components of the training were based on the results of Sub-Task 3 above; the structure of the overall course was based on the results of Sub-Tasks 1 and 2.

Sub-Task 5: Selection of a Training Institution and Trainers in Malawi

It was decided early in the project to involve local institutions and trainers in the design of the training program to be offered. This decision was based on a recognition of the knowledge and experience possessed by many of these individuals, their familiarity with the special conditions and constraints operative in their country and culture, and the motivational value derived from participating in the design of such a program.

Given these decisions, considerable priority was devoted to the selection of a suitable institution and individuals. The criteria for the selection of an institution 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.

It proved difficult to apply some of the criteria in Malawi and it was necessary to develop innovative means for meeting these requirements. Ultimately, the training program was a collaborative effort between the Malawi Entrepreneur Development Institute (a local training institution assisted by ILO) and DEMATT (a business development organization assisted by Partnership for Productivity).

Sub-Task 6: Design and Conduct of Training of Trainers and Curriculum Development Workshops

In conjunction with (and immediately following) the First Annual Network Meeting held in Oxford, England in the Summer of 1985, two designated trainers from Malawi were assembled together with 13 entrepreneurship trainers from seven other countries for a participatory three-week training of trainers (TOT) and curriculum development workshop. The TOT was held at the Cranfield Institute for Technology from July 19 to August 9, 1985. Selected individuals from ILO and A.I.D. participated in the first portion of the workshop.

The intensive workshop was based on an approach developed and practiced by MSI in previous projects and had 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 workshop made extensive use of small task groups, an iterative design of key elements of the curriculum, micro-teaching and process documentation. Where feasible, successful components from past programs were retained intact. Following the TOT workshop, national trainers returned

to Malawi to initiate preparatory work for the first round of training programs.

Sub-Task 7: Revision of the Training Program

Following the Cranfield TOT, substantial revisions were made to the draft training program. These revisions included combination and/or elimination of certain PECs, inclusion of additional business applications of the PECs involved, elimination of all business skill training and inclusion of additional opportunities for PEC practice and reinforcement.

Sub-Task 8: Field Testing of Data Collection Instruments

A tentative decision was taken to employ three basic impact measures complemented by other data as available. The indicators selected were establishment (or continuity) of business, full-time equivalent employment generated, and value-added. However, it was subsequently decided that the proposed measure of value-added would probably not be sufficiently reliable as a measure of project impact, particularly given the difficulty experienced in obtaining reasonable data on business expenses. Less compelling but more accessible measures include gross business sales, employment, entrepreneurial activity, and fixed investment.

Substantial effort was devoted to the design and pre-testing of detailed instruments and interview guides for collecting the necessary baseline and follow-up data. In addition, individuals were selected and trained to conduct the interviews in conjunction with MSI field staff.

Sub-Task 9: Development of a Quasi-Experimental Research Design, Selection of Control Groups, and Supervision of Baseline Data Collection

A research design capable of providing rigorous answers to two questions was developed. These questions were:

1. Can behavioral training produce significant positive impact on entrepreneurial performance?
2. What exogenous and endogenous variables influence the impact of such training programs?

In order to obtain answers to these questions, it was important to obtain baseline data. Prior to the training, 90 individuals were interviewed to obtain data on:

- Their relevant background and experience;
- Their PEC index;
- Their level of business knowledge and skill; and
- Their current level of business activity.

Training was provided to 45 of these individuals in two separate training courses. A control group of 45 individuals was composed of additional applicants to the program, with actual program selection based on random assignment.

Sub-Task 10: Delivery of Training Program

The first training program was conducted in Blantyre from July 21 - August 1, 1986. Held at the Polytechnic University, the training program contained 28 participants, seven of whom were representatives from the collaborating agencies who were identified as potential trainers. The second training program, held in Lilongwe from October 27 - November 12, was conducted for 30 participants, six of whom were from collaborating institutions. For purpose of this experiment, it was decided to provide participants with no training other than the new 80-hour behavioral component and to provide no special help or follow-up assistance to course participants after the course.

Sub-Task 11: Completion of Training Program Materials and Manuals

Following the course, all materials were revised including course agenda, trainer notes, videotapes, participant workbooks, detailed guidelines on installing and managing the program, and procedures for training of trainers. These materials and the course itself were subsequently refined in conjunction with the provision of additional offerings of the course in seven other countries.

Sub-Task 12: Collection of Impact Evaluation Data

The level of business activity of both treatment and control groups was measured in August and September of 1988, 24 months after the training, in an effort to detect performance impact attributable to the course. PEC indices were re-measured at that time to ascertain the effects of the course

and the elapsed time on the PECs of both groups. Those who participated in the course were also interviewed to determine their current level of knowledge and skill and their impressions concerning the course and its impact.

Sub-Task 13: Initiation of a Network for Disseminating Results

The Project continues to elicit substantial interest in both academic and professional circles. MSI's correspondence files now include inquiries from well over 100 organizations and researchers currently involved in entrepreneurship development efforts. ILO, UNIDO, NORAD, UNDP, DANIDA, the World Bank and the International Conference on Small Business Development have all expressed an interest and willingness to be involved in further development and dissemination of project results.

2. SOURCES OF ENTREPRENEURSHIP

A. Definition of Entrepreneurship

Although the word entrepreneur can be interpreted in a number of ways, it has most often been defined according to economic functions and outcomes. The word comes from the French verb entreprendre, meaning to undertake. In the early 18th century, Richard Cantillon identified an entrepreneur as one who bears risk in the process of buying component services at a certain price with the intention of reselling them at a later uncertain price.² Jean Baptiste Say emphasized the functions of bringing together different factors of production and ongoing management, in addition to the ability to bear risk.³ In the early years of this century, Joseph Schumpeter highlighted the innovative and change promoting functions of the entrepreneur who, by combining resources in a new and original way, serves to spur economic development and growth.⁴

More recently, Albert Shapero, building on and extending Schumpeter's definition, described the entrepreneur as one who takes the initiative to bring resources together in a new way or to reorganize resources to produce a relatively independent organization, the success of which is uncertain.⁵ Building on Cole's classic definition of an entrepreneur as one who undertakes "to initiate, maintain or aggrandize a profit oriented business unit," Richard Bruce has proposed a further extension of the term "entrepreneur" to include individuals involved in already existing organizations by describing an entrepreneur as any individual whose decisions directly determine the enterprise's fate, whether or not that individual has total stock ownership and total risk.⁶

There appears to be a common core to these definitions of an entrepreneur: the combining, organizing or reorganizing of resources; the initiation of change; and the ability to operate under conditions of risk or uncertainty. While many of these definitions of an entrepreneur emphasize the results of entrepreneurship as new products, services, processes, and/or organizations, some contemporary usage of the word also makes the term "entrepreneur" synonymous with the small businessperson.

Peter Kilby suggests 13 key functions that entrepreneurs perform but goes on to argue that just as there is a change over time in the particular

functions that an individual entrepreneur performs, there may be similar transformation in the nature of entrepreneurship as economies undergo substantial structural change.⁷ For example, the activities of an entrepreneur from a less developed country learning to operate in a rapidly changing post-industrial world may be more accurately described by the functions of adaptation and application rather than creation. Clifford Geertz, for instance, defines the function of an entrepreneur in a transitional society as being the adaptation of established means to new ends.⁸

Others have observed that the term entrepreneurship is often used to refer to very different types of objectives and behavior among so-called "entrepreneurs". Most commonly cited in the literature are the following four types of entrepreneurship:

- **Craftsman entrepreneur:** the individual who is essentially a technician and chooses (or is forced) to establish an independent business in order to practice his or her trade.⁹
- **Technology entrepreneur:** the individual who is associated with the development or commercialization of a new product or process innovation and establishes an enterprise in order to introduce and profit from these technological improvements.¹⁰
- **Opportunistic entrepreneur:** the individual who is focused on growth and the act of creating new economic activity and who establishes, purchases and "grows" enterprises in response to perceived opportunity.¹¹
- **Lifestyle entrepreneur:** the individual who is self-employed or starts a business because of the freedom, independence or other "lifestyle" benefits which that particular enterprise makes possible.

While these categories are not intended to be mutually exclusive, several entrepreneurship scholars suggest that it is feasible and instructive to identify a given entrepreneur as falling principally in one of these four categories.

Given the objectives of the current research, we propose to adopt the following broad definition of entrepreneurship:

An entrepreneur is any individual who organizes and/or manages resources in the form of a self-accounting non-farming enterprise, and

assumes a significant amount of risk associated with equity participation in that enterprise.

This definition includes, but is not limited to, entrepreneurs responsible for new products, production processes and marketing schemes ("innovators"). It includes those involved in commercial and service businesses as well as those involved in manufacturing and fabrication. Excluded from this definition, however, are venture capitalists and speculators ("investors") and hired managers. Also excluded are individuals like salesmen who may, nevertheless, evidence "entrepreneurial characteristics" in their work. Finally, this definition excludes farmers -- not because they are not entrepreneurs, but because agricultural enterprises embody certain unique features and have been studied extensively elsewhere.

B. Profile of an Entrepreneur

As one moves from the definitions of an entrepreneur in terms of functions and outcomes to descriptions of an entrepreneur in terms of personal history or profile, a careful review of the literature reveals that it is characterized by a great deal of speculation and relatively little empirical research.

Most scholars appear to agree that the quantity and quality of entrepreneurship available at a particular place and time is a consequence of factors affecting the supply of, as well as the demand for, entrepreneurs. Most also agree that there are behavioral as well as structural factors which influence the emergence of entrepreneurship in individuals and groups. It is striking, however, that the determinants of the demand for entrepreneurship have received considerably more analytical attention than have the factors which contribute to the supply and quality of entrepreneurship.

Also noteworthy is the high degree of consensus among scholars concerning the personal characteristics of successful entrepreneurs. Significantly, even those authors who find themselves in ostensibly opposing positions concerning the determinants of these "personal entrepreneurial characteristics" (PECs) have, with few exceptions, generated similar lists of descriptive characteristics.

Many of these apparent disagreements in the literature concerning the determinants of entrepreneurial behavior appear to reflect the disciplinary biases of their respective authors more than any obvious theoretical or

empirical conflict. In particular, psychologists typically emphasize the differences in motivation and personality which characterize successful entrepreneurs along with the factors in the nuclear family environment which may have contributed to these differences. Sociologists and anthropologists, on the other hand, tend to emphasize the sub-group and group norms which condition family and individual responses. And economists tend to stress the presence or absence of certain essential structural features of the economy (or the nature/quality of the "opportunity structure") which they consider to be of critical importance in influencing the emergence of entrepreneurship and the likelihood of entrepreneurial success.

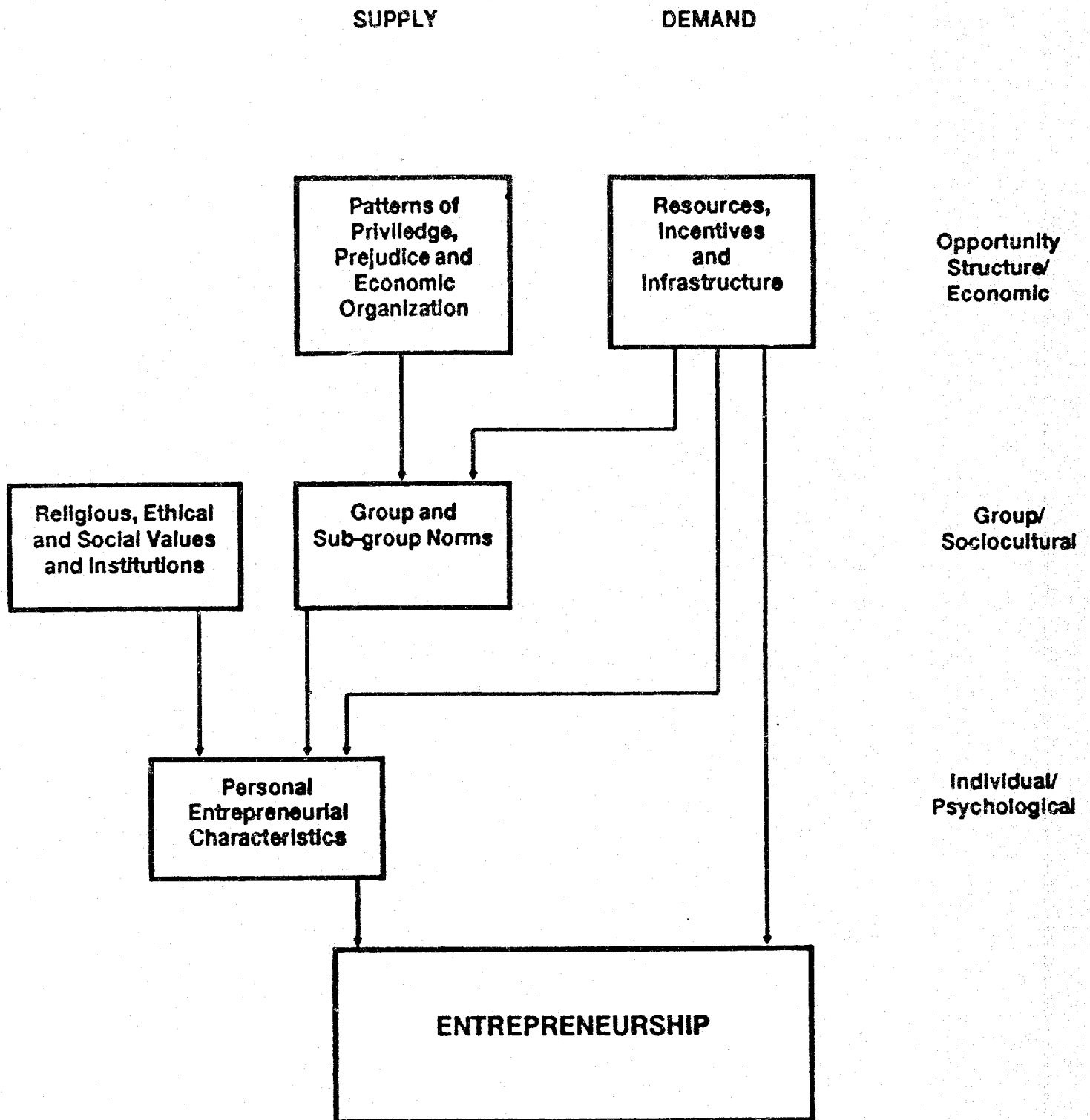
The most fundamental disagreements seem principally to revolve around two issues: the relative influence of supply vs. demand considerations and the means by which PECs are formed. Many structuralists suggest that economic policies and external economic forces (i.e., demand factors) are the dominant forces determining the extent and nature of observed entrepreneurship. Other social scientists point to the differential economic and entrepreneurial performance of particular groups and individuals facing similar external circumstances to indicate the importance of supply considerations. And among those who acknowledge the importance to entrepreneurship of differences in PECs, there are significant disagreements concerning the nature and extent to which family, group, genetics, individual choice and circumstance are responsible for these individual differences.

Figure 2.1 depicts the various factors and pathways alleged to contribute to the emergence of entrepreneurship. Although the present research focuses primarily on efforts at the level of the individual to identify and influence the PECs associated with successful entrepreneurship, this graphic suggests that it is necessary to discuss the other two levels (group and opportunity structure) for the following reasons:

- 1) an appreciation of the sociocultural and structural determinants of PECs should contribute sensitivity and understanding to the process of induced individual change;
- 2) group and opportunity structure factors may set limits on the nature and pace of individual change; and

FIGURE 2.1

DETERMINANTS OF ENTREPRENEURSHIP



- 3) group and opportunity structure factors may be important elements in particular strategies and tactics of induced individual change.

The following pages summarize previous research on the PECs associated with successful entrepreneurship and the factors alleged to contribute to increased and improved entrepreneurial behavior. Although all of the pathways indicated on the chart above are addressed, particular emphasis is placed on the individual behavioral characteristics associated with successful entrepreneurship and on the contextual factors which strengthen or inhibit the emergence of these characteristics.

The first section below summarizes findings concerning key PECs and their psychological roots. The second section presents the suggested influence of sociocultural factors on the emergence and nature of entrepreneurial behavior. The third section discusses the role of the opportunity structure in inducing, constraining and otherwise shaping entrepreneurship. And the final section summarizes the implications of these findings for the current research.

1. Individual/Psychological Factors

Within the group of entrepreneurship scholars concerned principally with individual/psychological factors there are those who feel that entrepreneurs are born and those who feel that they are made. Those who emphasize the feasibility of deliberate change maintain that entrepreneurs can be "made" by strengthening or modifying individual behavior patterns or psychological traits, certain of which are thought to be universally present. Those who emphasize the role of heredity and early childhood education offer the argument that various combinations of character traits or childrearing patterns, both of which are seen as relatively immutable, tend to predispose certain individuals towards entrepreneurship while steering others away from that path. Both groups, however, agree that an entrepreneur's behavior or psychological attributes and goals are somehow different from the norm, and that the entrepreneur has unique qualities which make him or her much more than a competent manager.

J.A. Schumpeter's profile of the entrepreneur describes a special type, of individual who has:

The dream and the will to found a private kingdom
... the will to conquer; the impulse to fight, to

prove oneself superior to others, to succeed for the sake not of the fruits of success, but of success itself ..., the joy of creating, and getting things done, or simply exercising one's energy and ingenuity ... a type who seeks out difficulties, changes in order to change, delights in ventures, (and for whom) pecuniary gain is indeed a very accurate expression of success.¹²

Schumpeter suggests that this type of personality is "born" and occurs randomly in the population. He was convinced of the existence of a clear relationship between individual traits and entrepreneurship, but did not believe in the possibility of substantially influencing the quality, or in increasing the incidence, of entrepreneurship through training or any other deliberate means.

By way of contrast, David McClelland maintains that it is indeed possible to train for entrepreneurship. McClelland's early research pinpointed what he called an individual's "need for achievement" (*n* Ach) as the principal motivating force behind entrepreneurial behavior.¹³

n Ach is intended to reflect an individual's urge to excel and summarizes a set of psychological and behavioral characteristics, including such things as preference for moderate risk, initiative, and a desire for feedback. While McClelland's earlier research focused almost exclusively on the need for achievement, several significant changes have occurred in his work over time. In 1969, he formally modified his thesis to acknowledge the critical importance of variables within the sociocultural sphere, as well as those inherent in the opportunity structure, maintaining that increased need for achievement motivation would be unlikely to result in economic activity unless there was an opportunity for such in the individual's world.¹⁴ It was also at that time that he revised his original thesis to acknowledge explicitly the potential contribution of training to strengthening *n* Ach.

Central to this discussion is the concept of "personality" and the extent to which entrepreneurial behavior is the product of fundamental and hence relatively immutable personality characteristics. Cattell, an acknowledged expert on individual psychology and personality, defines personality as "that which tells what a man will do when placed in a given situation", and traits as "relatively permanent and broad reaction tendencies".¹⁵ He further divides traits into abilities, temperament motives. Traits constitute the building blocks of personality and may, in

turn, derive from genetic predisposition, childhood experience or formative experience acquired later in life.

McClelland presented his basic theory in terms of "motives."

...[All] motives are learned...not even biological discomforts (as from hunger) or pleasure (as in sexual stimulation) are "urges" or "drives" until they are linked with cues that can signify their presence or absence. In time, clusters of expectancies or associations grow up around affective experiences, many of which are not connected by any means with biological needs. These clusters of expectancies are commonly labeled motives. More formally, motives are affectively toned associative networks arranged in a hierarchy of strength or importance within a given individual.¹⁶

Although McClelland asserts the crucial importance of child rearing practice in forming motive patterns, his theory is founded on the well documented experimental finding that many such motives can be significantly altered by later experience. More specifically, it has been suggested that motives tend to be more subject to change than temperament and less subject to change than abilities. McClelland specifically suggests that social and environmental factors, including training, can be of particular importance in "exciting" latent motives and encouraging the translation of dispositional states into specific patterns of behavior.

Much of the research on entrepreneurship and entrepreneurial characteristics has been of an anecdotal and impressionistic nature. There have, however, been several studies that apply considerable rigor to the inquiry. In addition to McClelland's research and the related research conducted by McBer and Company, the most rigorous of these studies include those conducted by Miner, Shaperio, Timmons, Pickle, Rao, Smith, and Vesper, and the survey pieces written by Brockhaus, Timmons and Hornady. Most other studies have aggregated expert opinion and/or utilized self-assessment instruments. A wide range of these studies and other findings is presented below.

One final note should precede a review of the evidence concerning behavioral characteristics. Virtually all of the empirical studies reviewed, with the notable exception of the research conducted by McBer and Company, began with explicit hypotheses about the possible behavioral traits of entrepreneurs. As such, each of these studies represents a test of the

presence or absence of pre-identified traits rather than an open-ended equity into the distinguishing characteristics of successful entrepreneurs. Therefore these studies can be taken to imply nothing about characteristics not included among those tested.

Following McClelland's seminal work, a number of researchers have conducted empirical studies demonstrating a positive linkage between achievement motivation and entrepreneurial performance. While this research has also received considerable criticism, *n* Ach continues to be the most extensively researched and best documented psychological characteristic associated with successful entrepreneurship.

Among the behaviors McClelland associated with high *n* Ach, "preference for moderate risk" and "goal setting" have been the ones to attract most attention and investigation. Several studies have provided corroborating evidence suggesting that successful entrepreneurs are more likely to express and manifest preferences for moderate risk than for either high or low risk alternatives. McClelland's early studies on the relationship of need for achievement to risk preference have been followed by serious studies of risk preference by Brockhaus, Miner, Timmons, Rao, Pickle and Versper. In each of these studies, successful entrepreneurs displayed a relationship to risk different from the norm found in the general population. Although the studies varied in their definitions and methods, each found that successful entrepreneurs showed a positive preference for situations they perceived to entail sufficient risk to be challenging without so much risk as to be experienced as a "gamble".

In a similar vein, a number of empirical studies have linked goal setting behavior with superior performance in business and other professions. These studies frequently relate such goal setting behavior to two other characteristics -- future orientation and willingness to delay gratification -- that are also alleged to contribute to successful entrepreneurial performance.

Various studies discuss "dissatisfaction" as a dominant personal characteristic in many successful entrepreneurs. Linked by de Vries, Bruce and others to entrepreneurs' preference for independence and their consistent desire to improve on past standards, this characteristic has been posited as a possible source of *n* Ach or other of the personnel characteristics and behaviors associated with successful entrepreneurship.¹⁷

Following *n* Ach, the psychological characteristic to receive most widespread attention in the entrepreneurship literature is what Rotter termed "internal locus of control".¹⁸ This characteristic suggests an individual who feels success to be more a product of good planning, hard work and talent than of fate or circumstance. Brockhaus suggests that such people have been found to display unusual initiative and to have more control over their own behavior; to be more successful at persuading other people, and yet less easily persuaded themselves; to be more active in seeking strategic information and knowledge relative to their situation; to be better informed; to perform better on tasks that are presented as skill-related, and less well on tasks that depend on luck or chance; to have clearer self-concepts; to be more trusting; and to react less to failure.¹⁹

Albert Shapero has been one of many to argue that internal locus of control is important in developing entrepreneurial behavior.²⁰ Shapero asserts that individuals with high internal locus of control are also apt to be relatively self-reliant and to like autonomy and independence, additional hallmarks of entrepreneurial behavior. Illustrative of recent research on this characteristic is the work of Hull, Bosely, and Udell, who designed personality inventories to identify potential entrepreneurs, and found internal locus of control to be the most successful predictor of who will start and stick with a small business.²¹ Related studies by Hornaday, Timmons and Akhoury add support to this assertion as does the work of Broehl and others studying biographical and autobiographical accounts of famous entrepreneurs.²² Among the salient criticisms of the use of internal locus of control as a defining characteristic of successful entrepreneurs is the contention that this attribute may be less descriptive of the many entrepreneurs who were "pushed" rather than "pulled" into entrepreneurship.

A high need for power, and correspondingly low need for affiliation, have been suggested by several recent studies as additional characteristics of many successful entrepreneurs. Among the behavior most frequently associated with this psychological profile, particular emphasis has been placed on leadership, the need/ability to influence others and the use of interpersonal networks and skills to accomplish business objectives. The empirical work of T.V. Rao and H. Pickle, looking at Indian and American entrepreneurs respectively, is illustrative of these studies.²³ Several writers have also suggested that these characteristics might be of greater

significance in more traditional societies where political influence and personal connections play relatively larger roles in an individual's capacity to accomplish important business objectives such as obtaining needed licenses and permits, securing access to protected goods in regulated markets, and obtaining credit.

Welsh and White, Hornaday, Rao, Timmons and others point to ego maturity characteristics such as flexibility, tolerance for ambiguity, self-confidence and willingness to learn as being directly related to successful entrepreneurial performance.²⁴ Although few of these characteristics have been subjected to rigorous empirical testing, a substantial amount of anecdotal evidence is adduced to support the assertions by scholars and practitioners concerning the importance of these characteristics.

Energy, commitment and persistence are among the other PECs or traits frequently cited in the entrepreneurship literature. While some studies argue that these characteristics reflect basic elements of personality, research by Harper relating these characteristics to the sense of discipline created by hardships endured earlier in life is of particular interest for those involved in deliberate efforts to strengthen entrepreneurship.²⁵

Finally, researchers have cited specific intellectual skills, capabilities and predispositions as being of critical importance to entrepreneurship. Among these, the characteristics which have received most attention are planning/analytical ability, innovative problem solving, curiosity/information seeking and the ability to sense opportunity. While there has been considerable controversy in the business management literature concerning the relevance of detailed planning and forecasting for entrepreneurial activities, these characteristics would otherwise appear to be broadly supported by respected analyses of the entrepreneurial function, particularly where the entrepreneurial function is defined to include responsibility for management of the venture. While intuitively plausible, however, the importance of these characteristics to successful entrepreneurship has been the subject of relatively little research.

Several researchers have argued that entrepreneurial behavior is partially or entirely learned. In marked contrast to those who believe such behavior patterns are genetically determined or the product of early childhood experiences, these individuals place primary emphasis on

experiences acquired later in life. Gibb and Ritchie, for example, assert that "entrepreneurship can be wholly understood in terms of the types of situation encountered and social groups to which individuals relate."²⁶ They go on to qualify this statement somewhat by assuming the "formative nature of early life experiences in creating basic traits and drives," but place "equal emphasis on the way adulthood may shape new entrepreneurial ideas and ambitions."

A similar position is taken by Mischel who suggests that entrepreneurial behavior is a consequence of "cognitive social learning variables [that are] the products of each individual's total history...and in turn regulate how new experiences affect him or her."²⁷ These cognitive social learning variables, according to Mischel, are of five types: (1) competencies, (2) encoding strategies and personal constructs, (3) expectancies, (4) subjective values, and (5) self-regulatory systems and plans. Implicit in these theories is the view that certain of these dimensions are more subject to change than others.

The most recent development in the discussion of psychological variables affecting entrepreneurship has been a stress on competencies rather than traits. The definition used by McClelland for "competency" is a very broad and pragmatic one that includes anything which is empirically measurable and which statistically predicts results, holding the opportunity structure constant. Accordingly, McClelland's most recent research seeks to identify what successful entrepreneurs do and how they think as a basis for detecting and strengthening these competencies in others.²⁸

Under the Entrepreneurship and Small Enterprise Development Project funded by the A.I.D., McBer and Company of Boston, Massachusetts was given the task of identifying the PECs or behaviors associated with successful entrepreneurship in developing countries. Based on field research in India, Malawi and Ecuador, this research identified certain competencies or traits which appeared to have some correlation with successful entrepreneurship in those countries.²⁹ These traits are:

- initiative: does things before being asked or forced by events.
- sees and acts on opportunities: seizes unusual opportunities to start a new business, obtain financing, land, work space or assistance.

- concern for high quality of work: states a desire to produce or sell a top or better quality product or service.
- commitment to work contract: makes a personal sacrifice or expends extraordinary effort to complete a job; pitches in with workers or works in their place to get a job done.
- efficiency orientation: looks for or finds ways to do things faster or at less cost.
- systematic planning: breaks large tasks down into subtasks or subgoals, anticipates obstacles and evaluates alternatives.
- assertiveness: confronts problems with others directly; tells others what they have to do.
- monitoring: develops or uses procedures to ensure that work is completed or that work meets standard of quality.
- recognizes the importance of business relationships: acts to build rapport with business contacts; sees interpersonal relationships as a fundamental business resource; places long-term good will over short term gain.

Statistical analyses of transcripts from the three countries yielded several interesting findings, including the following:

- Background variables were not significantly different between successful and less successful entrepreneurs.
- Indian entrepreneurs outscored entrepreneurs from the other countries with respect to almost all PECs.
- Entrepreneurs in manufacturing and service industries outscored those in marketing/trading with respect to several of the PECs.
- The same characteristics seemed to differentiate between successful and less successful entrepreneurs in all three countries and all three sectors.

Exact identification of the specific PECs that best distinguished successful from less successful entrepreneurs differed somewhat on the basis of what statistical test was employed. Results from the analysis of coded transcript data using a variety of statistical tests are presented below.³⁰

**Summary of Different Analyses on the Competency Scores
Contrasting Successful and Average Entrepreneurs**

<u>Competency</u>	<u>Discrim.</u>	<u>MANOVA</u>	<u>T-tests</u>	<u>Multi. R</u>
			5	
1. Initiative				
2. Sees and Acts on Opportunity	3	X	2	2
3. Persistence				
4. Information Seeking				
5. Concern for High Quality of Work	2	X	4	
6. Commitment to the Work Contract		X	7	
7. Efficiency Orientation		X	8	
8. Systematic Planning		X	2	
9. Problem Solving		X		
10. Self-Confidence				
11. Expertise				
12. Recognizing Own Limitations				
13. Persuasion	9			
14. Use of Influence Strategies	5			
15. Assertiveness	4		9	
16. Monitoring	7		6	3
17. Credibility, Integrity, Sincerity				
18. Concern for Employee Welfare	6			
19. Recognizing Importance of Business Relations	1	X	1	1
20. Provides Training for Employees	8			

Note: For the discriminant analysis, t-tests, and Multiple R, the order of entry or the level of significance is indicated by a number. (For example, Competency 19 is the first variable entered into the discriminant analysis and the stepwise multiple regression and is the most significant variable shown by the T-tests.) For the MANOVA, variables that differentiate the successful from the average entrepreneurs are indicated by X.

A battery of "selection instruments" was subsequently developed as the basis for a second phase of the research. The PECs included in the original Core Competency Model were reduced to 13 based on the following criteria:

1. Evidence that the Competency differentiates successful from average entrepreneurs;

2. Evidence that the competency occurs with sufficient frequency to justify assessing its presence in existing or potential entrepreneurs;
3. Opportunity for demonstration of the competency before starting the business or attaining a managerial position; and
4. Content validity of the competency and its behavioral indicators as skills needed in starting or running a business.

These 13 competencies included:

Initiative
Sees and Acts on Opportunities
Persistence
Information Seeking
Concern for High Quality of Work
Commitment to Work Contract
Efficiency Orientation
Systematic Planning
Problem Solving
Self-Confidence
Persuasion
Use of Influence Strategies
Assertiveness

A second round of data collection was performed in India and Malawi using these selection instruments. At issue were the extent to which these instruments proved effective in identifying PECs and the extent to which the presence or absence of specific PECs successfully accounted for differences in entrepreneurial performance.

The full battery of instruments was administered to 92 Indian entrepreneurs (46 successful and 46 average). In Malawi, the same instruments were administered to 161 individuals (48 successful entrepreneurs, 45 average entrepreneurs, 38 start-up entrepreneurs and 30 potential entrepreneurs). The tests failed to differentiate among the various groups in Malawi but found the following PECs to be statistically significant in distinguishing successful from less successful entrepreneurs in India.

Sees and Acts on Opportunities
Persistence
Information Seeking
Commitment to Work Contract
Systematic Planning
Self-Confidence
Use of Influence Strategies

Figure 2.2 summarizes those items which have been most frequently identified in recent research studies on entrepreneurship as salient entrepreneurial characteristics or individual competencies. Specific business related skills such as cost accounting have not been included in this chart.

PERSONAL ENTREPRENEURIAL CHARACTERISTICS

IDENTIFIED BY CURRENT RESEARCH *

	Akhouri & Bhattacharjee	Brockhaus	Bruce	Casson	East-West Center	Gasse	Hornaday & Abboud	Hornaday & Bunker	Indian Institute of Management	KHIC	McBer	Merclith, Nelson, & Neck	Miner	Pareek & Rao	Pickle	Quednao	Tay	Shapiro	Timmons
Need for achievement/concern for quality	•	•	•		•	•	•	•	•	•	•	•	•	•	•			•	
Internal locus of control/independence	•	•			•	•	•	•	•	•	•	•					•	•	
Initiative					•	•		•	•	•	•	•		•	•			•	•
Self-confidence	•				•	•		•	•	•		•		•	•			•	•
Problem solving/innovation				•	•	•		•	•	•		•		•	•		•	•	•
Propensity for moderate risk taking	•	•			•	•		•	•			•		•				•	•
Goal setting/results orientation					•	•			•	•					•	•		•	•
Future orientation				•	•				•			•			•	•		•	
Energy/commitment					•	•		•	•		•			•					•
Resilience/persistence								•	•	•		•		•				•	
Need/ability to influence								•	•					•	•			•	
Acceptance of limitations/willingness to learn					•							•				•		•	•
Information seeking					•			•	•					•					
Analytical ability/planning				•						•	•				•				
Ability to sense opportunity										•	•	•						•	
Efficiency Orientation					•				•		•								

* The sources cited above are listed in an Addendum to the Endnotes.

As noted above, the omission of a given characteristic from a specific study does not, except in the case of the McBer study, represent a finding that the characteristic in question was unimportant; rather, each dot on the matrix can be read/only as a positive statement about a characteristic that was found to be significant in a study designed to test the presence or absence of that characteristic. Given this fact, it is noteworthy that a number of characteristics were independently identified in a variety of studies employing different methodologies and that 15 (of 19) separate studies validate the importance of "need for achievement/concern for quality"; 12 validate the importance of "internal locus of control/independence"; 11 each found "initiative", "problem solving/innovation", and "self-confidence" to be significant; and 10 found "propensity for moderate risk taking" to be of consequence. It is also worth observing that several of the characteristics (e.g., initiative, energy/commitment, and need for achievement) are closely related to one another and, in some cases, merely reflect the terminology preferences of the researches involved. While this data is by no means incontrovertible nor can any given study be regarded as definitive, taken together these studies suggest the existence of a core set of characteristics sufficiently robust to occur independently in several serious studies of entrepreneurial characteristics and behavior.

Several have argued that the personal characteristics associated with successful entrepreneurship differ on the basis of type of business and stage of business development. For example, Pareek and Rao, aggregating the assertions of informed practitioners and the available research, suggest a possible breakdown of key PECs by type and stage of business.³¹ This breakdown is presented in Figure 2.3.

While most of the studies discussed above concern the existence or importance of particular traits, attitudes and behaviors, there has been little attempt to deal with the patterns or relationships among these factors. A promising area of future research thus concerns the configurations of characteristics most likely to result in effective entrepreneurial behavior. Although the research cited implicitly suggests that the effect of these characteristics is additive, there has been little effort other than McClelland's early work to investigate the relative importance of various characteristics, the causal linkages among them, or the extent to which strengths in certain areas can compensate for weaknesses in

other areas. Moreover, while McClelland's and McBer's recent work are explicitly interventionist in nature, few other recent writers specifically address the extent to which the psychological or individual traits they consider to be primary can be deliberately augmented.

It is noteworthy that virtually none of the studies cited above seek to demonstrate that the personal characteristics associated with successful entrepreneurship are in any way unique to entrepreneurs. On the contrary, many specially note that a variety of these characteristics are common among managers, salesmen and others involved in creative, high-performance professions. Brockhaus, for example, reviewing the data on internal locus of control, states that "it fails to uniquely distinguish entrepreneurs, but holds promise for distinguishing successful entrepreneurs from the unsuccessful."³² The most widely held view appears to be that often espoused by Hagen, Shapero and others that the presence or absence of specific environmental factors, role models or "determining events" will be instrumental in influencing whether personality characteristics or "dispositional states" manifest themselves in entrepreneurial behavior or find some other suitable outlet.³³

PECs DIFFERENTIALLY MORE IMPORTANT BY TYPE OF BUSINESS

Stages in Business Development	Common PECs	Manufacturing	Trade/Retail	Service
I. Establishment, Initiation: "Starting the Business"	<ul style="list-style-type: none"> — motivation: Δ Ach — low fear of failure — Δ Independence: "want to be own master" — moderate risk taking — initiative 	<ul style="list-style-type: none"> — clear business idea, including technical knowledge — 3-5 years' experience in similar technical business 	<ul style="list-style-type: none"> — low fear of failure (esp. in sales) — customer-relations orientation and skills — creativity in products, advertising, and promotion — product knowledge, product range, and product life cycle — "opportunistic scanning"—market sensitivity 	<ul style="list-style-type: none"> — low fear of failure (esp. in sales) — technical expertise — ability to find and train competent people
II. Going Concern, Management: "Running the Business"	<ul style="list-style-type: none"> — management skills, interpersonal skills — Δ Power — perseverance, "hard work" — stamina and adaptability, ability to cope with stress — access to resources and technical help 	<ul style="list-style-type: none"> — management skills emphasizing ability to delegate effectively 	<ul style="list-style-type: none"> — forecasting and foresight (market-research skills) — leadership, human-relations orientation, ability to promote employee "team spirit" 	<ul style="list-style-type: none"> — ability to manage professionals, "knowledge worker" staffs — public-relations skills — personal stress management: able to cope with crises
III. Expansion: "Growing the Business"	<ul style="list-style-type: none"> — "vision": future orientation, foresight — ability to plan — "extension motivation"—empire building — organization skills: getting and developing competent subordinates 	<ul style="list-style-type: none"> — generalist vs. technical-specialist interest by this — "opportunistic scanning"—sensitive to opportunities, market requirements 	<ul style="list-style-type: none"> — market foresight — knowledge of political, legal, and legislative factors affecting business 	<ul style="list-style-type: none"> — marketing skills

Similarly, there is little consensus in the literature as to whether the psychological traits and behavioral manifestations discussed above had their origins in genetic predisposition, child rearing practice or broader environmental forces. There is, as a result, correspondingly little consensus as to whether or not these characteristics can be "learned".

2. Group/Sociocultural Factors

Much of the literature in the field of entrepreneurship has been written by sociologists, social psychologists and cultural anthropologists. This research seeks to answer the question of why entrepreneurship appears to be disproportionately present among certain groups and at certain times, and emphasizes the social factors which incline particular groups towards entrepreneurship. In doing so, it draws on the extensive literature demonstrating the often complex relationships between culture and personality, between society-wide norms and patterns of individual and group behavior, and between social structure and the parameters of acceptable and viable activities.

While certain of the studies undertaken discuss entrepreneurship entirely in terms of social norms and roles, it is also possible to reinterpret such studies as providing alternative or supplementary explanations for the motives, traits and behavior of the individuals belonging to particular cultural or sub-cultural groups.

Theorists argue that through their norms and values, rewards and sanctions, socialization processes and support systems, sub-groups shape the attitudes, incentives and institutional context within which entrepreneurship operates. In this way, social and cultural variables can perhaps help to account for the unusual concentration of entrepreneurship within certain sub-groups and the accelerated emergence of entrepreneurship at certain points in time by providing explanations of: (1) the linkage of key PECs to certain norms, socialization processes and circumstances, and (2) the social and cultural factors conducive to the "translation" of key PECs into effective entrepreneurship. A number of researchers in this field are also concerned with the social and cultural consequences of entrepreneurship and draw particular attention to the effects of increasing individualism, materialism and technological change.

Viewed from these perspectives, entrepreneurship is a social role and a social process; and attempts to accelerate or alter the emergence of entrepreneurship represent efforts to speed up or otherwise influence what would otherwise be a gradual process of social change. Whether such change efforts are focused at the level of the individual, the sub-group and/or the overall opportunity structure, they nevertheless will come to affect the ways individuals perceive themselves as members of groups or societies and will, in turn, affect the way these individuals shape the future of their groups and societies.

The evidence suggesting the concentration of entrepreneurship in certain sub-groups is extensive and compelling. The published literature is replete with examples of such groups as Jews in Europe and the United States, Ibos in Nigeria, Jains in Paris, Gujeratis in East Africa, Chinese in Malaysia, Lebanese in West Africa and the Antioqueños in Colombia. In each case, the sub-group in question -- often an immigrant group -- came to occupy a dominant position in a country or region's economic growth and to be responsible for much of the innovation that fueled such growth. Those who emphasize the social determinants of entrepreneurship use this data to suggest that the entrepreneur is a product of his society whose response to events is influenced by the value system of the society and by his or her own earlier experiences. Theoretical arguments on this point are supported by a great deal of empirical evidence.

Max Weber was one of the first to relate social values to individual economic behavior by attributing the rise of capitalism to the prevailing Protestant work ethic.³⁴ McClelland states a variation on this theme when he cites a family's religious world view and, to a lesser extent, the father's occupation and living arrangement, as relevant to entrepreneurship because of the influence of these factors on child rearing decisions and thereby on the development of individual motives.³⁵

Several investigators refer to society-wide values, "national character" or sub-group norms as significant factors in the occurrence of entrepreneurship.³⁶ Charles Kindleberger, for example, cites national character (reflected in child rearing and role and attitude formation) as an important influence on economic behavior through its effects on mobility, risk taking, extent of family obligation, and the propensity to save.

Speaking more generally on the social determinants of entrepreneurship, various practitioners attempting to facilitate economic development via entrepreneurship have noted that it is easier to stimulate entrepreneurship if the prevailing culture or sub-culture: 1) values business-oriented training or apprenticeship as a viable alternative to conventional occupations; 2) sanctions the accumulation of individual wealth; 3) values monetary as opposed to landed wealth; 4) permits women to go into business; 5) values innovation and allows for moderate amounts of deviation from the norm regarding business operation; and 6) permits or provides a financial and business support structure for proprietors, including those who lack extensive personal wealth.

Thomas Cochran discusses entrepreneurial behavior as a function of society-wide values, sanctions and role expectations. He cites Fayerweather's study of American and Mexican executives by way of example.³⁷ The study attributes the better economic performance on the part of the Americans to their cooperative group orientation, which is facilitated by a perception of the United States as providing an egalitarian and democratic environment. Peter Kilby asserts the importance of cultural antecedents for certain capabilities such as coordination, control, cooperation and autonomy, which are integral to entrepreneurial success.³⁸

The most obvious linkage between social norms and individual entrepreneurial behavior is the direct transmission of occupational role from parent to child. C. Wright Mills observed that "the best statistical chance of becoming a member of the business elite is to be born into it"; substantial empirical evidence confirms this observation.³⁹ Shapero cites studies that indicate that the proportion of entrepreneurs with self-employed or entrepreneur parents is over 50% in the United States, 56% in Northern Italy, 74% in the Philippines, 80% in Kenya and 89% in Nigeria.⁴⁰ The most frequent explanations for this phenomenon are two: that key aspects of entrepreneurship can be and are learned through apprenticeship, and that the probability of entering any profession is heavily influenced by the existence of plausible role modes. In a recent Ph.D. dissertation studying entrepreneurship among native Hawaiians, Gene Ward presents additional empirical evidence suggesting that the probability of entering and being successful in business is best explained as a consequence of "differential associations" -- more specifically, the extent of access to people in

business and to the resources needed for successful business ventures.⁴¹ Based on these findings, he argues that entrepreneurship is a learned behavior and can be positively influenced by augmenting the access of potential entrepreneurs to relevant experiences and resources.

This observation is further substantiated by Shapero's conclusion, upon review of a number of empirical studies, that "the larger the number and variety of examples in a particular culture, country or locale, the greater the probability that the company-formation act will be credible to a larger number of individuals in that culture, country or locale."⁴² Frank Young completes the linkage between social models and norms on the one hand, and entrepreneurial behavior on the other, in his description of an Ach and other entrepreneurial personality characteristics as "the forceful reflections of these antecedent [cultural] conditions that constitute an independent factor which mediates between structural factors and consequent economic growth".⁴³

Several researchers have sought to specify, usually by detailed investigation of natural experiments, the factors in particular cultures that are likely to promote entrepreneurial behavior by the members of that cultural group. Typical of that work is Levine's comparison of the Hausa and the Ibo in Nigeria and Timberg's research on the Marwari in India.⁴⁴ Levine concluded, after detailed psychological, sociological and environmental assessment, that the greatly enhanced entrepreneurial behavior of the Ibos was best explained by a social mobility system that rewarded individual accomplishment, which in turn resulted in different "personality types". In a similar way, Timberg suggests that the Marwaris' entrepreneurial success in India might be explained in large measure by the experience in trading gained by that once migratory group, the institutions the group developed, and "the characteristics of organization, calculation, and speculation [that emerge] from a traditional caste vocation in trade."

In contrast to those theories that emphasize how social values and roles facilitate entrepreneurship are those theories suggesting that prevailing values and roles are reacted against to spark entrepreneurship. Everett Hagen, for example, argues that entrepreneurial behavior often becomes prevalent in a sub-group after some "determining event" leads to role deterioration or the withdrawal of respect previously accorded to that sub-group.⁴⁵ This withdrawal, he argues, can be the result of any one of the following types of occurrences:

- displacement by force
- denigration of value systems
- inconsistency of status symbols with changing distribution of economic power
- non-acceptance of expected status upon migration to a new country.

This withdrawal of respect leads to "normlessness" which, in turn, is a major source of creativity and entrepreneurship.

In a similar vein, Frank Young argues that when a subgroup encounters a setback such as loss of status or blocked mobility, one frequent response is providing its institutional resources to the most viable group members who then become entrepreneurs.⁴⁶ Clifford Geertz's research in Indonesia corroborates this finding, suggesting that entrepreneurs are generally from a well defined and socially homogeneous minority group that regards itself as a discriminated against yet superior sub-group in the community or society.⁴⁷ Similarly, Ruth Finney, working in New Guinea, found that high school students were motivated to become entrepreneurs in an attempt to rectify the "poor attitude" demonstrated towards them by the prevailing European administration.⁴⁸

Much of the research and theory on cultural marginality follows from Bert Hoselitz's work on ethnic minorities.⁴⁹ Hoselitz argued that culturally marginal groups tend to promote economic development because their members are often forced to adjust to drastic changes, and in the process develop innovative social behaviors. In a related piece of empirical research, Stanworth and Curran found that socially marginal individuals are disproportionately likely to be employed as owner-managers of small businesses in the U.K.⁵⁰ Further research findings supporting the relationship of social marginality to the incidence of entrepreneurial behavior are presented in carefully documented studies by Collins and Moore, Papanek, Scage and Gofee, Dickie-Clark, Shapero and others.⁵¹

In addition to the psychological interpretation of marginality and its effect on a sub-group's willingness to undertake risky, creative and relatively low status activities, three explanations have been offered for the obvious linkage between migration and entrepreneurship. Bruce introduces the term "extroception" (borrowed from zoology) to describe a special skill developed by migrants in response to "the need for the individual to analyze a [new] situation and adapt to it."⁵² This characteristic is closely associated with the opportunity scanning and information seeking behaviors

ascribed to successful entrepreneurs and may accordingly contribute to the effectiveness of potential businesspeople. A second possible linkage is suggested by the tendency of certain cultures to regard business as a socially undesirable occupation and to relegate particular groups of migrants to the performance of such commercial and industrial activities. Finally, it has been suggested by several observers that migrants often represent those individuals within any given group who are already most adventuresome, resourceful, willing to incur risk and oriented towards change.

The distinction between "first generation" and "second generation" entrepreneurship is perhaps useful in interpreting arguments regarding the relationship of social group to individual entrepreneurial behavior. Second generation entrepreneurs can be defined as those individuals whose parents, friends, relatives and neighbors include large numbers of entrepreneurs. In these cases, it is most appropriate to conceive of the influence of culture in terms of role models, traditional cultural norms, child rearing practices and the like. First generation entrepreneurs, however, are individuals who are not the product of such entrepreneurial cultures. These individuals are, by definition, social deviants and are much more likely to be pushed into entrepreneurship than pulled into it. In such cases, theories of displacement, marginality, determining events, and the like can be expected to be of greater relevance and utility.

One of the most avant-garde theories regarding sociocultural influences is presented by John Kunkel, a Skinnerian behaviorist.⁵³ Kunkel maintains that entrepreneurial behavior is an exclusive function of the social structure and can be straightforwardly manipulated by varying certain economic and social stimuli. He bases his theory on work done with a Peruvian Indian community in which a change in the reinforcing stimuli directly and rapidly resulted in increased cooperation and more leadership within the group.

In sum, the sociocultural variables most commonly cited in the literature as being conducive to the development of entrepreneurship include the following:

- experience of marginality;
- cultural system which permits mobility;
- cultural system which accords status/prestige to business related skills/activities;
- religious system which encourages hard work and personal accomplishment;

- cultural system which values manual labor/production;
- cultural system which provides role models; and
- family and/or subgroup which offers network of support.

3. Opportunity Structure/Economic Factors

Many students of entrepreneurship have drawn attention to the critical importance of the "opportunity structure" both in giving rise to entrepreneurial predispositions and in providing a vehicle for acting on such predispositions. David McClelland, for example, has suggested that:

It cannot be stressed too often that all of the evidence showing the importance of n Ach for business or entrepreneurial success applies largely in situations in which opportunity is held more or less constant across individuals or firms, and where success is at least moderately probable No matter how high a person's need to achieve may be, he cannot succeed if he has no opportunities.⁵⁴

It is thus of considerable importance to review the available literature and experience concerning the impact of structural economic factors on the development and emergence of entrepreneurial activity.

The traditional economic explanation of entrepreneurship has rested on the assumption that the supply of entrepreneurship is highly elastic and that the principle of profit maximization serves as a faithful predictor of how a "rational man" would respond to the opportunities of the marketplace. Within the context of this model, lack of vigorous entrepreneurial response in manufacturing, for example, is explained by various kinds of market imperfections and inefficient policy making. As Kent puts it, "the entrepreneurial response is autonomous and virtually automatic when demand is sufficient and markets are functioning properly."⁵⁵

High rates of inflation induce rational profit maximizers to invest in real estate, consumer goods inventories, precious metals, and the like where sure capital gains far exceed moderate and less reliable industrial profits. Abrupt changes in political administration, devaluation, restrictions on imported ingredients, and sudden wage increases by political fiat frequently result in substantial losses to industrial producers, and such losses are not shared by those who have invested in urban housing or stocks of imported goods. Add to these malfunctions the normally greater risks of industrial enterprise, its more extensive management requirements, and its greater dependence upon potentially scarce inputs, and limited entrepreneurial activity in manufacturing is not to be wondered at.

The inadequacy of the narrow economic assumptions of rationality and profit maximization to fully account for the observed behavior of entrepreneurs was however sufficient to lead the noted economist William Baumol to note that "by ignoring the entrepreneur we are prevented from accounting fully for a substantial portion of our historic growth ... and our body of theory as it has developed offers us no promise of being able to deal with a description and analysis of the entrepreneurial function."⁵⁶ McClelland has helped to account for this difficulty by suggesting that social and psychological factors influence the ways in which "rational" individuals define their interests, their time horizons and their perceptions of the available rewards and constraints.⁵⁷

March and Simon's seminal work on "satisficing",⁵⁸ the recent notion of "bounded rationality," and Leibenstein's x-efficiency theory (which seeks to incorporate individual variability and motivation as integral parts of an economic model) are among the few attempts to modify or relax the traditional economic assumption of profit maximization.

Leibenstein suggests that entrepreneurs carry out at least two major functions not taken into account by traditional economic theory, namely:

- Market "gap filling": spotting opportunities to market or create out of available inputs products or services "no one knew they needed or wanted" until the entrepreneur produced them; and
- "Input completing": overcoming obstacles to obtain inputs which are not readily available, e.g. obtaining credit where financing is available to some but not to others.⁵⁹

These behaviors, he asserts, are the product of differential motivation and the presence of specific personal characteristics such as initiative, opportunity seeking and persistence.

Although few scholars in the field of entrepreneurship development now contend that structural factors alone can serve to predict or determine the nature and extent of entrepreneurship in the short or medium term, most acknowledge the structuralist argument that personal traits alone are similarly insufficient to predict behavior and that there are certain structural factors which, appear to be critical for fostering and sustaining individual entrepreneurs and a climate of entrepreneurship. The literature suggests that the existence of the following elements in a given setting can prove instrumental in fostering successful entrepreneurship:

- underutilized natural or human resources;
- venture capital availability;

- on-going technical assistance mechanisms (educational institutions, extension services, information services, etc.);
- relative ease of credit accessibility (formal and/or informal);
- marketing facilities/structures;
- adequate infrastructural support (transportation, communication);
- favorable governmental fiscal and monetary policies;
- existence of a domestic market or an easily accessible export market for new goods and services; and
- relative political stability.

Similarly, the absence of any of these elements can be expected to serve as a limiting factor on the growth of entrepreneurship.

It should be added that factors such as those noted above are normally non-homogeneous in their incidence, distribution and availability among individuals, sub-groups, and nations. Any analysis of opportunity structure variables must therefore reflect the reality of the target groups of particular interest.

4. Conclusions

The preceding sections have presented a brief review of the available literature concerning the PECs of successful entrepreneurs and the factors contributing to the emergence of entrepreneurship in certain individuals, groups, and societies. Despite the fact that there has been some consensus concerning the PECs of successful entrepreneurs, there has been substantially more controversy concerning the direction of causality between individual and structural factors and the feasibility of intervening at the level of the individual to change individual PECs within a given social and economic environment. Among the general conclusions from this research are the following:

- (1) There do appear to be certain PECs and behaviors which distinguish successful entrepreneurs from other individuals, and there is some evidence that these PECs appear to be similar across countries and cultures. Research suggests that need for achievement, creative problem solving, internal locus of control, goal setting and opportunity scanning are among this set of common PECs.
- (2) Entrepreneurship is a complex phenomenon influenced not only by skills and attitudes, but also by the institutional environment and the prevailing pattern of opportunities.

- (3) Structural factors affect the emergence of entrepreneurship directly through their influence on institutions and incentives, as well as indirectly through their influence on the socialization of individuals.
- (4) While the opportunity structure influences social responses and social factors influence individual PECs, in none of these cases is the linkage entirely deterministic or unidirectional. Psychological, sociocultural and contextual (opportunity structure) changes are each likely to have major consequences for one another.

While little of the research presented above is explicitly normative in tone or interventionist in approach, the findings of this research nevertheless have several implications for any efforts to enhance entrepreneurship through training. Among the most salient of these implications are the following:

- (1) It appears that there are a set of personal characteristics and individual behaviors which, if they could be strengthened, would contribute to expanded and improved entrepreneurial ability. While there is considerable controversy about the source or origin of these characteristics and behaviors, there is general agreement about their nature. There is also some indication that a number of "core" characteristics may transcend national and sectoral differences and remain applicable throughout the business development cycle.
- (2) Certain ascriptive characteristics of individuals such as age, exposure to appropriate role models, prior experience, and wealth appear to have considerable impact on entrepreneurial performance. Training programs may therefore wish to incorporate these factors as selection criteria and/or to seek training approaches which substitute for specific shortcomings in participants' backgrounds.
- (3) Given their social patterns and economic circumstances, certain ethnic groups and nations are particularly likely to be promising sources of entrepreneurship. In particular, certain types of marginal groups, societies or groups which have already experienced major change, and societies with significant underutilized resources, represent special opportunities. Planners may wish to take these factors into account when designing training efforts,

making predictions about the likely impact of these efforts, and anticipating the social consequences of expanded entrepreneurship.

- (4) While certain behavioral characteristics may be necessary for successful entrepreneurship, they rarely appear to be sufficient. Management skills, essential business information, access to markets and credit, and a sound business concept all appear to be needed if entrepreneurial motivation is to bear fruit. As a minimum, training programs must be sensitive to the constraints imposed by the social structure and the opportunity structure. Moreover, training impact will probably be enhanced by incorporating specific elements designed to respond to participants' needs for skills, information and resources and to address constraints such as lack of suitable role models, support groups and capital.

3. BEHAVIORAL TRAINING IN ENTREPRENEURSHIP

As suggested above, economists traditionally have regarded the phenomenon of entrepreneurship as an automatic response to the presence or absence of critical structural features of the economy. Psychologists and anthropologists, on the other hand, have often considered entrepreneurial behavior to be either genetic in origin or the result of long-term socialization. Accordingly, all of these groups have tended to discount the possibility of using behavioral training as an effective short-term strategy to enhance the quality or increase the incidence of entrepreneurship in an individual or in a society.

Recently, however, scholars as well as development practitioners have begun to devote increased attention to entrepreneurship training. Much of the impetus for this redirection has resulted from widespread disappointment with the failure of structural interventions and credit programs to achieve expected development goals. Along with this disappointment has grown a corresponding recognition of the pivotal role often played by individual behavior in the success or failure of particular business ventures. While most scholars acknowledge the importance of heredity, early childhood education, culture, and the prevailing pattern of opportunities in generating entrepreneurship, realizations concerning the role, nature, and relative scarcity of entrepreneurship have resulted in increased interest in exploring the feasibility of deliberately accelerating the growth of entrepreneurship.

Much of the new emphasis on entrepreneurship training has focused on augmenting the business plans, management skills or relevant contacts of aspiring business people. However, as both the lay press and respected scholars have directed increased attention to the "intangible," "personality," or "behavioral" factors involved in successful entrepreneurship, practitioners have begun to distinguish training in entrepreneurship from the many other forms of training provided to entrepreneurs (see discussion of "Program Structure", Chapter Five). While few argue that behavioral training in entrepreneurship is sufficient to generate a significantly increased quantity and quality of entrepreneurs, many now argue that such training constitutes a valuable and perhaps necessary element in any such effort. This contention is advanced especially

with respect to groups which have yet to establish a strong culture, history and base of individualism, innovation and entrepreneurial activity.

Applied research in behavioral approaches to entrepreneurship training is a comparatively new field and one which, paradoxically, has its origins in developing countries. The past twenty-five years have seen sporadic increases in interest in entrepreneurship training, both among scholars and among practitioners. The goal of this section is to synthesize the results of existing work on entrepreneurship training in an effort to determine what has already been firmly established, what has been strongly suggested, and what directions remain to be investigated.

A. Changing Attitudes and Behavior

The central question associated with behavioral approaches to entrepreneurship training is the degree to which those individual attitudes and competencies associated with entrepreneurial success can be enhanced or improved through training.

Many researchers have sought to identify the personal entrepreneurial characteristics (or PECs) associated with successful performance. Several scholars have attempted to translate these PECs into training efforts, but McClelland's work on achievement motivation training (AMT) remains the most comprehensive such program and the only one to have been subjected to serious evaluation. A 1984 study by Harper of 53 entrepreneurship training programs, and a survey by Management Systems International of 21 major programs confirm that most of these programs base the "behavioral components" of their training programs on the work done by McClelland in the 1960s.⁶⁰

McClelland defined achievement motivation at one point as "the urge to improve". He subsequently elaborated on that definition by including four attributes which he asserted are so closely associated with high achievement motivation as to be inseparable from it. These four attributes are: a) a tendency to set moderate goals; b) a preference for work situations in which it is possible to exercise control over outcomes and take personal responsibility for results; c) a desire for feedback on performance; and d) initiative in researching and exploring the environment.⁶¹

The training approach and curriculum which McClelland originally developed, and which others have emulated, rests on certain basic hypotheses

about the best methods with which to stimulate the acquisition of a new trait -- in this case, the need for achievement (*n* ACH).

With respect to the teaching of achievement motivation, the process followed normally begins with the presentation of evidence showing how achievement motivation or the "entrepreneurial spirit" is related to performance and success. Participants study these research findings and how and why achievement motivation is related to improved performance. Following this introduction, achievement motivation training programs normally follow a relatively standard eight step sequence:

1. Through games, tests, and other devices, participants are given an opportunity to analyze their own spontaneous thinking or imagination and to score this material for motivational content according to well-defined scoring procedures. The purpose is to help them recognize achievement thinking in its various aspects so that they can reproduce it in their thoughts and, therefore, in their actions.
2. Participants are encouraged to use the understanding of their own motivation and thinking to evaluate their approach to their work; to set realistic but challenging goals for themselves.
3. Participants practice "Achievement Thinking" by learning to perceive job situations, problems, and possibilities in achievement terms. They engage in achievement-related activities in simulated business situations. Here they become aware of the relationship between achievement thinking and entrepreneurial actions.
4. Cases of successful entrepreneurs and sometimes entrepreneurs in person are presented to the group to enable the participants to see the relationship between successful business functioning and achievement thinking and also to understand the origins of entrepreneurial behavior.
5. Participants are, throughout the course, given an opportunity to experience and internalize the characteristics of successful entrepreneurs. This is done through (3) and (4) and by lectures, discussions, and demonstrations involving creative problem-solving and risk-taking.
6. The individual is encouraged to write an autobiography, to make plans for his future, to take the practical steps and make the commitments necessary to fulfill the personal goals he has set for himself. Personal counseling sessions are arranged for individuals to obtain better self-knowledge, more realistic appraisal of goals, and more creative ways of attaining them.
7. Participants are encouraged to examine their relations with others in the group throughout the course. In small and large groups, they are given opportunities to understand the needs of others and to help them in solving their problems.
8. Participants are given practice in aiding and supporting one another in group activities. This is designed to increase

cooperation upon their return to their area and to increase the probability of mutual reinforcement for one another in the future.

B. Program Structure

As part of this research, information was reviewed on different programs around the world which claim to provide some form of entrepreneurship training. These programs incorporate a remarkably broad array of target groups and approaches. Programs range from weekend seminars for high technology entrepreneurs to year long programs for secondary school drop-outs. Some concentrate on skills training while others stress motivation or the "brokering" of potential funding sources and markets. About half the programs have some systematic form of follow-up, but here again options range from intensive management counselling to periodic newsletters. Most programs include a motivational component, but these range from exhortatory speeches to detailed training programs. As a noteworthy exception to this diversity, it was found that the achievement motivation training developed by McClelland in the 1960s is still practiced, virtually unchanged, in most of the best established entrepreneurship training programs in the Third World.

Of the 53 entrepreneurship training centers identified by Harper's 1984 study, 79% included some form of behavioral training in their curricula.⁶² One third of the programs devoted 25% or more of their time to behavioral training, and 64% said they used the standard AMT exercises or approaches. The median duration of the programs surveyed was 4 1/2 weeks and, where it was provided, behavioral training was most normally presented as a one or two week module, most frequently at the end of a lengthier training program which included business and management skills and perhaps some vocational training as well. Over 80% of the programs surveyed also provided some form of management skills training, and a recent survey identified over 20 well developed (and very similar) training curricula and sets of materials frequently used to teach business management skills to aspiring entrepreneurs. Additional significant information on the 53 programs includes the following:

- most are relatively new (founded after 1978) and relatively small (less than 7 programs per year);
- almost all cater to potential (as opposed to existing) entrepreneurs, although over 60% express a preference for

applicants with clear business ideas and claim that most of their participants begin the course with such an idea;

- 40% of the courses charge fees and 45% are residential;
- 72% of the courses are continuous (as opposed to part-time or interrupted);
- 70% are provided by voluntary organizations, although the majority are financed by governments;
- a large proportion include management training (83%), technical training (62%), information dissemination (85%) and project preparation (87%) in addition to entrepreneurship training, although less than 1/3 of the programs allocate 25% or more of their time to any one of these areas;
- 75% involve fieldwork and counselling on student projects, and 57% include an opportunity to present projects to bankers as part of the course;
- among the "special help" provided to trainees, the most commonly mentioned types were follow-on advice (74% of programs), special marketing aid (70%), introductions to bankers (70%), subsidized loans (70%) and direct grants (40%); and
- less than half of the individuals directing programs had received any formal training-of-trainers preparation.

A somewhat smaller scale study including only ten programs was conducted in 1980 by Quednau.⁶³ The study revealed the following breakdown of components in entrepreneurship training programs, expressed as percentages of total program time devoted to Achievement Motivation Training (AMT), Business Management Skills (BMGMNT), and Business Plan Preparation (BPLAN):

	AMT	BMGMNT	BPLAN
1. CED/Ahmedabad	30	33	37
2. UP-ISSI/Manila	35	49	8
3. SEDCO/Swaziland	24	67	9
4. SISI/India	20	69	11
5. NPC/Malaysia	22	53	24
6. NPC/Indonesia	30	53	17
7. Min.Ind./Indonesia	40	40	20
8. Xavier Inst./India	33	38	29
9. MSCI/Manila	--	75	26
10. PBSP/Manila	--	100	separate

The three month Gujarat training program in India reflects a typical modular training structure.⁶⁴ It consists of a module each on: trainee identification and selection; achievement motivation training; product or opportunity guidance; management training; field experience or on-the-job

training relevant to the entrepreneur's business plan; business plan preparation; and business and financial assistance, which continues after the formal training is completed. The program is also typical in its emphasis on the business plan as the principal and unifying training product.

Depending on their orientation, programs tend to add to or subtract from this basic structure. The HETADI program, for example, adds an initial segment on business awareness or acculturation for those trainees who have not had previous exposure to business.⁶⁵ The orientation also emphasizes the need to integrate personal and business agendas, and includes individual counseling which addresses personal and domestic finance. The Institute for Economic Development and several other programs for potential entrepreneurs also provide comparable one-on-one counseling.

A review by Management Systems International of 11 non-university based entrepreneurship training programs in the United States and Europe indicates that there are two major types of such programs: programs aimed at middle-class technicians and professionals hoping to commercialize an innovation, and programs aimed at providing relatively poor or disadvantaged individuals with opportunities to go into business for themselves. While both types of programs emphasize business planning, market analysis and new business starts, these two types of programs differ substantially from one another. For example, the former (innovation oriented) programs tend to be shorter, more expensive, offered by for-profit organizations, linked to possible sources of venture capital, and focused on "brokering" of business relationships. The latter (oriented towards disadvantaged individuals) programs, on the other hand, are normally publicly funded and stress linkage to special lending (as opposed to venture capital) programs.

Common to most of these programs is a focus on the non-behavioral aspects of entrepreneurship and small business development, particularly finance mobilization, market analysis, business plan preparation and management. Information dissemination is also stressed and significant attempts at "networking" are included in many of these programs by matching would-be entrepreneurs with potential sources of finance and support. While certain of these programs include attitudinal or behavior components, these elements are typically secondary rather than primary. Only one program made any reference to McClelland or his theories and the others appeared to rely

on inspirational speeches rather than the sorts of behavioral training programs widely used in developing countries.

Several of the programs reviewed made specific claims concerning the effectiveness or impact of their training programs. However, there is little or no systematic research or evaluation to substantiate these claims and there appears to be limited articulation of any theoretical foundation for the incorporation and sequencing of the various elements in these programs.⁶⁶ Regarding the content and structure, the Gujarat program claims to have identified three features of the program that are critical to success: field experience, the use of entrepreneurs as project leaders, and the immediate linking of financing with an approved business plan. Other training programs also attest to the importance of these features. Enterprise North and the program at the University of the Philippines, for example, emphasize the significance of field work and on-the-job training (which is sometimes subsidized).⁶⁷ The HETADI Program stresses the importance of entrepreneurs as role models and requires its staff to have owned or currently own a small business. Role models have been claimed to be especially helpful in areas where there is a socio-cultural bias against business or a trainee population with lower self-esteem and confidence. The quick and appropriate linking of the "new" entrepreneur with financing is emphasized by a number of programs including the Masicap Regional Program in the Philippines. Some programs such as the Institute for New Enterprise Development, take a very aggressive role in such financing and actually make arrangements on behalf of the trainees.

C. Selection of Participants

Careful selection is incorporated in many programs, and Gene Ward of HETADI articulates a common sentiment when he argues that "the careful selection of participants largely determines a program's success".⁶⁸ The Gujarat Program in India has evaluated its own three step selection technique and found that only 17% of those individuals rejected by the process went on to start their own businesses while 44% of those selected for the program who succeeded in starting their own businesses.⁶⁹ However, there has been no systematic attempt in any of these studies to separate the effects of selection from the effects of training in accounting for differences in performance between participants and non-participants.⁷⁰

Most selection criteria rely heavily on indicators related to participants' backgrounds, especially business experience and/or family business experience. Among the range of variables commonly used to approximate business facility are: prior business experience or exposure; clarity and feasibility of the entrepreneur's product or idea; short projected start-up time; realism of proposed business size/scale; evidence of capability to capitalize the venture; and ability to do short range planning.

Many selection procedures also include trait or attitudinal-based indicators, frequently focused on motivation and commitment. The most commonly cited indicators are: motivation; resiliency; flexibility (both geographic mobility and a confidence in one's ability to support oneself if the venture should fail); and a willingness to accept moderate risk.

Many programs use a combination of selection techniques as illustrated by the four step HETADI process. The first step is a review of biographical data and records to determine interest; second, a psychological test to determine aptitude; third, a personal interview to reconfirm motivation, level of interest, business knowledge, maturity, and availability of time and financial resources; and finally, a review of the feasibility statement or business plan for the proposed business written by the candidate. At any stage in the process, the trainee may elect to discontinue the selection review. The Gujarat Program, which uses a similar selection process, has found the behavioral test scores to be more reliable than interviews in identifying those persons likely to start their own business.

A number of additional procedures have been developed in recent years for identifying and/or testing entrepreneurial potential. Among the many such procedures, those which have apparently received most extensive research examination are the following:

- various TAT analyses and other tests to determine n ACH
- Rotter's tests for internal locus of control⁷¹
- several tests to determine willingness and propensity to take risks
- Solomon's test of willingness to accept limitations
- Sexton's JPI/PLT-E modified test⁷²
- Miner's Sentence Completion Test T⁷³
- McBer's Focused Interview Technique intended to score PEC prevalence and intensity.⁷⁴

Use of these tests continues to be primarily for academic and research purposes, however, and there is no evidence that these tests are currently

being widely used to select potential entrepreneurs or participants for entrepreneurship training programs.

D. Follow-up Programs

Structured follow-up has been included in many programs. These follow-up programs entail various degrees of personal interaction or contact. Wayne Broehl, for example, followed his work with fertilizer distributors in India with the creation of an informational newsletter to share new techniques and improve business practices.⁷⁵ This newsletter included case studies, short vignettes on ideas for change, and suggestions for new business techniques. One of the main ideas behind the newsletter was to provide a way for the new entrepreneurs to maintain contact and exchange information with each other, and to facilitate the development of a support network.

McBer and Company uses follow-up seminars entitled "Blocks to Effective Business Behavior" that offer assistance with practical business problem solving as well as a forum for discussion and the exchange of ideas. The Swiss Research Institute of Small Business offers similar seminars which are essentially discussions, but with the restriction that participants be entrepreneurs within the same industry. HETADI offers one-on-one business consultation once every two weeks for an average of six months. These consultations include advice and counseling on the following topics: arranging financing and leasing arrangements; lining up suppliers and negotiating prices; networking within the business community; setting up business systems; monitoring sales and management decisions; and revising business plans.

E. Trainers

In addition to the careful selection of participants and the design of effective training programs and follow-up activities, the factor most frequently alleged to contribute to the success of entrepreneurship training programs is the personality and background of the trainers. The characteristics and skills most often mentioned are: a charismatic/motivational personality; personal business experience and an ability to present the complexities of operating a business; experience in

conducting experiential training for adults; and useful contacts which can serve as a support network for the trainees.

McBer and Company has found it extremely valuable to incorporate potential trainers onto their "research teams" as a means of broadening these individuals' understanding of their clients' needs and circumstances, and many practitioners cite the virtue of including trainers as part of any follow-up consultation or services provided to ex-trainees. Implicit in such approaches is a concept of the training program not as a single occurrence but as an integrated series of activities from pre-selection through follow-up.

4. METHODS AND FINDINGS OF PREVIOUS RESEARCH ON IMPACT OF BEHAVIORAL TRAINING

A. Qualitative Evaluation

There have been a number of studies, both formal and informal, which comment on the design and effectiveness of behavioral training in entrepreneurship. Most of these studies are anecdotal in nature and reflect the views of participants, trainers and outside "expert" reviewers.

Many studies or reports of this type were reviewed. The majority of these studies came from developing countries and concerned Achievement Motivation Training. Parenthetically, it is noteworthy that the AMT program as described in these reports is remarkably similar from country to country and program to program.⁷⁶

The reports were, for the most part, positive in their assessment of the AMT program. They did, however, recommend a number of programmatic changes and improvements. Typical of these comments are the following:

- "Malaysian trainers suggest that AMT can be improved by including relevant exercises on values that pertain to entrepreneurship, such as dominance, aggressiveness, and risk-taking." (Malaysia)
- "Despite encouraging results, AMT practitioners are raising questions on the adequacy of the McClelland model to explain entrepreneurial entry in Philippine culture. They doubt whether the "need to achieve" is the real motive of Filipino entrepreneurs, rather than either power or profit or the need to survive. Some training programs for entrepreneurs have been renamed Entrepreneurial Motivation Training rather than Achievement Motivation Training (to make them more relevant). Philippine trainers wish work could be done to gather data on other motives or values that may provide the basis for additions or revisions of the training design. [AMT needs] more case studies on success/failure stories of entrepreneurs and analyses of characteristics of entrepreneurs." (The Philippines)
- "Entrepreneurship is not so simple as achievement motivation. There are other factors related to entrepreneurship that must be considered. These factors are other traits that make some people entrepreneurs and others not. These must be identified and understood in the local context." (Indonesia)
- "We know that the entrepreneur is the key factor in a successful business. We train people to run a business, and some succeed. But we have to understand entrepreneurs better. We need better training tools to help people improve the non-technical parts of entrepreneurship like negotiating,

managing people, and taking quick advantage of an opportunity." (Egypt)

An informal Delphi procedure conducted among 15 senior practitioners in the field of entrepreneurship training resulted in a general consensus that current AMT training approaches had considerable value but were badly in need of modernization. In noting ways to improve the program, there was general agreement that the three most significant endogenous factors limiting the effectiveness of current behavioral programs were the following:

- The emphasis in current programs on "intangible" motives rather than more tangible behaviors;
- The relatively limited range of behavioral characteristics included in current programs (especially the exclusion of behaviors related to systematic planning or exercising influence); and
- The lack of relevance of many of the workshop activities to actual business situations.

Of 72 entrepreneurship training organizations contacted, more than 60% expressed a willingness to be involved in developing or testing new approaches to behavioral training. Similar interest was expressed by organizations as diverse as:

- | | |
|-------------------|--|
| ■ World Bank | ■ Corporation for Enterprise Development |
| ■ ILO | ■ U.S. Economic Development Corporation |
| ■ UNIDO | ■ Junior Achievement |
| ■ NORAD | ■ State of New Mexico |
| ■ GTZ | ■ Several developing country government agencies |
| ■ Babson College | |
| ■ Pace University | |

Each of these organizations indicated a positive prior association with AMT or something similar and a desire to see specific improvements made in those programs.

B. Impact Evaluation

There have to date been approximately 30 efforts to evaluate the impact of behavioral training in entrepreneurship. These studies vary considerably in their rigor and scope.

McClelland and Winter's original treatise, Motivating Economic Achievement, continues to be one of the more comprehensive efforts to determine the impact of such training programs. Most useful among the recent evaluation research on entrepreneurship training is the work of David Miron, Douglas Durand, Benjamin Catane, Momin Chowdhury, Mitchell S. Watkins &

Associates, Arthur Young and Company, UP/ISSI, and EDI who have each written analyses on the impact of achievement motivation training.⁷⁷

McClelland and Winter report data on two cities in India of roughly equivalent size, work force division and geographic location.⁷⁸ In one of the cities, 52 businessmen were given achievement motivation training (AMT). The second city and non-trainee businessmen in the first city served as control groups. All groups were measured over a two year period beginning just prior to training. In attempting to measure the effectiveness of AMT, McClelland and Winter separated the analysis into economic performance and business activity. To assess economic performance, they measured the number of new firms established, the number of hours worked, capital invested, and increases in employment and gross income. Businessmen who received AMT showed "significant improvements in many aspects of entrepreneurial performance" when compared to themselves prior to training and to the controls. Specifically, the AMT trainees:

- worked longer hours;
- made more definite attempts and actually started more new; business ventures;
- made more specific investments in new, fixed productive capital;
- employed more workers; and
- had relatively larger % increase in gross income.

In evaluating the business activity of participants, the study employed a system to provide comparable results for heterogenous groups. A score of zero was given to individuals who evidenced no change over the two year period. A score of negative one was given if there had been a decrease in income or profitability or if the firm had gone out of business. Positive one was earned when there were specific plans to improve, and a score of positive two was given when a new business was actually started, the individual was responsible for an unusual increase in the firm's income or profit level or had received an unusual promotion. After the two year period was complete, the groups were measured for their business activity. The average level of business activity was .57 for the control group, while those who received AMT averaged 1.61.⁷⁹

A particularly interesting study for providing insight regarding the troublesome problem of separating selection effects from training effects is the study done by the Irish Industrial Development Authority (IIDA) on its AMT program provided in 1969-1970.⁸⁰ A random list of business owners who

had received grants from the IDA were invited to attend the program. 14 were trained, with 18 declining the invitation for personal reasons and 14 (randomly assigned) serving as controls. All of these business owners were interviewed some time after the training and rated on 12 measures of economic performance. There was no difference found among the controls and those who declined to attend. There was, however, a difference on the part of the trainees, who out-performed the other groups on 10 of the 12 measures, including sales, fixed assets and working capital. A significant difference was also noted for new product development, joint ventures with other businessmen and business development planning.

A further study of the relationship between selection and training effects was carried out by The Center for Entrepreneurship Development in India.⁸¹ In a follow-up study in 1984 of 44 entrepreneurs trained during the years 1973 to 1978, it was found that of those who scored above the median in *n* Ach before training, 75% had created and sustained successful businesses after training, whereas of those below the median in *n* Ach, only 46% had created successful businesses after being trained.

Another study done in India from 1962 to 1967 compared 76 businessmen trained in achievement motivation with a similar control group that did not receive training.⁸² Over a two year period, trainees showed significant increases in entrepreneurial activity in comparison to their own prior levels and the levels attained by the control group. The following table summarizes the types and extent of changes observed:

	<u>Trainees</u>		<u>Control</u>	
	<u>Before</u>	<u>After</u>	<u>Before</u>	<u>After</u>
Active Entrepreneurs	18%	51%	22%	25%
Starting New Businesses	4%	22%	7%	8%
Making Unsuccessful Attempts to Start New Businesses		25%		7%
Working Longer Hours	7%	20%	11%	7%

For a subgroup of 35 of the 44 trainees who were in charge of their firm there were also significant increases after training in the following:

percentage of entrepreneurs making specific fixed capital investments (32% before to 74% after; controls: 29% before to 40% after); percentage of entrepreneurs employing more people (59% for trainees versus 33% for control); and average number of employees (1.46 before to 5.86 after; controls: 1.14 before to 2.74 after).

A number of studies have been conducted on Achievement Motivation Training Programs provided in the United States in conjunction with various government agencies and universities. An early study, under the auspices of the Economic Development Administration, involved training actual and potential minority businessmen in Washington D.C. and white businessmen in MacAlester, Oklahoma.⁸³ Approximately two hundred people were recruited in each city, with one half receiving AMT and the other half serving as a control group. Although there were a number of factors which inhibited direct comparisons of the groups (size, profitability and type of business), individually the trained businessmen all showed a larger gain in personal income than the controls. The most conclusive evidence of the impact of AMT was seen in the Washington group, where 31 trainees started a total of eleven new businesses with an average annual profitability of \$12,500, compared to only one new business for the controls with an operating loss of \$600.

In 1972 the Small Business Administration initiated a study of minority businessmen who received achievement motivation training in nine cities. The businessmen received the AMT only, with no additional business/management training or follow-up consulting. Information was collected on the businesses 18 months prior to and after the training by means of application forms, mailed questionnaires and/or telephone interviews. An important facet of this evaluation was the large number and broad scope (service, retail and manufacturing industries) of the sample. Trainees from each of the sectors showed improvements, with median monthly sales rising 231% for eleven manufacturing firms, 156% for eight retail firms and 276% for thirty three service firms.

Across sectoral lines, the percentage of 52 businessmen with monthly sales above the sample median rose from 19% to 56% with a gain in median monthly sales for trainees approximately ten times the rate of increase for the economy as a whole during the same period. The percentage of 43 businessmen with monthly profits above the sample median rose after training from 30 to 70%.

In a continuing effort to evaluate the effects of AMT, two training programs of a similar nature were presented to minority business owners in Seattle, Washington and Dallas, Texas. Each received AMT, sensitivity/awareness training and consulting services. The information, collected personally by interviewers, was centered on four measurements of economic performance: gross sales; before tax profits; personal income; and number of employees. Because of a lack of a control group, the businesses were compared to the local and general economy as found in the Business Conditions Digest of the Department of Commerce. In each case, the trained businessmen performed better than the other businesses in the local or general economy. The entrepreneurs in Seattle, Washington also showed a significant difference in regards to gross sales, before tax profits and personal income after training as compared to before.

Another study of Achievement Motivation Training was conducted in early 1974 by the Office of Minority Business Enterprise (OMBE). Financial information was collected on the trainees for six months before and after training by means of questionnaires. This information revealed that for gross sales, profits, owner's income and employees' income, there was a significant increase after training in comparison to the performance of the economy as a whole. The trainees average profit rose 44% when profits for the economy rose 20%; average gross sales rose 32% when the economy rose 8%; average owners' income rose 16% and average employee's income rose 33% when both fell for the economy by 9%.

The program of the Hawaii Entrepreneur Training and Development Institute (HETADI) has been widely cited for its success in combining behavioral training with management training for first generation native Hawaiian entrepreneurs.⁸⁴ In 1978, HETADI was contracted by the city of Honolulu to perform a CETA project to help fight unemployment. An independent evaluation of the project was conducted based on a random sample of graduates of the program and a control group of individuals who were selected out of the course. The study revealed that of the graduates, 66% were successful in starting a business compared to only 10% of the control group. Additionally, annual sales were higher for graduates than for controls, although the average number of jobs created by all firms was the same. The study made no effort to separate selection and training effects.

McBer and Company's Business Leadership Training Program, an adaptation of the original AMT program, has been one of the more widespread behavioral training program for entrepreneurs, with participants in the U.S. and several other countries. Mitchell S. Watkins and Associates conducted an appraisal of BLT's impact on the financial performance of one city's program participants and their businesses.⁸⁵ The evaluation was based on mailed questionnaires containing a qualitative and quantitative section. The response to the qualitative section indicated that most respondents found the course useful, while analysis of the quantitative section showed a positive cost benefit ratio to the government (i.e., incremental tax return greater than government investment).

One of the more rigorous impact evaluations of AMT was undertaken by Douglas Durand of the University of Missouri, St. Louis, in which 35 business owners or individuals considering going into business were randomly assigned to 4 groups.⁸⁶ Group 1 received both achievement and management (*ach+mgt*) training; Group 2 received achievement (*ach*) training only; Group 3 received management (*mgt*) training only; and Group 4 received no training.

The participants in the program were measured for business activity, achievement motivation and locus of control before, during and twice after training. Although there were no significant differences among the groups prior to training, post training tests revealed that motivation trained businessmen -- *ach* only and *ach+mgt* -- performed significantly ($p < .05$) more business activities than persons who were not exposed to motivation training. While the *ach+mgt* training group (Group 1) showed significantly higher rates of business activity than those who received only one type of training, the evidence also suggested that those who received achievement motivation training alone (Group 2) performed substantially better than those receiving management training alone (Group 3).

In addition to these more systematic studies, a number of more anecdotal or subjective findings have been reported. Illustrative of these efforts is the work of the BEP in Malaysia which has tried to evaluate and assist its participants over time according to criteria matched to specific stages of business development.⁸⁷ For those BEP participants who complete the program's first module and had previously established their own businesses, the assessment focuses on any change in sales, accounting and financial systems, and general management. For those who complete the module

and start up a business, the assessment focuses on the type of business started, the kind of problems encountered and the means used to solve them. For participants who have not started a business, the assessment focuses on why they haven't begun, when they will begin, what type of business they will start, where it will be located, and a copy of the business plan for it. Evaluation after the BEP's second and third training phases focuses on the firm's profitability, sales performance, marketing plans, and growth potential. While less than rigorous in their data collection and analysis methods, studies such as these provide a wealth of useful information on program effectiveness and how to improve it.

The studies reviewed above are noteworthy because of the consistently positive findings obtained using a variety of different methodologies in a number of different settings. Equally impressive is the substantial amount of unsolicited testimonial given to these programs by service providers and recipients supported by clear evidence of continued demand and spontaneous replication. However, although the studies cited above present substantial information supporting the positive impact of behavioral training in entrepreneurship and collectively represent strong evidence for such impact, these studies also give evidence for the considerable difficulties involved in conducting rigorous research in this area. Principal among the difficulties encountered in the studies presented above are the following six issues:

- establishing criteria and measures of "success";
- interpreting "failure";
- identifying suitable control groups;
- obtaining adequate response rates and data reliability;
- separating selection and training effects; and
- determining the impact attributable to individual components of the curriculum.

Each of these issues is reviewed in the paragraphs below, which also explore the implications of these issues for the current research.

C. Methodological Issues

1. Establishing Criteria and Measures of "Success"

Considerable controversy has surrounded the issue of success criteria. Substantively, the discussion concerns the extent to which various indicators capture the most important benefits which might accrue to an entrepreneur or to society. For example, employment (one

possible measure) often declines with increased investment, and productivity and profits (other possible measures) are hard to measure reliably and ignore the many other means through which successful entrepreneurs earn income from their ventures.

Methodologically, the selection of criteria and indicators must reflect data which it is feasible to collect from training recipients and control group members. In practice, this factor rules out the feasibility of using profit, income or tax data in most countries.

From a policy perspective, there appear to be a variety of views on the "level" of impact for which a training program should be held accountable. Helping to focus this issue, Harper recently organized possible indicators into a hierarchy of 8 levels along with a discussion of the implications, strengths and weaknesses of focusing evaluation efforts at each of these levels.⁸⁸ The eight levels identified by Harper include:

- (1) institution building
- (2) service output
- (3) enterprises created
- (4) employment created
- (5) economic activity added
- (6) net economic activity added
- (7) profits earned
- (8) increased government revenue

Although there is a considerable range of indicators used in the evaluations cited above, most focus on economic outcomes, not attitudinal or behavioral changes. For new businesses, the most often cited indicator is new business starts. Other frequently mentioned indicators include revenue, profit, and employment generated by new business activity; new products or processes introduced; successful application for commercial loans; loan repayment; use of sound management practices. A complete listing of possible success criteria used is listed on the following page, a compilation of the indicators used in the studies cited above plus recent publications by A.T. International, Fraser and Quednau.⁸⁹

SUGGESTED EVALUATION CRITERIA

- Institution Building
- Number and Quality of Training Programs and Other Services Provided
- Trainee Satisfaction
- Enhanced Trainee Motivation for Business Growth
- Improved Production Skills
- Improved Marketing Skills
- Enterprise Creation
- Increased Number and Value of Loans Made
- Improved Loan Repayment Record
- Improved Business Survival Rates
- Increased Use of Assistance by Trainees
- New Products and Services
- Employment Generation
- Increased Hours Worked
- Increased Personal Income
- New Investments and Increased Asset Base
- Improved Service Delivery
- Economic Activity Added
- Net Economic Activity Added
- Increased Profits
- Increased Government Revenues

2. Interpreting "Failure"

Failure is at least as difficult to operationalize and measure as success is. The major difficulty involved is determining the appropriate time span in which to expect and verify benefits. Entrepreneurship is generally considered to be a process that manifests itself over time. In all countries, the mortality rate of new firms is extremely high and very fast. In the U.S., for example, 50% of new firms fail within the first year. Those entrepreneurs who are ultimately successful usually have several prior business failures. It is thus questionable whether an initial "failure" really constitutes a failure or a requisite step in the entrepreneurship process.

In a similar vein, "entrepreneurial ventures" are, by their nature, risky undertakings; and the most creative of these ventures may well be riskier than most. Although no conclusive research is available, it is reasonable to assume that entrepreneurs associated with successful, high-growth, enterprises have probably experienced on average a higher number of previous business failures than the owners of more traditional enterprises.

The above considerations do not negate, however, the genuinely negative consequences of business failure. Such failures often consume all or most of an entrepreneur's personal finances; may result in losses by customers, lenders, or other creditors; and frequently entail major psychological trauma for the entrepreneur and his or her family.

Given these complexities, it is a non-trivial matter to establish the appropriate amount of lapse time to allow between training intervention and impact assessment. It is similarly difficult to establish the appropriate interpretation of business failures which may have occurred during that period. Despite the importance of these issues, neither have received any extensive discussion in the literature. In practice, evaluations have typically been conducted one or two years after program delivery and business failures have been assumed to have no positive or negative value.

3. Identifying Suitable Control Groups

Most evaluations of behavioral training in entrepreneurship have been undertaken without the benefit of control groups. Participants' performance after the course is compared longitudinally to the performance of these same individuals or enterprises prior to the course. This approach makes no

allowance for the effects of the passage of time (e.g. enhanced business experience and maturity) or the possible impact of exogenous factors (e.g. fiscal and monetary policy, business cycles and industry trends).

The problem of control group identification is, however, a complex one. Control group comparisons are relevant only to the extent that the control group resembles the treatment group in all respects other than the receipt of the training intervention. Applicants to training programs are, simply by virtue of their willingness to enroll in such programs, atypical. New businesses differ from established ones, shoe stores differ from furniture manufacturers, large enterprises differ from smaller ones, wealthier and better educated entrepreneurs differ from poorer and less educated ones, individuals from one ethnic group or location differ from those of another, and so on.

In addition, both ethical and operational difficulties surround the issue of collecting data from individuals who have not received the benefit of participating in the program. Many studies address this difficulty by using tabulated census data or other statistical norms as control groups, while others address this difficulty by using rejected program applicants or participants in other programs as control groups.

One final means of addressing the control group problem entails the use of regression analysis, discriminant analysis or other means for analysis of variance. Through these statistical methods it is possible to relate changes in observed impact to differences among individuals within the treatment group and thereby, in effect, use the individuals in the treatment group as a complete set of control groups for one another.

4. Obtaining Adequate Response Rates and Data Reliability

This problem is not unique to behavioral training in entrepreneurship but is common to virtually all survey research. One aspect of the problem - obtaining information from non-participants -- has been alluded to above. Other related problems include ensuring the quality and consistency of data collection and possible problems of intercoder reliability in processing the data.

In longitudinal studies of entrepreneurship training, there are three additional problems. First, members of the treatment and control group may be difficult to find one or two years later, particularly if they have

suffered an intervening business failure. Given the absence of comprehensive business directories and similar resource documents in most developing countries, this problem can be expected to be a serious one.

The second special problem concerns the reliability of data on business performance obtained through a question-and-answer format. And the third problem relates to the difficulties involved in standardizing the "treatment" received by participants, particularly where the training has been provided by different trainers and possibly different training institutions.

While none of these problems have simple or completely satisfactory solutions, a number of devices have been used in recent studies to minimize their impact. The approach to be taken in dealing with these issues in the current research is included in Chapter Six.

5. Separating Selection and Training Effects

A problem which has so far been considered "troublesome" by certain researchers, but which is in fact fundamental, is distinguishing between the effects of trainee selection and training itself on entrepreneurial behavior.

While these techniques have yet to be employed in studies of entrepreneurship training, evaluation research in other fields suggests that two useful methodological means for addressing the selection versus training issue are the use of random assignment to participant and control groups and the analysis of internal correlation data on program participants.

6. Determining Impact Attributable to Individual Components of the Curriculum

In the present research, particular concern is with the possible impact of behavioral aspects of the training program. Should it be possible to verify the impact of entrepreneurship training, questions would continue to exist concerning the aspect or component of the program responsible for this impact.

A review of the literature suggest two methods for addressing this issue of attribution. By limiting the treatment and only providing the component of particular interest, it would be possible to isolate the impact associated with the provision of this component. Such an approach would, however, have certain limitations. Positive or negative interactive effects

with other component would not be identified; alternative means of generating the same impact would not be considered; and participants would be presented with a program suspected to be partial or incomplete.

The second methodological approach used in several recent studies is the use of a "subtractive" design of the sort used by McClelland and Miron to study the incremental effect of achievement motivation training.⁹⁰ Using this method, one treatment group receives the entire intervention while another receives the intervention minus the component of particular interest. The difference between the observed impact on the two groups is judged to be the incremental impact of the component of interest. While this approach fully eliminates none of the shortcomings attributed above to the single component approach, it minimizes the negative consequences resulting from each of these shortcomings.

5. DESIGN AND DELIVERY OF EXPERIMENTAL PROGRAM

A. Program Design

1. Program Structure

Investigations conducted during the first year of this research yielded several tentative parameters for the new program. Informed opinion and the review of current programs suggested that two weeks would be the most feasible duration for a full-time entrepreneurship training program if such a program hoped to enroll any significant number of existing entrepreneurs. The same data also suggested that a one week program would be preferable and that intermittent courses would be more desirable than continuous ones.

For practical reasons of course supervision, it was not considered feasible to employ intermittent courses during the experimental period, thereby limiting the likely course duration to two weeks.

The experience of the most successful programs and the preponderance of expert opinion also suggested that entrepreneurship training programs should, ideally, contain six basic elements. These elements are: (1) an effective means of participant selection and orientation; a program which contains (2) attitude and behavior modification, (3) skill development, (4) linking of entrepreneurs with potential markets and sources of capital, and (5) presentation of appropriate role models; and, finally, (6) a follow-up program after the completion of the course. Given the nature of the research project, a decision was taken to emphasize the second element (attitude and behavior modification) and eliminate the other elements in order to test the specific impact of purely behavioral aspects of the curriculum.

Several other preliminary decisions were made concerning the design of the program as a "stand alone" activity rather than as part of a larger training or entrepreneurship development effort. Like the decision to focus on the attitude and behavior modification aspects of the curriculum, the decision to employ a stand alone effort was primarily motivated by the research objective of testing the independent effect of behavioral training on entrepreneurship. Additional reasons for this decision, however, were the desire to test a "minimalist package" devoid of the lengthy and labor intensive requirements associated with skills training and provision of technical assistance, and a belief that truly entrepreneurial individuals would individually seek out any supplementary assistance or advice they

required. The program was deliberately designed, however, to permit and facilitate its presentation on a part time basis and/or integration with other activities or models after the end of the experimental period.

The final important decision about program design concerned identification of the program's intended audience. There is a widely held view that it is inappropriate or counter-productive to provide training simultaneously to existing and potential entrepreneurs, and that the same training is unlikely to be relevant to these two groups. While this assertion would appear to have considerable face validity, a closer examination indicated no obvious reason why it should be true in the case of behavioral training in entrepreneurship. On the contrary, there appeared to be an equally compelling case to be made that a "mixed group" would offer specific benefits to both existing and potential entrepreneurs. Accordingly, and as a way of testing the relative impact of the training on these two groups, the decision was taken to design a program relevant to both groups and to include both groups among those who received the training. In order to limit somewhat the diversity of participants involved during the research phase of the effort, however, "in business" participants were limited to individuals who had been in business for relatively short periods of time. In practice, this latter limitation was found to have virtually no practical implications in terms of program design.

2. Training Approach

The pedagogical foundations that underlie the training program represent a systematic application of principles and precepts drawn from the following fields:

- trait acquisition theory,
- competency based learning,
- cross-cultural training, and
- adult learning.

This section describes in some detail the relevance of each of these areas to the present course and links specific aspects of the course to the theoretical underpinnings derived from each area.

a. Trait Acquisition Theory

The psychological theory of trait acquisition explores the nature of human behavior and the basis on which deliberate acquisition of traits can be facilitated. This theory, which has been extensively tested both in the laboratory and in the classroom, rests on the following series of hypotheses:⁹¹

1. The more thoroughly an individual develops and clearly conceptualizes the associative network defining a motive, the more likely he is to develop the motive.
2. The more an individual can link the newly developed associative network to related actions, the more the change in both thoughts and actions is likely to occur and endure.
3. The more an individual can link a motive to events in his everyday life, the more likely the motive complex is to influence his thoughts and actions in situations outside the training experience.
4. The more an individual perceives that a motive is required by the demands of his career and life situations, the more educational attempts designed to develop that motive are likely to succeed.
5. The more an individual can perceive and experience the motive as consistent with the ideal self-image, the more the motive is likely to influence his future thoughts and actions.
6. The more an individual can perceive and experience the motive as consistent with prevailing cultural values and norms, the more the motive is likely to influence his future thoughts and actions.
7. The more reasons an individual has to believe that he can, will, or should develop a motive, the more educational attempts are likely to succeed.
8. The more an individual commits himself to achieving concrete goals in life related to the motive, the more the motive is likely to influence his future thoughts and actions.
9. The more an individual keeps a record of his progress toward achieving goals to which he is committed, the more the newly formed motive is likely to influence his future thoughts and actions.
10. Changes in motives are more likely to occur in an interpersonal atmosphere in which the individual feels warmly but honestly supported and respected by others as a person capable of guiding and directing his own future behavior.
11. Changes in motives are more likely to occur the more the setting dramatizes the importance of self-study and lifts it out of the routine of everyday life, thereby creating an in-group feeling among the participants.
12. Changes in motives are more likely to occur and persist if the new motive is a sign of membership in a new and continuing reference group.

Closely related to this literature, although philosophically antithetical to it, is the extensive research by B. F. Skinner and others on "behavior modification".⁹² At its most basic level, this research posits that human feelings and behavior, including fundamental attitudes and predispositions, can be heavily influenced or determined by the provision of a systematic pattern of stimuli and reinforcement based on salient rewards (for "appropriate" behavior) and punishments (for "inappropriate" behavior). While usually associated with interventionist efforts to change or manipulate the behavior of others, there is no prima facie reason why these approaches are not equally relevant to voluntary change and the deliberate acquisition by an individual of desired attitudes and behaviors.

The behavioral training program on which the current research was conducted was explicitly designed to embody the twelve hypotheses of trait acquisition noted above. The content of lecturettes (like those of the Achievement Motivation Training Program of the 1960s), the design of workshop exercises and the organization of the training program were dictated by the desire to reflect these hypotheses in a thorough and consistent way.

The basic precepts of behavioral psychology are also evident in the workshop's content and structure. For example, large "PEC Cards" describing each of the PECs and its behavioral indicators are posted prominently; individuals receive small PEC stamps each time during the course when they evidence a particular PEC; every possible opportunity is seized to draw positive attention and award prizes for the manifestation of key PECs and to facilitate constructive self-criticism when individuals fail to manifest these PECs. Perhaps even more importantly, PECs are described, presented and reinforced in terms of specific, observable behaviors; participants are encouraged to focus their attention on these specific behaviors rather than on more general approaches, principles, or motives. Only half in jest, this feature of the course had been called "Quack theory" based on the belief that, if you learn to quack like a duck, for all practical purposes you are a duck.

To increase and enhance reinforcement, a structural feature termed "layering" was introduced into the design of the program whereby individual modules and exercises are so designed as to permit not only the reinforcement of the PEC in question, but also all of the other PECs previously introduced in the course. Not unlike the premises introduced by Maxwell Maltz in his

book Psychocybernetics, this procedure permits the repeated reinforcement of specific behaviors over a several week period and thereby permits initial behavioral change to take root.⁹³ As an additional device to foster reinforcement, participants are requested, beginning late in week 1 of the course, to engage in an activity called "PECs on Purpose". This activity requires each participant to identify one or more PECs s/he is trying to strengthen, take deliberate action during the evening to manifest that PEC, and report in the morning to his or her colleagues on the action(s) taken.

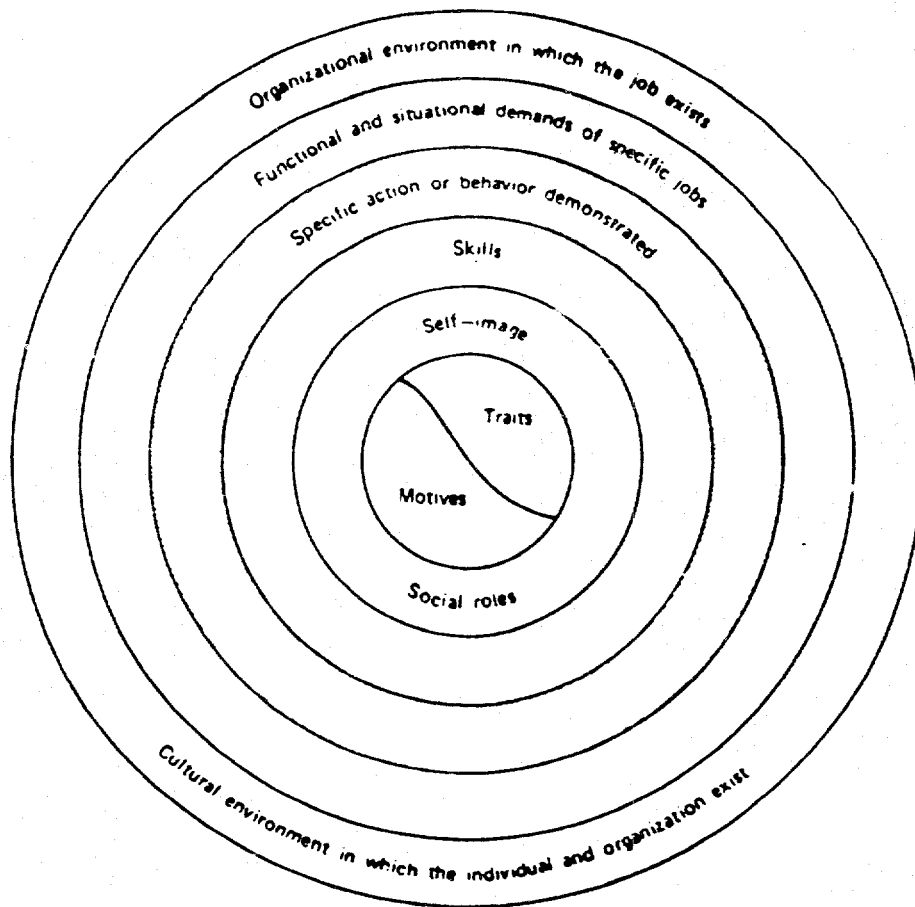
Unlike many behavior modification programs, the Workshop is based on the principle of "self directed change". All efforts to modify behavior are made entirely explicit and are entirely voluntary. Moreover, it is emphasized from the outset that it is impractical to seek to change more than 2 or 3 specific behaviors in a program of 80 hours. As a result, participants are encouraged as they go through each of the modules to experiment with new behaviors, decide which if any of the PECs they wish to strengthen, and only then to map out a specific plan for strengthening those PECs. This approach is consistent with the finding that realization of discrepancies between the ideal and the real with respect to individual characteristics can lead to a perceived need for change and to effective behavioral change. Also essential to the design of the current program is the finding of a subsequent study that such self-directed change depends critically on the existence of suitable instruments or other methods by which individuals can measure the extent to which they possess a particular competency and their progress in acquiring it.

b. Competency Based Learning

Since the early 1970s, the concept of competency based learning has received considerable and increasing currency. It begins with the notions that performance is better judged by deed than by declaration, that knowledge is of practical utility only when embodied in action, and that the factors responsible for effectiveness in particular jobs can be isolated and described in behavioral terms. It is further predicated on the premise that the best way of training people to do a job is to study the actual behavior of those individuals who do the job well and then teach individuals to acquire the characteristics of these "superstars".

Klemp defines a job competency as "an underlying characteristic of a person which results in effective and/or superior performance in a job."⁹⁴ Boyatzis goes on to distinguish a general competency from a threshold competency, which is defined as "a person's generic knowledge, motive, trait, self-image, social role, or skill which is essential to performing a job, but is not causally related to superior job performance."⁹⁵

As the following illustrates, each competency is regarded as existing simultaneously at three levels, with motives at the unconscious level, self-image at the conscious level and skills at the behavioral level.



Dynamic Interaction of Components of Job Performance and Levels of Competencies

Competency based learning asserts that basic characteristics underlie specific, observable behaviors, that these characteristics condition an individual's predisposition to display particular behaviors, and that these characteristics can be taught. Competency based training can therefore proceed by focusing on any or all of the three levels noted above and often

entails an effort to approach a specific competency in terms of all three levels simultaneously.

A number of scholars and practitioners have contributed to the translation of the general principles of competency based learning into a specific model for the provision of behavioral training. The result has been the development of a Competency Acquisition Process that includes the following six stages:⁹⁶

1. Recognition of the Competency. To provide participants with an opportunity to form clear concepts of the desired knowledge, behaviors, skills, or thought patterns through recognition of the competency in the specific thoughts and actions of superior target-job incumbents in actual situations.
2. Understanding of the Competency. To provide participants with an understanding of how the competency relates to performance and the types of situations that require competency demonstration.
3. Self-assessment or Instrumented Feedback on the Competency.
 - a. To provide an opportunity for participants to determine where they stand--whether they have the competency and to what degree
 - b. To provide an opportunity to formulate the discrepancies between the ideal (possession and demonstration of the competency) and the real (where the participant stands now)--the springboard of self-directed change
4. Experimentation with Demonstration of the Competency. To provide participants with an opportunity to try new behaviors: this may mean experimenting with ways of thinking and acting that are different from those used previously, or expanding the range of thinking and acting related to the competency
5. Practice Using the Competency.
 - a. To provide an opportunity for participants to practice using the competency in a variety of situations and under a variety of conditions
 - b. To provide an opportunity to refine and to continue to develop the ways of thinking and acting characteristic of the competency, with continuing self-assessment of performance
6. Application of the Competency in Job Situations and in the Context of Other Characteristics.
 - a. To provide participants with an opportunity to integrate the competency with other competencies, thoughts, and behaviors in real job situations
 - b. To provide for an ongoing plan of goal setting and practice for continued competency development.

Training for each of the 10 modules included in the Entrepreneurship Workshop follows this six step cycle. In the "recognition stage" videotapes, role plays and case studies are used to sharpen participants' ability to recognize the PEC in question. In the "understanding stage" lecturettes and discussions are used to explore the significance of the PEC for participants' past and future activities. Diagnostic instruments and exercises are used during the "self-assessment stage" to help participants evaluate their current strengths and weaknesses; and a Personal Improvement Workbook is used to plan strategies for strengthening individual PECs.

During the "experimentation stage" of each module, a variety of simulations and real life exercises are used to assist participants in applying a given PEC effectively and in observing the consequences. The "practice stage" includes a series of increasingly complex applications of the characteristic. A Business Creation Exercise where participants actively conceive and implement innovative micro-businesses, is used as a transition to the sixth stage, "application on the job", and provides for the integration of a number of the PECs in an actual business situation.

Participants are encouraged throughout the course to begin applying the PECs to their ongoing businesses or business ideas and are assisted in developing written business plans. An "action planning module" at the end of the course further assists them in making plans for the application of the PECs in launching or improving their businesses.

c. Cross-Cultural Training

Webster's Dictionary defines culture as "the integrated pattern of human behavior that includes thought, speech, action and artifacts and depends on man's capacity for learning and transmitting knowledge to succeeding generations." Given the nature of entrepreneurship and the role typically played by social groups in its development and transmission, it is both informative and useful to approach entrepreneurship as a culture or sub-culture with distinctive patterns of thought, speech and action often somewhat "foreign" to those most prevalent in particular countries, localities, ethnic groups, gender groups or social classes.

By their nature, cultures tend to perform a stabilizing role in society and to change only over time and in response to substantial pressure or incentive. They are normally transmitted in the first instance by parents to

their children and, in the second instance, by exposure to broader community institutions and practices. A culture is typically invisible to its members and defines many of their unspoken assumptions about the world. In the words of the oft-quoted Japanese kohan:

There are three great mysteries in the Universe:
Water to the fish,
Air to the bird, and
Man to himself.

Regarding entrepreneurship as a culture adds additional significance to the concepts of "first generation" and "second generation" entrepreneurship presented in Chapter 2. In second generation entrepreneurship, normal cultural forces (e.g., families, schools, social and religious groups) can be counted on to convey key aspects of entrepreneurship to new members. In the case of first generation entrepreneurship, however, these resources are unavailable and an alternative means must be sought to facilitate the desired acculturation. Available options are essentially altering the pattern of sanctions and incentives and waiting for prevailing behavioral norms to accommodate themselves to these changes and/or undertaking specific efforts to promote cultural change at the level of the individual by means of education, training and exposure.

While acknowledging the value of institutional and structural change, behavioral training in entrepreneurship implicitly assumes that there is some value to seeking change directly at the level of the individual as well. Since the effort can be seen as an attempt to assist individuals to be effective in (and eventually to become assimilated into) a foreign culture, the literature on cross-cultural training is of direct relevance and applicability.

Two major conclusions emerged from a review of the available research on cross-cultural training. First, it was found that cognitive learning strategies alone had limited effectiveness in promoting the desired behavioral change; and, second, it was found that a lack of self awareness and stereotypes constituted the largest barriers to cultural understanding and adaptation.

The behavioral training program which forms the basis of this research was designed to build on and reflect these principles of cross-cultural training. Among the devices used for this purpose, the most relevant are:

- a variety of experimental activities intended to make participants aware of their own beliefs, attitudes and values;
- the use of role playing and videotaping to elucidate the effects of the likely "cross-cultural conflicts" provoked by displays of entrepreneurial behavior within the prevailing culture;
- use of presentations and videotapes of successful entrepreneurs in the host culture and in other cultures;
- active and open discussion of the stereotypes associated with entrepreneurial behavior and the relationship of the PECs taught to participants' current values, beliefs and norms;
- use of the Business Creation Exercise and a variety of other mechanisms to encourage contact with, and discussion of, the prevailing business culture;
- the persistent use of business terminology and businesslike behavior to create and positively reinforce a microculture of entrepreneurship within the Workshop itself; and
- the provision for support groups and follow-up designed to preserve a sense of "belongingness" when participants return to environments more hostile to the display of entrepreneurial behavior.

d. Adult Learning

Within the broad field of adult learning, two areas are particularly relevant to the current research: andragogy and action learning.

The concept of "andragogy" (as distinct from "pedagogy") was first articulated in 1970 by Malcolm Knowles as a way of systematizing the available research data on the distinctive characteristics of how adults learn.⁹⁷ It has subsequently been the basis for literally thousands of research studies and for numerous operational programs in industry, education, government and the military. Some of the basic tenets of andragogy and their operational implications can be summarized as follows:

TENETS

1. Effective adult learning is self-directed. Faced with a classroom situation and an obvious authority figure, however, adult learners may instinctively revert to a role of dependency objectives:

2. Adults bring to training a wealth and diversity of experience, and feel this experience represents an important source of their self-identity. Learning is maximized when participants can relate the "new" to what they already know.

3. Adults will learn effectively only when they experience a need to know or do something.

IMPLICATIONS

a. Importance of relevant climate setting activities;

b. Need to involve participants in formulation of learning;

c. Value of "training contracts".

a. Importance of techniques such as group discussion, simulation, laboratory experiences, problem solving projects, and the like;

b. Need for individualized learning plans to reflect group diversity;

c. Need for strategies to help people transcend their own experience and preconceptions.

a. Importance of needs assessment;

b. Possible use of techniques to induce need to know (e.g. exposure to role models, career planning and diagnostic experiences);

c. Value of organizing curriculum around life experiences rather than according to subject matter units.

These principles and recommendations were directly applied in the design of the current course.

Action learning is defined by its developer, Reginald Revens, as:

Subjects learn with and from each other by mutual support, advice and criticism during their attacks upon real problems, intended to be solved in whole or in part. The learning achieved is not so much an acquaintance with new factual knowledge nor technical art conveyed by some authority such as an expert or a teacher (although such fresh acquaintance is not ruled out), as it is the more appropriate use, by reinterpretation, of the subject's existing knowledge, including his recollections of past lived experiences.⁹⁸

Many of the key assumptions of action learning parallel, and build on, the basic tenets of andragogy noted above. In addition, however, action learning entails a number of additional features and prescriptions that were employed

in the design of the behavioral training program developed as part of this research. Particularly significant are the following:

- Emphasis on real tasks such as the business creation exercise, participants' own business plans, and real presentations to bankers and investors.
- An emphasis on action (i.e. carrying out solutions) as well as theoretical solutions to problems (i.e. specifying solutions).
- A concentration on problems that do not have a single "correct" or "textbook" solution.
- Inclusion of genuine risk of penalty for failure in the problems and tasks presented to groups or individuals as a means of increasing the realism of the exercise and its likelihood of reflecting participants' true attitudes and motivations.
- Minimizing the intervention by "experts" who have no real responsibility for the real life actions at issue.

3. Selection of PECs

For reasons described above, the central approach towards behavioral training in this research revolved around the concept of personal entrepreneurial characteristics, or PECs. It was an initial premise of the research, and hence of the training program, that behavioral training would be most effective by concentrating on the systematic strengthening of specific PECs associated with successful entrepreneurial behavior.

Initial investigation indicated that there had been few rigorous attempts to identify PECs in an empirical manner, particularly in developing country contexts. As a result, the decision was taken to place considerable emphasis on the McBer research as a source of PECs for the training program. It was also recognized, however, that there were inherent difficulties and limitations involved in the research conducted by McBer. As a result, it was decided to include PECs identified by the McBer research only where these PECs were independently identified by several other researchers as well, and to retain the option of including PECs for which a preponderance of evidence existed, even if these PECs were not featured in the McBer findings.

The Entrepreneurship Workshop was ultimately designed to focus on ten Personal Entrepreneurial Characteristics (PECs). These PECs were chosen by means of a four step process. First, a thorough review was made of the research conducted by McBer and Company to determine those characteristics that emerged from their research in India, Ecuador and Malawi. This investigation yielded an initial list of 20 characteristics. To this list

were added three additional characteristics -- goal setting, moderate risk taking, and independence -- which had received substantial validation in previous research studies and for which a preponderance of substantiating evidence existed. The 23 characteristics chosen in this manner as an initial list of PECs included the following:

-
- | | |
|------------------------------------|--|
| ■ initiative | ■ persuasion |
| ■ opportunity seeking | ■ use of influence strategies |
| ■ persistence | ■ assertiveness |
| ■ information seeking | ■ monitoring |
| ■ concern for high quality of work | ■ credibility, integrity, and sincerity |
| ■ commitment to work contract | ■ concern for employee welfare |
| ■ efficiency orientation | ■ providing training for employees |
| ■ systematic planning | ■ recognizing the importance of business relationships |
| ■ problem solving | ■ goal setting |
| ■ self-confidence | ■ moderate risk taking |
| ■ expertise | ■ independence |
| ■ recognizing own limitations | |
-

This list of PECs was consolidated to 15 by combining certain PECs and deleting others. In this process, PECs were deleted only when there appeared to be no plausible means of addressing them during a relatively brief behavioral training program. The PECs combined or deleted during this stage of program development were the following:

- recognizing own limitations (included as an aspect of self-confidence)
- expertise (deleted)
- monitoring (included as an aspect of systematic planning)
- credibility, integrity and sincerity (deleted)
- concern for employee welfare (deleted)
- providing training to employees (deleted)
- recognizing the importance of business relationships (included as an aspect of use of influence strategies)
- independence (combined with self-confidence)

In early 1985, a comprehensive behavioral training program was designed based on the consolidated list of 15 PECs. The program was designed to be 80 contract hours in length and to build on the lessons learned during the initial part of the research concerning the structure and content of the most ostensibly successful of the existing programs. In particular, the learning method and module structure were based heavily on available research on trait acquisition, and competency-based training, cross-cultural training and adult learning (see pages 72 and 74) while program structure and duration drew extensively on the experience amassed by other EDP programs, most notably:

<u>Institution</u>	<u>Country</u>
UP/ISSI	Philippines
EDII	India
XISS	India
NPC	Indonesia
MARA	Malaysia
IIDA	Ireland
HETADI	USA (Hawaii)
Entrepreneurship Institute	USA (Ohio)
Venture Founders	USA (Washington, DC)

Individual exercises and training materials were drawn, wherever possible, from tested programs. These programs included the EDP programs listed above as well as an eclectic list of behavioral training programs covering subjects as diverse as negotiation, sales, personal growth and wilderness survival. A partial listing of the materials that were reviewed and used for this purpose includes the following:

PEC**SOURCE**

1. Initiative	EST Training
2. Opportunity Seeking	Trac, Inc. (Megatrends)
3. Persistence	U.S. Navy Officers' Training
4. Information Seeking	MTDI ATID Seminar
5. Concern for Quality	AMA Seminar on Quality Circles
6. Commitment to Work	Junior Achievement
7. Efficiency Orientation	ADL Operations Engineering Training
8. Systematic Planning	MSI Management Skills Training
9. Problem Solving	University Associates
10. Assertiveness	Amway Training
11. Persuasion	Getting to Yes
12. Use of Influence	Situation Management Systems Strategies
13. Self-confidence	Outward Bound
14. Moderate Risk	McBer AMT Taking
15. Goal Setting	Coverdale

The training program developed in this way was tested during the 1985 workshop in Cranfield, England which was attended by trainers from Malawi as well as experienced entrepreneurship trainers from India, Ecuador, the Philippines, Malaysia, Kenya, England and the United States.

The program participants were introduced in detail to the proposed training program. To ensure that the program was full pilot tested and that participants would provide as much feedback as possible, quality circles were developed to present the various modules and to make recommendations for the improvement of the course.

Several weaknesses in the original design were revealed during the Cranfield test, and a number of significant program modifications were made in the months following that field test. The most significant of these changes were the following:

- **Simplification:** the number of PECs included in the program was judged to be excessive for a course of the intended length. A decision was accordingly made to reduce further the number of PECs included in the program, to group the PECs for pedagogical purposes into three "clusters", and to encourage and assist each participant to select two or three PECs for particular emphasis.
- **Increased focus on business applications:** the initial design included a number of games and behavioral exercises that, while relevant to the PECs being taught, did not involve direct application of those behaviors in business contexts. Participants' difficulty in transferring insights gained from such games and exercises to realistic business situations proved to be greater than expected, and virtually all of the games, exercises and simulations included in the

program were modified to focus directly on relevant business applications of the PECs involved.

- **Reinforcement of specific behavioral changes:** the program's strategy for behavioral change is embodied in the 6-step learning cycle described in Chapter 3 which begins by teaching participants to recognize the PEC in question and understand its relevance to successful entrepreneurship, then to diagnose their current strengths and weaknesses vis-a-vis the PEC, to experiment with the optimal use of the PEC, to practice the PEC in a variety of controlled situations and finally to apply it on the job. The original design was judged to focus relatively too much emphasis on self-diagnosis thereby leaving insufficient time for experimentation and practice with the new behaviors. The program was redesigned to correct this imbalance.

In making a further consolidation of PECs, primary consideration was given to pedagogical concerns. In particular, PECs were combined or deleted where it had proven impossible or impractical to distinguish unambiguously one PEC from another, or where initial experience suggested the possibility of certain PECs being misinterpreted or used in a counter-productive manner. In addition, a pedagogical distinction was made at this time between PECs which appeared to be "teachable" behaviors and those concerning which it appeared to be impractical to do more than raise the awareness of participants. Although the latter set of PECs were retained in the program, the curriculum was adjusted to concentrate on the first three steps of the learning cycle (recognition, understanding and self-assessment) when addressing these PECs.

In modifying the preliminary list of 15 PECs to yield a final list of ten, the following changes were made:

- The PEC entitled "initiative" was deleted because, in practice, it proved impossible to distinguish it from two other key PECs -- "opportunity seeking" and "information seeking". It was decided that the latter two PECs were both more specific and more "teachable" and should therefore be the ones retained in the program.
- The "problem solving" PEC was deleted because it proved to be impossible for participants, trainers or researchers to distinguish relevant expressions of the PEC from trivial ones. As a compounding difficulty, it was observed that the manifestation of virtually every other PEC simultaneously constituted problem solving of some sort. Since no meaningful way could be found to "recognize" this PEC, its incorporation in the program was rejected as impractical.
- The PECs of "concern for quality" and "efficiency orientation" were combined into a single PEC, "demand for quality and

efficiency" to emphasize the operational trade-offs between quality and efficiency and to reflect the observation that the two characteristics involved are frequently manifestations of the same behavioral predisposition to improve upon current standards and practice.

- The PECs of "persuasion" and "use of influence strategies" were combined into a single PEC, "persuasion and networking", inasmuch as the use of influence strategies is easily conceived as a form of persuasion and, in practice, the two PECs appear to be behaviorally indistinguishable.
- the PEC entitled "assertiveness" was deleted because it was found to be difficult or impossible to teach this PEC in an appropriate way without a detailed knowledge of the particular culture in which one was operating.

These changes resulted in a final list of PECs that included the characteristics and behavioral indicators listed below.

The program was modified during late 1985 and early 1986 to correspond to this reduced and modified list of PECs and to incorporate the other structural changes noted above. New modules and exercises were subsequently field tested by incorporating them into existing training programs in Kenya, Senegal, England and the United States. Further revisions were made in light of this experience, and the full package was assembled for implementation in Malawi in July, 1986.

PERSONAL ENTREPRENEURIAL CHARACTERISTICS AND BEHAVIORAL INDICATORS

Achievement Cluster

Opportunity Seeking and Initiative

- Sees and acts on new or unusual business opportunities
- Acts before being asked or forced to by events

Persistence

- Takes repeated actions to meet a challenge or overcome an obstacle
- Switches to an alternative strategy to reach a goal

Risk Taking

- States a preference for situations involving a challenge or moderate risk
- Deliberately calculates risks
- Takes action to reduce risks or control outcomes

Demand for Efficiency and Quality

- Find ways to do things better, faster, or cheaper
- Acts to do things that meet or exceed standards of excellence or improve on past performance

Commitment to the Work Contract

- Accepts full responsibility for problems in completing a job
- Makes a personal sacrifice or expends extraordinary effort to complete a job
- Pitches in with workers or in their place to get a job done

Planning Cluster

Goal Setting

- Articulates clear, long range visions and goals
- Continually sets and revises short range objectives

Information Seeking

- Personally seeks information on clients, suppliers, competitors
- Uses personal and business contacts to obtain useful information

Systematic Planning and Monitoring

- Plans by breaking a large task down into sub-tasks
- Keeps financial records and uses them to make business decisions
- Develops or uses procedures to monitor that work is completed or that work meets standards set

Power Cluster

Persuasion and Networking

- Uses deliberate strategies to influence or persuade others
- Uses business and personal contacts as agents to accomplish own objectives

Independence and Self-Confidence

- Seeks autonomy from the rules or control of others
- Sticks with own judgement in the face of opposition or early lack of success
- Expresses confidence in ability to complete a difficult task or meet a challenge

As eventually offered, the Entrepreneurship Workshop was an 80-hour "stand-alone" program for identifying and expanding participants' potential to initiate and improve small businesses or other entrepreneurial activities. It was designed to be an opportunity for individuals to become more familiar with the behavioral characteristics of successful entrepreneurs; to look for, recognize and "code" these behaviors in themselves and in others; to strengthen and enhance the behaviors they choose to work on through practice and reinforcement; and, finally, to apply these behaviors in their own businesses. The target audience for the program included established business-people, potential entrepreneurs and owners of start-up businesses.

As offered in Malawi and subsequently elsewhere, the program begins with an Assessment Center in which standardized instruments are used to assess participants' entrepreneurial strengths and weaknesses. (A three-stage application and screening process was also developed, although these techniques were not employed in the field research that forms the primary basis for this study.) The remainder of the Workshop is divided into three sections or "clusters" -- Achievement, Planning and Power -- and these clusters are further divided into detailed modules covering each of the 10 PECs included in the program.

The **ACHIEVEMENT CLUSTER** focuses on participants' willingness, ability and tendency to take initiative and to seek and attain improved quality, productivity, growth and profitability. The PECs included in this cluster are Opportunity Seeking and Initiative, Persistence, Risk Taking, Demand for Quality and Efficiency, and Commitment to the Work Contract. In this part of the Workshop participants learn to:

- Identify personal entrepreneurial potential: strengths and weaknesses.
- Identify or refine a personal business opportunity.
- Understand and reassess their personal risk taking behavior.
- Appreciate the importance of persistence and commitment to the work contract.
- Understand the relationship of quality and efficiency to one another and to entrepreneurial success.

The **PLANNING CLUSTER** is designed to strengthen the PECs associated with planning and managing the venture. The PECs included in this cluster are Goal Setting, Information Seeking, and Systematic Planning and Monitoring. In this part of the Workshop participants learn to:

- Evaluate their present planning and problem solving skills.
- Set clear long-term and short-term goals and objectives.
- Conduct an information search.
- Develop realistic business and operational plans.
- Identify creative solutions to actual business problems.
- Understand the importance of objective feedback on personal and business performance.

Finally, the **POWER CLUSTER** is designed to improve participants' ability to influence outcomes to their advantage: to get necessary cooperation, to optimize the use of personal networks, and to use improved influencing and negotiating strategies. The PECs included in this cluster are Persuasion and Networking and Independence and Self-Confidence. In this part of the Workshop participants learn to:

- Persuade others to cooperate.
- Network personal and business contacts.
- Develop effective negotiating strategies.
- Use assertiveness to advantage.

The **Business Creation Exercise** is a two week event that runs concurrently with the Entrepreneurship Workshop. While participants are strengthening their PECs inside the Workshop, they are simultaneously identifying, planning, and starting up a micro-business for profit. The Business Creation Exercise adds a challenging, but very realistic, dimension to the Entrepreneurship Workshop, and provides a dramatic opportunity to witness, diagnose and strengthen PECs in a true-to-life business context. In addition, participants are encouraged throughout the Workshop to apply lessons learned to their own businesses or potential businesses and are given a specially designed Business Planning Workbook and individual counseling to assist them in planning their ventures. An optional follow-up program provides further assistance and reinforcement to participants after the Workshop through a series of entrepreneur forums, newsletters, and one-on-one assistance.

The training method used in the Workshop is highly interactive and experiential. In place of lectures, the training uses structured exercises, power groups, video presentations, diagnostic tools, business events, questionnaires and other vehicles designed to identify PECs and enhance them through practice.

The Workshop was designed to be teachable in two weeks on a full-time basis, or on a part-time basis over a longer period of time to meet the

special needs and preferences of participants. It can also be usefully linked in a variety of ways to existing programs of management consulting, management training or technology transfer. The agenda for the full-time program is presented below. For practical reasons, the programs offered in Malawi were based on this continuous, full-time model.

A detailed description of the 29 modules included in the curriculum is included as Appendix II to this document. Additional training materials developed to support the delivery and institutionalization of the program include:

- a manual for installing and managing the program that includes chapters on developing community support and resources, recruiting and selecting participants, training and orientation of trainers, providing follow-up for the training program and evaluating program effectiveness;
- a participant's manual that includes a Readiness Handbook to be used by participants prior to the program, a Personal Improvement Workbook to be used daily in conjunction with the training program, and a Business Planning Guide which provides participants step-by-step instructions for preparing their own business plans;
- a Trainer Certification Program that includes the design for specific training of trainers activities and standardized procedures for trainer certification. The three stages of certification provided for are Trainer-in-Training, certified trainer (i.e. competent to provide the course) and Master Trainer (i.e. competent to train other trainers).
- a set of videotaped interviews with successful entrepreneurs illustrating each of the PECs taught in the workshop.

WEEK: # 1 OF THE ENTREPRENEURSHIP WORKSHOP

DAY # 1 Monday	DAY # 2 Tuesday	DAY # 3 Wednesday	DAY # 4 Thursday	DAY # 5 Friday
Inauguration	Risk Taking Goal Setting	Persistence BCE	Information Exercise Results Introduction to the Business Planning Workbook	Efficiency Achievement Cluster Review
Participant and Trainer Presentations and Expectations Workshop Background Objectives and Methodology	Opportunity Seeking Introduction to the Business Creation Exercise (BCE)	Information Seeking Information Exercise	Quality	Presenting the BCE Mini Business Plan

WEEK: # 2 OF THE ENTREPRENEURSHIP WORKSHOP

DAY # 6 Saturday	DAY # 7 Monday	DAY # 8 Tuesday	DAY # 9 Wednesday	DAY # 10 Thursday
Systematic Planning and Monitoring	BCE Implemen- tation Financial Planning	Power Map Persuasion Strategies	Individual Video Presenta- tions	Achievement, Planning and Power Clusters Review Action Planning
Commitment to the Work Contract	Financial Exercises Planning Cluster Review	Influence Strategies Exercises in Persuasion and Influence	Individual Business Consultations	Closing out of BCE Evaluations WORKSHOP CLOSE

B. Program Delivery

Between July, 1986 and March, 1989, the entrepreneurship workshop was conducted for participants from 18 countries in Africa, Asia, Latin America, the Middle East and the United States. In all, 505 individuals participated in these programs which were conducted in English, Spanish, French, and Wolof.

Given the relatively limited resources available for research on these programs, detailed investigation on program impact was confined to the two course offerings in Malawi which involve a total of 45 participants. The remainder of this Chapter -- and the research findings presented in Chapter 6 -- are based on these two course offerings which took place in the latter half of 1986.

A decision was made relatively early in this research effort to work wherever possible with and through in-country research and training institutions. The rationale for this decision was two-fold: to increase the relevance of the activities undertaken and to increase the probability that they would be institutionalized in the country, thereby making a more lasting contribution to national development. In Malawi, this objective led to the identification of several institutions with interest in, and potential capacity for, participating in the effort. These included:

<u>Institution</u>	<u>Area(s) of Interest</u>
Development of Malawian Traders Trust (DEMATT)	Training, follow-up Technical Assistance, Research
Malawi Entrepreneurship Development Institute (MEDI) & ILO	Training
Small Enterprise Development Organization of Malawi (SEDOM)	Credit
Industrial Development Fund (INDEFUND)	Credit
Commercial Banks	Credit
Center for Social Research of the University of Malawi	Research
Africare	Funding for follow-up

A decision was made to form a coordinating group of these institutions called the Entrepreneurship Training Consortium (ETC). DEMATT was to take responsibility for recruiting participants, managing the training and providing follow-up; local trainers were to be provided by DEMATT, MEDI and ILO; representatives from SEDOM, INDEFUND and the Commercial Banks were to nominate participants and constitute a "Bankers Panel" for reviewing trainees' business plans; and the Center for Social Research was to take responsibility for assisting in the collection of baseline and follow-up data. Other major decisions included the following:

- participants would include both existing and potential entrepreneurs and would include a reasonable distribution of men and women;
- one training program each would take place in Blantyre and Lilongwe, Malawi's two major cities;
- training would be confined to behavioral training in PECs; and
- in the interest of testing a "least cost" model, follow-up efforts would be kept to a minimum.

It was also noted that, given the realities of Malawi's economic profile, participants would, in practice, be drawn from groups that were, even by African standards, relatively poor and relatively inexperienced in entrepreneurship.

The research design, which is described in detail in Chapter 6, entailed selection of a pool of 90 applicants; collection of baseline data (background, economic activity and PECs) for these 90 individuals; random assignment of these individuals to "treatment" and "control" groups in each of the two cities; provision of training for the "treatment" groups; and collection of follow-up data (economic activity and PECs) on both treatment and control groups.

A number of potential participants were recommended by SEDOM and DEMATT from among their current clients and applicants. Others heard about the program through word of mouth or local advertising. Given limited time and budget for recruitment, however, the task of identifying 90 eligible participants proved to be a formidable one, and virtually all individuals who expressed an active interest in the program were included in order to constitute the initial pool of 90. A list of the participants

with their status in business, type of business and type of participation (i.e., control group or trainee) is presented in Appendix III.

Several Malawian trainers and an ILO expert assigned to Malawi participated in the entrepreneurship workshop's initial pilot test and training of trainers session held in Cranfield, England in 1985. These individuals participated actively in the Blantyre and Lilongwe training programs, although the bulk of the training in both cases was provided by Moses Thompson and Lawrence S. Cooley, both of whom are employees of MSI in Washington, D.C.

6. EVALUATION OF EXPERIMENTAL PROGRAM

A. Design of Impact Assessment

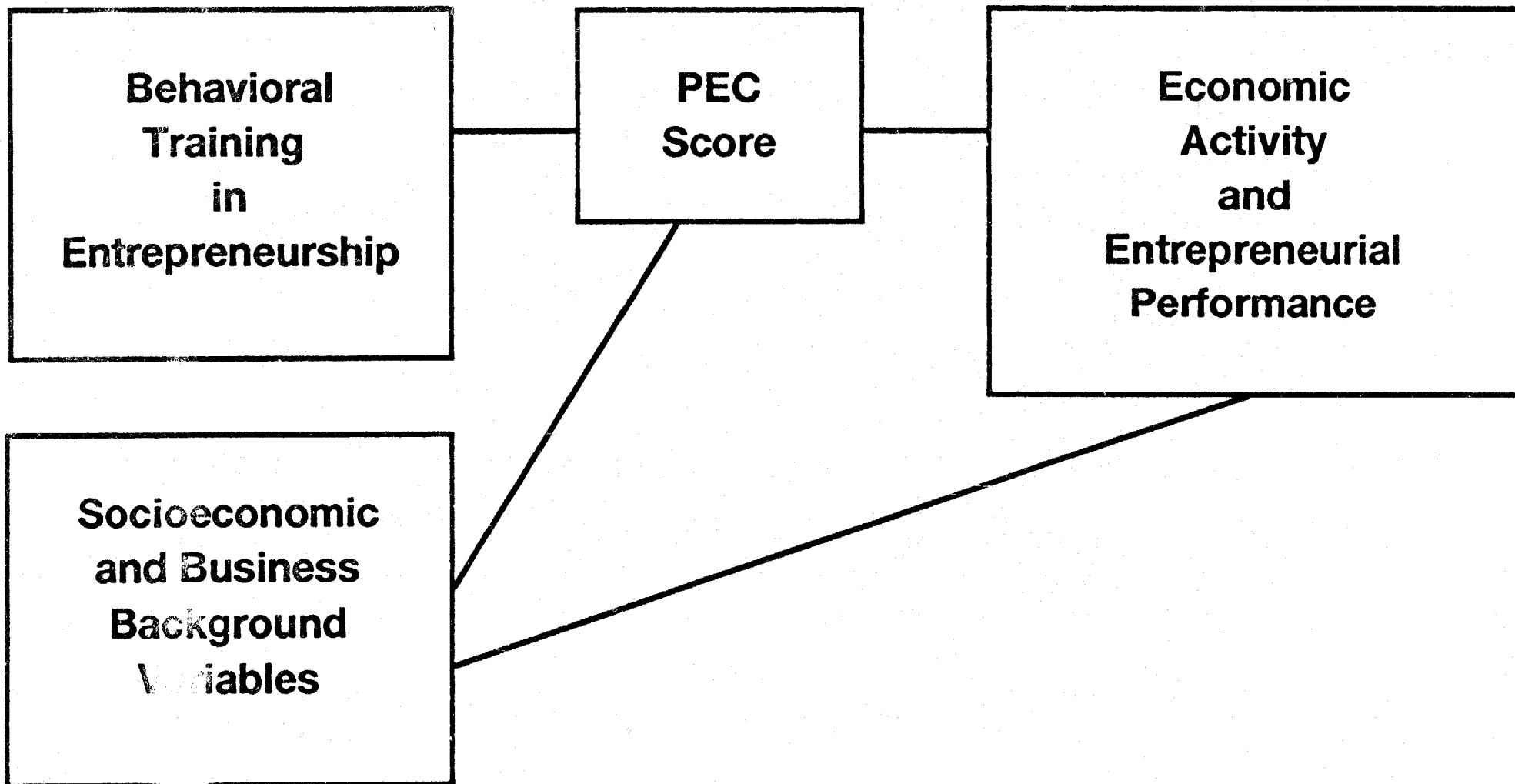
1. Study Objectives

The primary questions addressed in this study are: (1) can behavioral approaches to entrepreneurship training produce a significant positive impact on entrepreneurial performance and (2) if so, what exogenous and endogenous variables influence the impact of such training? The latter question entails the testing of hypotheses regarding the relative impact of the training program on individuals differing in terms of entrepreneurial aptitude, business experience prior to training, education, wealth and age, as well as an assessment of the training process itself. Related questions addressed in the study are the nature of the relationships between changes in Personal Entrepreneurial Characteristics (PECs) and changes in entrepreneurial performance, and the nature of changes in PECs over the course of the study period.

A conceptual model underlying the research is shown in Figure 6.1. The basic hypothesis of the program is that it is both possible and feasible to augment the performance of existing and potential entrepreneurs through behavioral training. The training program is intended to modify the entrepreneurial aptitude and behavior of program participants, which, in turn, is expected to result in improved entrepreneurial performance. While these changes in entrepreneurial behavior are hypothesized to be reflected in changes in the PECs of program participants, the research is also intended to test the possibility that there is an impact of behavioral training on economic performance that cannot be measured through changes in PECs. In the conceptual model guiding this research, socioeconomic and business background variables are treated as exogenous factors.

FIGURE 6.1

PROJECT CONCEPTUAL MODEL



2. Research Design

The basis for this study was a quasi-experimental research design. The basic design, illustrated in Figure 6.2, featured the comparison of changes in economic activities/entrepreneurial success for two experimental groups: (1) a treatment group that received the entrepreneurship training program (represented by the "X" in Figure 6.2) and (2) a randomly assigned control group that did not participate in the training program.

Figure 6.2 -- Original Research Design

(The "E"s are the data points for the treatment group and the "C"s are the data points for the control group.)

E(1) X E(2) E(3)

C(1) C(2) C(3)

Where: X = the project intervention (i.e. the training program)
C and E(1) = baseline measures of all variables (including PECs)
C and E(2) = 6-month measurement of PECs, economic activities and entrepreneurial performance
C and E(3) = 24-month (final) measurement of PECs economic activities and entrepreneurial performance

Subsequent review of the data collected in the intermediate round of data collection suggested that their use in the final analyses was unlikely to contribute significantly to a meaningful assessment of project effects and impact. Accordingly, these data are not considered in the analyses presented here. The modified research design thus is equivalent to a classic pre-test/post-test quasi-experimental design featuring two experimental groups with two sets of measurements taken 24 months apart. The measures of impact for the study are derived by comparing the pre-training measurements of PECs and economic indicators for the two groups with those obtained at the conclusion of the 24-month study period.

3. Indicators

At the outset of the study, a variety of entrepreneurship/business performance indicators of varying levels of complexity and refinement were considered. The most refined (and preferred) measure considered was net

business income. Increasingly less refined measures considered included gross business sales, employment, entrepreneurial activities and responsibilities (i.e. number and nature of business involvements) and fixed investment. Subsequently, some of the more refined indicators were excluded based upon an evaluation of the baseline survey data which suggested that they could not be measured with a sufficient degree of accuracy. To a large extent, this difficulty was attributable to the lack of written business records in Malawi and the relative lack of business sophistication on the part of those interviewed.

Ultimately, two economic performance indicators are used in the analyses reported in this document: change in employment and change in sales. While the employment data showed normal levels of variation, sales data were characterized by isolated cases of extreme values ("outliers"). (See Appendix V for raw data and frequency distributions). The use of such data with conventional multivariate analysis techniques would have seriously distorted the findings of the study in a positive direction. In view of this, a dichotomous variable was created to distinguish study subjects who achieved above average increases in sales (measured in terms of the median) from those whose growth in sales was below average. Alternatives to bivariate grouping were also explored, but were ultimately rejected for reasons discussed below.

The transformation of economic data into dichotomous variables served an additional function of insulating the sales measure from changes in the general economy of Malawi. In the economic data denominated in nominal currency values, the measurement of change is obscured by general inflation, differences in inflation rates among various commodities, and changes in exchange values. These effects can combine to affect socioeconomic groups differently and thus obscure the meaning of observed magnitudes of change. Given the small sample size and the ambiguity of how inflation and other economic factors have affected nominal currency values, it was judged most prudent to base the analysis on a measure that identified individuals who experienced positive or negative changes relative to one another.

Several tests were run to see if this transformation was meaningful. Other measures were tested such as: scaling, use of raw data with elimination of outliers, and dichotomous variables based on percentage change rather than absolute change. These alternative measures produced no useful

analysis. The variability of the data made credible outlier adjustment an arbitrary process with study results excessively dependent on how such adjustments were made. Attempts at scaling the data appeared equally arbitrary. Finally, the ranking of cases based on percentage change, rather than absolute change, produced a measure that bore no relationship to the other study variables since there were many cases with very low levels of economic activity, where virtually any increase in sales represented a large increase in percentage terms.

A similar dichotomous variable was created for change in employment to distinguish those study 17 subjects whose ventures created an increase in employment from those 30 with zero or negative growth. These two variables were then used as dependent variables in the regressions used to measure the net project impact on economic performance.

Background variables included in the analysis included: age, sex, education, and whether the respondent's father and/or mother owned a business. These variables were used both as control variables in measuring the net effects of the project training program on business performance and in assessing the extent of interactions between training and background variables.

Changes in entrepreneurial aptitude were measured by changes in PECs. Since the measurement of PECs took place at two points in time for both the treatment and the control group, the comparison of changes in PECs for the two experimental groups permitted the control of any "testing" and "maturation" effects (as measured by changes in PECs for the control group).

Finally evidence of entrepreneurial behavior were assessed by respondents' answers to questions concerning significant changes in products, production processes or marketing techniques during the six months prior to the follow-up survey.

The operational definitions of all variables included in the regression analyses are provided in Figure 6.3. Frequency distributions for the variables may be found in Appendix V.

Figure 6.3 -- Operational Definitions of Variables Used
in the Analysis

<u>Variable</u>	<u>Definition</u>
Age	Continuous variable measured in complete years.
Sex	1 = Female, 0 = Male.
Education	1 = Post secondary, 0 = secondary or less.
Father Owned Business	1 = Yes, 0 = No.
Mother Owned Business	1 = Yes, 0 = No.
Experimental Group	1 = Treatment group, 0 = Control group.
PEC Scores	Individual PEC scores measured on scale ranging from 1 to 5; Total PEC score derived by summing the 10 individual PEC scores.
Change in PEC Scores	Difference between baseline and followup PEC scores ($P_2 - P_1$).
Entrepreneurial Behavior	Evidence of significant innovation during 6 month period prior to follow-up survey
Change in Employment	Difference between number of employees reported in the baseline and followup surveys; coded "1" if employment increased and "0" otherwise (see text).
Change in Sales	Difference between gross sales reported in the baseline and followup surveys; coded "1" if the change exceeded the median change of K 451 and "0" otherwise.

Changes in variables, rather than their absolute levels, are used to identify training effects. Had levels been used, the analysis would have produced findings that confirm (or deny) the notion that highly entrepreneurial individuals have relatively higher PECs, that highly entrepreneurial individuals tend to be relatively more successful, or that relatively high PEC scores tend to identify individuals who are relatively more successful economically. These were not the study hypotheses. The central questions concern whether the training changed PECs and whether change in PECs appears to lead to relatively superior performance.

4. Data Collection

In July, 1986, detailed baseline interviews were conducted with 90 individuals who had expressed interest in the program (see Appendix I.A and I.B). These interviews averaged 2 1/2 hours and included detailed background information on the individual and his or her family, a profile of the interviewee's current and past economic activities, an assessment of each individual's current level of income, and a profile of each individual's current level on each of the 10 PECs included in the training program. This latter portion of the interview was based on the use of a one hour procedure called the Focused Interview Technique (FIT) developed by McBer and Company as a selection instrument for identifying entrepreneurial potential (see Appendix I.E).

The individuals conducting the baseline interviews had received detailed instruction in the administration of the Focused Interview Technique and were given complete oral and written instructions for carrying out the remaining portions of the interview. Data from the baseline interviews were sent back to Washington, D.C. for coding, processing and analysis.

Each individual was assigned a control number from 1 to 90 based on the order in which they were interviewed. A random number table was then used to select 45 of these individuals for inclusion in two treatment groups, 21 in Blantyre and 24 in Lilongwe. When nine of these individuals subsequently proved to be unable to attend the program on the scheduled dates, these individuals were re-assigned to the control group and nine additional individuals were selected randomly to participate in the training program.

As a cross check on the quality of the PEC interviews, the number of individuals conducting these interviews was limited to three, and two of these individuals participated in each interview. Initial interviewer training stressed proper coding of the PECs and inter-code reliability. Nevertheless, some problems existed in coding, and interviewer notes were used in several cases to re-code portions of interviews. In an effort to minimize uncertainty about future coding exercises, a decision was subsequently made to tape record future FIT interviews to permit expert review on a selective basis.

An extensive consistency check was carried out with regard to the background and economic positions of the baseline interview. New interviewers were chosen and sent to re-interview 10 of the individuals

interviewed during the baseline data collection. These interviewers were not given access to the data obtained from the original interviews. An analysis of the data collected during "cross check" interviews indicated a very high level of consistency with the data originally collected and thereby strengthened confidence in the quality of the original data collection effort.

In August and September, 1988, the final round of data collection was completed with workshop trainees and control group members. The data collection was done by two senior MSI employees -- Bonnie Daniels and Barbara Brown -- who spent eight days in Lilongwe and seven days in Blantyre interviewing respondents.

Every effort was made to achieve the highest possible response rate while at the same time being sensitive to the demands of respondents' businesses and busy schedules. Interviews were conducted at the convenience of the respondents. They were conducted in their homes, at their businesses, at the data collectors' hotel or at an intermediate location (such as a restaurant during their lunch hour), at any time of the day or evening, and on week-ends as well as weekdays. When necessary, transportation to and from the interview site was provided. Most interviews were conducted in English, however three were conducted in Chichewa, the local language, with the assistance of translators.

Attempts were made to interview all of the 90 initial (45 trainees and 45 control group members) respondents. Twenty-eight were not able to be interviewed for the following reasons:

- 5 moved within Malawi (but too far away to be interviewed)
- 6 moved out of Malawi
- 3 refused
- 9 not able to obtain information on current location, despite repeated efforts
- 4 temporarily out of town or on maternity leave.

Thus, a total of 62 interviews were conducted, 31 with trainees and 31 with control group members.

A three-part interview lasting approximately two hours was conducted with each respondent as follows:

- a one hour Focused Interview to measure PECs;

- a 30-45 minute Follow-Up Questionnaire (see Appendix I.C), similar in format and content to the baseline Background Interview conducted in 1986; and
- a 20-30 minute Supplemental Interview, the version administered depending upon whether the respondent was a trainee or control group member (both versions included as Appendix I.D). This questionnaire ascertained how, if at all, trainees had used the information and skills taught in the Entrepreneurship Workshop; for both trainees and control group members, whether they had received any training or other assistance (personal or institutional) in the past two years; and the major problem they currently faced in making their business succeed or do better.

The Focused Interviews were co-validated in the field by the two data collectors to ensure compatibility of scoring. To further increase the reliability of comparing the 1988 PEC data with the 1986 baseline PEC data, the data collectors re-validated the coding of the initial 1986 interviews by verifying textual data recorded at that time.

Six month sales figures and information on number of employees were among the data points collected for each enterprise during both the 1986 baseline data collection effort and the 1988 final data collection. In the initial stages of the analysis it was realized that a useful data point to generate for each individual would be the total number of employees that s/he had from all businesses s/he owned as a measure of total employment generated and revenue earned. Therefore, the following coding decisions were made to generate this variable and applied to all cases in both 1986 and 1988:

- For each respondent, the total number of part-time, full-time, and intermittent employees in all businesses s/he owned were added together to constitute one figure for each category of employees; and
- For each respondent, sales figures for all the businesses s/he owned were added together to generate one overall sales figure for a specific period of time.

5. Data Analysis

The bulk of the analysis presented below involves the comparison of changes in PECs and selected measures of entrepreneurial performance treatment and control groups, with personal and business background data characteristics used as statistical controls and in the assessment of interactions.

- **Statistical techniques used:** In view of the multivariate nature of the hypotheses being tested, multiple regression is the basic statistical tool used in the study. This facilitates the

estimation of the portion of observed changes in entrepreneurial performance attributable to the training program (i.e. the net program effect). Analysis of covariance techniques are used to assess the extent of differential program effects (i.e. interactions) for different subgroups of participants.

- **Focus on "in-business" cases:** It was anticipated that separate analyses would be performed to assess the magnitude of program effects on "in-business" study subjects relative to study subjects that were "not in-business" at the time of the training. However, due to relatively high sample attrition among the 29 individuals originally in the potential entrepreneur group; the fact that only 6 of the remaining 16 individuals in the "potential entrepreneur" category had received the training program; and the fact that only 1 of these 6 individuals (and none of the 10 individuals from the corresponding segment of the control group) began a business during the study period, there was very little left to analyze. Accordingly, the analysis focused on subjects who were already involved in entrepreneurial undertakings at the outset of the study.
- **Effect of sample attrition:** Since "dropouts" in studies such as the present undertaking tend to be selective on one or more of the characteristics related to the project outcome (as opposed to being randomly distributed), it is important for analytical purposes to have some indication of how dropouts differ from "retainees". Accordingly, special attention is paid to the nature and implications of sample attrition in the analysis and presentation of the study findings.
- **Changes in PECs:** Changes in PECs for treatment and control group subjects are compared to assess the extent of differential change. The background variables described above are then added to regressions to measure the net differential change in PECs when other factors are considered and the extent of project-background factor interaction.
- **Entrepreneurial behavior:** Data on the incidence of significant innovation is presented along with other descriptive information on the activities of program participants in order to provide additional insight into the possible effects of training activities on program participants.
- **Economic performance:** Changes in economic performance indicators are then examined. Regression analyses are undertaken to assess: (1) the gross impact of the training program on economic performance; (2) the extent to which gross differentials in sales and employment persist when the effects of background factors are taken into account; (3) the extent of project-background factor interactions; and (4) the relationship between changes in PECs and changes in economic performance indicators.
- **Levels of statistical precision:** In the statistical tests performed in the course of the analysis, a standard of 95 percent confidence ($p < .05$) is adopted as the cut-off for statistical

significance. Thus, all test statistics ("t" and "F" values) which are significant at $p < .05$ or above are labelled as statistically significant. Test statistics which exceed the 90 percent level of confidence ($p < .10$) are labelled as marginally significant.

B. Naure and Extent of Program Impact

1. Sample Composition

Table 1 presents several basic measures of the treatment and control groups at both the baseline and two years later. Statistical tables presented in Appendix V present additional details from the baseline survey.

While the cases were randomly assigned to the treatment and control groups, the baseline study nevertheless detected certain differences between the two groups. In most ways the treatment and control groups were comparable. For example, the two groups had roughly the same median age, roughly the same gender distribution, and nearly identical experience in running businesses. In certain other respects, however, the treatment and control groups were different: most notably, a substantially higher proportion of the treatment group completed secondary education (97 percent versus 81 percent). While the treatment group was also slightly better educated by other measures (percentage with university education and percentage with business training), the differences in these measures were slight. The treatment group also had a higher proportion of parents in business.

While these difference would appear to suggest a slight bias in favor of the treatment groups, subsequent analysis indicated that any such biases do not appear to have had a great effect on the findings. Most of the variables in which the experimental group appeared to be favored proved not to be significant factors in the analysis. The only exception to this was the education variable, where initial differences between the two groups served to obscure findings on the effect of training in raising PEC scores.

2. Sample Attrition

As discussed above, there were 90 participants at the outset of the study distributed in terms of experimental group and current business activity as shown in the top panel of Table 1. The numbers of subjects lost and retained over the course of the study are also shown in the top panel of Table 1. Overall, 28 subjects (31 percent) were lost to the study for one reason or another. The losses were the same for treatment and control groups

but were much greater among subjects who were not in business at the time of project training (45 percent versus 25 percent among those who had ongoing business undertakings at the outset of the project).

For the final analyses, there are 46 subjects in the "in-business" group for whom two rounds of measurements were obtained and 16 in the "not-in-business" group. While the former number is sufficient for analytic purposes, the latter number is so small as to preclude further analysis of the project's affect on the not-in-business group.

The fact that 31 percent of study subjects were lost over the course of the study is a potentially serious problem, depending on how different dropouts were from retainees in terms of characteristics which might be expected to effect the outcome indicators used in the study.

Table 1. -- Profile of Retained and Lost Sample Cases

	Not in business			In business			All Cases		
	Treatment	Control	Total	Treatment	Control	Total	Treatment	Control	Total
Number of cases:									
Retained	6	10	16	25	21	46	31	31	62
Lost	7	6	13	7	8	15	14	14	28

Total	13	16	29	32	29	61	45	45	90
Percent lost	53.8	37.5	44.8	21.9	27.6	24.6	31.1	31.1	31.1
Median age:									
Retained	31.3	34.2	33.1	36.2	34.8	35.6	35.3	34.6	34.9
Lost	37.9	36.6	37.3	34.7	33.1	33.8	36.3	34.6	35.5

Total	34.9	35.1	35.0	35.9	34.3	35.1	35.6	34.6	35.1
Percent male:									
Retained	66.7	70.0	68.8	48.0	38.1	43.5	51.6	48.4	50.0
Lost	71.4	83.3	76.9	28.6	12.5	20.0	50.0	42.9	46.4

Total	69.2	75.0	72.4	43.7	31.0	37.7	51.1	46.7	48.9
Percent completing secondary school or better:									
Retained	100.0	100.0	100.0	96.0	71.4	84.8	96.8	80.6	88.7
Lost	85.7	100.0	92.3	85.7	75.0	80.0	85.7	85.7	85.7

Total	92.3	100.0	96.6	93.8	72.4	83.6	93.3	82.2	87.8
Percent completing university education:									
Retained	33.3	30.0	31.3	32.0	28.6	30.4	32.3	29.0	30.6
Lost	28.6	16.7	23.1	57.1	12.5	33.3	42.9	14.3	28.6

Total	30.8	25.0	27.6	37.5	24.1	31.1	35.6	24.4	30.0

-- continued --

Table 1. -- Profile of Retained and Lost Sample Cases -- continued

	Not in business			In business			All Cases		
	Treatment	Control	Total	Treatment	Control	Total	Treatment	Control	Total
Percent completing business training:									
Retained	50.0	20.0	31.3	16.0	19.0	17.4	22.6	19.4	21.0
Lost	42.9	16.7	30.8	14.3	0.0	6.7	28.6	7.1	17.9

Total	46.2	18.8	31.0	15.6	13.8	14.8	24.4	15.6	20.0
Percent with mother owning a business:									
Retained	66.7	50.0	56.3	40.0	33.3	37.0	45.2	38.7	41.9
Lost	0.0	16.7	7.7	57.1	37.5	46.7	28.6	28.6	28.6

Total	30.8	37.5	34.5	43.7	34.5	39.3	40.0	35.6	37.8
Percent with father owning a business:									
Retained	83.3	40.0	56.3	60.0	47.6	54.3	64.5	45.2	54.8
Lost	28.6	33.3	30.8	42.9	50.0	46.7	35.7	42.9	39.3

Total	53.8	37.5	44.8	56.3	48.3	52.5	55.6	44.4	50.0

Data relevant to this issue are presented in the lower panels of Table 1. The table compares study retainees and dropouts in terms of selected background characteristics and initial PEC measurements. Subjects are grouped in the table by current business activity at the time of project training and by experimental group.

Looking first at the "Total" column under "All Cases", the only variables for which large differences are observed are whether the subjects' mothers or fathers had owned a business. Subjects whose parents had owned a business were significantly less likely to have been a dropout than those subjects whose parents had not owned a business. These differentials appear to be roughly similar in magnitude, however, among treatment and control group subjects and thus are not likely to bias the results of the analyses.

Closer examination of the interior cells of Table 1 reveals some differences which are not evident in the marginal totals. Dropouts from among subjects who had active businesses at the outset of the project were more likely to be males, while those in the not-in-business group were slightly more likely to be female. The baseline survey analyses suggested that females had somewhat lower mean PEC scores and tended to be disproportionately represented in cottage industries. Once again, however, the treatment and control groups seem to have been affected by sample attrition in approximately equal proportions.

Another differential worthy of note is with respect to university education. A higher proportion of dropouts in the treatment group were university graduates than were the retainees, while in the control group the opposite pattern of differentials is apparent. Thus, retainees in the treatment group are somewhat selective of the less well educated from among the original group while those in the control group are selective of the more well educated. While this outcome has the potential to bias the analytic results somewhat, it should be noted that the direction of the bias is against the project hypothesis being tested and thus should further strengthen the case for a positive project impact should such an outcome observed.

Finally, as the above data indicates, investigation as to the reasons for sample attrition suggest no specific pattern relevant to those hypotheses examined in this study.

In summary, the analysis of sample attrition indicates that while, as is frequently the case, dropouts are somewhat selective in their characteristics as compared with retainees, the extent of differences is quite modest in this case. Further, for those characteristics on which important differences are noted, the direction of potential bias is against the project hypothesis being tested. Thus, any positive findings in this study can be viewed as existing despite these biases, not because of them.

3. Effects of Training on PECs

The basic hypothesis of the research is that it is possible to augment the performance of entrepreneurs through behavioral training. The initial question to be addressed, then, is whether the project training program was successful in influencing the entrepreneurial orientation of program trainees as measured by their PECs. In Table 2, mean PEC scores for the initial and final rounds of data collection and changes over the course of the 24 month study period are displayed. A positive program impact would be suggested by greater improvements in PEC scores for program trainees than for control group subjects.

As indicated in the table, increases in total PEC scores are observed more or less across the board (i.e. among both treatment and control group subjects). Consistent with project expectations, substantially larger increases are observed for treatment group than for control group subjects suggesting a positive project effect on PECs.

The fact that PEC scores also increased somewhat for control group subjects suggests the presence of a testing or a maturation effect (or both) and gives some support to the secondary hypothesis that PECs are strengthened in the course of normal business activity.

Examination of changes in individual PEC scores indicates that improvements in a relatively small number of PECs account for much of the change in total PEC scores. In the in-business group, for example, the Persistence, Goal Setting, and Self-Confidence PECs accounted for roughly 70 percent of the change in the total PEC score. A similar pattern is observed for both the treatment and control groups.

Table 2. -- Changes in PEC Scores between the Baseline and Follow-up Measurement

	Not in business			In business			All Cases		
	Treatment	Control	Total	Treatment	Control	Total	Treatment	Control	Total
Number of cases	6.00	9.00	15.00	25.00	22.00	47.00	31.00	31.00	62.00
Total PEC scores:									
Baseline mean	12.00	10.11	10.87	12.60	11.05	11.87	12.48	10.77	11.63
Follow up mean ...	20.83	13.00	16.13	18.80	12.82	16.00	19.19	12.87	16.03

difference	8.83	2.89	5.27	6.20	1.77	4.13	6.71	2.10	4.40
Opportunity seeking:									
Baseline mean	2.17	1.22	1.60	1.72	1.55	1.64	1.81	1.45	1.63
Follow up mean ...	2.33	1.22	1.67	2.00	1.41	1.72	2.06	1.35	1.71

difference	0.17	0.00	0.07	0.28	-0.14	0.09	0.26	-0.10	0.08
Persistence:									
Baseline mean	1.17	1.11	1.13	1.12	0.95	1.04	1.13	1.00	1.06
Follow up mean ...	3.67	1.67	2.47	2.24	2.00	2.13	2.52	1.90	2.21

difference	2.50	0.56	1.33	1.12	1.05	1.09	1.39	0.90	1.15
Risk taking:									
Baseline mean	0.17	0.44	0.33	0.64	0.41	0.53	0.55	0.42	0.48
Follow up mean ...	1.33	0.78	1.00	1.56	0.82	1.21	1.52	0.81	1.16

difference	1.17	0.33	0.67	0.92	0.41	0.68	0.97	0.39	0.68
Quality and efficiency:									
Baseline mean	1.67	0.67	1.07	1.52	1.27	1.40	1.55	1.10	1.32
Follow up mean ...	1.50	1.22	1.33	1.68	0.73	1.23	1.65	0.87	1.26

difference	-0.17	0.56	0.27	0.16	-0.55	-0.17	0.10	-0.23	0.00

-- continued --

	Not in business			In business			All Cases		
	Treatment	Control	Total	Treatment	Control	Total	Treatment	Control	Total
Commitment to the work contract:									
Baseline mean	1.00	0.67	0.80	1.32	0.73	1.04	1.26	0.71	0.98
Follow up mean ...	2.33	1.00	1.53	1.88	1.32	1.62	1.97	1.23	1.60
.....
difference	1.33	0.33	0.73	0.56	0.59	0.57	0.71	0.52	0.61
Information Seeking:									
Baseline mean	2.17	2.00	2.07	1.60	1.64	1.62	1.71	1.74	1.73
Follow up mean ...	2.33	1.56	1.87	1.60	1.05	1.34	1.74	1.19	1.47
.....
difference	0.17	-0.44	-0.20	0.00	-0.59	-0.28	0.03	-0.55	-0.26
Goal setting:									
Baseline mean	0.50	0.44	0.47	0.52	0.86	0.68	0.52	0.74	0.63
Follow up mean ...	2.00	1.44	1.67	1.72	1.45	1.60	1.77	1.45	1.61
.....
difference	1.50	1.00	1.20	1.20	0.59	0.91	1.26	0.71	0.98
Planning and monitoring:									
Baseline mean	1.67	1.33	1.47	1.80	1.36	1.60	1.77	1.35	1.56
Follow up mean ...	1.17	0.89	1.00	1.36	1.41	1.38	1.32	1.26	1.29
.....
difference	-0.50	-0.44	-0.47	-0.44	0.05	-0.21	-0.45	-0.10	-0.27
Self confidence:									
Baseline mean	0.17	0.78	0.53	1.08	0.59	0.85	0.90	0.65	0.77
Follow up mean ...	2.17	1.78	1.93	2.44	1.27	1.89	2.39	1.42	1.90
.....
difference	2.00	1.00	1.40	1.36	0.68	1.04	1.48	0.77	1.13
Persuasion and networking:									
Baseline mean	1.33	1.44	1.40	1.28	1.68	1.47	1.29	1.61	1.45
Follow up mean ...	2.00	1.44	1.67	2.32	1.36	1.87	2.26	1.39	1.82
.....
difference	0.67	0.00	0.27	1.04	-0.32	0.40	0.97	-0.23	0.37

To test the significance of observed changes in PECs and examine the effects of background factors on PEC changes, a series of multiple regressions were run. The dependent variables in these regressions were the changes in PEC scores for study subjects. Separate regressions were run for each individual PEC and for the total PEC score. For each dependent variable, two regressions were run: one regression in which the only independent variable in the regression equation was the dummy variable for experimental group (i.e. treatment or control) and another regression in which a series of control variables were also included. The first of the regressions provides a test of the statistical significance of the observed change in PECs for the treatment versus the control group (or the gross project effect), while the second regression permits the measurement of the effect of the project training on PECs when the effects of the other variables included in the regressions are taken into account (the net project effect). The results of the regressions with the total PEC score as the dependent variable are summarized in Table 3.

When only the experimental group dummy variable is included in the regression equation, the difference in the magnitude of change in total PEC scores between the treatment and control is significant at the $p < .05$ level. The inclusion of the series of control variables used in the study, however, reduces the significance of the coefficient of the experimental group variable to a tenuous level of statistical significance ($p < .20$).

When the effects of all variables in the regressions are considered simultaneously, the strongest predictor of change in total PEC scores is the education variable indicating that the PEC scores of more educated participants in both treatment and control groups improved more than those of the less educated members of their respective groups. While the data also suggest an impact of training on PECs irrespective of education level, the inadvertent over-representation of more educated individuals in the treatment group limits the ability to reach an unambiguous conclusion on this matter. PEC score changes also tended to be somewhat greater among male than female study subjects, although this differential is very marginal in magnitude ($p < .20$). Overall, the regression "fit" is adequate, with a significance level of $p < .10$.

Table 3. -- Regression Results for Total PEC change

Dependent Variable.. Total PEC Change

Variable(s) Entered on Step Number 1.. AGE
 2.. EDUCATION
 3.. WHETHER FATHER OWNED A BUSINESS
 4.. GROUP (trained or control)
 5.. SEX
 6.. WHETHER MOTHER OWNED A BUSINESS

Multiple R	.50879	Analysis of Variance			
R Square	.25887		DF	Sum of Squares	Mean Square
Adjusted R Square	.14485	Regression	6	51.88683	8.64781
Standard Error	1.95165	Residual	39	148.54795	3.80892

F = 2.27041 Signif F = .0565

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
AGE	8.60356E-04	1.05502E-03	.11731	.815	.4197
ED	.44792	.24508	.28512	1.828	.0753
FBUS	-.10682	.58591	-.02556	-.182	.8563
XGRP	.79191	.59715	.18951	1.326	.1925
XSEX	-.90358	.69540	-.21561	-1.299	.2014
MBUS	.63260	.71812	.14628	.881	.3838
(Constant)	4.46088	2.22256		2.007	.0517

Variable(s) Entered on Step Number 1.. GROUP (trained or control)

Multiple R	.30391	Analysis of Variance			
R Square	.09236		DF	Sum of Squares	Mean Square
Adjusted R Square	.07219	Regression	1	20.22162	20.22162
Standard Error	2.10140	Residual	45	198.71455	4.41588

F = 4.57930 Signif F = .0378

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
XGRP	1.31455	.61429	.30391	2.140	.0378
(Constant)	4.04545	.44802		9.030	.0000

It was not possible to unambiguously trace the increase in PECs to the participation or non-participation in the training program. There are at least two factors that may have contributed to this result:

- The sample is very small (31 treatment, 31 control). Any further subdivision of the sample would reduce the numbers of cases (or statistical degrees of freedom) below any threshold for meaningful analysis. Thus it is not possible to statistically adjust for differences between the experimental and control groups, particularly in levels of education.
- The PEC measurements are problematic. In Malawi, the baseline average PEC was extremely low (11.6). By way of contrast, baseline average PEC scores were 22.1 in The Gambia, 22.9 in Nigeria, and 27.7 in Argentina. A change of one point up or down in the Malawi PEC scores would be roughly a 9 percent change. More dramatically, the follow-up average PEC was 16.0, an increase of 4.4. An error of one point in either the baseline or follow-up would result in a 23 percent error in the measurement of change. Thus, the effect of measurement errors is potentially very large and, from a practical standpoint, almost certain to have clouded the results.

Interpreted in another way, however the data reported above provides some support for the hypothesis that the effects of the training program may be "conditioned" by selected exogenous factors. The most consistent and influential of these was level of education. Subjects with higher levels of education had larger increases in PEC scores and marginally greater improvements in economic performance. Whether the subjects' father had owned a business had a negative effect on change in economic performance indicators in some regressions, but the effect was inconsistent from regression to regression.

To test the possibility that training had significant effects on PECs only for individuals with relatively high levels of education, an experimental group/education interaction variable was constructed to test incremental project training effect on subjects with at least some advanced education. This variable was added to the regression which included the control variables in Table 3. The results of this regression were roughly the same as those above and the interaction explanation was accordingly dismissed.

The question of whether improvements in PECs were greater among those with initially higher PEC scores was also pursued in the analysis. To examine this question, the mean change in total PEC scores for the top one-third of study subjects in terms of baseline survey PEC scores was compared with the remainder of the subjects (irrespective of experimental group membership). The mean increase in total PEC scores among the top PEC scorers in the baseline survey was 5.3 points versus 4.7 points for the comparison group. This difference is not statistically significant.

4. Impact on Entrepreneurial Behavior

The key hypothesis undergirding this research is that it is possible to enhance significantly the entrepreneurial behavior of those participating in the training. To help gain insight into the ways in which such changes might affect business practices, training participants were asked a series of questions regarding recent changes made in operating their businesses, 72 percent of the respondents reported having made substantial changes in either products or services, production processes, marketing, and/or advertising in the six months prior to the data collection.

Illustrative experiences included the owner of a business school who gained advertising by persuading a reporter and photographer to do a story on her school that subsequently appeared in the local newspaper. A garment manufacturer had relocated and changed the focus of her production to simple dresses made with African prints, rather than the "high fashions" that had not sold as well. An innkeeper had upgraded his business by improving the quality of his rooms, raising his prices, and expanding his advertising efforts to include billboards near the airport. A poultry-rearer said:

Just recently I improved the technique for raising chicks; I used to have a high death rate. Now I use plastic rather than metal drinkers and I medicate the water. Also, I use sawdust now instead of grass to keep the room dry.

Problems? Yes. For example, my feed supplier stopped his deliveries between September and February. But I guess it was a good thing: I have now learned how to prepare my own feed out of meat, bonemeal, maize and soy.

Finally, a tailor had only recently begun to make uniforms for a new customer, Air Malawi Services, and said, "Frankly, I've become very popular."

A series of comparable questions asked of control group members produced very few concrete examples of recent innovation.

Appendix IV -- a before/after appraisal of the trainees and an analysis of the Supplemental Interview -- offers further insight into the apparent impact of the workshop on the trainees' behavior.

5. Impact on Economic Performance

The most important hypothesis in this research concerns the impact of training on economic performance. As described earlier in the report, two indicators of economic performance are used in the study: changes in employment and changes in gross sales. A multiple regression approach was taken to the examination of this question. The dependent variables for the regressions were dichotomous variables indicating study period growth (or lack thereof) in the case of employment, and above or below average growth in the case of sales (see Figure 6.3 for operational definitions of these variables). As in the regression analysis of changes in PECs, two sets of regressions were run for each dependent variable -- one with only a dummy variable for experimental group (i.e. treatment versus control) and a second regression which also included a series of control variables. PEC scores were not considered in these regressions. The relationship between changes in PECs and changes in economic performance indicators were considered in subsequent regressions.

Despite a general decline in the economy of Malawi during the study period, fifty two percent of treatment group subjects reported an increase in employment in their business enterprises over the course of the period (Figure 6.4). The comparable figure for the control group was 18 percent. With respect to sales, 80 percent of the treatment group as compared to only 10 percent of the control group reported growth in sales which exceeded the median for the study retainees as a whole.

Figure 6.4 -- Changes in Sales and Employment by Treatment and Control Groups (# of cases)

<u>Variable</u>	<u>Treatment</u>	<u>Control</u>	<u>Total</u>
Change in sales:			
Cases above median	20	2	22
Cases below median	5	20	25
	---	---	---
All cases	25	22	47
Change in employment:			
Increased employment ...	13	4	17
Did not increase	12	18	30
	---	---	---
All cases	25	22	47

The results of the regression analyses of changes in sales and employment are displayed in Table 4. When only the experimental group dummy variable is included in the regressions, the coefficients are positive and significant in both regressions, with a significance level in the case of change in sales of $p < .0001$ and $p < .05$ in the case of change in employment. The inclusion of control variables in the second set of regressions has a negligible impact on the coefficient for the experimental group variable in the sales change equation, but reduces the coefficient in the change in employment equation to significance at the 90 percent confidence level ($p < .10$).

Among other factors influencing employment change was "father's occupation". Subjects whose father did not own a business were more likely to have experienced an increase in employment than those whose father had owned a business. This unexpected result may be due to the fact that, in the Malawi context, the fathers of subjects who owned a business were likely to have owned a farm or related agricultural enterprise, which may not have had the same beneficial effect on entrepreneurial success in the next generation as has been shown in other studies.

Higher education also had a positive effect on employment growth ($p < .10$). In the sales change regression, no factor other than the training itself emerges as significant, although level of education and sex (males outperformed females) are just below the cutoff adopted for marginal significance.

**Table 4 -- Regression Results for Changes in Sales and Employment
excluding the Effect of Total Change in PECs**

Variable(s) Entered on Step Number 1.. AGE
2.. EDUCATION
3.. WHETHER FATHER OWNED A BUSINESS
4.. GROUP (trained or control)
5.. SEX
6.. WHETHER MOTHER OWNED A BUSINESS

Multiple R	.74771	Analysis of Variance			
R Square	.55907		DF	Sum of Squares	Mean Square
Adjusted R Square	.49123	Regression	6	6.38066	1.06344
Standard Error	.35922	Residual	39	5.03238	.12904

F = 8.24148 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
AGE	1.75313E-04	1.94184E-04	.10017	.903	.3722
ED	.07312	.04511	.19506	1.621	.1131
FBUS	-.02058	.10784	-.02064	-.191	.8496
XGRP	.64712	.10991	.64897	5.888	.0000
XSEX	.19398	.12799	.19398	1.516	.1377
MBUS	.01842	.13218	.01785	.139	.8899
(Constant)	.06906	.40908		.169	.8668

Equation Number 1 Dependent Variable.. SCHG

Variable(s) Entered on Step Number 1.. XGRP

Multiple R	.70909	Analysis of Variance			
R Square	.50281		DF	Sum of Squares	Mean Square
Adjusted R Square	.49176	Regression	1	5.88395	5.88395
Standard Error	.35957	Residual	45	5.81818	.12929

F = 45.50864 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
XGRP	.70909	.10511	.70909	6.746	.0000
(Constant)	.09091	.07666		1.186	.2419

**Table 4 -- Regression Results for Changes in Sales and Employment
excluding the Effect of Total Change in PECs (continued)**

Variable(s) Entered on Step Number 1.. AGE
2.. EDUCATION
3.. WHETHER FATHER OWNED A BUSINESS
4.. GROUP (trained or control)
5.. SEX
6.. WHETHER MOTHER OWNED A BUSINESS

Multiple R	.54160	Analysis of Variance			
R Square	.29333		DF	Sum of Squares	Mean Square
Adjusted R Square	.18461	Regression	6	3.06083	.51014
Standard Error	.43483	Residual	39	7.37396	.18908
		F =	2.69806	Signif F =	.0274

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
AGE	2.22157E-04	2.35059E-04	.13275	.945	.3504
ED	.09868	.05460	.27531	1.807	.0784
FBUS	-.30039	.13054	-.31505	-2.301	.0268
XGRP	.26266	.13305	.27548	1.974	.0555
XSEX	.11664	.15493	.12198	.753	.4561
MBUS	-.02454	.16000	-.02487	-.153	.8789
(Constant)	.35535	.49519		.718	.4773

Equation Number 1 Dependent Variable.. ECHG

Variable(s) Entered on Step Number 1.. XGRP

Multiple R	.35119	Analysis of Variance			
R Square	.12334		DF	Sum of Squares	Mean Square
Adjusted R Square	.10386	Regression	1	1.33834	1.33834
Standard Error	.45978	Residual	45	9.51273	.21139
		F =	6.33101	Signif F =	.0155

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
XGRP	.33818	.13440	.35119	2.516	.0155
(Constant)	.18182	.09802		1.855	.0702

To investigate further the hypothesis linking changes in PECs and changes in economic performance, an effort was made to assess the extent to which the apparent project effects on economic performance observed in the above regressions could be attributed to changes in PECs. To test this possibility, the "change in total PEC score" variable was substituted for the experimental group variable in the regressions described above. The rationale here was that if the project effects apparent in Table 4 were attributable to the training, this should be reflected by roughly comparable regression coefficients for the dummy variable and the "change in PECs" variable. Dissimilar coefficients for the substituted variable or for other variables in the regression would constitute evidence to the contrary. While this is not a formal test of the hypothesis, the fact that the treatment group and change in PEC variables behave very similarly in otherwise identical regressions supports the supposition that they are measuring the same phenomena. The results of the regression tests of this hypothesis are shown in Table 5. When the PEC change variable is the only independent variable in the equation, it is highly significant with respect to both the change in sales and change in employment variables. When control variables are added, the size of the coefficients are reduced considerably, but the change in PEC effect remains highly significant (at the $p < .01$ level) in the case of change in sales and marginally so in the case of change in employment ($p < .10$). In large part, these results mimic the findings when the experimental group variable is used instead of PEC score change, although the magnitude of the effects are reduced somewhat. This would seem to suggest that part of the apparent project effect observed in Table 4 could be accounted for by changes in PECs.

An alternative to a possible project effect in explaining the impact on PEC-scores could be a non-project education effect. In fact, it might be reported as a simultaneous effect of both factors, with education appearing to predominate. The change in PECs is not unambiguously related to training. PEC-change's correlation with education is substantially closer than it is with training. The fact that education is not a stronger predictor of sales and employment may be masked by the fact that PEC-change enters before education but is related more strongly to education than is training. Unfortunately, the precise relationships between these variables are masked by the ambiguities in the data, such as the limited sample size, the

dichotomous nature of the education and dependent variable, and the significant differences in relationships between the predictors and the two impact variables. Without a good handle on these relationships and the correlations between education, training, and PEC scores, it is quite possible that education may be important in making it all happen. Yet, the high significance level of the experimental group dummy in predicting sales (notably, $p < .0001$) and employment ($p < .05$) does suggest the strong probability of a project effect on the enterprise impact variables.

In an effort to investigate the possibility that the observed results were an artifact of the dichotomization process applied to the study's two principal economic variables, two analytical alternatives to dichotomization were explored. Efforts to treat sales and employment as continuous variables and to group them into multiple categories proved to be of limited utility due to the fact that absolute changes were, in the majority of cases, very small and, in the remaining cases, characterized by a distribution with a long, thick tail (see Appendix V for raw data and frequency distributions). With respect to sales, for example, 58% of cases reported changes of 749 Kwacha or less and the remaining 42% included widely dispersed results, with a number of cases evidencing substantial increases extending up to increases of 50,000 Kwacha. It is noteworthy, however, that all but two of the control cases evidenced change of less than 750 Kwacha while 17 of 25 of the treatment group experienced increases larger than that amount. This relationship is depicted graphically in the histogram presented below. A comparable if somewhat less dramatic result characterizes changes in employment by treatment and control groups where 13 of the 17 firms that experienced employment increases (including all firms with increases of more than 6 employees) were headed by trainees, and almost 2/3 of those firms experiencing employment declines were in the control group. Given this distribution of the data and the small sample size involved in this study, additional sub-categorization of the sales and employment variables had no meaningful effect on the analysis other than to reduce significantly the degrees of freedom for estimating error, thereby further limiting the precision of the result.

Table 5 -- Regression Results for Changes in Sales and Employment
including the Effect of Total Change in PECS

Equation Number 1 Dependent Variable.. Change in Sales

Variable(s) Entered on	Step Number	
	1..	Change in total PEC score
	2..	Whether Father had a business
	3..	Whether Mother had a business
	4..	Age
	5..	Education
	6..	Sex

Multiple R	.55168	Analysis of Variance			
R Square	.30435		DF	Sum of Squares	Mean Square
Adjusted R Square	.19733	Regression	6	3.47354	.57892
Standard Error	.45120	Residual	39	7.93950	.20358
F = 2.84376		Signif F = .0215			

..... Variables in the Equation

Variable	B	SE B	Beta	T	Sig T
PTOT	.10043	.03621	.42089	2.773	.0085
FBUS	.02050	.13527	.02056	.152	.8803
MBUS	-.01131	.16763	-.01096	-.067	.9466
AGE	2.51440E-04	2.43880E-04	.14367	1.031	.3089
ED	.06854	.05871	.18285	1.167	.2501
XSEX	.30825	.16373	.30825	1.883	.0672
(Constant)	.02992	.53602		.056	.9558

Equation Number 1 Dependent Variable.. SCHG

Variable(s) Entered on Step Number 1.. PTOT

Multiple R	.46659	Analysis of Variance			
R Square	.21770		DF	Sum of Squares	Mean Square
Adjusted R Square	.20032	Regression	1	2.54761	2.54761
Standard Error	.45104	Residual	45	9.15452	.20343
F = 12.52304		Signif F = .0009			

..... Variables in the Equation

Variable	B	SE B	Beta	T	Sig T
PTOT	.10787	.03048	.46659	3.539	.0009
(Constant)	-.04373	.15889		-.275	.7844

**Table 5 -- Regression Results for Changes in Sales and Employment
including the Effect of Total Change in PECS (continued)**

Equation Number 1 Dependent Variable.. Change in employment

Variable(s) Entered on Step Number 1.. Change in total PEC score
 2.. Whether Father had a business
 3.. Whether Mother had a business
 4.. Age
 5.. Education
 6.. Sex

Multiple R	.52636	Analysis of Variance			
R Square	.27706		DF	Sum of Squares	Mean Square
Adjusted R Square	.16583	Regression	6	2.89102	.48184
Standard Error	.43981	Residual	39	7.54376	.19343

F = 2.49102 Signif F = .0389

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
PTOT	.06044	.03530	.26489	1.712	.0948
FBUS	-.28245	.13186	-.29623	-2.142	.0385
MBUS	-.04998	.16340	-.05065	-.306	.7614
AGE	2.31667E-04	2.37724E-04	.13844	.975	.3358
ED	.08690	.05723	.24244	1.518	.1370
XSEX	.18015	.15960	.18841	1.129	.2659
(Constant)	.24047	.52249		.460	.6479

Equation Number 1 Dependent Variable.. Change in employment

Variable(s) Entered on Step Number 1.. PTOT

Multiple R	.37628	Analysis of Variance			
R Square	.14159		DF	Sum of Squares	Mean Square
Adjusted R Square	.12251	Regression	1	1.53639	1.53639
Standard Error	.45496	Residual	45	9.31467	.20699

F = 7.42243 Signif F = .0091

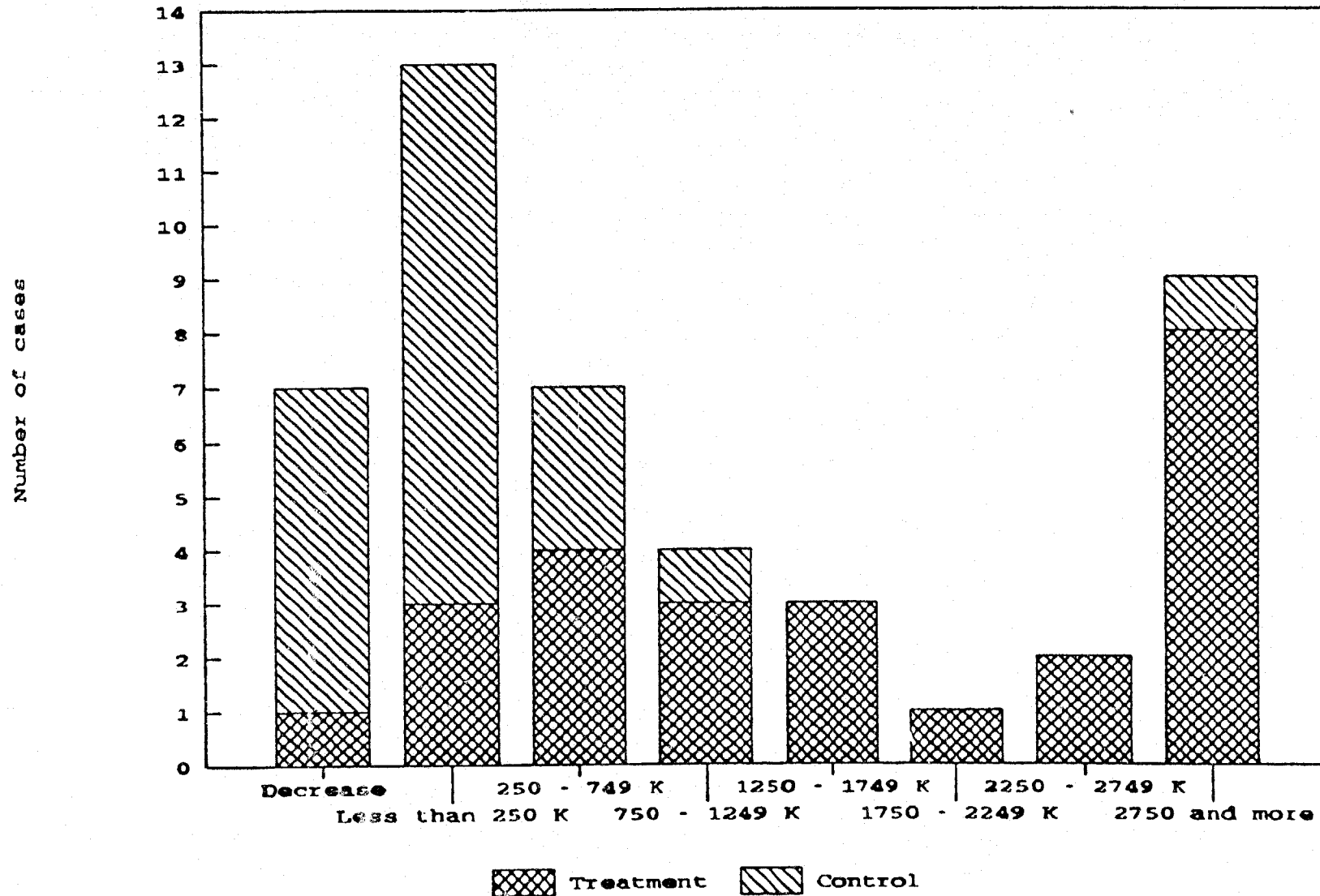
----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
PTOT	.08377	.03075	.37628	2.724	.0091
(Constant)	-.03576	.16027		-.223	.8244

FIGURE 6.5

Distribution of change

(August 1986 - August 1988)



7. PRINCIPAL FINDINGS AND LIMITATIONS OF THE CURRENT RESEARCH, AND IMPLICATIONS FOR FUTURE RESEARCH ACTIVITIES

The findings of this research point to the possibility of a significant impact from short-term behavioral training on entrepreneurial behavior and economic performance during the 24-month study period. Greater growth in sales and in employment were observed for program trainees in comparison to the control group. These findings, which tend to support the value of entrepreneurship development and behavioral training, need to be interpreted with some care and caution. This chapter first discusses the study's principal findings and the major contribution of this research to the theory and practice of entrepreneurship development, behavioral training and program evaluation. Subsequent sections of the chapter summarize major limitations of the research and priorities for future research efforts.

A. Contribution to Current Theory and Practice

This research is intended to advance an understanding of the nature of Personal Entrepreneurial Characteristics (PECs) and their relationships to training and enterprise performance. The evidence reported here does demonstrate a strong relationship between the training and performance of entrepreneurs.

However, one must acknowledge that the evidence is indicative rather than conclusive. The lack of comparable data on other training programs and other programs for assisting small enterprises limits our conclusions. For example, while the training-to-performance relationship is strong, little is presented in this report about the comparable empirical impacts of other training programs. Accordingly, further and comparable research would be necessary to assess whether such training is any more efficient than other forms of enterprise support, such as credit or information dissemination on new products, markets, or technologies. The contributions and conclusions that this research does support are summarized in the following paragraphs.

1. Personal Entrepreneurial Characteristics

This research also gives modest support to the contention that there is a core set of behavioral characteristics associated with successful

entrepreneurial performance in a number of contexts. Nothing in this research verifies unequivocally the importance of any given PEC or set of PECs, or the contention that there exists a discrete set of such characteristics that are consistent from country to country and business to business. This analysis continues to invite more detailed and disaggregated research (see Section D.3 of this chapter) concerning the role and prevalence of specific PECs among particular groups, and the consequences of specific PEC strengths, deficiencies and patterns. In general, however, validation of the concept of "personal entrepreneurial characteristics" and the development of an initial list of such characteristics is the principle finding of this research.

A second finding of this research with respect to PECs points to the possibility that a number of these characteristics may be "teachable." The small sample sizes and measurement difficulties involved once again limit our ability to draw unequivocal or disaggregated conclusions on this matter, but the data did indicate that those who took the training registered larger PEC increases (measured two years later) than those who did not, and that these differentials existed for all but one of the PECs taught in the program. While there is some possibility that these differences reflect the increased ability of trainees to use PEC vocabulary, the likelihood of such a bias is minimized here by the two-year lag period and the requirement that coders score only actual behaviors reported and not statements of attitude or preference. The "teachability" of the PECs, however, remains open to further empirical study. Agnosticism on the issue stems from statistical ambiguities--for example, the fact that education's impact on PEC-score changes was nearly three times that of training. Since there is only a weak statistical training/PEC-change relationship, confirmation requires further testing.

2. Behavioral Training in Cross-Cultural Contexts

The training program developed and tested as part of this research is perhaps the most documented and deliberate use of behavioral training approaches to data in third world contexts. Although substantially more research has been conducted on McClelland's original AMT program and on selected health, population and agricultural extension activities designed to modify participants' attitudes and actions, each of these other major

programs purports to focus its efforts on motivation and/or development skills, rather than explicitly on behavioral change. This research thus represents a test of the applicability of western approaches to behavioral training applied to audiences in and from the third world. The fact that the basic premise of such training -- that personal behavior is, to a large degree, a matter of personal choice -- is regarded by many as a unique attribute of western culture adds importance to the finding that such training was ostensibly both accepted and effective among relatively traditional groups in Africa.

Even in western countries, there are relatively few documented examples outside of laboratory or therapeutic contexts of training programs constructed through a careful and consistent application of theories of behavioral training and behavioral change. While numerous programs implicitly incorporate and reflect the tenets involved in behavioral training, the construction of these training programs has typically been either intuitive and/or undocumented. This research is thus also intended to contribute in a meaningful way to the theoretical and operational literature on training design.

Finally, the training program is developed to include a number of innovative techniques for accelerating behavioral change and for adapting course content to inter-cultural settings and heterogeneous populations. Many of these techniques have direct transfer value to behavioral training in a variety of other areas.

3. Entrepreneurship Development

Despite the critical importance of entrepreneurs and entrepreneurship, few private sector development strategies or programs include any systematic means for identifying entrepreneurial potential, for enhancing that potential, or for stimulating new sources of entrepreneurship. National programs aiming to increase entrepreneurial activity by means of policy reform alone have generally proven to be infeasible or disappointing in the near term. Venture capital, which is more attuned to the identification and financing of entrepreneurial potential, is unavailable in most developing countries and underdeveloped regions. Financing institutions typically have excellent systems for assessing collateral, mediocre systems for assessing

project feasibility and no system at all for assessing entrepreneurial acumen.

Numerous management training programs have been developed for strengthening accounting skills, feasibility analysis, marketing and inventory control; but few, if any, of these programs address the fundamental question of how to select and strengthen the entrepreneur and his or her business plan.

Following its testing in Malawi, the training program developed and tested as part of this research has been offered in English, French, Spanish and Wolof for participants from 34 countries.

4. Program Evaluation

Methodologically, the research presented here represents a classic application of quasi-experimental research to the evaluation of a human resource development program in a third world context. While the data collection and analysis procedures employed in this study are well documented in the theoretical literature on program evaluation, these procedures have been infrequently applied to the evaluation of human resource development programs, and almost never in third world contexts. As a result, the fact that it did prove both possible and worthwhile to apply these methods in evaluating entrepreneurship training in Malawi may itself be a noteworthy, if modest, contribution of this research. In this regard, the experience gained and reported with regard to efforts at random assignment, maintenance of inter-coder reliability, control of attrition, collection of reliable economic and behavioral data from semi-literate respondents, and impact attribution would appear to be particularly relevant for future evaluation of human resource development efforts in developing countries.

B. Limitations of the Research

The research conducted has several significant limitations in addition to those discussed above. The most notable of these limitations concern sample size, population characteristics, measurement problems and the possible influence of exogenous variables on observed results. Each of these possible limitations is discussed in turn in the paragraphs below:

1. Sample Size

As discussed in Chapter 6, the total number of individuals ultimately included in this research was 62 -- 31 trainees and 31 control group members. The initial restriction of the study to one country and 90 subjects was dictated by economic considerations. Further reduction in sample size from 90 to 62 was a consequence of attrition occasioned principally by movement of individuals within Malawi or to other countries. Further reduction of the sample for certain of the analyses performed to 46 individuals was a result of the decision to focus analysis on those who were already "in business" at the time of baseline study.

Given this relatively small sample size, conclusions reached on the basis of this study are necessarily tentative. However, several factors help to offset this limitation. First, detailed analysis indicates little evidence suggesting that results would have been significantly altered by the inclusion of those individuals who were lost from the baseline group. Overall attrition was equal for both treatment and control groups, the resulting groups display baseline characteristics comparable to one another in most salient respects, and there is no obvious pattern associated with the observed attrition. Moreover, the consequence of reduced sample size for any conclusions regarding statistical significance are reflected in the confidence levels reported. That statistical significance was found in key areas despite relatively small sample sizes is added testimony to the strength of the observed differences in performance between treatment and control groups.

One "casualty" of this research's relatively small sample size was the need to drop the analytical distinction between observed effects for "in business" versus "not in business" individuals and to confine analysis to the former group. Given the very small number of individuals remaining in the sample from the original "not in business" group, no separate analysis of this sub-group was possible and it was necessary to exclude these 16 individuals from portions of the overall analysis. The study thus speaks only to the ostensible effects of the training for those individuals already in business at the time of the training.

2. Population Characteristics

Formal testing of the program was confined to Malawi and to individuals with relatively limited business knowledge, experience or acumen. Having subsequently conducted the course and screened candidates from 12 other countries, no group has evidenced PEC scores nearly as low as the average PEC scores recorded in Malawi. Possible inter-coder reliability can be discounted as an explanation for this phenomenon inasmuch as those individuals conducting PEC interviews in Malawi were the same individuals who conducted the interviews in several of the other countries. This observation is consistent with conventional wisdom which labels Malawians as being, on balance, among the world's least entrepreneurial populations.

Consistent with the above observations, business activities among trainees and non-trainees in Malawi were, for the most part, simple and modest. Several of the individuals involved ran businesses that would, by most definitions, be considered micro-businesses from which they "eked" out incomes substantially less than the salaries paid to government employees. Many were "pushed" into business by lack of an available alternative, and a large number tried to operate their businesses without sacrificing their regular, full-time, jobs.

While low levels of business activity and business acumen are characteristic of much of the developing world, the group of individuals included in the Malawi experience can fairly be judged as somewhat extreme, thereby further limiting the extent to which certain research findings from this group can be extrapolated to other groups.

On the other hand, a growing body evidence suggests that the entrepreneurship training approach developed as part of this research is most effective with individuals who begin the training with relatively high PEC levels. While the statistical data is still insufficient to draw this conclusion with certainty, trainers in a variety of countries and contexts have consistently reported that the largest incremental improvements were realized by individuals who approached the course in an entrepreneurial manner and brought with them good ideas and a willingness to act on those ideas. Substantial anecdotal evidence on pre- and post-course performance adds credence to this view. In each case but Malawi, this evidence suffers from the lack of a carefully documented control group, but does appear to indicate that the greatest post-course changes attributed by participants to

the course were experienced by participants that entered with relatively high PECs. If it is true, it would suggest that a careful testing of the training program among more entrepreneurial populations would be likely to result in a stronger, not a weaker, finding than reported here.

3. Measurement Problems

This research encountered several measurement problems. Many of those interviewed kept no written records of their business transactions and therefore were able to answer questions about business performance only by making estimates or informed guesses. While the questionnaires used were specifically designed with this limitation in mind and minimized the need for recall, projection or understanding of complex concepts such as net profit or value added, one limitation of the research continues to be the absence of any independent evidence of business performance other than the information provided orally by participants. Site visits to respondents' businesses and frequent consistency cross checks of the information provided by them were introduced to address in part the absence of reliable business records, but the lack of such records continues to be a source of concern.

Another set of potential measurement limitations concern the collection of data on PECs. As noted above, the difficulties associated with inter-coder reliability were minimized in this research by use of the same two trained interviewers to conduct ex-post interviews and to verify the coding of baseline interviews. A second complication in PEC measurement concerned the language in which interviews were conducted. Interviews were conducted in English wherever possible. This factor may have resulted in some underscoring of PEC levels for those individuals who were less than fully articulate in English. Interviewers were instructed and trained, however, to make necessary allowances for such language problems and translation was employed in those cases where communication in English proved to be particularly difficult.

A third factor limiting the reliability of PEC measurement is the level of interviewer judgement implicit in the scoring process. Extraordinary efforts were gone to in order to minimize any possible biases introduced in this manner. Substantial pre-testing, two-person interviewer teams, lengthy interviewer coding manuals and training programs were all intended to minimize any subjective elements in the scoring process. Ultimately,

however, possible inadvertent cultural biases continue to be an inherent limitation in this type of research offset only by the fact that any conclusions reached regarding PECs relate to changes and relative levels rather than to absolute magnitudes.

Finally, the PEC measurement problem in Malawi was compounded by the generally low level of PECs found among study participants. While absolute levels of PECs are theoretically irrelevant to the analyses performed, low absolute levels have as a consequence the fact that small changes in PEC levels result in major shifts in percentage terms. For example, a change in score for a given PEC from "1" to "2" constitutes a 100% increase while a change from "4" to "5" represents only a 25% change. Given the other uncertainties involved in PEC measurement, Malawi's low absolute levels further limit the certainty with which one can draw firm conclusions from this research regarding changes in PECs.

4. Exogenous Variables

The training program in Malawi on which this research is based represented the first offering of an entirely new training program. As such, the program was characterized by the usual array of start-up problems, and has since been substantially revised, refined and improved. In this respect, therefore, the experience as documented constitutes a "worse case scenario" and may thus misrepresent and under-estimate the program's potential impact. The possibility of other exogenous variables having a significant effect on observed outcomes can never be entirely discounted. In this case, the possible effects of changes in the economy or general environment were controlled for by assigning individuals randomly to treatment and control groups thereby attempting to ensure that any such effects would have been felt equally by both groups. Parenthetically, however, it may be relevant to note that the research took place during a period of stagnation and decline in the Malawian economy indicating that any improvement in sales or employment by the studied firms reflects real growth in these firms in an otherwise negative economic environment.

A second possible exogenous variable offering research outcomes was the concern that the experimental group (i.e., the trainees) would receive differential access to other technical assistance, training or credit. To guard against this possibility, business support agencies were specifically

requested to avoid the provision of any special services or priority to program participants. Even training follow-up, which is theoretically a part of the training program, was limited to a single 1/2 day meeting so as not to confound subsequent attribution. A detailed series of questions administered as part of the final interview questionnaire verified that, in fact, trainees had as a group received no access to special services other than the training program itself.

A final set of concerns regards the influence of a possible "Hawthorne effect" on observed impact. Given the absence of a "placebo," it is impossible to say with certainty whether program impact was solely a response to the content or whether it might reflect, in some measure, participants' positive response to the program's novelty and visibility. While it would be desirable to test this assumption further (see section "C" below), from a practical perspective it may be preferable to try and institutionalize any Hawthorne effect that does exist and to regard it as a permanent feature of the program. In subsequent offerings of the course, it has ostensibly proven possible to sustain this effect even after the transition to local trainees and repeated offerings of the course. If correct, this observation suggests that it may be more important, in programs of this type, to find ways of intensifying and sustaining the Hawthorne effect rather than eliminating it.

In summary, this research suffers from the normal limitations one would expect in designing, delivering and evaluating a new program to a relatively small number of homogenous individuals in a single country. These limitations are compounded somewhat by the lack of business acumen and business rewards on the part of those individuals participating in the study and by the measurement difficulties inherent in research of this type.

C. Implications for Future Research

As is frequently the case, this study raises as many questions as it answers. From it follow an array of possible research issues, many of which have considerable operational consequences. The most notable of these issues include the following:

1. Cross-Cultural Validity

The training program that forms the basis for this research has now been offered in 12 countries and four languages to participants of 34 different

nationalities. An increasing number of these course offerings have been presented by local trainers, and a variety of country-specific modifications have been introduced. In each case, baseline data has been collected on participants' business and PEC levels and, in several cases, follow-up data has been collected on participants' business performance after the training. In no case other than Malawi, however, have resources been available to constitute a control group and perform quasi-experimental research of the sort reported in this study. The data are consistent with the hypothesis that the entrepreneurial training had an impact on enterprise performance, although the relationship between training and PECs is not clear. Conclusions must necessarily remain tentative until suitable testing occurs in a larger number of sites with a wider range of participants. Repetition of the study design, or of one similar to it, would be necessary to increase confidence in the hypotheses involved.

2. Relationship Between Training, PECs and Performance

Given the relatively small number and homogeneous nature of the individuals included in this research, it was not possible to test various subordinate hypotheses of interest. Those hypotheses provoked by this study which would benefit considerably from additional research include the following:

- individuals who enter the course with higher (or lower) PEC scores show greater incremental gains in PEC levels and business performance as a result of participating in the course;
- certain PECs or combinations of PECs are more critical than others for success in business and/or for deriving benefit from the training program;
- there are "threshold levels" for certain PECs beyond which further increases yield no additional impact on business performance;
- certain PECs are more likely to be enhanced by the training than are others;
- the training is more likely to have a significant incremental impact on individuals already in business (or not already in business); and
- education is (or is not) a critical determinant of the success of the training.

In addition, the current research did not fully validate the direct linkage from training to changes in PECs to changes in performance. The nature of this linkage would thus provide fertile ground for additional study.

3. Training Program Design

Given the objectives of the current research, considerable efforts were taken not to provide program participants with any additional training, technical assistance, access to credit or other follow-up support. The rationale for denying participants these other services was the desire to test a minimalist approach and to simplify the process of attributing changes in business performance to the behavioral training provided. There is ample evidence from other programs, however, that training impact is much enhanced by the addition of consistent reinforcement after the course and by facilitating access to other necessary information, skills and services. It would thus be desirable, over time, to test the incremental benefit (and cost) of adding these additional elements to the core entrepreneurship training program tested here.

Of similar interest would be a careful testing of a shorter and more focused version of the training program (e.g., two long weekends) or of different formats (e.g., evening adult education sessions, and/or integration with longer academic or technical courses). Such testing would also provide the opportunity to compare the impact of the training program to various alternative forms of business training such as accounting and stock control.

4. Cost Effectiveness

The current study provides no obvious basis for judging the cost efficiency of the training program developed and tested. In part, this lack is due to uncertainty as to how best to account for the fixed costs associated with this first offering of the course and how to estimate the effect of the course on those individuals who could not be located at the time ex post survey data was being collected.

Inasmuch as the course was subsequently offered on numerous occasions under varying conditions, it is now possible to estimate the costs involved rather reliably. Such costs are highly sensitive to the number of participants in a given course, the number of times the course is repeated in

a given venue, and the salary levels paid to the trainers involved. Moreover, these costs are typically offset to a greater or lesser degree by fees charged to participants. Taking all of these factors into consideration results in net program cost to course sponsors varying from \$0 per participant in Argentina to \$2000 per participant in Nigeria.

Estimation of typical benefits from the training is somewhat more complex. The nature of such benefits depends critically upon the perspective from which the analysis is performed. For governments, benefits include additional employment (and associated reduction in welfare obligations, political turbulence and human misery), net foreign exchange benefits, increased value added and tax revenue. For individual participants, benefits include increased profits, personal income and a variety of intangible benefits.

In absolute terms, the largest gains from a program of this sort are unlikely to be experienced by very small scale or poor entrepreneurs. These individuals are also the least able and willing to pay significant fees for participating in the program. The lower down the economic ladder one goes, the less likely one is to show a positive financial return on public investment in entrepreneurship training. On the other hand, many governments and donor agencies feel socially or developmentally inclined to work with participants whose personal circumstances are somewhat less enviable than those who currently own and run substantial enterprises.

Given the above considerations and the importance of relating costs to benefits in training programs of this sort, future research should be focused on the feasibility, "profitability" and trade-offs involved in providing a training program such as that presented in this research to different target groups. Costs, returns and break even points could be calculated for both the individuals involved and for the nation. While this analysis would not by itself dictate appropriate social policy, it would serve to clarify the implications of various options and the feasibility of sustaining them over time.

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ADDENDUM TO THE ENDNOTES:

**Personal Entrepreneurial Characteristics
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Appendix I: Data Collection Instruments

A. Baseline Questionnaire

Baseline Questionnaire

ENTREPRENEURSHIP AND SMALL ENTERPRISE DEVELOPMENT PROJECT

Background Questionnaire

1. Country
- ① 1 ☐ Malawi
- 2 ☐ Ecuador
- 3 ☐ India
2. Project group
- ② 1 ☐ First wave training
- 2 ☐ Second wave training
3. Person interviewed:
- Name _____
- ③ Survey control number _____
4. Interviewer:
- _____
5. Interview date:
- ④ _____ Month (1 = Jan., 2 = Feb., etc.)
- ⑤ _____ Year
6. Interview
- ⑥ 1 ☐ Completed
- 2 ☐ Not completed. Give reason:
- _____
- _____
7. Time began:
- . _____ AM or PM
8. Time ended:
- _____ AM or PM

Section A. -- Background Information

A1. Please give me your name and current address.

Name _____

Address _____

A2. What is your current age in completed years?

⑦ _____ years

A3. How many years of formal education do you have in . . .

⑧ _____ Primary school

⑨ _____ Secondary school

⑩ _____ Business training

⑪ _____ University education

A4. How many years of experience do you have supervising employees. Include supervision in your own business or jobs working for other businesses when you were a paid supervisor.

TICK BOX OR COMPLETE THE BLANK

⑫ ☐ None

_____ years

A5. How many years of experience do you have in managing a business. Include management in your own business or jobs working for other businesses when you were a paid manager.

TICK BOX OR COMPLETE THE BLANK

⑬ ☐ None

_____ years

A6. Which of the following most accurately describes your background in BOOKKEEPING?

READ THE CATEGORIES TO THE RESPONDENT AND CHECK A BOX FOR THE RESPONDENT'S ANSWER

⑭

1 ☐ no experience or training

2 ☐ no training, some experience

3 ☐ some training, no experience

4 ☐ training and experience

Section A. -- Background Information -- continued

<p>A7. Which of the following most accurately describes your background in SUPERVISION?</p> <p>READ THE CATEGORIES TO THE RESPONDENT AND CHECK A BOX FOR THE RESPONDENT'S ANSWER</p>	<p>⑮</p> <p>1 <input type="checkbox"/> no experience or training</p> <p>2 <input type="checkbox"/> no training, some experience</p> <p>3 <input type="checkbox"/> some training, no experience</p> <p>4 <input type="checkbox"/> training and experience</p>
<p>A8. Which of the following most accurately describes your background in MANAGEMENT?</p> <p>READ THE CATEGORIES TO THE RESPONDENT AND CHECK A BOX FOR THE RESPONDENT'S ANSWER</p>	<p>⑯</p> <p>1 <input type="checkbox"/> no experience or training</p> <p>2 <input type="checkbox"/> no training, some experience</p> <p>3 <input type="checkbox"/> some training, no experience</p> <p>4 <input type="checkbox"/> training and experience</p>
<p>A9. Do you own a business or a major share of a business that is currently operating?</p>	<p>⑰</p> <p>1 <input type="checkbox"/> Yes - SKIP TO A23</p> <p>2 <input type="checkbox"/> No</p>
<p>A10 Have you ever owned a business or been an equal partner in a business?</p>	<p>⑱</p> <p>1 <input type="checkbox"/> Yes - owner</p> <p>2 <input type="checkbox"/> Yes - equal partner</p> <p>3 <input type="checkbox"/> No - SKIP TO A18</p>
<p>A11 Have you owned or been an equal partner in MORE THAN ONE business?</p>	<p>⑲</p> <p>1 <input type="checkbox"/> Yes</p> <p>2 <input type="checkbox"/> No</p>

Section A. -- Background Information

I am now going to ask you some questions about your previous businesses.

INTERVIEWER: BEGIN WITH MOST RECENT BUSINESS INVOLVEMENT AND CONTINUE WITH FORMER BUSINESSES.

A12 What was the name of this business?	A13 Were you the . . .	A14 What kind of business was this?	A15 When did this business begin? GET THE YEAR AND MONTH	A16 When did this business end? GET THE YEAR AND MONTH	A17 How did your involvement with this business end?
_____	20 1 <input type="checkbox"/> sole owner 2 <input type="checkbox"/> partner 3 <input type="checkbox"/> shr holder	21 _____ _____ _____	22 Month _____ 25 Year _____	23 Month _____ 26 Year _____	24 Reason _____ _____ _____
_____	27 1 <input type="checkbox"/> sole owner 2 <input type="checkbox"/> partner 3 <input type="checkbox"/> shr holder	28 _____ _____ _____	29 Month _____ 32 Year _____	30 Month _____ 33 Year _____	31 Reason _____ _____ _____
_____	34 1 <input type="checkbox"/> sole owner 2 <input type="checkbox"/> partner 3 <input type="checkbox"/> shr holder	35 _____ _____ _____	36 Month _____ 39 Year _____	37 Month _____ 40 Year _____	38 Reason _____ _____ _____

Section A. -- Background Information -- continued

A18 Do you plan to begin a new business or acquire an existing business during the next 12 months?

④1

1 ☐ Yes

2 ☐ Not sure

3 ☐ No - SKIP TO A23

A19 Please describe the kinds of business plans you are now considering.

PROBE AS NECESSARY TO DETERMINE THE KIND OF BUSINESS, LOCATION OF THE BUSINESS, MEANS OF FINANCING, OTHER PARTNERS OR FAMILY MEMBERS, AND BUSINESS STRATEGY.

④2

A20 What needs to happen for you to decide whether you want to pursue any of your plans?

④3

Section A. -- Background Information -- continued

A21 What is your MAIN source of financing for your prospective business?

**RECORD VERBATIM BELOW AND THEN
TICK THE APPROPRIATE BOX**

44

- 1 ☐ Banks
- 2 ☐ Government loans
- 3 ☐ Supplier credits
- 4 ☐ Other family members
- 5 ☐ Your own savings
- 6 ☐ Others (specify)

A22 If (NAME MAIN SOURCE FROM A21) is your main source of financing, what are your alternative sources?

**RECORD VERBATIM BELOW AND THEN
TICK THE APPROPRIATE BOX**

45

- 1 ☐ Banks
- 2 ☐ Government loans
- 3 ☐ Supplier credits
- 4 ☐ Other family members
- 5 ☐ Your own savings
- 6 ☐ Others (specify)

A23 Has your father ever owned or operated a business?

46

- 1 ☐ Yes - Explain:

- 2 ☐ No

Section A. -- Background Information -- continued

A24 Has your mother ever owned
operated a business?

④7

1 ☐ Yes - Explain:

2 ☐ No

A25 Have any of your other
relatives in this country
owned or operated a business?

④8

1 ☐ Yes - Explain:

2 ☐ No

A26 Do any of your close friends
currently own or operate
a business?

④9

1 ☐ Yes - **ASK A27**

2 ☐ No - **SKIP TO A28**

A27 How many of your close
friends currently own or
operate a business?

⑤0

_____ close friends

A28 Please tell me about your
objectives for going into
business.

⑤1

**RECORD THE ANSWER VERBATIM. IF
THE RESPONDENT GIVES AN ANSWERS
IN ONLY A FEW WORDS, SAY:**

Can you be more specific or Do you
have any other reasons

Section B. --- Economic Activities

ASK FIRST: What is currently the major activity you are involved in? By major activity, I mean the one you spend the most time in doing each week. Is it working in a business enterprise that you own or partially own, working as an employee for someone else, or some other activity?

COMPLETE ITEMS B1 THROUGH B3 ACROSS THE LINE BELOW FOR THIS ACTIVITY.

B1. Major Activity (CHECK ONE)	B2. Please describe what you do in this activity.	B3. When did you start this activity?
<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> 1 <input type="checkbox"/> Business </div> <div style="width: 40%;"> 2 <input type="checkbox"/> Employee </div> <div style="width: 20%;"> 3 <input type="checkbox"/> Other (describe) _____ </div> </div>	<div style="text-align: center;"> ② </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> Month ③ _____ Year ④ _____ </div> <div style="width: 20%;"></div> </div>
B.4 Do you earn the majority of your income from this activity or from some other activity?	<div style="text-align: center;"> ⑤ 1 <input type="checkbox"/> This activity 2 <input type="checkbox"/> Some other activity - DESCRIBE </div>	

Section B. -- Economic Activities -- continued

CHECK ITEM B3 ON THE PREVIOUS PAGE. IF THE DATE IS MORE THAN 6 MONTHS AGO, SKIP TO QUESTION B10.
IF THE DATE IS LESS THAN 6 MONTHS AGO, ASK THE QUESTIONS BELOW AND COMPLETE B5-B9 FOR THE NEXT ACTIVITY.

CONTINUE THIS PROCESS UNTIL ACTIVITIES FOR THE ENTIRE 6 MONTH PERIOD ARE COVERED.

What was your major activity before (MENTION PREVIOUS ACTIVITY)--working in a business that you own or partially own, working as an employee for someone else, or some other activity?

B5 Earlier major activity (CHECK ONE)	B6 Please describe what you do in this activity.	B7 When did you start this activity?	B8 When did you terminate this activity?	B9 Describe why this activity ended
1 <input type="checkbox"/> Business 2 <input type="checkbox"/> Employee 3 <input type="checkbox"/> Other (What?)	7 <hr/> <hr/> <hr/>	8 Month <hr/> 11 Year <hr/>	9 Month <hr/> 12 Year <hr/>	10 Reason <hr/> <hr/> <hr/>
1 <input type="checkbox"/> Business 2 <input type="checkbox"/> Employee 3 <input type="checkbox"/> Other (What?)	14 <hr/> <hr/> <hr/>	15 Month <hr/> 18 Year <hr/>	16 Month <hr/> 19 Year <hr/>	17 Reason <hr/> <hr/> <hr/>
1 <input type="checkbox"/> Business 2 <input type="checkbox"/> Employee 3 <input type="checkbox"/> Other (What?)	21 <hr/> <hr/> <hr/>	22 Month <hr/> 25 Year <hr/>	23 Month <hr/> 26 Year <hr/>	24 Reason <hr/> <hr/> <hr/>

Section B. -- Economic Activities -- continued

B10 During the previous 6 months, were you involved in any additional business ventures outside the main activities you just mentioned? Be sure to include any agricultural businesses and business ventures that mainly involve investing in land, buildings, or securities.

☐ Yes - COMPLETE B11 THROUGH B14 FOR EACH BUSINESS MENTIONED.

☐ No - SKIP TO B15

B11 Please describe what you do/did in this business venture. Also, what was the usual number of employees at this business?		B12 When did your involvement in this business start?	B13 When did your involvement in this business end?	B14 Describe why your involvement in this business ended.
Description _____ _____ _____	Number of persons ③② _____	Month ②⑦ _____ Year ③① _____	Month ②⑧ _____ Year ③① _____	Reason ②⑨ _____ _____ _____
Description _____ _____ _____	Number of persons ③③ _____	Month ③③ _____ Year ③⑥ _____	Month ③④ _____ Year ③⑦ _____	Reason ③⑤ _____ _____ _____
Description _____ _____ _____	Number of persons ④④ _____	Month ③⑨ _____ Year ④② _____	Month ④① _____ Year ④③ _____	Reason ④① _____ _____ _____

Section B. -- Economic Activities -- continued

B15 REFER TO THE MAJOR ACTIVITIES LISTED IN ITEMS B1 AND B5. IF MORE THAN ONE ASK: "Which of the following was your major activity for the entire 6 month period?
(READ THE LIST IN B1 AND B5) _____

B16 INTERVIEWER: TICK THE BOX CORRESPONDING TO THE CATEGORY OF MAJOR ACTIVITY FOR ENTIRE PERIOD AND FOLLOW SKIP INSTRUCTION.

45

Major activity is:

- 1 ☐ Business - SKIP TO B21
- 2 ☐ Employee - ASK NEXT QUESTION
- 3 ☐ Other - SKIP TO C1

B17 Would you please estimate the total amount of salaries and wages that you received from your job in the past 6 months? Please identify which category is the best estimate of income from the job for the 6 month period.

46

- 1 ☐ Less than _____
- 2 ☐ _____ to _____
- 3 ☐ _____ to _____
- 4 ☐ Over _____

SHOW RESPONDENT CATEGORIES TO THE AND TICK THE APPROPRIATE ONE

B18 I'm now going to ask you about new developments in your job in the past 6 months. Do you have any new responsibilities in your job?

47

- 1 ☐ No
- 2 ☐ Yes - EXPLAIN:

B19 In the past 6 months, have you made any major decisions for your organization that affects how the organization operates or conducts its business?

48

- 1 ☐ No
- 2 ☐ Yes - EXPLAIN:

Section B. -- Economic Activities -- continued

B20 Have you received a promotion
in the past 6 months?

④

1 ☐ No

2 ☐ Yes - PLEASE DESCRIBE:

SKIP TO QUESTION C1

B21 I am now going to ask you some
questions about your current
business. Does this business
operate in more than one
location?

⑤

1 ☐ No

2 ☐ Yes - PLEASE DESCRIBE:

B22 Do you own this business
entirely, is it a family
business, or do you own it
along with others outside of
your immediate family?

ENTER THE ANSWER VERBATIM AND
THEN CHECK THE APPROPRIATE BOX

①

1 ☐ Own the business entirely
(responsible for all
management of the business)

2 ☐ Family business
(share management with other
family members)

3 ☐ Owner with other nonfamily
members -- ASK HOW MANY
OTHERS _____ persons

4 ☐ Other arrangement

Section B. -- Economic Activities -- continued

B23 Is this a new business that you and others started or did you purchase an existing business?

②

1 ☐ New business

2 ☐ Existing business

B24 IF A NEW BUSINESS SAY

I'm going to ask about some of the things that you might have done in starting your business. Please tell me if you had primary responsibility (mark **PRIM COLUMN**), someone else had responsibility (mark **ELSE column**), or if this activity was not required (mark the **NA column**).

IF AN EXISTING BUSINESS SAY:

I'm now going to ask you about changes to the business that were made by you after you acquired the business. Please tell me if you had primary responsibility for making changes in any of the following areas (mark the **PRIM column**), if someone else had primary responsibility (mark the **ELSE column**), or if no changes were made (mark the **NA column**).

Activity (CIRCLE THE NUMBER)	P R I M	E L S E	NA
Determined business location	③ 1	2	3
Obtained business licenses	④ 1	2	3
Arranged for financing	⑤ 1	2	3
Recruited staff	⑥ 1	2	3
Procured equipment	⑦ 1	2	3
Designed the product or service offered	⑧ 1	2	3
Kept the books	⑨ 1	2	3
Authorized payments	⑩ 1	2	3
Determined the prices of the products or services	⑪ 1	2	3
Organized advertising or marketing	⑫ 1	2	3

Section B. -- Economic Activities -- continued

B25 Did you do anything else that I haven't mentioned in starting or changing your business?

**RECORD THE RESPONDENT'S ANSWER
VERBATIM**

⑬

B26 What is your MAIN source of financing for your business?

**RECORD VERBATIM BELOW AND THEN
TICK THE APPROPRIATE BOX**

⑭

- 1 ☐ Banks
- 2 ☐ Government loans
- 3 ☐ Supplier credits
- 4 ☐ Other family members
- 5 ☐ Your own savings or earnings
- 6 ☐ Others (specify)

B27 If (NAME MAIN SOURCE IN B26) is your main source of financing, what are your alternate sources?

**RECORD VERBATIM BELOW AND THEN
TICK THE APPROPRIATE BOXES**

⑮

- 1 ☐ No alternate sources
- 2 ☐ Banks
- 3 ☐ Government loans
- 4 ☐ Supplier credits
- 5 ☐ Other family members
- 6 ☐ Your own savings
- 7 ☐ Others (specify)

B28 How many full time and part time persons do you employ in this business. Please include all locations.

⑯

_____ full time persons
⑰
_____ part time persons

Section B. -- Economic Activities -- continued

<p>B29 I'm now going to ask you about any changes that you might have made in operating this business in the past 6 months. In the past 6 months, have you made any changes in the products or services that you offer?</p>	<p>⑮</p> <p>1 <input type="checkbox"/> No changes</p> <p>2 <input type="checkbox"/> Yes - Please explain</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>B30 In the past 6 months, have you made any changes in how you <u>produce</u> your products or how you provide your services?</p>	<p>⑯</p> <p>1 <input type="checkbox"/> No changes</p> <p>2 <input type="checkbox"/> Yes - Please explain</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>B31 In the past 6 months, have you made any changes in how you <u>market or advertise</u> your products or services?</p>	<p>⑰</p> <p>1 <input type="checkbox"/> No changes</p> <p>2 <input type="checkbox"/> Yes - Please explain</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>B32 In the past 6 months, have you made any important new contacts associated with this business?</p>	<p>⑱</p> <p>1 <input type="checkbox"/> No changes</p> <p>2 <input type="checkbox"/> Yes - Please explain</p> <p>_____</p> <p>_____</p> <p>_____</p>

Section B. -- Economic Activities -- continued

<p>B33 What is the main product or service in this business?</p>	<p>②②</p> <hr/> <hr/>
<p>B34 What units do you use to measure the amount of business you are doing in SAY PRODUCT OR SERVICE NAMED IN B33</p>	<p>②③</p> <hr/>
<p>B35 How many SAY UNITS NAMED IN B34 did you sell or deliver last month?</p>	<p>②④</p> <hr/>
<p>B36 Now I'm going to ask you to compare your performance to <u>that of similar businesses you know about</u>. Please rank yourself on a scale of 1 to 10, where 1 means the least successful, 5 means about the same success as similar businesses, and 10 means the most successful among similar businesses. You may use any number between 1 and 10. Do you want me to repeat the question? IF ASKED TO, DO SO.</p>	<p>Ranking from 1 to 10:</p> <p>②⑤</p> <hr/>
<p>B37 Now I'm going to ask you to compare your performance to <u>you own objectives</u>. Rank yourself on a scale of 1 to 10, where 1 means the least successful, 5 means about the same as <u>your objectives</u>, and 10 means the greatly exceeding <u>your objectives</u>. You may use any number between 1 and 10. Do you want me to repeat the question? IF ASKED TO, DO SO.</p>	<p>Ranking from 1 to 10:</p> <p>②⑥</p> <hr/>

Section C. -- Introduction to Business Income and Expenditures

C1 REFER BACK TO ITEMS B1, B5, AND B11. CHECK IF THE RESPONDENT HAS ANY BUSINESS ACTIVITY IN PAST SIX MONTHS. TICK THE APPROPRIATE BOX ON THE RIGHT AND FOLLOW THE SKIP PATTERN.

27

- 1 ☐ No business activity - **END INTERVIEW**
- 2 ☐ One business only - Complete sections D and E and F for this business after asking question C2.
- 3 ☐ More than one business - Complete sections D, E, and F for each business. Be sure to enter the name of the business in C2 and remind the respondent which business you are referring to when you complete sections D, E, and F.

Now, continue with question C2

C2 (section gives an overview of D, E, and F and gives a pep talk about confidentiality, "we're not tax collectors", importance of best estimates, and so forth. To be provided by MSI.)

NOW HAND THE RESPONDENT THE FLASHCARD AND SAY:

I'm now going to ask about the income and expenditures from your business for the past 6 months. In order to get the proper measurement of business income and expenditures for the past 6 months, I need to include the components on this card. Do you have records on financial statements for your business that contain this information for the past 6 months, or would you prefer that we try to determine amounts together?

IF RESPONDENT HAS RECORDS, TRANSCRIBE APPROPRIATE AMOUNTS TO EACH ITEM D, E, AND F. ASK THE QUESTION FOR EACH ITEM THAT IS NOT COVERED IN THE RECORDS

IF THE RESPONDENT HAS NO RECORDS, ASK QUESTIONS IN SECTIONS D, E, AND F

(THE FOLLOWING PAGES ARE FOR ACTIVITY _____).

Section D. -- Business Receipts

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD WHETHER . . .	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>D1. The next group of questions that I am going to ask you refer only to (NAME BUSINESS, STOP IF NO MORE BUSINESSES) (WRITE NAME OF BUS.) _____</p> <p>During the past 6 months, what was the total value of all sales of goods to customers?</p>	<p>②⑥</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p>AMOUNT: ③⑦ _____</p>	<p>Was this response</p> <p>②⑨</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>D2. During the past 6 months, what was the cash value of products or services that you exchanged for someone else's products or services?</p>	<p>③①</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p>AMOUNT: ③③ _____</p>	<p>Was this response</p> <p>③②</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION TO 6 MONTHS

Section D. -- Business Receipts -- continued

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD WHETHER . . .	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>D3. During the past 6 months, what was the total amount of receipts and/or commissions for services that you received? Do not include sales reported in item D1.</p>	<p>34</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">35 AMOUNT: _____</p>	<p>Was this response</p> <p>35</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>D4. During the past 6 months, what was the value of all government subsidies received? Do not include payments for government contracts or government purchases from your business.</p>	<p>37</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">38 AMOUNT: _____</p>	<p>Was this response</p> <p>38</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>D5. During the past 6 months, were there any other receipts not already mentioned, such as rent, interest, or dividends? (PLEASE DESCRIBE): _____</p> <p>_____</p>	<p>40</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">42 AMOUNT: _____</p>	<p>Was this response</p> <p>41</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION TO 6 MONTHS

Section E. -- Business Expenses

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD WHETHER . . .	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>E1. During the past 6 months, what was the total value of all cash payments to suppliers FOR RAW MATERIALS, SUPPLIES AND MERCHANDISE FOR RESALE?</p>	<p>④③</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount </p> <p align="right">④⑤ AMOUNT: _____</p>	<p>Was this response</p> <p>④④</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>E2. During the past 6 months, what was the total value of all cash payments to suppliers FOR EQUIPMENT, CAPITAL GOODS, AND SUPPLIES NOT FOR RESALE?</p>	<p>④⑥</p> <p>1 <input type="checkbox"/> None - SKIP TO E4</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount </p> <p align="right">④⑧ AMOUNT: _____</p>	<p>Was this response</p> <p>④⑦</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION TO 6 MONTHS

Section E. -- Business Expenses -- continued

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD AMOUNT	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>E3. Please describe each of the major purchases of equipment you have made or improvements in your facilities, during the past 6 months.</p> <p>CONTINUE TO ASK "ARE THERE ANY OTHER ITEMS?" UNTIL THE RESPONDENT SAYS "NO"</p> <p>DESCRIPTION: _____</p> <p>_____</p> <p>_____</p>	<p align="center">⑤</p> <p>(amount) _____</p>	<p>Was this response</p> <p>④</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>DESCRIPTION: _____</p> <p>_____</p> <p>_____</p>	<p align="center">②</p> <p>(amount) _____</p>	<p>Was this response</p> <p>①</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>DESCRIPTION: _____</p> <p>_____</p> <p>_____</p>	<p align="center">④</p> <p>(amount) _____</p>	<p>Was this response</p> <p>③</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION TO 6 MONTHS

Section E. -- Business Expenses -- continued

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD AMOUNT	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>E3. (CONTINUATION OF PREVIOUS PAGE)</p> <p>CONTINUE TO ASK "ARE THERE ANY OTHER ITEMS?" UNTIL THE RESPONDENT SAYS "NO"</p> <p>DESCRIPTION: _____</p> <p>_____</p> <p>_____</p>	<p align="center">⑥</p> <p>(amount) _____</p>	<p>Was this response</p> <p>⑤</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>DESCRIPTION: _____</p> <p>_____</p> <p>_____</p>	<p align="center">⑧</p> <p>(amount) _____</p>	<p>Was this response</p> <p>⑦</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>DESCRIPTION: _____</p> <p>_____</p> <p>_____</p>	<p align="center">⑩</p> <p>(amount) _____</p>	<p>Was this response</p> <p>⑨</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION TO 6 MONTHS

Section E. -- Business Expenses -- continued

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD WHETHER . . .	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>E4. During the past 6 months, what was the cash value of payments in kind to suppliers FOR RAW MATERIALS, SUPPLIES AND MERCHANDISE FOR RESALE? By payments in kind, I mean payments that you made in the form of your products or services rather than cash.</p>	<p>⑪</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p>AMOUNT: _____</p>	<p>Was this response</p> <p>⑫</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>E5. During the past 6 months, what was the cash value of payments in kind to suppliers FOR EQUIPMENT, CAPITAL GOODS, AND SUPPLIES NOT FOR RESALE? By payments in kind, I mean payments that you made in the form of your products or services rather than cash.</p>	<p>⑬</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p>AMOUNT: _____</p>	<p>Was this response</p> <p>⑭</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>E6. During the past 6 months, what was the total cost of employees salaries and wages PAID IN CASH?</p>	<p>⑮</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p>AMOUNT: _____</p>	<p>Was this response</p> <p>⑯</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION TO 6 MONTHS

Section D. — Business Expenses — continued

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD WHETHER . . .	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>E7. During the past 6 months, what was the total cash value cost of employees salaries and wages PAID IN KIND?</p>	<p>⑰</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">⑱ AMOUNT: _____</p>	<p>Was this response</p> <p>⑩</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>E8. During the past 6 months, what was the total cost of interest paid on loans, business debt, and supplier credit?</p>	<p>⑳</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">㉑ AMOUNT: _____</p>	<p>Was this response</p> <p>㉒</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>E9. During the past 6 months, what was the total cost of commissions paid?</p>	<p>㉓</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">㉔ AMOUNT: _____</p>	<p>Was this response</p> <p>㉕</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION TO 6 MONTHS

Section D. -- Business Expenses -- continued

<p>E10 During the past 6 months, what was the total cost of advertising, publicity, and marketing?</p>	<p>②⑥</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">②⑧ AMOUNT: _____</p>	<p>Was this response</p> <p>②⑦</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>E11 Does this business currently have an inventory of goods or products that have not yet been sold?</p>	<p>②⑨</p> <p>1 <input type="checkbox"/> Yes - ASK E12</p> <p>2 <input type="checkbox"/> No - SKIP TO E15</p>	
<p>E12 Is the current level of inventories greater than, less than, or about the same level as inventories were 6 months ago?</p>	<p>③⑩</p> <p>1 <input type="checkbox"/> Greater - ASK E13</p> <p>2 <input type="checkbox"/> Less - SKIP TO E14</p> <p>3 <input type="checkbox"/> About the same - SKIP to E15</p>	
<p>E13 So, your inventories are larger by a certain amount than they were 6 months ago. Can you estimate the value of this difference?</p>	<p align="right">③①</p> <p>AMOUNT: _____ SKIP TO E15</p>	
<p>E14 So, your inventories are smaller by a certain amount than they were 6 months ago. Can you estimate the value of this difference?</p>	<p align="right">③②</p> <p>AMOUNT: _____ SKIP TO E15</p>	

Section D. -- Business Expenses -- continued

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD WHETHER . . .	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>E15 During the past 6 months, what was the total amount of taxes and fees paid to the government?</p>	<p>③③</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">③⑤ AMOUNT: _____</p>	<p>Was this response</p> <p>③④</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>E16 During the past 6 months, were there any other expenses not already mentioned, such as rent, repairs, or maintenance? (PLEASE DESCRIBE): _____</p> <p>_____</p>	<p>③⑥</p> <p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Resp. knows amount</p> <p align="right">③⑧ AMOUNT: _____</p>	<p>Was this response</p> <p>③⑦</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION TO 6 MONTHS

Section F. -- Consistency Checks

F1. Use your calculator to determine the total value in items D1 through D5. Enter the amount here: _____

F2. Use your calculator to determine the total value in items E1 through E16. Enter the amount here: _____

F3. Subtract the amount in F2 from the amount in F1. Enter the result here (apparent profit or loss): _____

F4. If the amount shown on line F3 is less than zero (F2 is greater than F1),
Tell the respondent: "It appears that you have not made a profit. Is this
correct?"

☐ Yes ASK WHY _____

☐ No - WORK WITH THE RESPONDENT TO
DETERMINE WHICH FIGURES ARE
WRONG OR INCOMPLETE AND MAKE
ALL REQUIRED CORRECTIONS.

F5. If the amount shown on line F3 is MORE THAN TWICE the figure in F1,
Tell the respondent: "It appears that you have made a big profit. Is this
correct?"

☐ Yes ASK WHY _____

☐ No - WORK WITH THE RESPONDENT TO
DETERMINE WHICH FIGURES ARE
WRONG OR INCOMPLETE AND MAKE
ALL REQUIRED CORRECTIONS.

END OF QUESTIONNAIRE - IF THIS IS THE LAST BUSINESS, THANK THE RESPONDENT FOR HIS/HER COOPERATION

B. Baseline Description of the Business

☐ Check when all work in
this interim monitoring
report is completed.

Baseline Description of the Business

1. Business identification

a. Name and address of the MAIN business described in the questionnaire

b. Survey Control Number

2. Obtain the following information from the owner of the business:

a. Is this business in . . .

- | | |
|--|--|
| <input type="checkbox"/> manufacturing | <input type="checkbox"/> agriculture |
| <input type="checkbox"/> wholesale trade | <input type="checkbox"/> retail trade |
| <input type="checkbox"/> hotels, restaurants, cafe | <input type="checkbox"/> business services |
| <input type="checkbox"/> personal services | <input type="checkbox"/> other (describe)
<hr/> |

b. Ask the owner to describe the business, including what he makes or sells, what kinds of people are the primary customers, and what, if anything, makes the business different from others providing similar products and services in the nearby area. Use the back of this page if more space is needed.

3. Ask if the business depends upon IMPORTED MATERIALS AND SUPPLIES.

1 ☐ Does NOT depend on imported materials and supplies

2 ☐ Does depend on imported materials and supplies. Then ask:

Do you import these goods or do you rely on other to provide these imported goods?

1 ☐ Import directly

2 ☐ Relies on others

4. Ask if the business depends upon EXPORTING IT'S PRODUCTS OR SERVICES.

1 ☐ Does NOT depend on exporting it's products or services

2 ☐ Does depend on exporting it's product or services. Then ask:

Do you export these goods or do you rely on other to do the actual exporting of goods or service?

1 ☐ Export directly

2 ☐ Relies on others

5. Take a photograph of the outside of the premises. Make sure the photograph clearly shows the store front, store name, and physical conditions of the immediate area. Take more than one photograph if necessary to accomplish this. The photo will be used later in this study to (a) identify the premises and (b) determine if major changes in the physical premises or immediate area have occurred.

6. Immediately after you have left the premises, write a description of the inside of the premises. Your description will be used for purposes similar to the photograph. Record your description below. Use the back of this page if more space is needed.

The following questions pertain to all other businesses or gainful activities in which this owner is involved. Continue to ask the respondent if there are any other businesses, enterprises, or other gainful activities in which he/she is CURRENTLY engaged or has been engaged during the past 6 months. Complete the following page for each such activity. It is especially important to find out about all the activities, even if only partial information is available for some of them.

Business or other enterprise number _____

1. Name and brief description of this business or other enterprise:

2. Is this business in . . .

1 ☐ manufacturing

2 ☐ agriculture

3 ☐ wholesale trade

4 ☐ retail trade

5 ☐ hotels, restaurants, cafe

6 ☐ business services

7 ☐ personal services

8 ☐ other (describe)

3. Number of people currently employed: _____ employees

4. Total value of business revenue (sales, receipts, commissions, fees, etc.) _____

5. Main product or service (describe) _____

6. Who owns this business (interviewer: record the answer verbatim and then classify the response):

1 ☐ Self only 2 ☐ Self and family 3 ☐ Self and partners
number of partners: _____

7. Is this enterprise a new business you began yourself or did you purchase an existing business from someone else?

1 ☐ New business

2 ☐ Purchased existing business

8. Please give me the date you (began/purchased) this business: _____
(month)

9. Ask if the business depends upon IMPORTED MATERIALS AND SUPPLIES.

1 ☐ Depends on imports

2 ☐ Does NOT depend on imports

10. Ask if the business depends upon EXPORT MARKETS.

1 ☐ Depends on exports

2 ☐ Does NOT depend on exports

C. Follow-Up Questionnaire -- August 1988 Interview Guides

Follow-Up Questionnaire
ENTREPRENEURSHIP AND SMALL ENTERPRISE DEVELOPMENT PROJECT
(August 1988 Version)

1. Person interviewed: Name _____

Survey control number _____

2. Sex

1 ☐ Male

2 ☐ Female

3. Interviewer: _____

4. Interview date: _____ Month (01 = Jan, 02 = Feb, etc.)

_____ 88 Year

5. Interview

1 ☐ Completed

2 ☐ Not completed. Give reason:

6. Time began:

_____ AM or PM

7. Time ended:

_____ AM or PM

8. Current address of
person interviewed:

9. OFFICE USE ONLY

1 ☐ Group E

2 ☐ Group C

Section A. Economic Activities

<p>A1 Are you currently working as an employee for another person, company, or for the government?</p>	<p>1 <input type="checkbox"/> Yes - ASK A2 - A5</p> <p>2 <input type="checkbox"/> No - SKIP to A6</p>
<p>A2 What is your current monthly wage or salary?</p>	<p>Monthly wage or salary in Kwacha:</p> <p>_____</p>
<p>A3 I'm now going to ask you about new developments in your job in the past 6 months. Do you have any new responsibilities in your job?</p>	<p>1 <input type="checkbox"/> No</p> <p>2 <input type="checkbox"/> Yes - WHAT ARE THEY?</p> <p>_____</p> <p>_____</p>
<p>A4 In the past 6 months, have you made any major decisions for your organization that affect how the organization operates or conducts its business?</p>	<p>1 <input type="checkbox"/> No</p> <p>2 <input type="checkbox"/> Yes - PLEASE DESCRIBE THEM.</p> <p>_____</p> <p>_____</p>
<p>A5 Have you received a promotion in the past 6 months?</p>	<p>1 <input type="checkbox"/> No</p> <p>2 <input type="checkbox"/> Yes - HOW MUCH DID SALARY GO UP?</p> <p>_____</p> <p>_____</p>
<p>A6 Do you currently own or operate a business</p>	<p>1 <input type="checkbox"/> Yes - SKIP to A9</p> <p>2 <input type="checkbox"/> No</p>
<p>A7 Are you trying to start a business now?</p>	<p>1 <input type="checkbox"/> Yes - PLEASE EXPLAIN:</p> <p>_____</p> <p>_____</p> <p>2 <input type="checkbox"/> No</p>

Section A. Economic Activities (cont'd)

<p>A8 What are the main barriers that are preventing you from getting started?</p>	<hr/> <hr/> <hr/> <p style="text-align: center;"><u>END INTERVIEW</u></p>
<p>A9 How many different businesses do you own or operate?</p>	<p>_____ businesses</p>
<p>A10 Did your purchase or begin any new business activity during the past 6 months?</p>	<p>1 <input type="checkbox"/> Yes - ASK A11</p> <p>2 <input type="checkbox"/> No - SKIP TO A12</p>
<p>A11 How many businesses did you start in the past 6 months?</p>	<p>_____ businesses</p>
<p>A12 Did you terminate any businesses in the past 6 months?</p>	<p>1 <input type="checkbox"/> Yes - ASK A13 and A14</p> <p>2 <input type="checkbox"/> No - SKIP to A15</p>
<p>A13 How many businesses did you terminate in the past 6 months?</p>	<p>_____ businesses</p>
<p>A14 What was the reason that you terminated the business (these businesses)?</p>	<hr/> <hr/> <hr/> <hr/>
<p>A15 I would now like to ask a few questions about your <u>main</u> business. By main, I mean the one that you spend most of your time operating. What is the name and address of this business?</p>	<hr/> <hr/> <hr/> <hr/>

Section A. Economic Activities (cont'd)

A16 Does this business operate in more than one location?

1 ☐ No

2 ☐ Yes - **PLEASE DESCRIBE:**

A17 For this survey, we need to classify your business. Would you please describe your business? What do you produce (**RECORD THE ANSWER**). Who are your workers (**RECORD THE ANSWERS**)? What makes your business different from others (**RECORD THE ANSWERS**)?

A18 **INTERVIEWER: Classify the business in one of these categories based on the description above.**

- 1 ☐ Manufacturing - small home business
- 2 ☐ Manufacturing - bigger enterprise than home business
- 3 ☐ Wholesale trade
- 4 ☐ Hotels, restaurants, cafes
- 5 ☐ Personal services

- 6 ☐ Agriculture
- 7 ☐ Retail trade
- 8 ☐ Business services
- 9 ☐ Construction
- 10 ☐ Other (**DESCRIBE**)

Section A. Economic Activities (cont'd)

<p>A19 Does this business depend upon materials and supplies?</p>	<p>1 <input type="checkbox"/> Yes - ASK A20</p> <p>2 <input type="checkbox"/> No - SKIP TO A21</p>
<p>A20 Do you import these goods or do you rely on others to provide these imported goods?</p>	<p>1 <input type="checkbox"/> Import directly</p> <p>2 <input type="checkbox"/> Relies on others</p>
<p>A21 Does this business depend upon exporting its products or services?</p>	<p>1 <input type="checkbox"/> Yes - ASK A22</p> <p>2 <input type="checkbox"/> No - SKIP TO A23</p>
<p>A22 Do you export these goods or do you rely on others to do the actual exporting of goods or services?</p>	<p>1 <input type="checkbox"/> Export directly</p> <p>2 <input type="checkbox"/> Relies on others</p>
<p>A23 Do you own this business entirely, is it a family business, or do you own it along with others outside of your immediate family?</p> <p>ENTER THE ANSWER VERBATIM AND THEN CHECK THE APPROPRIATE BOX</p>	<div style="border-bottom: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <p>1 <input type="checkbox"/> Own the business entirely</p> <p>2 <input type="checkbox"/> Family business (share ownership with other family members)</p> <p>3 <input type="checkbox"/> Owner with other nonfamily members -- ASK HOW MANY OTHERS _____ persons</p> <p>4 <input type="checkbox"/> Other arrangement</p>

Section A. Economic Activities (cont'd)

<p>A24 Is this a new business that you and others started or did you purchase an existing business?</p>	<p>1 <input type="checkbox"/> New business - ASK: When was this business started? _____ (month) _____ (year)</p> <p>2 <input type="checkbox"/> Existing business - ASK: When did you purchase it? _____ (month) _____ (year)</p>
<p>A25 What is you MAIN source of financing for this business?</p> <p>RECORD VERBATIM BELOW AND THEN CHECK THE APPROPRIATE BOX</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>1 <input type="checkbox"/> Banks</p> <p>2 <input type="checkbox"/> Government loans</p> <p>3 <input type="checkbox"/> Supplier credits</p> <p>4 <input type="checkbox"/> Other family members</p> <p>5 <input type="checkbox"/> Your own savings or earnings</p> <p>6 <input type="checkbox"/> Others (specify)</p>
<p>A26 If (NAME MAIN SOURCE IN A25) is your main source of financing, what are your alternate sources?</p> <p>RECORD VERBATIM BELOW AND THEN CHECK THE APPROPRIATE BOX</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>1 <input type="checkbox"/> No alternate sources</p> <p>2 <input type="checkbox"/> Banks</p> <p>3 <input type="checkbox"/> Government loans</p> <p>4 <input type="checkbox"/> Supplier credits</p> <p>5 <input type="checkbox"/> Other family members</p> <p>6 <input type="checkbox"/> Your own savings or earnings</p> <p>7 <input type="checkbox"/> Others (specify)</p>
<p>A27 Excluding yourself, how many full time and part time persons do you employ in this business. Please include all locations.</p>	<p>_____ full time persons</p> <p>_____ part time persons</p>

Section A. Economic Activities (cont'd)

A28 I'm now going to ask you about any changes that you might have made in operating this business in the past 6 months. Have you made any changes in products or services that you offer?

- 1 ☐ No changes
2 ☐ Yes - **PLEASE DESCRIBE THESE CHANGES**

A29 In the past 6 months, have you made any changes in how you produce your products or how provide your services?

- 1 ☐ No changes
2 ☐ Yes - **PLEASE DESCRIBE THESE CHANGES**

A30 In the past 6 months, have you made any changes in how you market or advertise your products or services?

- 1 ☐ No changes
2 ☐ Yes - **PLEASE DESCRIBE THESE CHANGES**

A31 In the past 6 months, have you made any important new contacts associated with this business?

- 1 ☐ No changes
2 ☐ Yes - **PLEASE DESCRIBE THESE CHANGES**

Section A. Economic Activities (cont'd)

<p>A32 In the past 6 months, what kind of problems have you experienced in your business?</p>	<hr/> <hr/> <hr/> <hr/> <hr/>
<p>A33 What have you done to solve these problems?</p>	<hr/> <hr/> <hr/> <hr/> <hr/>
<p>A34 What have been your major accomplishments in the past 6 months?</p>	<hr/> <hr/> <hr/> <hr/> <hr/>
<p>A35 When you describe how much your business produces, what unit of measure do you use, such as pounds, dozens, bushels, and so forth?</p>	<p>(unit of measure)</p>
<p>A36 How many of these units did you sell or deliver last month?</p>	<hr/>

Section A. Economic Activities (cont'd)

A37 Now I'm going to ask you to compare your performance to that of similar businesses you know about. Please rank yourself on a scale of 1 to 10, where 1 means the least successful, 5 means about as successful as other similar businesses, and 10 means the most successful among similar businesses. You may use any number between 1 and 10.

Ranking from 1 to 10:

A38 Now I'm going to ask you to compare your performance to your own objectives. Rank yourself on a scale of 1 to 10, where 1 means the least successful, 5 means about the same as your objectives, and 10 means greatly exceeding your objectives. You may use any number between 1 and 10.

Ranking from 1 to 10:

Section B. Business Receipts (Main Business)

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD WHETHER . . .	IF THE RESPONDENT GIVES AN AMOUNT . .
<p>The next group of questions that I am going to ask you refer only to your main business.</p> <p>During the past 6 months, what was the total value of all sales of goods to customers?</p>	<p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Respondent knows amount AMOUNT: _____</p>	<p>Was this response</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>During the past 6 months, what was the cash value of products or services that you exchanged or bartered for someone else's products or services?</p>	<p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Respondent knows amount AMOUNT: _____</p>	<p>Was this response</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>During the past 6 months, what was the total amount of other receipts and/or commissions your business received for services that it provided to customers? Do not include sales reported in item B1.</p>	<p>1 <input type="checkbox"/> None</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Respondent knows amount AMOUNT: _____</p>	<p>Was this response</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

Section B. Business Receipts (cont'd)

ASK THIS QUESTION, EXACTLY AS WRITTEN	RECORD WHETHER . . .	IF THE RESPONDENT GIVES AN AMOUNT . .
B4. During the past 6 months, did your business generate any other revenue not already mentioned? (PLEASE DESCRIBE): _____ _____	1 <input type="checkbox"/> None 2 <input type="checkbox"/> Some, amount unknown 3 <input type="checkbox"/> Respondent knows amount AMOUNT: _____	Was this response 1 <input type="checkbox"/> based on actual records? 2 <input type="checkbox"/> based on other information? 3 <input type="checkbox"/> an approximate guess?
B5. Does this business currently have an inventory of goods or products that have not yet been sold?	1 <input type="checkbox"/> Yes - ASK B6 2 <input type="checkbox"/> No - SKIP TO C1	
B6. Is the current level of inventories greater than, less than, or about the same level as inventories were 6 months ago?	1 <input type="checkbox"/> Greater - ASK B7 2 <input type="checkbox"/> Less - SKIP TO B8 3 <input type="checkbox"/> About the same - SKIP TO C1	
B7. So, your inventories are larger by a certain amount than they were 6 months ago. Can you estimate the value of this differences?	AMOUNT: _____ SKIP TO C1	
B8. So, your inventories are larger by a certain amount than they were 6 months ago. Can you estimate the value of this differences?	AMOUNT: _____ SKIP TO C1	

IF THE RESPONDENT GIVES ANSWERS IN AMOUNTS PER DAY OR WEEK, USE THIS SPACE TO SHOW CONVERSION

Section C. Investment Expenses

<p>C1. During the past 6 months, did you purchase any equipment or buildings?</p>	<p>1 <input type="checkbox"/> Yes Ask C2</p> <p>2 <input type="checkbox"/> No ASK: Why Not? and record the answer verbatim</p>	<p>_____</p> <p>_____</p> <p>_____</p>
<p>ASK THIS QUESTION, EXACTLY AS WRITTEN</p>	<p>RECORD WHETHER . . .</p>	<p>IF THE RESPONDENT GIVES AN AMOUNT . .</p>
<p>C2. Please describe each of the major purchases of equipment or buildings you have made, or any improvements in your facilities, during the past 6 months.</p> <p>DESCRIPTION: _____</p> <p>_____</p>	<p>1 <input type="checkbox"/> None - SKIP TO D1</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Respondent knows amount AMOUNT: _____</p>	<p>Was this response</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>CONTINUE TO ASK, "ARE THERE ANY OTHER ITEMS?" UNTIL THE RESPONDENT SAYS "NO"</p>		
<p>DESCRIPTION: _____</p> <p>_____</p> <p>_____</p>	<p>1 <input type="checkbox"/> None - SKIP TO D1</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Respondent knows amount AMOUNT: _____</p>	<p>Was this response</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>
<p>DESCRIPTION: _____</p> <p>_____</p> <p>_____</p>	<p>1 <input type="checkbox"/> None - SKIP TO D1</p> <p>2 <input type="checkbox"/> Some, amount unknown</p> <p>3 <input type="checkbox"/> Respondent knows amount AMOUNT: _____</p>	<p>Was this response</p> <p>1 <input type="checkbox"/> based on actual records?</p> <p>2 <input type="checkbox"/> based on other information?</p> <p>3 <input type="checkbox"/> an approximate guess?</p>

Section D. Other Businesses

The following questions pertain to all businesses other than the one already described earlier in this interview in which the owner is involved. Continue to ask the respondent if there are any other businesses in which he/she is:

- CURRENTLY engaged or
- HAS been engaged during the past 6 months

Complete the following pages for each such activity. It is especially important to find out about all the activities, even if only partial information is available for some of them.

One page **MUST** be filled for EACH business.

(Refer to Question A9 for total number of businesses. First business was covered in the previous section. All others must be covered in one page each in the following sections).

VERY IMPORTANT:

Be sure to complete a page for every business that was active during the past 6 months.

BUSINESS NUMBER 2

D1 Please tell me the name of this business and describe what it does.	<hr/> <hr/> <hr/>
D2 INTERVIEWER: Classify the business based on the description in D1.	
1 <input type="checkbox"/> Manufacturing - home business only	5 <input type="checkbox"/> Personal services
2 <input type="checkbox"/> Manufacturing - bigger enterprise than home business	6 <input type="checkbox"/> Agriculture
3 <input type="checkbox"/> Wholesale trade	7 <input type="checkbox"/> Retail trade
4 <input type="checkbox"/> Hotels, restaurants, cafes	8 <input type="checkbox"/> Business services
	9 <input type="checkbox"/> Construction
	10 <input type="checkbox"/> Other
D3 Excluding yourself, how many full time and part time people do you currently employ in this business?	<hr/> full time <hr/> part time
D4 What is the total value of your sales and commissions from this business in the past 6 months?	<hr/>
5 During the past 6 months, did you purchase any equipment or buildings? If so, approximately how much?	1 <input type="checkbox"/> Yes - How much? <hr/> 2 <input type="checkbox"/> No
D6 Who owns this business (READ CATEGORIES AND MARK ONE)?	1 <input type="checkbox"/> Self only 2 <input type="checkbox"/> Self and family 3 <input type="checkbox"/> Self and partners
D7 Did you begin this business or purchase it from someone else?	1 <input type="checkbox"/> Began business 2 <input type="checkbox"/> Purchased business
D8 What month and year did you purchase or begin this business?	<div><input type="text"/> <input type="text"/> Month</div> <div><input type="text"/> <input type="text"/> Year</div>

BUSINESS NUMBER 3

D1 Please tell me the name of this business and describe what it does.	<hr/> <hr/> <hr/>												
D2 INTERVIEWER: Classify the business based on the description in D1. <table border="0"><tr><td>1 <input type="checkbox"/> Manufacturing - home business only</td><td>5 <input type="checkbox"/> Personal services</td></tr><tr><td>2 <input type="checkbox"/> Manufacturing - bigger enterprise than home business</td><td>6 <input type="checkbox"/> Agriculture</td></tr><tr><td>3 <input type="checkbox"/> Wholesale trade</td><td>7 <input type="checkbox"/> Retail trade</td></tr><tr><td>4 <input type="checkbox"/> Hotels, restaurants, cafes</td><td>8 <input type="checkbox"/> Business services</td></tr><tr><td></td><td>9 <input type="checkbox"/> Construction</td></tr><tr><td></td><td>10 <input type="checkbox"/> Other</td></tr></table>		1 <input type="checkbox"/> Manufacturing - home business only	5 <input type="checkbox"/> Personal services	2 <input type="checkbox"/> Manufacturing - bigger enterprise than home business	6 <input type="checkbox"/> Agriculture	3 <input type="checkbox"/> Wholesale trade	7 <input type="checkbox"/> Retail trade	4 <input type="checkbox"/> Hotels, restaurants, cafes	8 <input type="checkbox"/> Business services		9 <input type="checkbox"/> Construction		10 <input type="checkbox"/> Other
1 <input type="checkbox"/> Manufacturing - home business only	5 <input type="checkbox"/> Personal services												
2 <input type="checkbox"/> Manufacturing - bigger enterprise than home business	6 <input type="checkbox"/> Agriculture												
3 <input type="checkbox"/> Wholesale trade	7 <input type="checkbox"/> Retail trade												
4 <input type="checkbox"/> Hotels, restaurants, cafes	8 <input type="checkbox"/> Business services												
	9 <input type="checkbox"/> Construction												
	10 <input type="checkbox"/> Other												
D3 Excluding yourself, how many full time and part time people do you currently employ in this business?	<hr/> full time <hr/> part time												
D4 What is the total value of your sales and commissions from this business in the past 6 months?	<hr/>												
5 During the past 6 months, did you purchase any equipment or buildings? If so, approximately how much?	1 <input type="checkbox"/> Yes - How much? <hr/> 2 <input type="checkbox"/> No												
D6 Who owns this business (READ CATEGORIES AND MARK ONE)?	1 <input type="checkbox"/> Self only 2 <input type="checkbox"/> Self and family 3 <input type="checkbox"/> Self and partners												
D7 Did you begin this business or purchase it from someone else?	1 <input type="checkbox"/> Began business 2 <input type="checkbox"/> Purchased business												
D8 What month and year did you purchase or begin this business?	<table border="0"><tr><td><input type="text"/></td><td><input type="text"/></td><td>Month</td></tr><tr><td><input type="text"/></td><td><input type="text"/></td><td>Year</td></tr></table>	<input type="text"/>	<input type="text"/>	Month	<input type="text"/>	<input type="text"/>	Year						
<input type="text"/>	<input type="text"/>	Month											
<input type="text"/>	<input type="text"/>	Year											

BUSINESS NUMBER 4

<p>D1 Please tell me the name of this business and describe what it does.</p>	<p>_____</p> <p>_____</p> <p>_____</p>												
<p>D2 INTERVIEWER: Classify the business based on the description in D1.</p> <table border="0"> <tr> <td>1 <input type="checkbox"/> Manufacturing - home business only</td> <td>5 <input type="checkbox"/> Personal services</td> </tr> <tr> <td>2 <input type="checkbox"/> Manufacturing - bigger enterprise than home business</td> <td>6 <input type="checkbox"/> Agriculture</td> </tr> <tr> <td>3 <input type="checkbox"/> Wholesale trade</td> <td>7 <input type="checkbox"/> Retail trade</td> </tr> <tr> <td>4 <input type="checkbox"/> Hotels, restaurants, cafes</td> <td>8 <input type="checkbox"/> Business services</td> </tr> <tr> <td></td> <td>9 <input type="checkbox"/> Construction</td> </tr> <tr> <td></td> <td>10 <input type="checkbox"/> Other</td> </tr> </table>		1 <input type="checkbox"/> Manufacturing - home business only	5 <input type="checkbox"/> Personal services	2 <input type="checkbox"/> Manufacturing - bigger enterprise than home business	6 <input type="checkbox"/> Agriculture	3 <input type="checkbox"/> Wholesale trade	7 <input type="checkbox"/> Retail trade	4 <input type="checkbox"/> Hotels, restaurants, cafes	8 <input type="checkbox"/> Business services		9 <input type="checkbox"/> Construction		10 <input type="checkbox"/> Other
1 <input type="checkbox"/> Manufacturing - home business only	5 <input type="checkbox"/> Personal services												
2 <input type="checkbox"/> Manufacturing - bigger enterprise than home business	6 <input type="checkbox"/> Agriculture												
3 <input type="checkbox"/> Wholesale trade	7 <input type="checkbox"/> Retail trade												
4 <input type="checkbox"/> Hotels, restaurants, cafes	8 <input type="checkbox"/> Business services												
	9 <input type="checkbox"/> Construction												
	10 <input type="checkbox"/> Other												
<p>D3 Excluding yourself, how many full time and part time people do you currently employ in this business?</p>	<p>_____ full time</p> <p>_____ part time</p>												
<p>D4 What is the total value of your sales and commissions from this business in the past 6 months?</p>	<p>_____</p>												
<p>5 During the past 6 months, did you purchase any equipment or buildings? If so, approximately how much?</p>	<p>1 <input type="checkbox"/> Yes - How much? _____</p> <p>2 <input type="checkbox"/> No</p>												
<p>D6 Who owns this business (READ CATEGORIES AND MARK ONE)?</p>	<p>1 <input type="checkbox"/> Self only</p> <p>2 <input type="checkbox"/> Self and family</p> <p>3 <input type="checkbox"/> Self and partners</p>												
<p>D7 Did you begin this business or purchase it from someone else?</p>	<p>1 <input type="checkbox"/> Began business</p> <p>2 <input type="checkbox"/> Purchased business</p>												
<p>D8 What month and year did you purchase or begin this business?</p>	<p><input type="text"/> <input type="text"/> Month</p> <p><input type="text"/> <input type="text"/> Year</p>												

D. Malawi EDP Evaluation Supplemental Interview Guides

MALAWI EDP EVALUATION SUPPLEMENTAL INTERVIEW GUIDE

-- EXPERIMENTAL GROUP --

1. Overall, looking back, do you feel that the Workshop has made a great deal of difference in what you have done or how you have done things in your business or work, that it has made some difference, or that the workshop didn't make any real difference at all in what you have done or how you have done things?

- (1) Great deal of difference
- (2) Some difference
- (3) Didn't make any real difference

1A. Why do you feel that way?

2. As you may remember, during the Workshop we talked a lot about PECs -- Personal Entrepreneurship Characteristics. These are qualities such as goal setting, risk taking, information seeking, etc. which are important to have when you are trying to start or run a business of your own. Do you remember talking about these PECs?

- (1) Yes (ASK Q. 3)
- (2) No (GO TO Q. 4)

3. Have you ever used any of the information about the PECS -- Personal Entrepreneurship Characteristics -- or used any of the PEC-related skills that you developed in the Workshop in your business or your work in any way?

(1) Yes (ASK Q. 3A)

(2) No (GO TO Q. 4)

3A. How did you use it? BE SPECIFIC. OBTAIN DETAILED EXAMPLES. REFER TO POINTS RAISED IN PRIOR INTERVIEW.

4. Have you ever used anything you learned in the workshop in your business or work in any way that we haven't already talked about?

(1) Yes (ASK Q. 4A)

(2) No (GO TO Q. 5)

4A. (IF YES) What did you use?

4B. How did you use it?

5. Looking back, is there anything that you have done in your business or work that you feel was a direct result of taking the workshop -- that is, that you definitely would not have done if you had not taken the workshop? OBTAIN DETAILED, SPECIFIC EXAMPLES. PROBE FOR AS MANY EXAMPLES AS POSSIBLE.

6. Have you received any other training or taken any courses to help you in your business or in your work within the past two years?

(1) Yes (ASK Q. 6A)

(2) No (GO TO Q. 7)

6A. (IF YES) What kinds of training have you received? BE SPECIFIC.

7. In general, is your way of living -- the place you can afford to live, the amount of money you have to buy things or do things -- better, about the same, or not as good as it was two years ago?

(1) Better

(2) About the same

(3) Not as good

7A. Why do you feel that way?

IF RESPONDENT DOES NOT HAVE OWN BUSINESS, ASK Q. 8 THEN TERMINATE INTERVIEW.

IF RESPONDENT DOES HAVE OWN BUSINEES, SKIP TO Q. 9 AND CONTINUE INTERVIEW.

8. (IF NO BUSINESS) Two years ago when you applied to take our Entrepreneurship Workshop you indicated that you were interested in having a business of your own. Why are you currently not in business? PROBE: What happened that changed your plans?

TERMINATE INTERVIEW

9. (IF HAVE BUSINESS) Have you received any help or assistance with your business from any person or institution within the past two years?

- (1) Yes (ASK Q. 10)
- (2) No (GO TO Q. 11)

- 9A. (IF YES) What kind of help or assistance? PROBE FOR SPECIFIC KIND OF ASSISTANCE AND NAME/POSITION OF INDIVIDUAL OR INSTITUTION.

10. What is the biggest single problem you have in making your business succeed or do better? PROBE: On a day-to-day basis, what is the most difficult thing or the hardest problem that you have to deal with?
11. What would be most helpful to you in making your business more successful or do better?
12. Would you say that your business is doing better, about the same, or not as well as it was two years ago?
- (1) Better
 - (2) About the same
 - (3) Not as well
 - (4) Working in different business from two years ago (SKIP TO Q. 13)
- 12A. Why do you feel this way?

13. When people start businesses or buy businesses they have ideas or expectations about how the business will do. Would you say that your business has done a lot better than you thought it would, about the same as you thought it would, or not quite as well as you thought it would.

- (1) Better
- (2) About the same
- (3) Not as well

13A. What things, if any, happened in your business that you did not expect?

13B. What things, if any, went on in your city or country that you did not expect that affected your business in some way?

14. INTERVIEWER ASSESSMENT OF BUSINESS:

- (1) Very successful**
- (2) Somewhat successful**
- (3) Somewhat unsuccessful**
- (4) Very unsuccessful**

INTERVIEWER COMMENTS:

MALAWI EDP EVALUATION SUPPLEMENTAL INTERVIEW GUIDE

-- CONTROL GROUP --

1. Have you received any training or taken any courses to help you in your business or in your work within the past two years?

(1) Yes (ASK Q. 2A)

(2) No (GO TO Q. 3)

1A. (IF YES) What kinds of training have you received? BE SPECIFIC.

2. In general, is your way of living -- the place you can afford to live, the amount of money you have to buy things or do things -- better, about the same, or not as good as it was two years ago?

(1) Better

(2) About the same

(3) Not as good

2A. Why do you feel that way?

IF RESPONDENT DOES NOT HAVE OWN BUSINESS, ASK Q. 3 THEN TERMINATE INTERVIEW.

IF RESPONDENT HAS A BUSINESS, SKIP TO Q. 4 AND COMPLETE QUESTIONNAIRE.

3. (IF NO BUSINESS) Two years ago when you applied to take our Entrepreneurship Workshop you indicated that you were interested in having a business of your own. Why are you not currently in business? PROBE: What happened that changed your plans?

TERMINATE INTERVIEW

4. (IF HAVE A BUSINESS) Have you received any kind of help or assistance with your business from any person or institution within the past two years?
- (1) Yes (ASK Q. 4A)
 - (2) No (GO TO Q. 5)
- 4A. (IF YES) What kind of help or assistance? PROBE FOR SPECIFIC KIND OF ASSISTANCE AND NAME/POSITION OF INDIVIDUAL OR INSTITUTION.

5. What is the biggest single problem you have in making your business succeed or do better? PROBE: On a day-to-day basis, what is the most difficult thing or the hardest problem that you have to deal with?
6. What would be most helpful to you in making your business more successful or do better?
7. Would you say that your business is doing better, about the same, or not as well as it was two years ago?
- (1) Better
 - (2) About the same
 - (3) Not as well
 - (4) Working in different business from two years ago (SKIP TO Q. 8)
- 7A. Why do you feel this way?

8. When people start businesses or buy businesses they have ideas or expectations about how the business will do. Would you say that your business has done better than you thought it would, about the same as you thought it would, or not as well as you thought it would?

- (1) Better
- (2) About the same
- (3) Not as well

8A. What things, if any, happened in your business that you did not expect?

8B. What things, if any, went on in your city or country that you did not expect that affected your business in some way?

E. Focused Interview Manual and Interview Evaluation Form

FOCUSED INTERVIEW MANUAL

Focused Interview Background

The focused interview is a method of obtaining specific information on how a respondent has acted and thought in five designated situations. These situations are representative of those that everyone has encountered, and they can provide a reliable way to determine the extent to which a respondent exhibits the 13 competencies associated with successful entrepreneurship.

Focused Interview Administration

The focused interview is administered orally. Each of the five situations is presented to the respondent and he is asked to describe in some detail a specific situation from the past that exemplifies it. During the 10 minutes allotted for each situation, the interviewer asks a set of questions intended to elicit as much information as possible about what the respondent did, said, thought, and felt.

This section presents general instructions, identifies the five situations to be covered in the interview, and gives the specific questions used to probe for information not given by the respondent.

General Instructions

1. Tell the respondent that the purpose of the interview is to get a better understanding of how he has actually gone about handling past situations. Indicate that this information will be useful in making decisions about the purpose of the assessment.
2. Explain that you will ask the person to give detailed descriptions of what he did, said, thought about, and felt in five situations from his recent past. Specifically, for each situation you will want the person to answer the following:
 - How did you first get involved in the situation?
 - What were you trying to accomplish?
 - Did you talk to anyone about what you were going to do? If yes, describe the conversation.

- Was anyone else involved?
 - What was the sequence of things you did?
 - What was your part in the situation?
 - How did it turn out? Are there any other key things you did?
 - What did you feel you accomplished?
3. Explain that there will be additional questions associated with each situation.
 4. It may be helpful for the respondent to have in front of him on a 4 x 6 index card a list of the questions that are consistent across the five situations.
 5. Indicate you will be making some notes throughout the interview to help you remember what the person said.
 6. If you have a tape recorder, explain why you would like to record the interview (to help you remember sections of the interview), and request permission to use it.
 7. Stress the confidentiality of the interview. Indicate who specifically will have access to the notes and/or tape.
 8. Ask for questions and give whatever information is necessary to make the process and reasons for the interview clear.
 9. Present each situation and spend 10 minutes per situation gathering information.
 10. When necessary, ask the probes associated with each question.
 11. Let the person know, by thanking him, when he has given a lot of detail on what he did, said, thought, and felt in a situation.
 12. At the end of the interview thank the person for the information and time. Respond to any questions.

Situations for the Focused Interview

For each situation listed below, ask the respondent to tell you about a time when:

1. He did something on his own.
2. He had to get someone to do something.
3. He had a significant amount of difficulty in getting something done.
4. He was pleased with something he accomplished.
5. He took a risk.

PROBES FOR FIVE SITUATIONS

1. A TIME WHEN YOU DID SOMETHING ON YOUR OWN

- How did you first get involved?
- What were your thoughts in the beginning?
- What were you trying to accomplish?
- Did you talk to anyone about what you were going to do?
If yes, tell me about that conversation.
- Was anyone else involved?
- What was the sequence of things that you did?
- What was your part in this?
- How did it turn out?
- Were there other key things that you did?
- What did you feel you accomplished?
- Did you do any planning as part of this? If so, what specifically did you do?

2. A TIME WHEN YOU HAD TO GET SOMEONE TO DO SOMETHING

- How did you first get involved?
- What were your thoughts in the beginning?
- What were you trying to accomplish?
- Did you talk to anyone about what you were going to do?
If yes, tell me about that conversation.
- Was anyone else involved?
- What was the sequence of things that you did?
- What was your part in this?
- How did it turn out?
- Were there other key things that you did?
- What did you feel you accomplished?
- Who else was involved?
- What were you trying to get them to do?
- What did you do to get them to do it?
- What did you say to them?
- What was the response?
- How successful were you in getting them to do what you wanted them to do?

3. A TIME WHEN YOU HAD A SIGNIFICANT DIFFICULTY IN
GETTING SOMETHING DONE

- How did you first get involved?
- What were your thoughts in the beginning?
- What were you trying to accomplish?
- Did you talk to anyone about what you were going to do?
If yes, tell me about that conversation.
- Was anyone else involved?
- What was the sequence of things that you did?
- What was your part in this?
- How did it turn out?
- Were there other key things that you did?
- What did you feel you accomplished?
- What was the difficulty or problem?
- Were there any other key things that you did to deal with
this problem?
- What were you thinking during this situation?
- How successful do you think you were in overcoming the
difficulty?

4. A TIME WHEN YOU WERE PLEASED WITH
SOMETHING YOU ACCOMPLISHED

- How did you first get involved?
- What were your thoughts in the beginning?
- What were you trying to accomplish?
- Did you talk to anyone about what you were going to do?
If yes, tell me about that conversation.
- Was anyone else involved?
- What was the sequence of things that you did?
- What was your part in this?
- How did it turn out?
- Were there other key things that you did?
- What did you feel you accomplished?
- What made you most proud about this accomplishment?
- Were there any other key things you did as part of this situation?

5. A TIME WHEN YOU TOOK A RISK

- How did you first get involved?
- What were your thoughts in the beginning?
- What were you trying to accomplish?
- Did you talk to anyone about what you were going to do?
If yes, tell me about that conversation.
- Was anyone else involved?
- What was the sequence of things that you did?
- What was your part in this?
- How did it turn out?
- Were there other key things that you did?
- What did you feel you accomplished?
- What was the risk?
- What were your thoughts about that risk at the time?
- Would you do it again? If yes, what leads you to this decision?

Interview Scoring

Scoring the interview for the 13 competencies takes place during the interview and is done at the end of each situation. To increase the reliability of your scoring and thus give you a more valid picture of the person's use of the competencies, it is important that you review the competencies and indicators prior to each interview.

To further increase the accuracy of the scoring, use the following criteria:

You can score

Statements beginning with "I" that describe what the respondent did, said, thought, or felt (e.g., "I thought I'd better talk to his boss first.").

Statements in the first person ("I") in which the respondent is describing his involvement in one situation (e.g., "On Thursday morning I called up Ed . . .").

Statements that, although they do not specify the actor, make clear from the context that the actor is the respondent (e.g., "So the report got done on time. . . . My boss always has me write the quarterly reports.").

You can't score

Statements in which the person says "we," "he and I," "our team," etc. (e.g., "We planned it and organized our goals.").

PROBLEM: What did the respondent contribute to the group effort? You can't be sure.

Statements that begin: "What I do," "Usually I," "I would," "Typically I," etc. (e.g., "I would try to do that first.").

PROBLEM: These are generalizations about how he sees situations or prefers to act. In any one situation a person may or may not act in the typical or desired way. This is too general to code.

Vague statements about actions, thoughts, interactions, or outcomes in which it is unclear who played what part (e.g., "He was convinced in the end.").

PROBLEM: All respondents are unclear at some point in describing who did what. Unless the respondent probes to clarify a statement or volunteers more detail, he won't get credit for the vaguely described action.

You can score

Statements in which the respondent describes his activities in detail (e.g., "I asked Helen to hold my calls. Then I sat down behind my desk and said, 'You owe me an explanation.'").

A respondent's characteristic manner of thinking or approaching a situation if he has provided detail on what led up to a particular action (e.g., "I wanted them to see my point, so I decided to make a presentation.").

Statements that include clear explanations of the roles people played in a particular situation (e.g., "Ed was my boss. I told him his ideas were lousy.").

Statements about thoughts, feelings, words, or actions that the respondent volunteers in response (e.g., "What were you feeling?" "I felt let down. I'd counted on him.").

You can't score

Statements in which the respondent uses nonspecific terms to describe his activity (e.g., "We met and I got him to explain . . .").

PROBLEM: You don't know what he said, did, thought, felt. The description is too vague; more precise behavioral data are needed to code.

Description of an action without what led up to it (e.g., "I made a presentation.").

PROBLEM: An action described without contextual detail is a sterile piece of information --it means little. We need to know: What led up to it? Whose idea was it? What was the person thinking?

Statements in which it is unclear who was involved (e.g., "I told him the idea was lousy.").

PROBLEM: A statement is ambiguous if the actors are not specified. For example, telling off a subordinate provides a picture different from telling off the boss.

Descriptions confirming the interviewer's stated expectation of what the respondent did, said, felt (e.g., "So you felt let down?" "Yeah, I did.").

PROBLEM: Even though the interviewer's expectation could be right, the respondent might be giving the expected response to please the interviewer. It is not codable because you can't be sure that the respondent would have said this had it not been suggested by the interviewer.

You can score

Specific reconstructions of dialogue (e.g., "He said he wanted to use the old method. I said, 'This one is more efficient--let me show you.'").

Statements of what the respondent felt or thought during the situation he is describing (e.g., "At that point, I didn't want to deal with him again.").

Statements describing what the respondent did in the past (e.g., "I picked up the report three hours before the meeting.").

The focused interview scoring form contains instructions on how to record whether or not the respondent demonstrated any of the competencies.

After recording the competencies demonstrated for each situation, add the number of checkmarks (✓) across situations for each competency and place the number under the Total Score column. Then add the numbers in the Total Score column to give a final total that represents an overall index of competency use.

Transfer the information to the Focused Interview Profile Sheet, following the instructions associated with that sheet, to produce a competency profile that graphically represents the relative competency strengths and weaknesses.

You can't score

Descriptions of the content or flow of conversations without specific dialogue (e.g., "I talked about what was the best way to do it.").

PROBLEM: One's intended message or tone does not necessarily match what was said. Reconstructed dialogue, by contrast, specifies what the person said, uncontaminated by post-hoc interpretation.

Statements of current feelings or thoughts about the past (e.g., "I think it was an upsetting situation.").

PROBLEM: These are after-the-fact rationalizations that include knowledge of how everything turned out. Coding is done to capture the essence of how a person performed (thought, felt, etc.) in the past.

Statements about what the respondent might do in the future ("I'll pick up the report early next time.").

PROBLEM: There's no behavior, since it hasn't happened yet.

INTERVIEW EVALUATION FORM

Name of Interviewee _____

Interviewer _____

Instructions

Use the following checklist to indicate whether or not the respondent demonstrates various behaviors and thoughts in the situations described in the interview. Whenever the respondent demonstrates a specific behavior and/or thought that represents a PEC for a situation, place a checkmark () under the "situations" column number associated with the incident being discussed. Thus, when the respondent is talking about a time when he did something on his own, check the spaces under column 1 where behaviors and/or thoughts representing specific competencies are demonstrated; when the respondent is talking about a time when he had to get someone to do something, check the appropriate spaces under column 2; and so forth.

INTERVIEW EVALUATION FORM

<u>CHARACTERISTICS</u>	<u>SITUATIONS</u>					<u>TOTAL SCORE</u>
	1	2	3	4	5	
1. OPPORTUNITY SEEKING AND INITIATIVE	_____	_____	_____	_____	_____	= _____
- Sees and acts on new or unusual business opportunities						
- Acts before being asked or forced to by events						
2. COMMITMENT TO THE WORK CONTRACT	_____	_____	_____	_____	_____	= _____
- Accepts full responsibility for problems in completing a job						
- Makes a personal sacrifice or expends extraordinary effort to complete a job						
- Pitches in with workers or in their place to get a job done						
3. PERSISTENCE	_____	_____	_____	_____	_____	= _____
- Takes repeated actions to meet a challenge or overcome an obstacle						
- Switches to an alternative strategy to reach a goal						
4. RISK TAKING	_____	_____	_____	_____	_____	= _____
- States a preference for situations involving a challenge or moderate risk						
- Deliberately calculates risks						
- Takes action to reduce risks or control outcomes						
5. DEMAND FOR EFFICIENCY AND QUALITY	_____	_____	_____	_____	_____	= _____
- Finds ways to do things better, faster, or cheaper						
- Acts to do things that meet or exceed standards of excellence or improve on past performance						
6. GOAL SETTING	_____	_____	_____	_____	_____	= _____
- Articulates clear, long range visions and goals						
- Continually sets and revises short range objectives						

<u>CHARACTERISTICS</u>	<u>SITUATIONS</u>					<u>TOTAL SCORE</u>
	1	2	3	4	5	
7. INFORMATION SEEKING	—	—	—	—	—	= —
- Personally seeks information on clients, suppliers, competitors						
- Uses personal and business contacts to obtain useful information						
8. SYSTEMATIC PLANNING AND MONITORING	—	—	—	—	—	= —
- Plans by breaking a large task down into sub-tasks						
- Keeps financial records and uses them to make business decisions						
- Develops or uses procedures to monitor that work is completed or that work meets standards set						
9. PERSUASION AND NETWORKING	—	—	—	—	—	= —
- Uses deliberate strategies to influence or persuade others						
- Uses business and personal contacts as agents to accomplish own objectives						
10. INDEPENDENCE AND SELF CONFIDENCE	—	—	—	—	—	= —
- Seeks autonomy from the rules or control of others						
- Sticks with own judgment in the face of opposition or early lack of success						
- Expresses confidence in ability to complete a difficult task or meet a challenge						

TOTAL PEC SCORE —

PEC PROFILE SHEET

Opportunity Seeking
and Initiative

Persistence

Commitment to the
Work Contract

Demand for Efficiency
and Quality

Risk Taking

Goal Setting

Information Seeking

Systematic Planning
and Monitoring

Persuasion and
Networking

Independence and
Self-Confidence

0	1	2	3	4	5

PEC SCORES

Appendix II: Summary of Training Program

TOPIC: Opening Day: Part #1

DAY: 1

SESSION TITLE: Introduction to Entrepreneurship Training

DURATION: 2 Hours

MATERIALS: Introduction to Entrepreneurship Training Handout
 Focused Interview Results
 Group PEC Graph
 Sample PEC Graph
 Name Cards
 Program Objectives, Schedule
 Sample "Opening Speech"

OBJECTIVES: To introduce each participant and prepare him or her for the special demands of the training program.

To have participants share expectations about seminar and agree on seminar objectives and schedule.

Formal Opening Speech: The Entrepreneurship Workshop is usually introduced by a senior official or person of local prominence. The opening speech emphasizes that the course strives to assist participants to assess and strengthen aspects of themselves, Personal Entrepreneurship Characteristics (PECs), found to be consistently demonstrated by successful entrepreneurs.

Diad Introductions: After the opening speech and introduction of the trainers, the participants are asked to form diads and interview each other concerning their backgrounds and expectations of the course. These expectations are recorded by the trainers on a flip chart for later use in the session.

Characteristics of the Successful Entrepreneur: A ten-minute video "Introduction to Entrepreneurship" is shown and an overview is presented of the MSI/McBer research, the workshop objectives and methodology. Participants are informed that they will be asked to first recognize the behavior of successful entrepreneurs in others, then assess their own strengths and weaknesses regarding the entrepreneurial attributes, "experiment" with new behaviors, and finally, set personal learning objectives and take specific actions to cultivate the traits desired.

Integrating Expectations and Objectives: A diagram of the course structure is presented to indicate that workshop sessions will be devoted to the Achievement PEC cluster during the first week, and the Planning and Power PEC clusters during the second week. Concurrently, participants will undertake the Business Creation Exercise and preparation of their own business plan for presentation to a Banker Panel at the end of the Workshop. The trainers then relate the listing of participant expectations previously recorded to the course objectives.

Integrating/Results of Selection Process: A graph illustrating the Focused Interview (FI) results for the group is used to summarize the group's

strengths and weaknesses. Each participant is asked to refer to his or her individual FIT chart and set personal learning objectives by identifying three PECs that they wish to concentrate on.

TOPIC: Opening Day: Part #2

DAY: 1

SESSION TITLE: Training Methodology and Training Contract

DURATION: 20 Minutes

MATERIALS: How to Make a Cup Exercise
3 Blank sheets of paper for each participant
Pitcher of water
Training contracts

OBJECTIVES: To introduce participants to the behavioral training method used during the seminar and the kind of responsibility this places on the staff and participants.

To agree on a training contract and to relate it to the PEC of Persistence.

Accelerated learning: This 20-minute session provides an introduction to the experiential nature and 6-step learning cycle of the Accelerated Learning Method used in the workshop. The trainer explains that the instruction method uses gaming, role playing, case studies and other exercises rather than lectures to create experiences for participants to discover important learnings for adaptation to business situations. A handout is distributed that indicates the six steps of the training cycle and the types of activities entailed by each step. Principles of Learning: To more vividly demonstrate the basis for the Accelerated Learning Method, three principles that underlie the experiential learning method are introduced. The first principle, "we learn best by doing", is exemplified by an experiment that requires the group to perform a simple task based first on instructions delivered in a lecture format, then based on a demonstration, and finally based on instruction through supervised applications. The success in performing the task is progressively greater with each successive method, illustrating the Confucian saying "What I hear, I forget. What I see, I remember. What I do, I know". The second principle, "you learn only what you want to learn, is discussed to stress the need for a desire to learn. The third principle, that learning depends on the ability to relate the new to what is already known, is explained to emphasize the participants' responsibility for testing the relevance of the new ideas and behaviors and for actively seeking applications. Training Contract: A contract between the participants and the training team is presented and signed. The contract is intended to emphasize the importance of a commitment to fulfilling work agreements in order to achieve intended results.

TOPIC: Opening Day: Part #3
DAY: 1
SESSION TITLE: Ring Toss: Business Readiness
DURATION: 1 1/2 Hours
MATERIALS: "Are You Ready for Entrepreneurship?"
 Questionnaire
 Ring Toss Game
 A measuring tape at least 5m long
 Personal Improvement Workbook (PIW)
OBJECTIVES: To enable participants to gather data about themselves as
 a basis for later self-examination and discussion.
PECs: Risk Taking

- * Takes what he or she perceives to be moderate risks
- * States a preference for situations that involve moderate risk

Self Confidence (optional)

- * Has a strong belief in self and own abilities
- * Expresses confidence in own ability to complete a difficult task or meet a challenge

Readiness for Entrepreneurship: Participants are introduced to the idea that not everyone is ready for being an entrepreneur. A questionnaire "Are You Ready for Entrepreneurship?" is administered and the results are discussed to facilitate self-diagnosis. A single-page essay entitled "Who Am I?" is assigned for participants to describe their career goals and capabilities while the next exercise is begun. Willingness to be an Entrepreneur: A children's game originally used by David McClelland in the Achievement Motivation Training Program is used to enable participants to gauge their own risk-taking behavior. The first round is played by each participant in private and the second round is played before the group. Every participant who wishes to enter the third round must "buy into the game" by paying a nominal amount to become eligible for prizes that vary according to the degree of difficulty of the target selected. This exercise allows participants an opportunity to compare their willingness to accept risks in instances with and without group pressure and monetary costs. Processing the Exercise: In evaluating the results of each successive round, attention is drawn to on motivation and re-assessments of "risk" as public scrutiny, competition, and the possibility of financial loss are successively introduced.

Entrepreneurial behavior of moderate risk-takers is contrasted from timidity and rashness. In summarizing learnings from the exercise, the trainer stresses that the main objective was to demonstrate facets of the participants' personalities of which they may not have been previously aware.

TOPIC: Opening Day: Part #4
DAY: 1
SESSION TITLE: Long Term Goal Setting: "My Movie"
DURATION: 1 1/2 Hours
MATERIALS: PIW
OBJECTIVES: To enable participants to think of their definitions of a successful life and project goals for 20, 10 and 5 years.
PEC: Goal Setting

- * Sets clear and specific short term objectives
- * Sets clear long term goals

QUOTE: "If you don't know where you're going, any road will get you there".

Recognition: A primary characteristic of successful entrepreneurs introduced early in the course is their capacity to clarify long-term goals, and define them in specific enough terms to guide and inspire action. The video "The Faces of Entrepreneurship" is shown to evoke awareness and discussion of the goal-setting practice. Although part of the "planning" cluster of PECs reviewed in the second week, goal-setting is introduced on the opening day of the workshop as it provides a starting point for behavioral change and entrepreneurial enterprise. Understanding: Participants are asked to consider a quotation on goal-setting and to write a half-page story on good goal setting behavior based on personal experience or imagination. The purpose of these exercises is to instill understanding of the importance to entrepreneurs of effective goal-setting. Self-Diagnosis: Examples are elicited of how goal-setting attributes of members in the group have influenced personal achievement. Reference is made to the "Who Am I Exercise", written in the previous module, to focus on the benefits of clearly expressed objectives. Experimentation: Group members are invited to join in a visualization exercise by imagining their lives portrayed in a movie. The exercise is intended to assist participants to see themselves in the present as influenced by past decisions and circumstances; and to run the visualization forward to reveal aspirations for the future. Participants are then asked to write these aspirations in their PIWs. Reinforcement, Integration & Refinement: The 20, 10 and 5 year visions are written down and discussed in pairs to encourage clear personal definitions of "success". The group is reconvened to share their goals and their feeling about them and to consider the power and importance of having long-term goals. Practical suggestions are presented on how to strengthen this PEC, such as setting daily work plans, weekly objectives, and adopting a critical perspective of one's actions. Application: Group members are informed that by the end of the two weeks they

will be asked to set some short range goals that will help them move toward their long range vision and are asked to begin thinking about these goals and plans.

TOPIC: Business Creation Exercise: Part #5

DAY: 2

SESSION TITLE: Introduction to the Business Creation Exercise

DURATION: 1/2 hour

MATERIALS: BC Exercise Guidelines
BC Exercise Steps

OBJECTIVES: To introduce the Business Creation Exercise (BCE)

To enable participants to begin practicing PECs related to achievement, power, and planning clusters.

To contextualize PEC training in business applications.

To communicate the idea that everyone has a different 'PEC makeup'.

Introduction of the BCE: A handout is distributed which outlines the basic steps of the Business Creation Exercise (BCE). The BCE requires that group members form a "company" (team identification), identify a product or service (opportunity scanning), conduct an information search, prepare a business plan, present the plan to a "Bankers Panel", implement and close out the business at a profit (or loss) and repay any loans obtained all within the two weeks of the workshop. The Banker Panel will approve loans not to exceed \$75 for proposals that they assess as viable. The class is advised that the two-week assignment is designed to provide an opportunity to observe the nine PECs within themselves and practice new behavior and skills under "live" business conditions.

The trainer explains that time for most of the work on the Business Creation Exercise must be found outside the classroom, in the evening and on the weekend. This time is to be regarded as a test of initiative, persistence and commitment. The lessons and learnings from each major step or "milestone" of the BC Exercise are reviewed during class sessions. Class time in the afternoon of Day #2 is given to the first milestone "Team and Idea Identification" to enable group members to report on their company teams and product selection. The Banker Panel presentations and follow-up discussions of the business plan on Day #5 constitute the second and third milestones. The fourth milestone is a review on Day #6 of each member's experience with planning and start-up of the business project over the weekend break. The fifth milestone is the final class review of the BC Exercise on the last day of the workshop.

TOPIC: Opportunity Seeking

DAY: 2

SESSION TITLE: Opportunity Scanning Exercise

DURATION: 6 hours

MATERIALS: Bag of Sawdust
Self Diagnostic Instruments, Part 3

OBJECTIVES:

To enable participants to understand the relationship between problems, trends, unmet needs and entrepreneurial opportunities.

To help participants be able to identify key problems, unmet needs and trends that exist in their immediate environment and generate a set of opportunities that respond to them.

To assist participants to identify an opportunity that their workgroup will use for the BCE.

To have participants decide on a business idea or special opportunity for their own enterprise.

PEC: Opportunity Seeking:

- * Sees and acts on new business opportunities
- * Seizes unusual opportunities to obtain financing, equipment, and work space or assistance

QUOTES:

"Where the rest of the world sees problems the entrepreneur sees opportunities."

"Creativity comes from the elimination of all unnecessary assumptions."

Warm-Up: This 6-hour session examines the first task of an entrepreneur: the identification and selection of an attractive business opportunity. A puzzle is presented as a warm-up exercise to illustrate how conventional thinking can inhibit creative problem-solving by the unconscious acceptance of limiting beliefs and assumptions. Recognition: A demonstration of opportunity scanning is conducted by placing a clearly labeled bag of sawdust before the group and calling for suggestions of alternative ways for using the waste material, hypothetically on behalf of a timber company entrepreneur. Once a listing of roughly 20 ideas is generated, the group is reminded that they have just done what successful entrepreneurs do: they saw opportunities where others see problems. Understanding: A written example and/or video presentation of opportunity scanning is considered to sharpen understanding of "opportunity seeking" behavior. A distinction is made between ideas and opportunities as sources of entrepreneurial action, noting that while ideas and inventions can lead to opportunities, opportunities originate from the needs of consumers, the conditions of the marketplace, favorable situations, competitive advantages and timing. Self-Assessment: A self-diagnostic questionnaire is taken, supplementing the Focused Interview (FIT) ratings, to assist the participants to appraise their own predispositions and abilities to recognize business opportunities. Experimentation: An exercise is held to demonstrate a simple technique for opportunity scanning. The group is asked to divide up and take 20 minutes to brainstorm lists of problems, unmet needs and underutilized resources found in their community. The concept that every business responds to a need is used to generate examples of enterprises that correspond to each previously listed problem, unmet need, and unused resource. Participants are then requested to apply the same approach to their own BCE proposals to generate business project ideas or evaluate the prospects of tentative concepts. Reinforcement, Integration & Refinement: Examples are discussed of how the PEC of opportunity seeking in isolation from other PECs can produce negative results or cause difficulty, as in opportunity seeking without planning leading to foolish investment decisions. The relationship between "opportunity seeking" and "opportunism" is also explored in detail. Application: As a homework assignment, group members are asked to declare their tentative business project ideas to a trusted friend or advisor. The trainer emphasizes that declaration to others is a critical step in developing commitment to their idea and their plans.

TOPIC: Persistence

DAY: 3

SESSION TITLE: Persistence

DURATION: 1 1/2 hours

MATERIALS: Jump-ropes of 2.25 m for each participant

OBJECTIVES: To raise participants' awareness of the importance of persistence in the entrepreneurial process.

PEC: Persistence:

- * Takes repeated or different actions to overcome an obstacle
- * Makes a personal sacrifice or expends extraordinary effort to complete a job
- * Sticks with own judgement in the face of opposition or early lack of success

QUOTES: "Success in business is 10% inspiration and 90% perspiration."

"To try and to fail is experience. Not to try is failure."

Recognition: This session focuses on persistence as a fundamental personal entrepreneurial characteristic. A video on persistence is shown and a self-diagnostic questionnaire is administered to stimulate discussion of indicators of persistence. Understanding: Further examples of the PEC evident in the group members' culture or religion are elicited. The participants are then asked to divide into groups of 6-7 to invent short plays to dramatize persistence. The dramatizations are used by the trainer to make the point that persistence is fundamental to all of the PECs explored in the workshop. Self-Assessment & Experimentation: An exercise requiring physical exertion by each individual is undertaken. Note is made that persistence can be experienced only when a person has to stretch beyond the point of what is easy for them and that it takes on different meaning in the context of a goal. Reinforcement, Integration & Refinement: A series of case examples of

persistence in business situations are examined. Among the points discussed are local attitudes toward this kind of persistence, and the relationship of persistence to commitment to the work contract. Application: The BCE is cited as an opportunity to experience what persistence feels like in action. The trainer stresses that persistence is required to overcome various obstacles likely to be encountered in implementing the BCE, and such situations are discussed in detail.

TOPIC: Business Planning
DAY: 3
SESSION TITLE: The Mini Business Plan
DURATION: 3 Hours
MATERIALS: "The Mini Business Plan"
 "The Business Plan"
 "Questions to be Answered in a Business Plan"
OBJECTIVE: To enable participants to list the important components of a business plan.
 To ground PEC training in a business context.

Introduction: This session presents a business plan outline for use in the Business Creation Exercise and in the participants' personal businesses. The outline distributed in this session identifies core concepts of the business plan to be elaborated further by the Business Planning Workbooks. Before reviewing the outline step-by-step, the reasons for preparing business plans and the reasons why such plans are not done more often are discussed. The group is encouraged to consider what questions a banker would expect a business plan to answer, such as what are the significant risks and problems involved in starting the enterprise; what are the long term profit prospects and cash flow requirements; who will buy the product or service; and what is the best way to produce the product. Common Risk Factors: The business plan is portrayed as a tool for anticipating risk factors common to new businesses that are often regarded as beyond the entrepreneurs' control, but are, in fact, foreseeable. Examples of unforeseen changes that if not adequately planned for, might cause a new business to have problems are given, including: changes in raw material or labor price or availability; equipment failure; unfulfilled promises of credit or financing; and longer than expected delay in payment of bills by customers. Business Plan Components: Basic elements of the business plan and the contents of each component are reviewed. The plan summary is depicted as informing readers what may be expected of them as well as what is being proposed. The business description is recommended to address distinguishing features of

the proposal for capturing sales in addition to principal products and markets. Market information called for includes market size, trends and competition; customer profile and preferences; advertisement and distribution channels. The Operations component is recommended to consider production capacity and start-up time; how differing volumes of production affect costs; and what stock levels will be required of raw materials, work-in-progress and finished products. Ownership, management and staff issues discussed include technical skill requirements; division of management responsibility; and arrangements for sharing profits with investors. Suggested financial data include forecasts of profit and loss accounts for at least the first two years; the amount and timing of start-up capital; the interest rate that can be paid for loans; and the financial effects of possible disruptions to cash flow.

TOPIC: Business Creation Exercise

DAY: 3

SESSION TITLE: Processing Milestone #1:
Individual/Group Composition
Product/Service Identification

DURATION: 30 minutes

MATERIALS: None

OBJECTIVES: To reinforce the PECs of Risk Taking and Opportunity Seeking in realistic contexts.

PECs: Risk Taking
Opportunity Seeking

Team/Company Identification: This session is devoted to "processing" the first step of the Business Creation Exercise, or drawing out learnings from the formation of teams and the identification of project proposals. Participants are asked to submit in writing the names of the individuals joining them in their business, if any, and their proposed name for the business project. The trainer elicits reasons from those on teams why they chose to collaborate and from those acting alone why they chose to do this. The respective advantages and disadvantages of each option are discussed. It is observed that working with others mobilizes a wider range of skills and more management time, but involves the risk of disagreement and confused decision-making; and that working alone may mean greater control over the decision making process, greater rewards and feeling of individual satisfaction, yet more risks and hard work. The cultural factors and pressure involved in making these decisions are explored in detail. Product/Service Identification: Each team is asked whether they have a clear business project idea or not. Those that do not are asked to explain why, noting if they have not managed to work together, if they had so many ideas they could not select one, or if they found there was always a good reason for not following any idea put forward. Company teams that were able to choose a business concept are requested to describe the process by which they developed it. Team members report if they relied on inspiration or on a structure for analyzing consumer needs; and how they managed to reach agreement. If nobody has come up with a proposal, the trainer cites examples of successful project ideas and leads a brainstorming session to turn discarded concepts into viable business proposals.

TOPIC: Information Seeking

DAY: 3

SESSION TITLE: Inter Urban Taxi Business

DURATION: 4-6 Hours

MATERIALS: Information Seeking Example
Case Study: Inter Urban Taxi Study
Preliminary Information List
Instructions to the Participants

OBJECTIVES: To enable participants to experience the importance of personally obtaining information.

To have participants experience the importance of identifying needed information; prioritizing what is important (quality vs. quantity); planning how to collect it efficiently; and deciding how to use it.

To enable participants to realize that it is feasible to collect a great deal of useful information in a relatively short period of time.

PEC: Information Seeking

- * Personally seeks information on clients, supplies, and/or competitors.
- * Consults experts for business or technical advice.
- * Uses contacts or information networks to obtain useful information.

QUOTATION: "Information is power."

"The first step toward good answers is to ask good questions."

Recognition: This session prepares the group for a field exercise in information gathering. A single-paragraph example of data collection and a video clip are used to introduce the concept of information seeking as an entrepreneurial characteristic.

Understanding: Quotations and the self-diagnosis instrument are relied upon to strengthen understanding of this entrepreneurial attribute. Ways that entrepreneurs gather information are discussed by the group. Self-Assessment: Participants are asked to reflect on their Focused Interview scores and their normal behavior to evaluate whether the scores provide a good estimate of how strong they are in this PEC. Experimentation: A single-page draft of a tentative business idea, entitled the "Inter-Urban Commuter Taxi Case", is distributed. Group members are asked to make note of information requirements needed for a business plan. The trainer hands out a "preliminary information list" derived from the case example or a list of key data items required to prepare the taxi business plan. Participants are then divided into workgroups and assigned to augment and prioritize the entries on the "information list". The workgroups are informed next that a competition will be held with an award to be given to the winning team based on three criterion: quality of their information list; first team to complete their list; and quality of the information obtained. It is noted that the field exercise in information seeking will be conducted as a competition since that is the way business must operate. Finally, the workgroups are told that the deadline for information collection and presentation before judges is 5 o'clock that afternoon. Upon their return to the classroom, the teams present their research findings and assessments of the viability of the taxi business proposal. Once the award is made based on the quality, speed, completeness, accuracy, and usefulness of the information gathered, an informal discussion is held on how problems encountered were overcome. The trainer inquires whether the more successful teams spent a few minutes planning how they would go about finding the information before rushing off. Other questions raised concern methods for allocating tasks, persuading informants to cooperate, and adjustment to data scarcity. Reinforcement, Integration & Refinement: Key learnings from the field exercise are summarized. The trainer notes that planning can improve information gathering, while excessive time spent on planning or excessively rigid plans can be counterproductive. Basic steps in planning for data collection are identified, which include: 1) clarifying objectives and leadership; 2) identification of questions; 3) assigning priorities; 4) allocating responsibilities; and 5) agreeing on a schedule. The merits of accuracy and timeliness are assessed, noting that while a miscopied figure can waste effort spent in data collection, accurate information which is too late may be useless. The group is thus advised to consider when an approximate answer is sufficient, and when accuracy demands confirmation by triangulation. Application: Teams organized for the Business Creation Exercise are assigned to formulate a plan for information gathering.

- TOPIC:** Demand for Efficiency and Quality
- DAY:** 4
- SESSION TITLE:** Part #1: Demand for Quality
- DURATION:** 3 Hours
- MATERIALS:** Samples of three simple locally made products might include:
- . A simple chair or table made by a carpenter
 - . A sandal or shoe
 - . A locally made garment which is manufactured for stock and not to personal order
 - . A piece of hardware such as a simple stove or cooking vessel
 - . If appropriate, products can be chosen from participants' own businesses.
- "Quality Improvement Questions" Handout
Product Improvements Worksheet
- OBJECTIVE:** To enable participants to identify and enhance their tendency and ability to strive for improved quality.
- PEC:** Demand for Efficiency and Quality
- * Acts to do things that meet or beat existing standards of excellence, or improve on past performance.
- QUOTE:** "Only the best is good enough."

Recognition: This 3-hour sequence of structured exercises is designed to enhance concern for product quality. The general behaviors which represent this PEC are identified and described using written case examples and video illustrations. Understanding: Further examples and quotations are used to establish the relationship between concern for quality and efficiency and successful entrepreneurship. The tradeoff between quality and efficiency is represented by a diagram juxtaposing quality, time, and costs. Self-Assessment: Participants evaluate descriptions

they wrote of their own products or intended products to determine how strongly or weakly concern for quality is emphasized or demonstrated. Experimentation: Workgroups are formed and each is asked to "value analyse" the 3 sample products and list possible quality improvements for each. After 40 minutes, the product improvement suggestions from each workgroup are compared for innovativeness and originality. Participants are then divided into BCE groups to brainstorm a series of quality improvements for their business projects. Reinforcing, Integration & Refinement: Diad discussion groups are each given a different case study to identify what is needed to supplement concern for quality to make the PEC effective. Application: Participants are asked to think tonight about the quality of their home and/or their "real life" product or service and what they can do to improve it.

TOPIC: Demand for Efficiency and Quality

DAY: 4

SESSION TITLE: Part #2: Efficiency Orientation

DURATION: 3 Hours

MATERIALS: Video segments on Efficiency Orientation
Handout (case study)
Cork Balls Game
Available props for demonstrations
Time Management Handouts

OBJECTIVE: To enable participants to understand the relationship between efficiency and profit potential in enterprise;

To introduce participants to systematic methods for improving efficiency in the use of time and other resources.

PEC: Demand for Efficiency and Quality

* strives to do things better, faster or cheaper

QUOTE: "A stitch in time saves nine."

Recognition: This 3-hour session provides learning exercises to introduce participants to systematic methods for improving operational efficiency. Video segments and self-diagnosis instruments are employed to identify the nature of efficiency orientation and to emphasize the compulsive nature of this PEC in many successful entrepreneurs. Understanding: The trainer first demonstrates inefficient and efficient ways of performing a simple task, such as carrying a heavy load through a doorway or writing a check. The group is then instructed to divide into triads and select a routine business activity to analyze. Each person develops a proposal to improve one operation of the business activity and presents his or her proposal to the rest of the triad for additional comments. Self-Diagnosis: People who had high FIT scores for efficiency are called upon to give an example of their efficiency orientation at work. Experimentation: The experimentation step is divided into 3 parts: 1) the Cork Ball Game; 2) a Site Visit; and 3) Time Management. Each is designed to bring out different dimensions of efficiency: the first two

to bring out different dimensions of efficiency in the production process, and the third for identifying efficiencies in personal use of time. Due to the length of the Time Management Exercise, it is undertaken in the next session. The Cork Ball Game requires rival teams to design a system for packaging cork balls into vials and to compete against each other to test their assembly line procedures. The Site Visit Exercise involves a trip to a nearby manufacturing enterprise to enable participants to observe the production process and evaluate its operational efficiency. Reinforcement, Refinement & Linking: Group members are urged to consider ways to accomplish daily tasks with less time and effort. Application: An assignment is given for participants to refer to a checklist of questions to identify efficiencies in their own businesses for presentation at the next morning session.

TOPIC: Demand for Efficiency and Quality

DAY: 4

SESSION TITLE: Part #3: Time Management

DURATION: 1 1/4 Hours

MATERIALS: Major Timewasters
"Time of Your Life" film summary
Tips for Maximizing Time
Action Planning Worksheet

OBJECTIVES: To analyze how you use your time and to identify major time wasters/savers.

To plan methods for more effective utilization of your time.

PEC: Demand for Efficiency and Quality

- * Acts to do things that meet or beat existing standards of excellence, or improve on past performance.
- * Strives to do things better, faster or cheaper

Recognition: This session offers additional exercises in efficiency orientation concentrating on the dimension of time. Opening remarks are made to introduce the concept of time as a limited resource. Understanding Self-Diagnosis: Participants' individual time management styles, problems and foibles are reviewed to enable group members to assess their use of time. A diagram is presented that makes the point that most people spend the majority of their time on urgent but unimportant endeavors. A listing of "major timewasters", derived from extensive research in profit and non-profit organizations, is presented and compared to those identified by participants. A film entitled The Time of Your Life is shown that presents 6 key ideas around which a number of strategies are suggested for mastering time management. Reinforcement, Integration & Refinement: Practical tips for dealing with "timewasters" are presented. Application: Everyone is asked to relate the session's most important lessons to their own businesses and to be prepared to discuss their observations when they return the next day.

TOPIC: Achievement Cluster Review

DAY: 5

SESSION TITLE: Cluster #1 Review

DURATION: 1 1/2 hours

MATERIALS: Video (Ed Lewis)
Interview Evaluation Form
PIW

OBJECTIVES:

- To enable participants to recognize and "code" Achievement PECs in the behavior of successful entrepreneurs.
- To identify the cluster #1 PECs each individual wishes to strengthen and to set specific objectives for doing so.
- To declare to themselves and the training staff what PECs each person will work on during the rest of the workshop.

PECs:

Achievement Cluster:

- * Opportunity Seeking
- * Information Seeking
- * Persistence
- * Risk Taking
- * Demand for Efficiency and Quality

QUOTE: "Hence they became what they beheld"
(William Blake)

Introduction: The morning of the fifth day is devoted to a review of the Achievement Cluster of Personal Entrepreneurial Characteristics (PECs). The opening lecture explains that the first cluster of 5 PECs is composed of behaviors that are manifestations of the desire to achieve. The group is reminded that setting personal objectives may not necessarily mean strengthening their weakest PEC, but rather should focus on PECs the strengthening of which would be likely to help them most. A video scoring sheet is distributed which lists the Achievement Cluster PECs and a space to indicate how they thought the PEC was evidenced by the entrepreneur in the video. After the video, the discussion centers on the recognition of behavioral indicators and possible missing PECs that might have made the entrepreneur depicted in the video even more successful. Self-Diagnosis: The

procedure used to analyze the video is repeated for self-assessment. Participants are asked to identify the Achievement PECs which they feel they have clearly manifested during week 1. Practical suggestions are elicited on how to cultivate missing entrepreneurial attributes. New Learning Objectives: Workgroups consult with training team members to set new learning objectives for the Achievement Cluster PECs. An announcement is made that the morning YMIL (Yesterday's Most Important Learning) sessions will be replaced during the second week of the workshop with "PECs on Purpose" (POP) sessions. The POP sessions are structured plenary opportunities for participants to report their planned attempts at strengthening their PECs the evening before. These sessions are used to underscore a critical element of the learning methodology -- the importance of practicing the PECs deliberately rather than simply identifying them when they occur by chance.

TOPIC: Business Creation Exercise

DAY: 5

SESSION TITLE: Presenting the Business Plan

DURATION: 1 1/2 hours

MATERIALS: Sufficient money to allow \$20 per person for a maximum of \$100 per team to be handed out to each business team or individual if their proposal is judged to be viable. This money is to be repaid on day ten, since it is a loan and not a grant. It is important that sufficient money be available, and that some or all of it can be "lost". If an institution is bureaucratically unable to provide the money, it may be requested from a bank or other sponsor, whose representative attends this session, or participants may be asked to invest their own money. It is vital that real money be used, so that the business creation exercise is not regarded as a game.

OBJECTIVE: To enable participants to practice persuasive presentations of business plans to potential sources of finance.

BCE Banker Panel: BCE proposals are presented to the Banker Panel during this session using the mini-business plan format introduced earlier in the week. The panel members, who are preferably bankers but may also be entrepreneurs or faculty members, must judge the viability of the business project proposals and decide whether or not they should be supported. The objective of the exercise is not to produce polished or elaborate proposals, but to enable participants to identify an opportunity and to realize that it is possible to conceive, plan, and operate a profitable business enterprise even under severe time and resource constraints. The intent is to encourage innovative business ideas and to simulate actual credit conditions to the maximum possible extent. After each presentation, the panel withdraws for a maximum of 5 minutes to make their decisions. When the panel reconvenes, it announces its decision and negotiates the terms of the loan. Depending on the level of risk involved by the project, the panel will determine the necessary amount of equity or collateral required. Not all proposals are approved and some may receive less than the requested sum. Those who have been lent money will have to repay it plus a modest interest charge. Any surplus will be theirs to keep. The panel explains to those teams not granted a loan why they were unsuccessful and what steps they might take.

TOPIC: Business Creation Exercise

DAY: 5

SESSION TITLE: **Milestone #3: Processing Business Plan Development & Presentation to Panel**

DURATION: 45 Minutes

MATERIALS: The business plans

OBJECTIVE: To enable participants to enhance their ability to seek and use information effectively.

PECs: Information Seeking
Persistence

Processing the Business Plan: This session is allotted to deciphering learnings from the BCE and the Bankers Panel presentations. The participants are reminded that one of the objectives of the course is to help them identify the right questions to ask in order to start or expand their own enterprises. Another objective noted is to learn how to find the answers to these questions as efficiently as possible. The trainer asks what has been learned thus far from the BC exercise about the components of a business plan. The discussion also identifies what type of information was found to be most inaccessible and what options were tried after initial data collection efforts were thwarted. The responses are then explicitly processed in terms of the PECs included in the Achievement Cluster, particularly Information Seeking and Persistence. The participants are then asked what they learned from presenting their plans to the panel and from listening to other people's presentations. The group is encouraged to consider the next step in setting up their BC enterprise. They are introduced to the concept of implementation planning (to be discussed more fully in the next session) and assisted in formulating implementation plans for their weekend BCE activities.

TOPIC: Systematic Planning

DAY: 5 - 6

SESSION TITLE: Introduction to the Planning Cluster

DURATION: 1 1/2 Days

MATERIALS: Case Study on Ernest's Furniture Manufacture

OBJECTIVES

To introduce participants to the basic concepts of planning based on clear statements of objectives.

To introduce the Planning Cluster

To develop a preliminary action plan for the BCE events over the weekend.

PECs: Goal Setting

- * Sets clear and specific short term objectives
- * Sets clear and long term goals

Systematic Planning and Monitoring

- * Develops and uses logical, step-by-step plans to reach goals
- * Evaluates alternatives
- * Monitors progress and switches to alternative strategies when necessary to achieve goals

QUOTES:

"First build your castles in the air. Then be sure to construct firm foundations beneath them".

"Where there's a way, there's a will".

Recognition: The session before and after the weekend break introduce the Planning Cluster of PECs: 1) goal setting; and 2) systematic planning and monitoring. These two fundamentals of the planning process are portrayed in a video; and their interdependence with the Achievement cluster PECs is illus-

trated. Systematic but flexible planning is emphasized as especially important in less developed countries (LDCs) due to the complexity, difficulty and uncertainty of LDC business environments. Understanding: First, simple and clear definitions of the terms "systematic" and "planning" are given. Next, the idea is conveyed that effective entrepreneurs plan by "beginning at the end" or have an output orientation rather than an input orientation. Basic steps of an output orientation to planning are presented, as follows: 1) defining measurable, realistic and manageable objectives; 2) identifying all activities required by the objectives; 3) formulating a schedule for undertaking activities; 4) identifying individuals who will do each activity; and, 5) estimating resources and costs necessary to complete the activities. Criteria of good objectives - clarity, realism, manageability and targeting - are examined; and guides for expressing objectives in written form are noted. Self-Diagnosis: The results of the Focused Interviews are reviewed to enable group members to assess their strengths and weaknesses in this entrepreneurial characteristic. Business objectives written as a pre-session exercise are evaluated based on the criteria mentioned previously. Experimentation: BCE groups are asked to identify near-term objectives they want to achieve by Friday. Each group is instructed to then develop activity lists for each objective. These objectives and activity lists will be utilized in subsequent sessions. The Cash Book is introduced as an important monitoring tool for the entrepreneur.

TOPIC: Business Creation Exercise

DAY: 6

SESSION TITLE: Milestone #4: Processing Implementation Plan

DURATION: 45 Minutes

MATERIALS: If available, team plans
"Hypothetical Situations"

OBJECTIVES: To enable participants to learn from the process of developing a plan for implementing a real business.

To enhance their commitment to quality and efficiency.

PECs: Opportunity Seeking
Persistence
Demand for Quality & Efficiency
Goal Setting
Systematic Planning and Monitoring
Others, as appropriate

Processing the Implementation Plan: This 45 minute session reviews the implementation of the BCE over the weekend. Company teams describe their strategies for beginning the business project and the process they went through to devise their plans. The trainer elicits answers to such questions as the following: did they break down the larger into smaller tasks; did they assign responsibilities; and did they explore alternatives and choose the most efficient. Answers given to these questions are related to the basic steps of the planning process covered in the introduction to planning module. Group members are also called upon to discuss what other PECs were important to them for starting their business projects and what problems were encountered. The trainer uses examples given by the class to review all of the PECs studied thus far. A series of hypothetical entrepreneurial situations are used to further analyze the PECs. The hypothetical case studies are related to the BCE to reiterate the importance of the PECs to running a business.

TOPIC: Planning Cluster

DAY: 6

SESSION TITLE: Near Term Objective Setting and Workplanning

DURATION: 1/2 day

MATERIALS: Self-Scoring Questionnaire Case Study

OBJECTIVE: To enable participants:

1. To set clear, measurable and realistic near term business objectives.
2. To develop realistic activity plans and schedules and to elaborate a Gantt Chart.
3. To be able to lead a team in workplanning.

PECs: Systematic Planning and Monitoring
Goal Setting

Recognition: This half-day session elaborates further on goal-setting and activity plan formulation, and introduces two planning techniques: The Planning Matrix and the Gantt Chart. Introductory comments are made to indicate that Achievement Cluster PECs are indispensable to successful entrepreneurship but are not sufficient. The trainer continues by noting that a critical element of successful entrepreneurship is the ability to set goals, systematically plan how these goals are to be achieved, keep track of progress and make changes when new problems or opportunities arise. This type of systematic but flexible planning is identified as the topic of this session. Self-scored questionnaires and a video are used to assist group members to recognize circumstances requiring planning. **Understanding:** A seminar-discussion exercise is conducted to reveal generic planning functions. Examples of successful events are elicited and reasons why the events were a success are recorded on a flip chart. The reasons listed are then shown to support a recurring pattern in management practice found throughout the world. **Self-Diagnosis:** Triads are formed for the participants to share personal examples of systematic planning. For those having difficulty thinking of examples, the trainer inquires if that is because planning is a particular weakness or if it has not been important in their experience. FIT ratings and BCE experience are drawn on to aid self-assessments of planning ability. **Experimentation:** A written case study is utilized to introduce the Planning Matrix technique and to clarify the relationship between the terms "purpose", "output", and "activities". The use of Gantt Charts in activity planning is demonstrated, illustrating the concepts of "simultaneity", "sequentiality", and "dependence". **Refinement:** Disadvantages to planning are considered, such as its possible effect of cutting off yet unknown options and opportunities. **Application:** An assignment is given to begin elaborating a Planning Matrix for their BC Exercise.

small entrepreneur putting together his P&L statement. **Cash Flow Statement:** The concept of cash flow is explained; the importance of ~~the cash flow state-~~ment is emphasized; and reasons for not holding excess cash are outlined. Using a model cash flow statement, basic terms, such as sources of cash and disbursements, are reviewed to give an overview of the cash flow statement preparation exercise. Trainees are then given thirty minutes to draft a cash flow statement based on a local case study. Participants are assigned as homework the task of preparing daily cash flow projections and expected end-of-project P&L statements for their BCEs.

TOPIC: Financial Planning

DAY: 7

SESSION TITLE: Part #1: Introduction
Part #2: Balance Sheet
Part #3: Profit and Loss Statement
Part #4: Cash Flow Statement

DURATION: 5 Hours

MATERIALS: Combined Furniture Center Ltd. Handout
Balance Sheet
Profit and Loss Data Sheets, Parts 1 and 2
Personal Monthly Budget Sheet
Personal Financial Statement
Start-up Costs Worksheet
Capital Equipment Worksheet
Cash Flow Worksheet
Comoran (Kenya) Case Study

OBJECTIVES: To enable participants to understand the purpose of financial planning and how to use critical documents to create a business plan for submission to a banker panel.

PECs: Systematic Planning and Monitoring
Information Seeking
Opportunity Seeking

Introduction: This session provides a brief introduction to the importance and use of three basic financial planning tools: 1) the Balance Sheet; 2) the Profit and Loss Statement; and 3) the Cash Flow Statement. The purpose of the module is to demonstrate the value and feasibility of systematic financial planning and monitoring. The Balance Sheet: The purpose of a balance sheet is explained and types of assets and liabilities are defined. A case example is used to illustrate the preparation of a balance sheet. As a test of the participants' understanding, they are requested to draw up a balance sheet for another example company. Profit and Loss Statement: The purposes of a profit and loss statement are described and distinguished from those of a balance sheet. Worksheets are filled in for a case study to begin the profit and loss statement exercise. Once the worksheets are completed, learnings are reviewed by posing questions based on the case study, such as the difference between start-up and operating costs; the amount of the owner's equity that should be contributed to start-up expenses; the total repayment that must be budgeted; and the amount of savings possible from equity rather than debt financing. Other case examples are presented to reconstruct the typical analysis of a

TOPIC: Cluster Review

DAY: 7

SESSION TITLE: Achievement & Planning Clusters Review

DURATION: 2 Hours

MATERIALS: Video (Stew Leonard)-#3
Interview Evaluation Form
PIW

OBJECTIVES: To review the first two clusters

To improve participants' ability to recognize PECs in complex situations.

To identify one to two PECs from the Planning Cluster participants wish to strengthen deliberately during the rest of the workshop.

PECs: Achievement Cluster

- * Risk Taking
- * Persistence
- * Opportunity Seeking
- * Information Seeking
- * Demand for Efficiency and Quality

Planning Cluster

- * Systematic Planning and Monitoring
- * Goal Setting

Introduction: This session which is modeled on the first cluster review (module 14) is meant to provide a skill building event in identifying entrepreneurial behavior; a review of the first two clusters of PECs; and a preview of the third cluster. In order to make the PEC identification easier, scoring sheets with a list of the PECs studied thus far are distributed. After viewing the video, participants are asked to recount evidence of each PEC exhibited. The tendency of some PECs to reinforce one another is noted, as in the link between information seeking and demand for quality and efficiency.

Reference is also made to PEC combinations important at different stages of the business. (for example, opportunity seeking and information seeking during start-up) and to the possible trade-offs among PECs. The strengths and weaknesses of the entrepreneur in the video are discussed in detail and used as a basis for initiating a discussion of each participant's strengths and weaknesses. Setting Personal Objectives: Participants are asked to consider their Profiles of the first day as well as their workshop experiences to determine what would be the most useful entrepreneurial behavior for them to strengthen. These choices are written in their PIWs along with specific actions that will be taken to strengthen each of the PECs selected. Finally, group members then meet individually with the training staff to discuss their new learning objectives and to elaborate plans for achieving them.

TOPIC: The Power Cluster

DAY: 8

SESSION: Persuasion and Networking

DURATION: 6 1/2 Hours

MATERIALS: Power & Influence Questionnaire
Persuasion/Networking/Influence Cases
Making Effective Presentations
Video Equipment: camera and playback (optional)

OBJECTIVES: To enable participants to understand the nature of power in entrepreneurial ventures and to become more comfortable and skillful in using influencing strategies.

To strengthen participants' tendency and ability to develop strategies for using their own and other peoples' power to influence business outcomes.

PECs: Persuasion and Networking

- * Uses deliberate strategies to influence or persuade others
- * Uses business and personal contacts to accomplish own objectives

QUOTE: "Power is the ability to get things done."

Recognition: The nature and use of individual power in the entrepreneurial setting is explored in this session. The exercise sequence is intended to enhance awareness and ability to focus on areas of influence and control. Persuasion and networking, two methods of exerting influence to gain cooperation from people, are discussed and observed in dramatizations and video portrayals of business events. Understanding: A diagram or "power map" is presented to correlate basic power situations in business, e.g. buying, selling, or requesting something, with three degrees of power: direct control, indirect influence, and environmental factors that may be circumvented or adjusted. Self-Assessments: Power and influence questionnaires taken previously are examined to prompt consideration of what sources of authority are most often relied upon: fear, contacts, expertise, information, position, personality, or rewards. The nature and role of body language is also discussed, dramatized and assessed. Experimentation: Role playing exercises are used in the experimentation step to let participants practice persuasion in situations involving employees relation and sales; and networking in a

hypothetical social occasion with industry and government officials. Emphasis is placed in these situations on doing a careful power map before proceeding, deliberately selecting an influencing strategy, and practicing the use of "power brakes" with which participants may be less familiar or comfortable. These exercises are videotaped if possible to permit more effective analyses and feedback. Application: An assignment is given to devise an influencing strategy for a future business situation requiring persuasion. The influencing strategy must include a "power map" of the operational field; the role of the person to be influenced; rationale for the sources of power to be utilized; and a demonstration of the words to be spoken and body language used.

TOPIC: The Power Cluster

DAY: 8

SESSION TITLE: Self Confidence

DURATION: 1 1/2 Hours

MATERIALS: The IP Questionnaire

OBJECTIVES: To enable participants to recognize the "Impostor Syndrome" in themselves in order to better cope with their insecurities as entrepreneurs and gain self confidence.

PEC: Self Confidence

- * Has a strong belief in self and own abilities
- * Expresses confidence in own ability to complete a difficult task or meet a challenge

QUOTE: "If you don't believe in yourself, no one else will."

Introduction: The entrepreneurial characteristic of self-confidence is investigated in this workshop module through two exercise sequences. The first introduces a common insecurity referred to as the "Impostor Syndrome". The second, optional session involves the participants in a physical exercise intended to build self confidence by confronting minor fears and creating success experiences. Recognition: An introduction to the topic of self confidence is given that explains that confidence is not bravado, but rather a strong, quiet belief in one's own abilities. A video segment is shown and participants are instructed to identify when self confidence is exhibited. The scene in the video is then re-run to reinforce the recognition. Understanding: A case example is read out loud to the group to illustrate the "Impostor Syndrome" or pattern of self doubt. After the reading, group members are asked to share examples of "impostor" feelings within themselves. The trainer emphasizes that everyone has "impostor" feelings at some point in their lives and that research has shown that the Impostor Phenomenon is prevalent among many high-achievers. Self-Diagnosis: A questionnaire designed to reveal impostor behavior, filled out anonymously before the session, is reviewed individually and a group score is computed. Inhibiting effects of the Impostor Phenomenon on the entrepreneur are outlined, such as reluctance to pursue new ideas or take business risks. Refinement & Integration: Workgroups are formed to develop strategies for countering the impostor syndrome. Group members are asked to consider such issues as how their culture views mistakes, and if admitting a gap in knowledge is seen as normal and necessary for learning, or

as a sign of incompetence. Application: Each participant is given 10 minutes to write a plan of action for countering the imposter syndrome within themselves. The group is reminded that in order to counter these feelings, they need to put into practice the skills they have been learning throughout the course on how to take moderate risks, how to seize and act on new business opportunities, how to take repeated actions to overcome obstacles, and how to set realistic goals. The group is then asked to identify other prevalent obstacles to self-confidence in themselves and to suggest means for overcoming these obstacles.

TOPIC: SELF-CONFIDENCE

DAY: Additional

SESSION TITLE: Pole Walk (optional)

DURATION: 1/2 Day

MATERIALS: Two vertical poles or tree trunks approximately 10 to 15 feet apart. A third pole about the diameter of a telephone pole lashed or bolted to connect the two vertical poles at a height of 6-8 feet. The ground beneath should be grass, sand, or some other soft surface.

HANDOUTS: Guidelines for Writing Confidence Building Contracts
Personal Contract

OBJECTIVES: To enable the participants to understand the process of building self-confidence and to experience it in an exercise.

PEC: Self-Confidence:

- * Has a strong belief in self and own abilities
- * Expresses confidence in his or her own ability to complete a task or meet a challenge.

QUOTE: "If you do not believe in yourself, no one else will."
else will."

Recognition: Introductory comments stress that it isn't really known whether people gain self confidence as a result of having successful experiences or whether people tend to have successful experiences because they are self confident. It is noted that it seems likely that it works both ways. The trainer tells the group that the technique introduced in this section gets the process of building confidence going by helping to create success experiences. By beginning with small successes, group members can gradually build to a higher level of self confidence to handle important matters.

Understanding & Self Diagnosis: Teams are formed to undertake an obstacle course type event. The objective is to get the entire team to clear the obstacle without climbing on the vertical supports. Afterward, team members are asked to report their feelings at various points throughout the exercise and relate them to a challenge an entrepreneur might encounter.

Integration & Refinement: As a preface to the next exercise, the trainer presents five

basic ways that people's self confidence is eroded. Each person is asked to write down a problem they are having difficulty with or a situation with which they are dissatisfied. The situation is to be described in detail, including its causes and factors preventing them from overcoming it. The group then considers what self confidence has to do with their willingness to take responsibility for their problems. Application: Copies of a handout "Guidelines for Writing Confidence-Building Contracts" are distributed and a case example of a personal contract for self-improvement is reviewed. The class is assigned to make individual contracts with themselves for a week or ten days. Each day they are to record whether or not they kept their promises to themselves and make a few remarks about the difficulty or ease of keeping the promises.

TOPIC: Cluster Review

DAY: 9

SESSION TITLE: **Achievement, Planning and Power Cluster Reviews
Fishbowl Coding of Live Interview**

DURATION: 2 Hours

MATERIALS: Video (Judy Wineler)
Interview Evaluation Form
PIW

OBJECTIVES: To improve participants' ability to recognize PECs in complex situations and code for them accurately.

PECs: Achievement Cluster

- * Risk Taking
- * Persistence
- * Opportunity Seeking
- * Information Seeking
- * Demand for Efficiency and Quality

Planning Cluster

- * Systematic Planning and Monitoring
- * Goal Setting

Power Cluster

- * Persuasion and Networking
- * Self Confidence

Introduction: In this session, a guest entrepreneur is interviewed by the training team before the class while the students use the Focused Interview instrument to code PECs exhibited. The principle behind this Live Interview Workshop is that PEC recognition makes PEC modelling easier. That is, if the class members can see the PEC and know how it works, they can more readily adopt the behavior. Scoring Guidelines: During the interview, the guest is asked to talk about five types of situations involving, respectively, achieving something individually; gaining cooperation from others; overcoming

difficulty; feeling pleased with an accomplishment; and taking a risk. The focused interview observation scoring form contains a space to record what competencies the respondent demonstrated in each of the five situations and the evidence observed. Plenary Review of the Interview: After the guest has left, a plenary discussion is conducted of the interview. Scoring sheets are reviewed and a show of hands is asked for each PEC. Participants are next asked to identify the entrepreneur's strengths and reasons for success. As a final exposure to the coding technique, a video summarizing the 3 PEC clusters is shown and scored in the same manner as the interview. Group members are then asked to score themselves over the past 2 weeks and to decide what Power cluster PECs to strengthen. Their responses are written in their PIWs along with specific plans for strengthening the designated PECs, and the plans are then discussed individually with members of the training staff.

TOPIC: Progress Assessments

DAY: 9

SESSION TITLE: Individual Consultation

DURATION: 1/2 Day

OBJECTIVES: To confirm the clarity and realism of participants' self-perception and to assist participants to formulate realistic action plans and the commitment necessary to carry out those plans.

This half day is devoted to meeting with participants, either individually or in small groups, to discuss their progress during the workshop, their remaining areas of weakness, their business ideas, plan, or anything else of particular relevance to their subsequent success. There is no single prescribed format for these discussions. Participants' PIWs and BPWs should be used along with initial Focused Interview results and any observations or notes made by the trainer or the participant during the workshop.

TOPIC: Business Creation Exercise

DAY: 10

SESSION TITLE: Milestone #5: Processing the BCE

DURATION: 1 1/2 Hours

MATERIALS: Oral or written presentations of business results

OBJECTIVES: To enable participants to identify their application of each of the PECs during the BC exercise and thus to enhance their own ability to apply the PECs thereafter.

PECs: All the PECs

QUOTE: "Life is like sitting in the cockpit of a 747: sometimes it's hard to know which dials to watch."

Processing the Business Creation Exercise: The results of the Business Creation Exercise are presented in the morning of the last day of the workshop. First, each team reports on their earnings and returns the banker's investment. The team making the most profit per person is declared the winner and awarded a prize. Second, the full set of PECs are listed on the board and each company that made a profit is asked to identify the cluster or PECs which they feel contributed most to their success. Specific examples of when these PECs were seen are cited. Third, those teams which were unable to pay back their original stake are requested to identify the PECs or cluster of PECs whose omission contributed most to their inability to earn a profit. Lessons learned are discussed in detail and the group is asked how the BCE experience has changed the way they now look at doing business. Participants are asked to state at least one specific lesson they have learned from this exercise that they can relate to their business.

TOPIC: Next Steps Planning

DAY: 10

SESSION TITLE: Next Steps Planning

DURATION: 2 Hours

MATERIALS: Action Planning Worksheets
PIW

OBJECTIVES: To summarize personal objectives set during the workshop and to translate these into action strategies.

To prepare a 3-month action plan for use during the follow-up period.

To define the basis for organizing the consulting assistance to be provided by the local business advisory team.

"Next Steps" Planning: In this session, participants develop a PEC Personal Contract and a 3 month action plan to guide implementation of strategies to achieve personal learning objectives set during the workshop. Guidelines for Writing Confidence Building Contracts: Among the guidelines presented for composing the PEC Personal Contract are recommendations to make the contract for a challenge that is neither too difficult nor too easy; for a specific period of time; and for measurable results. PEC Personal Contract: Group members are advised to concentrate on PECs that work in tandem. For instance, if they want to work on opportunity seeking, they should not neglect information seeking. Once they have selected the PEC(s) they want to work on, each member of the group is asked to list on the contract reasons why their chosen PEC(s) are important to them and what specific, perhaps small, daily actions they can take to strengthen them. After plenary or diad discussions to refine these action steps, the contracts are signed. An agreement is made to read the last sheet of the contract, which specifies daily actions, every morning for the next 21 days. Action Planning: Action Planning is a critical component of the 2-week workshop. From the methodological point of view it is step #6 in the learning cycle: Application in the business. Action planning is used to transform learnings, actual and latent, into action or commitment to action. The time frame chosen is 3 months. This relatively short time frame is intended to focus the participant's attention on the immediate next steps, and specific follow-up they intend for themselves and need from the small business advisory consultants. The logic of the Action Plan is simple and employs the techniques taught in the systematic planning and monitoring module. Participants are asked to use a pre-prepared form to write a clear statement of 2-3 business objectives and key action-steps for each.

These are placed on a bar chart for clarity and scheduling. The final documents are photocopied and discussed with the trainer team. One copy is submitted to the follow-up consultant team to be used for organizing follow-up meetings.

TOPIC: Presenting Business Plans

DAY: 10

SESSION TITLE: **Presentation to Bankers Panels and
A Roundtable Discussion**

DURATION: 2 Hours

MATERIALS: Participants' business plans, at least four copies of each.

Any presentation equipment that is available, such as flip charts, overhead projectors, etc.

OBJECTIVE: To enable selected participants to present their plans to potential sources of finance and other interested parties.

To provide participants with clear and practical feedback on the typical concerns of finding agencies and the possible deficiencies in their plans and presentations.

Briefing the Participants: The pre-session briefing stresses that unlike the presentations given in module 15 as part of the Business Creation Exercise, these Banker Panel presentations are not a training exercise, but primarily an opportunity for participants to obtain funding for their businesses. It is also a learning experience for them, however, and those proposals which panel members do not feel merit financing will not be rejected out of hand. The participants responsible for them will be given practical, detailed, sympathetic, but if necessary, brutally frank guidance as to how they can improve their proposals. Written business plans are presented to the panel in advance of this session and the mini-business plan is used to organize oral presentations. Class members who choose not to make presentations or whom the trainers feel are not yet ready to do so are reminded that they will have another opportunity to present to the panel as part of the seminar follow-up in approximately 1-2 months. Session Time Table: Each participant has 20 minutes to present his or her business plan to the panel, to answer any questions, and, if possible, to begin negotiations for finance. A representative from each panel briefly summarizes the panel's reaction to each of the presentations, pointing out deficiencies and ways that they might be improved. After the formal feedback, an opportunity is provided for participants or media representatives to meet informally with panel members, and for any presentations of awards. In the session summary, the group is reminded that the last 2 weeks were focused principally on business behaviors not on business skills; that the PECs can be used as a foundation but not as a

substitute for developing business skills; and that the Banker's Panel was intended to assist class members to set realistic expectations about the future.

TOPIC: Closing of the Workshop

DAY: 10

SESSION TITLE: Evaluation, Preparation for Follow-up, Closing Ceremonies, and Reception

DURATION: 1 1/2 Hours

MATERIALS: Evaluation Forms
Certificates of Achievement
Special Awards (where applicable)

OBJECTIVES: To get immediate feedback from participants on the quality and usefulness of the workshop.

To bring closure on the workshop and prepare the group for the next phase.

Workshop Evaluation: The importance of feedback for improving the workshop is explained. The group is given 20-30 minutes to complete the evaluation. Names are optional. Participants are then asked, one by one, to declare what has been most useful to them in the workshop and what use they expect to make of it. Preparation for the next week and the follow-up: The group is reminded of the caution made at the opening session about being a "critical thinker" rather than an over enthusiastic "True-Believer" in the workshop. Experience suggests that many group members will have found the workshop to be a powerful experience and that they will be leaving the workshop on a "high". It is explained that an exhilarating personal growth opportunity such as this one is typically followed by a wave of discouragement and frustration as people find it difficult to sustain the buoyancy of the feeling most will be experiencing. Soon after the workshop, most of them will begin to sense the power of the course slipping away. The participants are assured that this is a normal phenomena that everyone has experienced and that they should expect it to happen. The class is told that there are two ways to reduce the impact of this. One is to know it's coming, identify it when it happens and be able to define it. The second is to make plans for what to do when it happens in order to sustain some of the energy and self-confidence generated during the workshop. The Follow-Up: The follow-up is a significant element of the workshop. It is the bridge between the strong experiences/learnings of the 2-week program and real business improvements (expansion, value added, new starts). By this point, the participants have made several important preparations for the 3 month follow-up period. They have: (1.) written Action Plans; (2.) started or completed a Business Plan; and (3.) written a PEC Improvement Plan. The group is told of the interest of the small business advisory consultants (usually the sponsor of the workshop) in assisting participants, using these documents as a starting point. Before

the workshop concludes, a brainstorming session is held to identify the kind of follow-up assistance participants want or need, either individually or as a group. Based on what is identified, agreements are made about what can be provided. Certificates: Certificates of Accomplishment are distributed at closing ceremonies presided over by an appropriate official. A concluding reception is also recommended.

Appendix III: Participant Lists - Blantyre and Lilongwe

Participant List - Blantyre

	Name	Business	E/P/S*	C/T**
1.	Kansengwa, Mr. P.	Poultry & Livestock	P	T
2.	Kalihe, Mr. T.	Gemstone Extraction	P	T
3.	Saukila, Mrs.	Starch from Cassava	P	T
4.	Kamwana, Mr. E.G.	Poultry Rearing	P	C
5.	Chinkhadze, Mr. T.W.	Bottle Store	E	T
6.	Zabula, Mr. D.	Rice Processing	P	C
7.	Bakali, Mrs. S.	Tailoring	P	C
8.	Mukhumbwe, Mr. D.K.	Building Contractor	E	T
9.	Sawali, Mr. P.	Grocery	P	T
10.	Osman, Mrs. S.	Butchery	E	T
11.	Kwenje, Mr. W.N.	Tailoring	E	T
12.	Mpochela, Mr. F.G.	Tailoring	E	C
13.	Mphwiyo, Mr. M.M.	Wholesale	P	T
14.	Kaime, Mr. A.	Bee-Keeping	P	T
15.	Malipa, Mr. H.	Building Contractor	E	T
16.	Banda, Mrs. G.L.	Maize Mill	E	T
17.	Matemba, Mrs. D.	Tailoring	E	C
18.	Banda, Mr. K.	Selling Rice	E	C
19.	Likoya, Mrs. E.R.	Typing School	P	T
20.	Bvumbe, Chief	Poultry Rearing	E	T
21.	Maliro, Mr. S.	Retail Shop	P	C
22.	Stambuli, Mr. G.J.	Fish-monger	E	C
23.	Chaluma, Mr. S.M.	Tailoring	E	T
24.	M'manga, Mrs. P.	Crocheting & Embroidery	E	T
25.	Kachingwe, Mr. C.	Selling Flour & Beans	E	C
26.	Mbaluma, Mrs. R.	Vegetable Selling	E	C
27.	Chilambe, Mr. H.B.	Poultry Rearing	P	C
28.	Numeri, Mrs. E.	Tailoring	E	C
29.	Limbe, Mrs. C.N.	Tailoring	E	C
30.	Nkhweliwa, Mr. B.	Knitting	P	C
31.	Kachapila, Mr. R.	Mfg. of Steel Products	E	T
32.	Chirwa, Mr. B.C.	Shoe Making	E	C
33.	Chatha, Mrs. F.	Selling Charcoal	E	C
34.	Dalo, Mrs. J.P.	Grocery & Bottle Store	E	C
35.	Bola, Mr. G.P.	Grocery	E	C
36.	Muwalo, Mrs. M.	Grinding Mill	P	T
37.	Matikanya, Mrs. E.R.	Tailoring	E	T
38.	Viola, Mrs. G.E.	Tailoring	E	C
39.	Khaorea, Mr. A.M.	Restaurant	P	T
40.	Kafwamba, Mr. A.A.	Maize Mill	P	C
41.	Bande, Mr. B.P.	Tailoring	E	C
42.	Viola, Mr. E.N.	Maize Mill	P	C
43.	Nyirenda, Mr. C.M.	Poultry Rearing	P	C
44.	Chimombo, Mr. H.W.	Poultry Rearing	P	C
45.	Kachingwe, Ms. F.	Selling Curios	E	T

* Established (E), Potential (P), or Starter (S)

** Control (C), Trained (T)

T=21

Participant List - Lilongwe

	Name	Business	E/P/S*	C/T**
46.	Mambulu, Mr. J.M.	Carpentry	E	T
47.	Pensulo, Mrs. G.	Trading in Firewood	E	C
48.	Kotokwa, Mrs. E.C.	Tailoring	E	C
49.	Malenga, Mrs. E.M.	Bottle Store	S	T
50.	Swira, Mr. S.	Tailoring	E	C
51.	Mtonya, Mr. M.S.	Poultry Rearing	P	T
52.	Mwale, Mrs. L.	Mini-Bakery	P	T
53.	Mhango, Mrs. M.	Poultry Rearing	S	T
54.	Kambuwa, Mrs. O.C.	Tailoring	E	T
55.	Upindi, Mr. A.G.	Poultry Rearing	S	T
56.	Bwanali, Mrs. M.	Butchery	E	T
57.	Pensulo, Mr. L.E.	Hawker	E	T
58.	Bongo, Mr. M.P.	Charcoal Trading	P	C
59.	Mwangolera, Mr. G.S.	2nd Hand Clothes Trading	P	C
60.	Chitwere, Mr. L.	Hawker	P	T
61.	Kwelepeta, Mrs. I.N.	Tailoring	E	C
62.	Kamanga, Mrs. E.	Knitting	S	C
63.	Mvula, Dr. A.W.J.	Veterinary Surgeon	E	T
64.	Mvula, Mrs. L.	Tailoring	E	C
65.	Kaweke, Mrs. M.	Knitting	E	T
66.	Ntodwa, Mrs. D.E.	Poultry Rearing	S	T
67.	Hauya, Ms. D.	Confectionery	E	T
68.	Kalumbu, Mr. W.B.	Poultry Rearing	E	T
69.	Makupe, Mr. W.B.	Welding Shop	E	T
70.	Mgwadira, Mrs. M.	Knitting	E	T
71.	Msosa, Mr. Y.P.	Tannery	P	T
72.	Chatipwa, Mrs. D.V.	Tailoring	P	C
73.	Mwale, Mrs. R.S.	Restaurant	E	C
74.	Kachali, Mrs. E.	Tailoring	S	C
75.	Nyirenda, Mr. H.G.C.	Poultry Rearing	E	C
76.	Kajawa, Mrs. S.	Knitting	E	T
77.	Nthara, Mrs. E.	Baking	E	C
78.	Katumbi, Mrs. L.	Knitting	E	T
79.	Lijabu, Mrs. M.R.	Snack Shop	S	T
80.	Mayuni, Mrs. E.	Produce Trading	E	T
81.	Kambalame, Mr. W.B.	Bakery	P	C
82.	Chinthunzi, Mrs. F.J.	Tailoring	E	C
83.	Cheyo, Mr. J.	Metal Fabrication	E	T
84.	Kutengule, Mrs. E.	Baking	E	T
85.	Mbewe, Mrs. J.	Knitting & Crocheting	E	C
86.	Mapata, Mrs. R.	Knitting	E	C
87.	Mandala, Mrs. M.	Tailoring	E	C
88.	Gomani, Mrs. F.	Rice Trading	E	C
89.	Munyangale, Mrs. C.	Knitting	E	C
90.	Makato, Mrs. B.C.	Tailoring	S	C

* Established (E), Potential (P), or Starter (S)

** Control (C), Trained (T)

T=24

Appendix IV: The Experimental Group

A. Malawi Trainees -- Before and After

MALAWI TRAINEES -- BEFORE AND AFTER

Mr. D.K. Mukhumbwe

At the time of the 1986 Entrepreneurship Workshop, Mr. Mukhumbwe was in the construction business. He employed 60 persons full time and had revenues of 4,000 K during the six months prior to the workshop. Due to a shortage of building materials, construction has become his secondary business, in which he now employs 15 full time people and twenty people part time. His prior six month sales were 3,000 K. His current primary business is gemstone extraction, which he started after the Workshop. This business employs 10 persons and had sales of 20,000 K in the last six months.

Mr. Rex Kachapila

At the time of the 1986 workshop, Mr. Kachapila was a sales representative for a firm selling hardware items. He also had a welding business in which he made door frames and steel window frames. He employed 8 persons full time and had sales of 6,500 K in the previous six months. By August, 1988, Mr. Kachapila had been promoted to Sales Manager in his job. His welding business was still ongoing; he had cut his labor force to 5 full time employees and had drastically increased his sales to 30,050 K during the past six months.

Mrs. Mayuni

At the time of the Workshop, Mrs. Mayuni had a food "take away" and fresh produce sales business. She employed 8 people full time and had had sales of 18,000 K during the past 6 months. By August, 1988 her reputation had grown as had her business. She had become an employer of 17 people, expanded her menu substantially, and had 6 month revenues of 300,000 K. She claims that the Workshop increased her awareness of the necessity of knowing one's competition and the importance of customer relations and quality control.

Mrs. Osman

At the time of the workshop, Mrs. Osman ran a butchery business which employed 5 people and had sales of 24,000 K during the past six months. Shortly thereafter she terminated this business and went into the fabric screen printing and fashion design business. While a participant in the Workshop she developed a plan for starting a fashion design enterprise and, by August, 1988 she owned Fashion Dynasty, a boutique in the Mt. Soche Hotel, the main hotel in Blantyre. She employed 8 full time people and two part time people and had had sales of 152,800 K during the past six months.

Mrs. E.R. Likoya

In the summer of 1986, Mrs. Likoya was working full time as a secretary for Malawi Railways and also had three businesses: a secretarial school (which she considered her primary side business), selling firewood and selling rice. In the secretarial school she employed one part time person. Revenues had been 1,300 K for the past six months. By August, 1988, Mrs. Likoya had been promoted and was supervising all secretaries for the railroad and had initiated an internal training program for Malawi Railroad secretaries to upgrade their skills. Although she is no longer selling firewood and rice, her primary business, Progressive Secretarial School and Services, has expanded. She has purchased more typewriters, moved to a new location, and stepped up her marketing. She now has three full time teachers (she used to do all the teaching herself) and had had revenues of 5,200 K during the past six months.



Mrs. Likoya's Progressive Secretarial School and Services

Mr. Kaime

In July of 1986 Mr. Kaime was working full time for Portland Cement and wanted to start a bee-keeping business. This did not ever materialize. In August of 1988 he was still working for Portland Cement and had plans to start a hair salon. He had obtained some equipment for it, but still needed money to rent space.

Mr. Herman Malipa

At the time of the 1986 Workshop, Mr. Malipa was the owner of Malpaso Building Contractors, specializing in the construction of buildings and the fencing of premises. He employed 12 full time and 30 part time employees and had had revenues of 18,000 K during the previous six months. By August, 1988 the business had grown substantially. He had fifteen full time employees, 30 part time employees and had had revenues of 75,000 K during the prior six months.

Chief S.M. Brumbwe

At the time of the workshop, Chief Brumbwe had a poultry raising business. He employed four people full time and ten people part time and had had sales of 7,872 K during the previous six months. Since that time he has also bought layers, so he sells eggs in addition to raising chickens. In August, 1988 he had 2 full time and 7 part time employees and revenues for the previous six months were 16,200 K.

Dr. Mvula

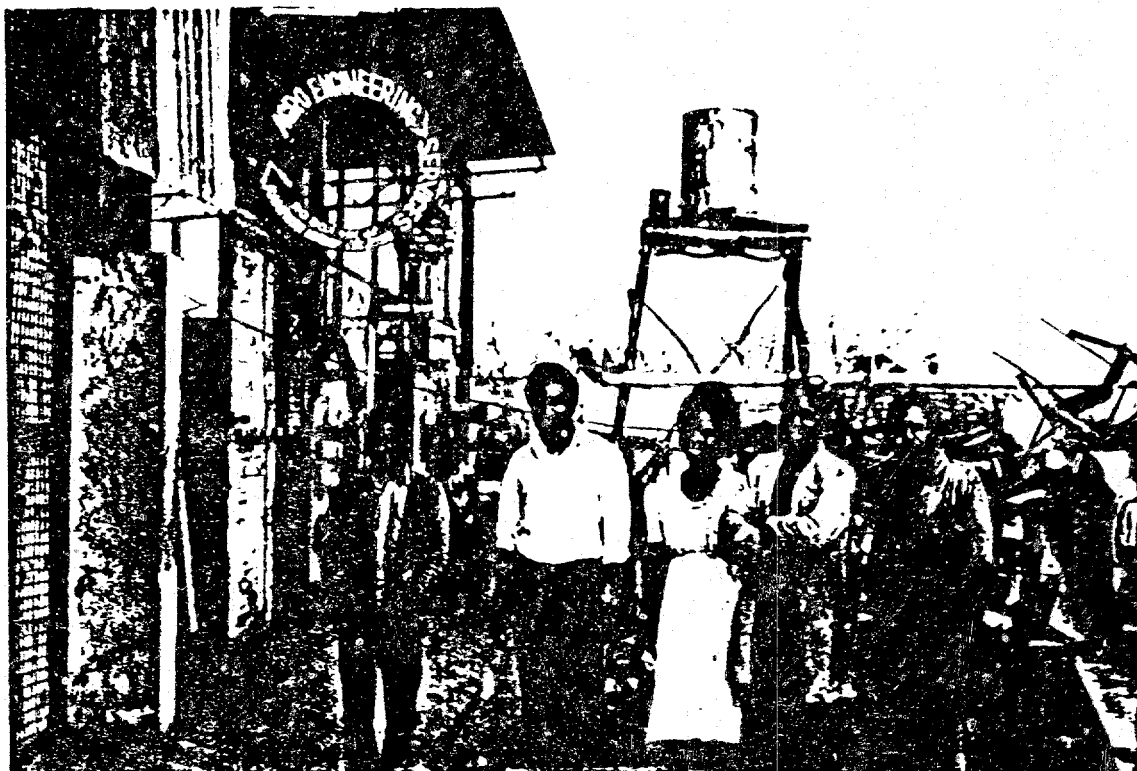
Dr. Mvula is a veterinarian with a private practice. At the time of the workshop he employed three people full time and had receipts of 4,760 K during the previous six months. In August, 1988 Dr. Muula had two employees and had had sales of 4,550 K during the past 6 months. His business had been hurt by the limited size of his clientele (mostly expatriates) and difficulty in obtaining drugs.

Mrs. G.L. Banda

At the time of the workshop in 1986, Mrs. Banda was teaching physical science and math at a secondary school and also had a maize mill business. In the maize mill business she employed three people full time and two people part time and had had sales of 3,200 K during the past six months. By August 1988, although she was still working full time elsewhere, her maize mill business employed 7 full time persons, 12 part time persons and revenues had increased to 40,545 K during the previous six months.

Mr. J. Cheyo

At the time of the workshop in 1986, Mr. Cheyo had a metal fabrication (welding) business, Agro Engineering Services. He had two full time and two part time employees and had had 4,000 K in sales during the past six months. By August, 1988 his business had expanded. He had six full time employees (plus employs approximately 30 people intermittently throughout the year) and had had revenues of 8,000 K during the previous six months.



Mr. Cheyo's metal fabrication business, Agro Engineering Services

Mr. Stanley Chaluma

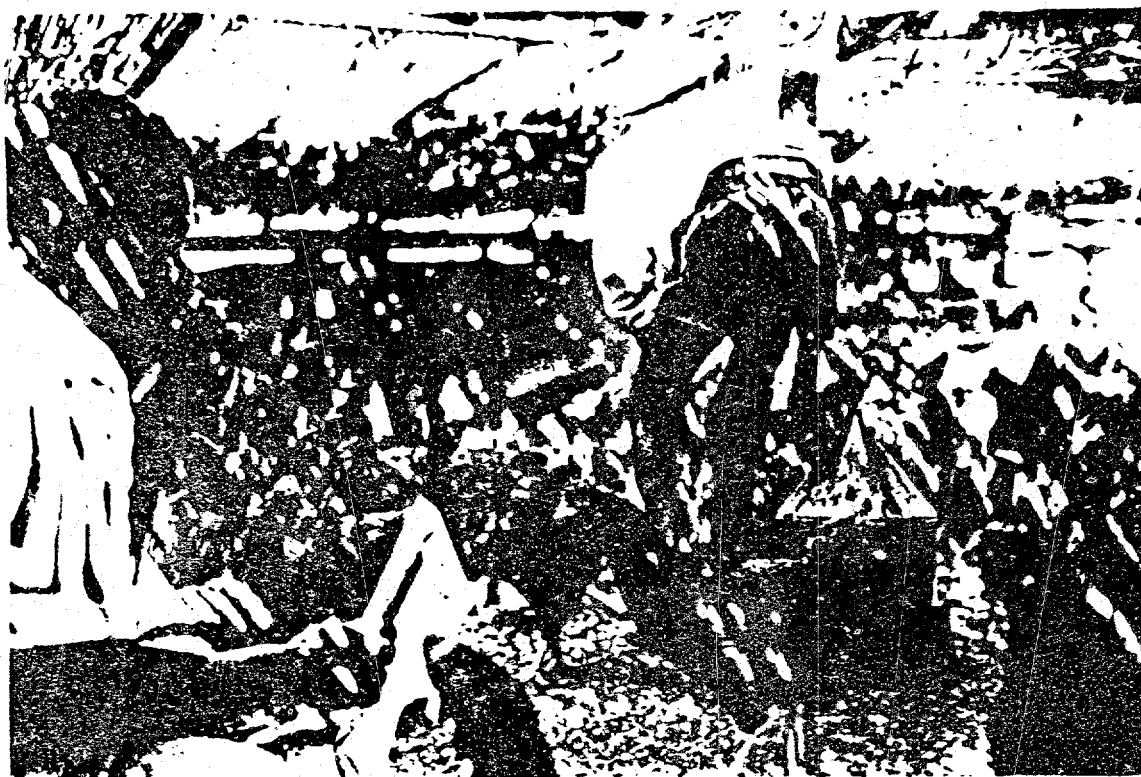
Mr. Chaluma worked full time as a production assistant and was the owner of a tailoring business which employed three people at the time of the 1986 Entrepreneurship Workshop. Revenues were 2,500 K for the six months prior to the workshop. In August, 1988, Mr. Chaluma was still working full time, now in the area of debt collection. His tailoring business was no longer operating, but he now owned a fish business which is run on a day-to-day basis by his wife and which had sales of 4,320 K in the prior six months.

Mrs. N. Kawele

At the time of the workshop, Mrs. Kawele had a knitting/embroidery business. She sold items to foreign visitors at the Kamusu International Airport. She had one employee and sales of 665 K during the last 6 months. She terminated that business because of the small profit margin and started a chicken raising business in February of 1988. By August of that year she had one employee and had had sales of 2,000 K in the previous six months.

Mr. Mtonya

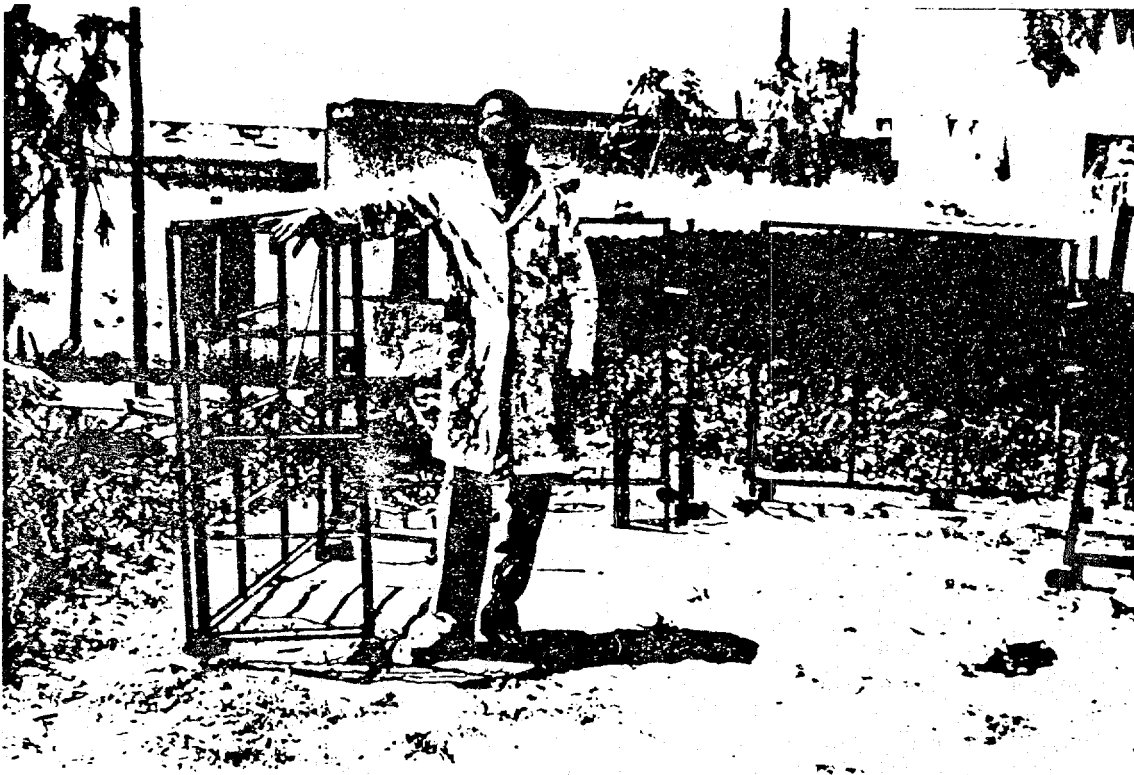
At the time of the 1986 Workshop, Mr. Mtonya was working full time in a government position and farming maize and tobacco as a side business. He had no employees and had sales of 1,200 K during the prior 6 months. In August 1988 he was still working full time and continuing to farm (sales were 1,750 K for the previous 6 months). In addition, he had started a successful chicken raising business in which he employed one person and had had sales of 4,500 K in the past six months.



Mr. Mtonya's Chicken Coop

Mr. W.B. Makupe

In the summer of 1986, Mr. Makupe owned and operated the Coolspark Electrical and General Repairs Company. He had two full-time employees, three part-time employees, and sales of 1,800 K during the past six months. In August, 1988 this business was still ongoing, with 3 full-time employees and sales of 6,720 K during the previous six months. He has expanded his business to include the making (by welding) of steel windows, beds, chairs and tricycles, in addition to his regular repair work. According to Mr. Makupe, the workshop affected his business in two major ways: it taught him how to keep books (he now does) and gave him new marketing ideas (he now has cards and actively markets rather than waiting for customers to come to him).



Window Frames Designed and Built by Mr. Makupe

Mr. Paul Sawali

At the time of the 1986 Workshop, Mr. Sawali was employed as an auto mechanic and had no business of his own. By August, 1988 Mr. Sawali had started Atupele Enterprise, a grocery store. He has two full time employees.

Mr. Kwenje

At the time of the 1986 Workshop, Mr. Kwenje was the owner of Kume Tailoring Shop and the Phee Rest House. These businesses together employed one person full time and one person part time and had sales of 1,000 K in the past six months. The tailoring business was terminated in 1987 due to non-payment by customers. His rest house was still running in August, 1988 and employed two full time persons. Revenues had increased to 2,750 K in the past 6 months. He attributes this increase to the installation of an innovative sign on the highway advertising his rest house as well as quality improvements he made to the rooms.

Mrs. Bwanali

In the summer of 1986, Mrs. Bwanali owned a butchery, employing 2 full time people and with sales of 15,000 K during the last 6 months. In August, 1988 the Delezina Supermarket, her butchery, had had sales of 54,024 K. She is keeping books and claims to be marketing her merchandise using techniques learned at the Workshop.



Delezina Supermarket, Mrs. Bwanali's Butchery

Mrs. Mgwadira

Mrs. Mgwadira had a jersey-making (knitting) business at the time of the workshop. She had one employee and sales of 2,000 K during the previous six months. By August, 1988 she had terminated this business and had two other businesses, a samosa making and selling business (which employed one person and had had revenues of 5,880 K during the past six months) and a fish sales business.

Mr. Mambulu

At the time of the Workshop, Mr. Mambulu was employed as a worker supervisor and also had a small furniture making company which employed four persons full time and two persons part time. Revenues for the prior six months had been 1,350 K. By 1988, although he was still employed full time, his furniture business had become a serious business rather than the hobby he considered it at the time of the workshop. He employed 5 people full time and had had 3,000 K in sales during the previous six months. He had made internal procedural changes such as starting to keep books, conducting marketing surveys, standardizing production as a means of quality control, and utilizing new marketing techniques.

Mrs. Ronnie Matikanya

At the time of the 1986 Workshop, Mrs. Matikanya owned a tailoring shop that made dresses for ladies and children. She had 2 full time employees and had sales of 3,000 K during the prior six months. She also had a secondary business selling ground nuts which had sales of 660 K in the prior six months. In August 1988, Mrs. Matikanya had three ongoing businesses. Her primary business was paraffin sales, for which she had one full time employee and had had sales of 28,000 K during the past six months. Her second business involved the sale of maize, rice and peas. She worked in that business by herself and had sales of 42,400 K during the past six months. In addition, her tailoring business was still ongoing. She still had two full time employees but sales had increased to 9,300 K during the previous six months.

Mrs. Kajawa

At the time of the workshop in 1986, Mrs. Kajawa had a small tailoring business making cushions and tablecloths. It employed one person full time (herself) and she had had 130 K in sales during the past six months. In August of 1988, she was tailoring baby suits and revenues for the previous six months had been 144 K.

Mrs. Kutengule

At the time of the workshop, Mrs. Kutengule worked full time as a civil servant and also had a cinnamon roll baking business which employed 2 people and had sales in the past 6 months of 5,400 K. In August, 1988 she still had her full time position and her roll baking business had expanded. It employed 3 full time people and sales in the last six months had been 10,800 K.

Mrs. Kambuwa

At the time of the 1986 workshop, Mrs. Kambuwa owned and operated a tailoring shop, Body Map Creations. She had five full time employees and had had sales of 10,000 K during the previous six months. Her business has grown substantially and in August, 1988 she had 11 full time employees. She used to make just clothing but this year got (after extensive marketing) the contract to provide all uniforms for Air Malawi. She also has two agents in Blantyre who sell her clothing. In the past six months she had had sales of 65,000 K.



Mrs. Kambuwa's Boutique,
Body Map Creations

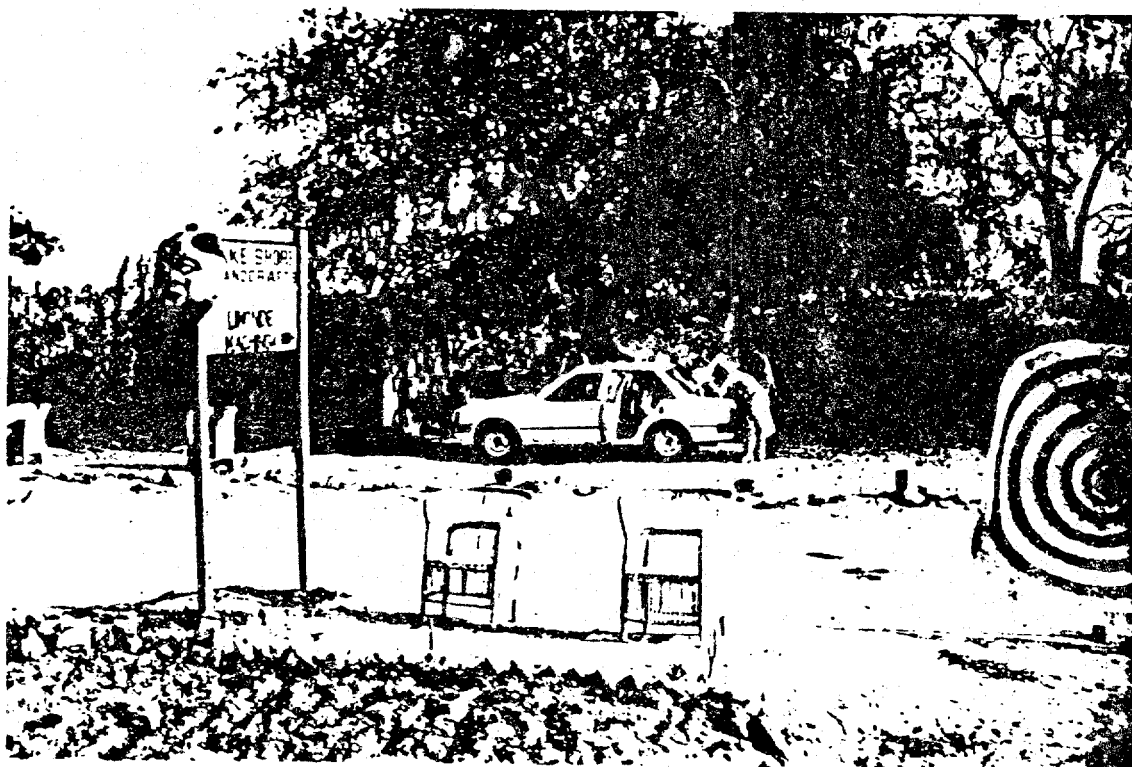
Mr. Msosa

At the time of the workshop, Mr. Msosa was in the preliminary planning stages for the first tannery business (leather processing, ever started in Malawi. By August, 1988 the plans for the tannery had proceeded well, a substantial loan had been obtained, and construction of the tannery had commenced. The tannery (although not yet completed) already has six full time employees plus three in training in the technical areas required. The opening of the tannery is scheduled for June, 1989.



Mr. Msosa's Tannery Under Construction

Mr. Msosa also owns Lakeshore Handicrafts which sells locally and exports wooden crafts, straw items, and pottery. He has six full time employees in this business and had had sales of 6,520 K during the previous six months.



Mr. Msosa's Lakeshore Handicrafts

Miss Kachingwe

At the time of the workshop in 1986, Miss Kachingwe was unemployed but planned to get into the business of selling curios. In August, 1988 she had started two businesses. Her primary business is an import/export company which imports various items such as salt, materials, batteries, tires, etc. and exports curios. She employs four full time people in this business and had had sales during the previous six months of 153,000 K. Miss Kachingwe also has a small fish business which employs two people full time and had sales of 2,000 K during the past six months.

Mr. Chitwere

In the summer of 1986, Mr. Chitwere was working full time as an accountant for the government and did not have a business. In August, 1988 he was still working full time as an accountant, but had three side businesses: selling firewood, selling beans and selling rice. In his firewood business he employed three full-time people (plus 10 others intermittently to split wood and cut down trees) and had had 3,400 K of sales in the past six months. His bean selling business had one full time employee and six month sales of 500 K and the rice selling business had one full time employee and a profit of 250 K during the past six months (he didn't know the gross sales for that business).

Mrs. Mgwadira

Mrs. Mgwadira had a jersey-making (knitting) business at the time of the workshop. She had one employee and sales of 2,000 K during the previous six months. By August, 1988 she had terminated this business and had two other businesses, a samosa making and selling business (which employed one person and had had revenues of 5,880 K during the past six months) and a fish sales business.

Miss Hauya

At the time of the 1986 workshop, Miss Hauya was working full time for ADMARC, a government agency. She also had a small business making and selling meat pies in which she employed one part time person. During the previous six months she had had sales of 360 K. She had terminated this business just prior to the August, 1988 interview, when she was relocated to a rural area because of her job. Since there is not a market for meat pies among villagers, she is planning to start a business extracting oil from ground nuts.

Mrs. Lijabu

At the time of the 1986 workshop, Mrs. Lijabu was working full time at the Commercial Bank of Malawi and ran a snack bar take-away business in two locations. She employed two full time people in this business and had had 7,120 K in sales during the prior six months. She terminated this business shortly after the workshop. By August, 1988 Mrs. Lijabu had started a poultry raising business. She had two full time employees and had had sales of 18,000 K during the past six months.

B. Supplemental Interview Analysis -- PEC-Related Behavior

SUPPLEMENTAL INTERVIEW ANALYSIS

Findings

All ex post interviews with program participants included a series of questions focusing on the respondents' use of PEC-Related Skills. The following pages summarize that data.

The respondents were asked if they remembered talking about the ten Personal Entrepreneurial Characteristics (PECs) during the 1986 Workshop. All responded affirmatively. The respondents were then asked the following question:

Have you ever used any of the information about the PECs -- Personal Entrepreneurship Characteristics -- or used any of the PEC-related skills that you developed in the Workshop in your business or your work in any way? How did you use it?

Table 1 (below) summarizes the number of times respondents mentioned that they had used a particular PEC in their business or work since the Workshop in 1986.

Table 1: Number of Respondents That Used PECs In Their Work

<u>PEC</u>	<u>Number of Mentions</u>
Independence and Self-Confidence	22
Opportunity Seeking and Initiative	17
Persistence	17
Demand for Efficiency and Quality	17
Information Seeking	14
Planning and Monitoring	14
Risk Taking	12
Goal Setting	9
Persuasion and Networking	6
Commitment to the Work Contract	5

Typical examples of individual responses are detailed below.

1. Independence and Self-confidence

Independence and Self-Confidence: "Seeks autonomy from the rules or control of others; sticks with own judgment in the face of opposition or early lack of success; and expresses confidence in ability to complete a difficult task or meet a challenge."

Three-fourths of the respondents attributed a feeling of "courage" or increased confidence in pursuing business matters to the Workshop.

- A fishmonger said, "After attending [the Workshop] I was brightened. I have courage to meet people, confidence to talk

to directors and presidents of companies about business."

- One new businessman said, "Before I looked at a small horizon. After the Workshop I realized that there is a lot to be done to get a business going. In spite of problems I have kept going. I wouldn't have tried to start a hair salon business if not for the Workshop."
- Another participant said, "I'm able to go out and talk to people. I'm more open to people. I used to just think people would know [what I was thinking]. Now I practice; I talk to people at parties. It takes courage to talk about yourself."
- A rice and maize exporter began exporting to Zaire and Zimbabwe in 1987. "I never would have thought somebody small like me could do this. In the Workshop they told me to think big, reach out, have bigger goals."
- Some even made use of the materials provided to them during the Workshop. "Whenever I was in doubt I looked at the PECs and the materials and I was encouraged."

2. Demand for Efficiency and Quality

Demand for Efficiency and Quality: "Finds ways to do things better, faster, or cheaper; and acts to do things that meet or exceed standards of excellence or improve on past performance."

Over half of the experimental group interviewed mentioned the Demand for Efficiency and Quality PEC as one that they had used since the Workshop. Illustrative quotes are as follows:

- A carpenter said, "I have improved the quality of the furniture we make. I'm trying to standardize production so others [assistants] can do it when I'm not there."
- A man who sells handicrafts and curios said, "When I have to give a contract to a factory, I now make a careful judgement as to who would be able to do a good job at the most reasonable cost."
- A poultry-rearer spoke of the importance of clean chicken eggs to her customers. "When I first started in the business, you sent the boy to sell the eggs and they were sometimes dirty. Now [I] have them wash the eggs. I want to sell the cleanest and the best eggs in town." She went on to say, "I also learned to feed my chickens day and night. Some people only feed during the day."
- Another businessman said, "I am constantly trying to find new ways to upgrade my business."
- A produce store operator said, "[The Workshop] taught us to

improve quality. When I buy rice, I've developed a way to remove the bad rice and only keep the long ones."

3. Information Seeking

Information Seeking: "personally seeks information on clients, suppliers, competitors; (and) Uses personal and business contacts to obtain useful information."

In the Supplemental Interview, fourteen (14) respondents cited Information Seeking as a PEC that they remember from the Workshop and have since employed in their work. Examples of their responses follow:

- "I learned how to find markets, get help, and find out about the competition."
- "I wanted to find out about the best equipment, so I got manuals to read."
- "I go in offices and companies when I'm in South Africa -- even if I don't know anyone -- just to get information. I also look in directories now."
- "Before the Workshop, I never thought about asking anyone for advice about my farm."
- "I visit my competitors to find out how to make better samosas."

4. Planning and Monitoring

Systematic Planning and Monitoring: "plans by breaking a large task down into sub-tasks; keeps financial records and uses them to make business decisions; and develops or uses procedures to monitor that work is completed or that work meets standards set."

Fourteen respondents cited the Planning and Monitoring PEC as one they had used in their businesses. Examples include the following:

- One woman said, "The Workshop helped me. I used to just do things. Now I am planning; I make a plan before I see people so I can approach them with confidence."
- Another said, "Through this course I learned the importance of managing cash flow, keeping books. Before I was spending money without realizing it."
- One of the poultry rearers said that the Workshop taught her planning. "I first said to myself I would like to have 500 chicks every two weeks and how I would do it. I worked it out - the amount of feed. I also looked at the space I had -- is it enough? I had to make sure I had money ready to buy the chicks, not just that I wanted them."

- A veterinarian said, "I have learned to improve planning in the purchasing of materials. I was spending too much, not planning. Now I'm cutting down on costs."
- A man who operates a resthouse said that since the Workshop "I write down my goals and my plans so that I don't forget them and I stick to what I decided."

5. Goal Setting

Goal Setting: "Articulates clear, long range visions and goals; Continually sets and revises short range objectives."

Goal Setting was mentioned by nine (9) respondents as a PEC they had used since the Workshop. A woman who sells curios said, for example, that she now sets monthly sales targets. The carpenter quoted above said, "I told my assistants that I wanted five dining sets sent on a particular day and that we have to work toward that goal." And a tailor explained that in planning each month, she has learned to set definite goals and share these goals with her employees.

6. Persuasion and Networking

Persuasion and Networking: "Uses deliberate strategies to influence or persuade others; Uses business and personal contacts as agents to accomplish one's own objectives."

In the Supplemental Interviews, six (6) people cited **Persuasion and Networking** as a PEC that they have used since the Workshop.

- "[The Workshop encouraged me] to talk to people -- to influence people -- so that if someone is already buying from someone else, I'll find some way to talk him into doing business with me," said one respondent.
- A businessman admitted, "I didn't realize that I'd had a poor approach to the client and that dress and attitude are important. Now I think about all the things I need to do to influence people to buy from me."
- "Advertising, I wouldn't have done it. I gave forms to students to give to their friends. I went on radio -- on a women's program -- to talk about the school. It brought in lots of students."
- The butcher noted, "I learned to contact customers when I have something special. I sell by telephone."

7. Commitment to the Work Contract

Commitment to the Work Contract: "Accepts full responsibility for problems in completing a job; makes a personal sacrifice or expends extraordinary effort to complete a job; and pitches in with workers or in their place to get a job done."

The Supplemental Interview identified five (5) respondents who cited **Commitment to the Work Contract** as a PEC that they remember from the Workshop and have applied in their work.

- "I learned to keep to my word. If I agree to deliver at a certain date and time, I have to make certain not to disappoint [the customer] a single time or he will lose confidence in me," observed one woman.
- A butcher said, "When I can't get meat [from a supplier] I get it from other butcher friends. Although I don't make a profit when this happens, this is my way of ensuring that my customers get the meat they need and don't start going to another butcher."
- In one instance the data collectors experienced this PEC first-hand. As a designer/tailor explained, "That's why I didn't want to meet with you during work. Now I won't take time off work."

Appendix V: Supplemental Data

Table 1...Treatment and Control Groups: by Whether or Not in Business and Sex

	Total		Study group			
	Number of cases	Column percentage	Control group		Trained group	
			Number of cases	Column percentage	Number of cases	Column percentage
Subject owns a business:						
Female.....	25	40.3%	12	38.7%	13	41.9%
Male.....	21	33.9%	9	29.0%	12	38.7%
Subtotal.....	46	74.2%	21	67.7%	25	80.6%
Subject does not own business:						
Female.....	5	8.1%	3	9.7%	2	6.5%
Male.....	11	17.7%	7	22.6%	4	12.9%
Subtotal.....	16	25.8%	10	32.3%	6	19.4%
Both categories:						
Female.....	30	48.4%	15	48.4%	15	48.4%
Male.....	32	51.6%	16	51.6%	16	51.6%
Total.....	62	100.0%	31	100.0%	31	100.0%

Table 2.--Treatment and Control Groups: by Sex and Whether or Not in Business

	Total		Study group			
	Number of cases	Column percentage	Control group		Trained group	
			Number of cases	Column percentage	Number of cases	Column percentage
Females:						
Subject owns a business	25	40.3%	12	38.7%	13	41.9%
Does not own business.	5	8.1%	3	9.7%	2	6.5%
Subtotal.....	30	48.4%	15	48.4%	15	48.4%
Males:						
Subject owns a business	21	33.9%	9	29.0%	12	38.7%
Does not own business.	11	17.7%	7	22.6%	4	12.9%
Subtotal.....	32	51.6%	16	51.6%	16	51.6%
Both categories:						
Subject owns a business	46	74.2%	21	67.7%	25	80.6%
Does not own business.	16	25.8%	10	32.3%	6	19.4%
Total.....	62	100.0%	31	100.0%	31	100.0%

Table 3.--Treatment and Control Groups: by Whether or Not in Business and Age

	Total		Study group			
	Number of cases	Column percentage	Control group		Trained group	
			Number of cases	Column percentage	Number of cases	Column percentage
Subject owns a business:						
Under 25.....	3	4.8%	2	6.5%	1	3.2%
25-29.....	7	11.3%	6	19.4%	1	3.2%
30-34.....	12	19.4%	3	9.7%	9	29.0%
35-39.....	7	11.3%	2	6.5%	5	16.1%
40-44.....	11	17.7%	5	16.1%	6	19.4%
45-49.....	6	9.7%	3	9.7%	3	9.7%
Subtotal.....	46	74.2%	21	67.7%	25	80.6%
Subject does not own a business:						
25-29.....	5	8.1%	3	9.7%	2	6.5%
30-34.....	4	6.5%	2	6.5%	2	6.5%
35-39.....	5	9.7%	4	12.9%	2	6.5%
45-49.....	1	1.6%	1	3.2%	0	0.0%
Total.....	16	25.8%	10	32.3%	6	19.4%
Both categories:						
Under 25.....	3	4.8%	2	6.5%	1	3.2%
25-29.....	12	19.4%	9	29.0%	3	9.7%
30-34.....	16	25.8%	5	16.1%	11	35.5%
35-39.....	13	21.0%	6	19.4%	7	22.6%
40-44.....	11	17.7%	5	16.1%	6	19.4%
45-49.....	7	11.3%	4	12.9%	3	9.7%
Total.....	62	100.0%	31	100.0%	31	100.0%

Table 4.--Treatment and Control Groups: by Whether or Not in Business and Education

	Total		Study group			
	Number of cases	Column percentage	Control group		Trained group	
			Number of cases	Column percentage	Number of cases	Column percentage
Subject owns a business:						
Primary.....	7	11.3%	6	19.4%	1	3.2%
Secondary.....	25	40.3%	9	29.0%	16	51.6%
University.....	14	22.6%	6	19.4%	8	25.8%
-----	---	-----	---	-----	---	-----
Total.....	46	74.2%	21	67.7%	25	80.6%
Subject does not own a business:						
Secondary.....	11	17.7%	7	22.6%	4	12.9%
University.....	5	8.1%	3	9.7%	2	6.5%
-----	---	-----	---	-----	---	-----
Total.....	16	25.8%	10	32.3%	6	19.4%
Both categories:						
Primary.....	7	11.3%	6	19.4%	1	3.2%
Secondary.....	36	58.1%	16	51.6%	20	64.5%
University.....	19	30.6%	9	29.0%	10	32.3%
-----	---	-----	---	-----	---	-----
Total.....	62	100.0%	31	100.0%	31	100.0%

Table 5.--Treatment and Control Groups: by Whether or Not in Business and Whether or Not Subject's Father Owned a Business

	Total		Study group			
	Number of cases	Column percentage	Control group		Trained group	
			Number of cases	Column percentage	Number of cases	Column percentage
Subject owns a business:						
Father owned business.	25	40.3%	10	32.3%	15	48.4%
Father didn't own bus.	21	33.9%	11	35.5%	10	32.3%
Total.....	46	74.2%	21	67.7%	25	80.6%
Subject does not own a business:						
Father owned business.	9	14.5%	4	12.9%	5	16.1%
Father didn't own bus.	7	11.3%	6	19.4%	1	3.2%
Total.....	16	25.8%	10	32.3%	6	19.4%
Both categories:						
Father owned business...	34	54.8%	14	45.2%	20	64.5%
Father didn't own bus...	28	45.2%	17	54.8%	11	35.5%
Total.....	62	100.0%	31	100.0%	31	100.0%

Table 5...Treatment and Control Groups: by Whether or Not in Business and Whether
or Not Subject's Mother Owned a Business

	Total		Study group			
	Number of cases	Column percentage	Control group		Trained group	
			Number of cases	Column percentage	Number of cases	Column percentage
Subject owns a business:						
Mother owned business.	17	27.4%	7	22.6%	10	32.3%
Mother didn't own bus.	29	46.8%	14	45.2%	15	48.4%
Total.....	46	74.2%	21	67.7%	25	80.6%
Subject does not own a business:						
Mother owned business.	9	14.5%	5	16.1%	4	12.9%
Mother didn't own bus.	7	11.3%	5	16.1%	2	6.5%
Total.....	16	25.8%	10	32.3%	6	19.4%
Both categories:						
Mother owned business...	26	41.9%	12	38.7%	14	45.2%
Mother didn't own bus...	36	58.1%	19	61.3%	17	54.8%
Total.....	62	100.0%	31	100.0%	31	100.0%

Table 6.--Treatment and Control Groups: Characteristics of the Business

	Total		Study group			
	Number of cases	Column percentage	Control group		Trained group	
			Number of cases	Column percentage	Number of cases	Column percentage
Whether business is in more than 1 place:						
No.....	38	82.6%	16	76.2%	22	88.0%
Yes.....	8	17.4%	5	23.8%	3	12.0%
Total.....	46	100.0%	21	100.0%	25	100.0%
Ownership status:						
Owns entirely.....	32	69.6%	12	57.1%	20	80.0%
Family business.....	13	28.3%	8	38.1%	5	20.0%
Owns with others.....	1	2.2%	1	4.8%	0	0.0%
Total.....	46	100.0%	21	100.0%	25	100.0%
Was this business created or bought?						
Created.....	44	97.8%	19	95.0%	25	100.0%
Bought.....	1	2.2%	1	5.0%	0	0.0%
Question not answered...	1	(na)	1	(na)	0	(na)
Total.....	46	100.0%	21	100.0%	25	100.0%
Type of business:						
Cottage industry.....	18	39.1%	10	47.6%	8	32.0%
Manufacturing.....	4	8.7%	2	9.5%	2	8.0%
Personal services.....	1	2.2%	0	0.0%	1	4.0%
Agriculture.....	3	6.5%	1	4.8%	2	8.0%
Retail trade.....	13	28.3%	8	38.1%	5	20.0%
Business services.....	5	10.9%	0	0.0%	5	20.0%
Other.....	2	4.3%	0	0.0%	2	8.0%
Total.....	46	100.0%	21	100.0%	25	100.0%

Note: 16 Cases did not own a business

Table 6. Treatment and Control Groups: Characteristics of the Business

	Total		Study group			
	Number of cases	Column percentage	Control group		Trained group	
			Number of cases	Column percentage	Number of cases	Column percentage
Business dependeds on imported materials:						
Yes.....	26	57.8%	14	66.7%	12	50.0%
No.....	19	42.2%	7	33.3%	12	50.0%
Question not answered...	1	(na)	0	(na)	1	(na)
Total.....	46	100.0%	21	100.0%	25	100.0%
Does this business import directly:						
Yes.....	3	15.8%	2	28.6%	1	8.3%
No.....	16	84.2%	5	71.4%	11	91.7%
Question not answered...	27	(na)	14	(na)	13	(na)
Total.....	46	100.0%	21	100.0%	25	100.0%
Does the subject own land?						
Yes.....	16	35.6%	7	33.3%	9	37.5%
No.....	29	64.4%	14	66.7%	15	62.5%
Question not answered...	1	(na)	0	(na)	1	(na)
Total.....	46	100.0%	21	100.0%	25	100.0%
Does the subject own buildings:						
Yes.....	15	33.3%	6	28.6%	9	37.5%
No.....	30	66.7%	15	71.4%	15	62.5%
Question not answered...	1	(na)	0	(na)	1	(na)
Total.....	46	100.0%	21	100.0%	25	100.0%
Does the subject own farm equipment:						
Yes.....	6	13.3%	2	9.5%	4	16.7%
No.....	39	86.7%	19	90.5%	20	83.3%
Question not answered...	1	(na)	0	(na)	1	(na)
Total.....	46	100.0%	21	100.0%	25	100.0%

Note: 16 Cases did not own a business

Table 1: Sales reported in 1986 and 1988
(sorted from the largest change to the smallest change)

1 = Treatment 2 = Control	Sales 1986	Sales 1988	Change 86 to 88	Percent increase
1	18000	75000	57000	316.7
1	18000	50000	32000	177.8
2	500	20667	20167	4033.4
1	747	13283	12536	1678.2
1	1667	10833	9166	549.9
1	2500	9004	6504	260.2
1	533	5000	4467	838.1
1	1083	5083	4000	369.3
1	4000	7467	3467	86.7
1	666	3834	3168	475.7
1	750	3700	2950	393.3
1	1187	3000	1813	152.7
1	1350	3000	1650	122.2
1	216	1733	1517	702.3
1	1312	2700	1388	105.8
2	100	1083	983	983.0
1	900	1800	900	100.0
1	200	1041	841	420.5
1	292	1120	828	283.6
1	667	1333	666	99.9
1	333	980	647	194.3
1	167	618	451	270.1
2	100	506	406	406.0
2	18	400	382	2122.2
2	27	400	373	1381.5
1	417	720	303	72.7
1	111	333	222	200.0
2	16	208	192	1200.0
2	1000	1167	167	16.7
2	50	150	100	200.0
2	83	175	92	110.8
2	83	160	77	92.8
2	250	317	67	26.8
2	600	667	67	11.2
1	700	758	58	8.3
2	150	200	50	33.3
2	20	53	33	165.0
2	283	300	17	6.0
1	22	28	6	27.3
2	208	181	-27	-13.0
1	60	0	-60	
2	250	42	-208	-83.2
2	2000	1500	-500	-25.0

Table 1: Sales reported in 1986 and 1988 (continued)
(sorted from the largest change to the smallest change)

1 = Treatment 2 = Control		Sales 1986	Sales 1988	Change 86 to 88	Percent increase
	2	1092	583	-509	-46.6
	2	8333	6001	-2332	-28.0
	2	7800	4500	-3300	-42.3

Distribution of change

(August 1986 - August 1988)

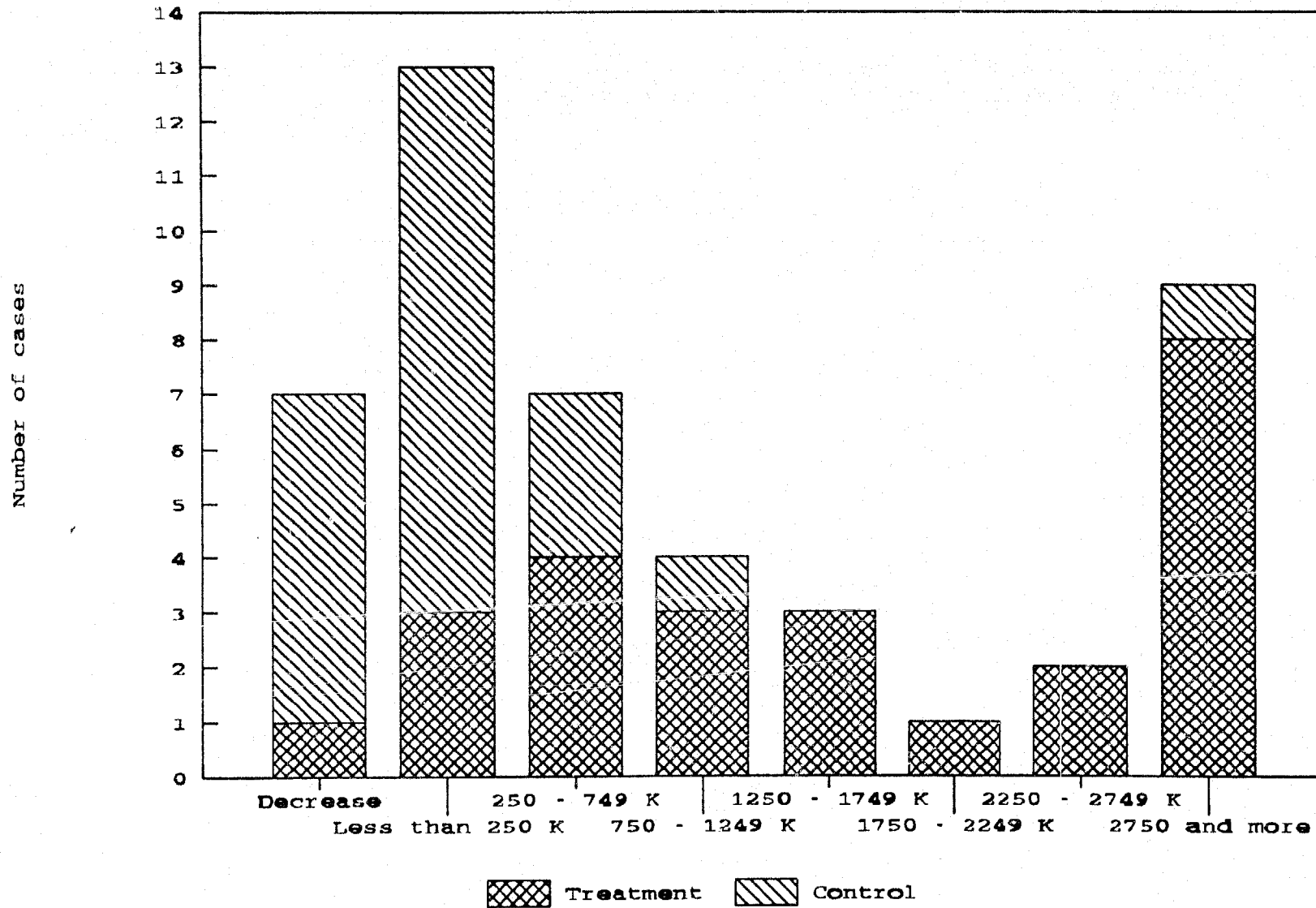


Table 2: Employment reported in 1986 and 1988

1 = Treatment 2 = Control	Empl 1986	Empl 1988	Empl Change
1	6	36	30
1	5	19	14
1	8	17	9
1	5	13	8
1	0	6	6
2	13	19	6
2	2	8	6
1	5	10	5
1	42	45	3
1	1	3	2
1	1	3	2
1	3	5	2
1	3	5	2
2	6	7	1
1	2	3	1
2	1	2	1
1	2	3	1
1	2	2	0
2	1	1	0
1	1	1	0
2	1	1	0
2	1	1	0
1	2	2	0
1	1	1	0
2	3	3	0
2	1	1	0
2	2	2	0
2	1	1	0
1	0		0
2	1	1	0
1	2	2	0
1	1	1	0
1	1	0	-1
2	1	0	-1
2	1	0	-1
2	1	0	-1
2	1	0	-1
2	4	3	-1
2	1	0	-1
2	1	0	-1

Table 2: Employment reported in 1986 and 1988 -- continued

1 = Treatment 2 = Control	Empl 1986	Empl 1988	Empl Change
2	4	3	-1
1	3	0	-3
1	8	5	-3
2	3	0	-3
1	14	9	-5
1	70	45	-25

Distribution of employment change

(August 1986 - August 1988)

