

THE LEARNING PROCESSES, CHARACTERISTICS,
AND BEHAVIORS OF NECESSITY
ENTREPRENEURS IN
NORTHEAST BRAZIL

By

RONALD DUGGINS

Bachelor of Arts
Oklahoma Baptist University
Shawnee, Oklahoma
1994

Master of Education
University of Central Oklahoma
Edmond, Oklahoma
1997

Submitted to the Faculty of
the Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF EDUCATION
May, 2005

COPYRIGHT

By

Ronald Duggins

May, 2005

THE LEARNING PROCESSES, CHARACTERISTICS,
AND BEHAVIORS OF NECESSITY
ENTREPRENEURS IN
NORTHEAST BRAZIL

Thesis Approved:

Dr. Robert Nolan

Thesis Advisor

Dr. Bert Jacobson

Dr. Margy McClain

Dr. Reynaldo Martinez

Dr. A. Gordon Emslie

Dean of the Graduate College

ACKNOWLEDGMENTS

This study would not have been possible without the assistance of World Vision Brazil and the research team members in Brazil. The following individuals were vital to the success of this project: Serguem Jessui Machado da Silva, Executive Director, World Vision Brazil; João Helder Diniz, Economic Development Manager, World Vision Brazil; Elza Fagundes Gonçalves, Micro-credit/Microfinance Manager, World Vision Brazil; Daniela Santos, World Vision Brazil; Juliana Paz, World Vision Brazil; José Agostinho Almada de Abreu, Research Liaison, Francisco Alves, Research Team Member; and Janderson Villar Trigueiro, Research Team Member. My gratitude is also extended to the entrepreneurs who participated in the survey. They have my deepest honor and respect for striking out on their own to make a way for themselves and their families.

I am also indebted to Juan Jose Llisterri from the Sustainable Development Department at the Inter-American Development Bank (IADB) and to Dr. Miguel Bacic from the Universidade Estadual de Campinas in São Paulo, Brazil for allowing me to use the survey instrument they created for a similar study carried out by the IADB.

Much gratitude is extended to my advisor Dr. Nolan and my other committee members, Dr. Jacobson, Dr. McClain, and Dr. Martinez, for their suggestions and guidance in conducting this research project. Also, many thanks are extended to Dr. Warde for his assistance in setting up the database for the analysis of the data. Finally,

my wife Jane deserves more credit than I can express and has been an unwavering partner providing constant support and encouragement throughout this process.

TABLE OF CONTENTS

CHAPTER I INTRODUCTION.....	1
A. Background	1
B. The Problem	4
C. The Purpose of the Study	5
D. The Significance of the Study	6
E. The Limitations of the Study.....	7
F. Definitions of Terms	7
CHAPTER II REVIEW OF LITERATURE	13
A. Poverty.....	13
B. Human Capital Theory	15
C. Entrepreneurship	18
D. Entrepreneurship & Business Development & Growth	19
E. Entrepreneurship In History	20
F. Economic Entrepreneurship Theories	21
G. Entrepreneurship & Economic Development.....	23
H. Entrepreneurship Training & Education	26
I. Culture & Entrepreneurship	32
J. Role of Non-governmental Organizations (NGOs).....	37
K. Entrepreneurship & Microenterprise Development in Latin America.....	40
CHAPTER III METHODOLOGY	50
A. Research Design	50
B. Characteristics of Brazil & Sample Region	53
C. World Vision Brazil	58
D. Sample	60
E. Instrumentation.....	61
F. Researcher Training and Field Test.....	65
G. Data Collection.....	67
H. Data Analysis	69

CHAPTER IV FINDINGS	73
A. General	73
B. Section 1 – Background Information	73
C. Section 2 – Inception Stage	87
D. Section 3 – Business Operation.....	97
E. Research Questions and the Data	106
F. Comparison From Prior Research	114
 CHAPTER V CONCLUSIONS AND RECOMMENDATIONS	 119
A. Conclusions From Data	120
B. Conclusions From a Comparison with Prior Research	122
C. Recommendations for Practice.....	123
D. Recommendations for Research.....	129
E. Concluding Comments	130
 BIBLIOGRAPHY.....	 132
 APPENDIX A – ENGLISH QUESTIONNAIRE FOR BUSINESS OWNERS	 141
APPENDIX B – PORTUGUESE QUESTIONNAIRE FOR BUSINESS OWNERS (QUESTIONÁRIO PARA EMPRESÁRIOS).....	150

LIST OF TABLES

Table 1 - CROSSWALK OF RESEARCH QUESTIONS TO SPECIFIC SURVEY QUESTIONS..... 52

Table 2 – NATIONAL PERCENTAGES BY GENDERS OF YEARS OF SCHOOLING 55

Table 3 - ALPHA COEFFICIENTS FOR ORIGINAL IADB SURVEY INSTRUMENT 63

Table 4 - NUMBER & PERCENTAGE OF BUSINESS BY AGE (YEAR OF START-UP) 74

Table 5 - NUMBER & PERCENTAGE OF PRIMARY BUSINESS BY CATEGORIES 75

Table 6 - NUMBER & PERCENTAGE OF SPECIFIC BUSINESS ACTIVITY 77

Table 7 - AGE CATEGORIES BY MEAN, STANDARD DEVIATION, & MINIMUM/MAXIMUM AGE..... 78

Table 8 - CURRENT AGE BY NUMBER & PERCENTAGE 79

Table 9 - AGE BEGAN THINKING ABOUT STARTING BUSINESS BY NUMBER & PERCENTAGE..... 79

Table 10 - AGE STARTED FIRST BUSINESS BY NUMBER & PERCENTAGE 80

Table 11 - AGE STARTED CURRENT BUSINESS BY NUMBER & PERCENTAGE 81

Table 12 - PERCENTAGE OF MEN AND WOMEN IN PRIMARY BUSINESS CATEGORIES 82

Table 13 - PERCENTAGE OF MEN AND WOMEN IN SPECIFIC BUSINESS ACTIVITIES 83

Table 14 - HOW MANY TIMES STARTED A BUSINESS BY NUMBER & PERCENTAGE..... 85

Table 15 - COMPULSARY EDUCATION COMPLETION BY NUMBER AND PERCENT	86
Table 16 - LEVEL OF EDUCATION BY GENDER	86
Table 17 - REACTION OF FAMILY AND OTHERS TOWARDS ENTREPRENEURSHIP PLAN.....	89
Table 18 - WHERE LEARNED ENTREPRENEURSHIP SKILLS BY NUMBER AND PERCENTAGE.....	90
Table 19 - SOURCES USED TO IDENTIFY BUSINESS FOCUS BY NUMBER AND PERCENTAGE.....	93
Table 20 - CONNECTIONS OF MOST IMPORTANT PEOPLE BY PERCENTAGE.	94
Table 21 - LENGTH OF TIME TO BECOME OPERATIONAL BY NUMBER & PERCENT	95
Table 22 - PERCENTAGE OF UTILIZATION OF FINANCING SOURCES.....	99
Table 23 - INITIAL INVESTMENT BY PERCENTAGE OF ENTERPRISES	100
Table 24 - MAIN PROBLEMS BY NUMBER AND PERCENT	102
Table 25 - WHERE RECEIVED SUPPORT TO SOLVE PROBLEMS	103
Table 26 - REASONS RESPONDENTS GAVE FOR CHOOSING TO WORK FOR OTHERS OR BE SELF-EMPLOYED	105
Table 27 - HOPES AND DREAMS FOR BUSINESS BY NUMBER & PERCENT...	106
Table 28 – A SUMMARY OF CURRENT STUDY AS COMPARED TO PRIOR RESEARCH IN LATIN AMERICA	115

CHAPTER I

INTRODUCTION

A. Background

Poverty is a major concern in all parts of the world. The reduction or alleviation of poverty is one of the stated goals of most major multilateral organizations such as the World Bank, United Nations, Inter-American Development Bank, and the Asian Development Bank. Poverty is seen as one of the catalysts of instability in the developing world and a cause for negative social indicators across the globe. According to the World Bank, in 2001, 1.1 billion people in low- and middle-income countries lived in extreme poverty (<US\$1/day) and 2.7 billion lived in poverty (<US\$2/day).

The problem of poverty has motivated people in multiple fields and disciplines to seek ways to help alleviate this tragedy. On the economic front, empirical studies point to economic and aggregate income growth as contributing to reductions in poverty (De Janvry & Sandoulet, 2000; Ferreira, 1999). Other studies suggest that one of the most important ingredients in economic and income growth is investment in human capital (Barham, Boadway, Marchand, & Pestieu, 1995; Piazza-Georgi, 2002). Birdsall and Londono (1997) state that structural inequalities in the distribution of land and of human capital clearly have negative effects on economic growth.

Human capital is schooling, formal training courses, on-the-job training,

expenditures on medical care, lectures on personal and business practices, and a myriad of other activities that contribute to the knowledge, skills, health, and values that reside within individuals (Becker, 1993; Schultz, 1971). While the purchase of a piece of land is an investment in physical capital, an expenditure of tuition or payment for health services is an investment in human capital.

As noted, one way to reduce poverty is by investing in the human capital of the poor. When an investment of human capital is made with the poor, such as education and healthcare, they then possess assets that can potentially be leveraged and/or spent as they seek to meet their daily needs and pursue opportunities, goals, and dreams. This investment can reap benefits both on a macro and micro level. Benefits on the macro level are seen as increased growth in the macro or larger economy of the community, region, and nation. At the micro level the human capital assets provide the means with which the poor can engage and participate in the economic, political, and social processes that can lead to their benefit.

One of the main forms of human capital is entrepreneurship. According to Piazza-Georgi (2002), entrepreneurship is the key form of human capital and “at the core of the very possibility of economic dynamics, and hence growth” (p. 463). Entrepreneurship is looked upon as a foundational force in building and maintaining economies and societies and it is being promoted as a key to the functioning of market economies and in job creation in transition and developing economies (Becker, 1993; Garavan & O’Cinneide, 1994a, 1994b; Matlay, 2001; Mueller & Goic, 2002; OECD, 1999; Piazza-Georgi, 2002; Schultz, 1971; Schultz, 1993; Weeks & Seiler, 2001). Ripas (1998) points to a shift by theorists and policy makers from looking at entrepreneurship as only a tool for innovation

and economic growth to viewing entrepreneurship as the target of economic activity.

In addition to the broad or macro economic impact, entrepreneurship is shown to have micro or personal level benefits as well. It is seen as a way to become self-sufficient or self-reliant as it provides individuals with the ability to partly control their own economic destiny (Garavan & O'Connell, 1994a; Haveman & Berchadker, 2001; Khan, 2000; Pieck, 1999). In this manner the entrepreneurs do not have to depend on an employer for their income. On the societal level entrepreneurship is seen as important in the creation and stability of democracy and encouraging sociocultural diversity (Ahwireng-Obeng, 1993; OECD, 1999).

As detailed in Chapter 2 of this study, entrepreneurship has been shown to contribute to overall economic growth, which leads to a reduction in poverty as well as provide micro and societal benefits. These positive contributions of entrepreneurship have led governments, multilateral organizations, non-governmental organizations (NGO's), and other groups to incorporate entrepreneurship development as a key component in their strategies as they seek a reduction in poverty.

Entrepreneurs can generally be divided into two groups. One group can be called opportunity motivated entrepreneurs or opportunity entrepreneurs. Opportunity entrepreneurs are those who perceive an opportunity and choose to start a business as one of several possible career choices. These entrepreneurs normally would not need to pursue the opportunity in order to make a living, but they identify an area of potential development and take the risk required to begin a new enterprise. This group has received extensive research attention (Ardichvili, Cardozo, & Ray, 2003; Deamer & Earle, 2004; Fletcher, 1999; Hindle & Yencken, 2004; Kantis, Ishida, & Komori, 2002; Robichaud,

McGraw, & Roger, 2001).

The second classification of entrepreneurs can be termed necessity motivated entrepreneurs or necessity entrepreneurs. These are individuals who see entrepreneurship as their last or only hope for income generation and survival. Necessity entrepreneurs may face situations in which there are no other employment options or the options that are available are unsatisfactory. They believe it is necessary for their survival to begin an enterprise. This group of entrepreneurs has received less research attention and is primarily located in developing countries where the incidence of poverty is much higher than in developed countries (Reynolds, Bygrave, Autio, & Cox, 2003; Reynolds, Bygrave, Autio, Cox, & Hay, 2002; Ripas, 1998).

B. The Problem

Although entrepreneurship is being pursued as one of the avenues to help alleviate poverty in developing countries, the majority of entrepreneurship research has been conducted in developed countries such as the United States and Western Europe where the incidence of necessity entrepreneurship and poverty is much lower (Kantis et al., 2002; Mueller & Thomas, 2000; Reynolds et al., 2002; Ripas, 1998; Weeks & Seiler, 2001). It is also noted that entrepreneurship research with the poor around the world and in Latin American is in its embryonic stage (Kantis et al., 2002; Ripas, 1998). While much has been written about the learning processes, characteristics, and behaviors of entrepreneurs who would be classified as opportunity entrepreneurs, less has been written about these same aspects of necessity entrepreneurs.

The problem, as addressed by this study, is that the processes and policies devised by those seeking to assist necessity entrepreneurs may be based upon the characteristics of opportunity motivated entrepreneurs. Reynolds et al. (2002) raised the possibility that necessity entrepreneurs may not be affected in the same manner by traditional entrepreneurial frameworks, and that current entrepreneurship education and training programs may be biased towards opportunity entrepreneurs. Reynolds et al. (2002) have also suggested that government and non-governmental organizations need to develop a different set of processes and policies for the support of necessity entrepreneurs.

C. The Purpose of the Study

To address the problem presented here, the research questions of this study were developed for the purpose of obtaining a better understanding of the learning processes, characteristics, and behaviors of necessity entrepreneurs in the study sample located in the Northeast of Brazil. The focus of this research project was on the entrepreneurial process of necessity entrepreneurs during the pre- and early enterprise development phases. This study sought to describe necessity entrepreneurs along the following lines: personal and family demographic characteristics of the sample, learning processes utilized to prepare for enterprise start-up, characteristics of the enterprises, processes utilized to start and finance the enterprises, and behaviors of the individuals as entrepreneurs.

D. The Significance of the Study

This study was significant in that it more clearly identified the learning processes, characteristics, and behaviors of necessity entrepreneurs of the study sample in Northeast Brazil. This provided a beginning point for comparing necessity and opportunity entrepreneurs and analyzing the programs developed to assist various entrepreneurs. Since the purposive sample for the study was drawn from World Vision Brazil's PROMICRO entrepreneurship program, the findings were of particular interest to this organization. The findings provided World Vision Brazil with a more detailed picture of their necessity motivated entrepreneurship clients. The information World Vision Brazil keeps on their PROMICRO clients is limited to names, addresses, business types, amount of micro-loans received, and repayment information. The findings of this study provided a better picture of the entrepreneurs' backgrounds, work history, market understanding, entrepreneurial influences and supports, and attitudes towards entrepreneurship.

The findings also determined that the World Vision Brazil entrepreneurship program could benefit from programs and activities specifically developed based upon the identified learning processes, characteristics, and behaviors of necessity entrepreneurs. The findings supported the contention of Reynolds et al. (2002) that government and non-governmental organizations need to develop specific processes and policies for the support of necessity entrepreneurs.

This study also contributed additional research to the limited field of entrepreneurship research that focuses specific attention on the countries and regions within Latin American.

E. The Limitations of the Study

This study employed an interview survey method thereby the design of the survey was cross-sectional. This meant that the interview data was gathered at one point in time and that events described in the interview may have happened over a period of time and were reported as remembered.

The mode of data gathering was an orally administered questionnaire. Because some of the participants of the study were fully or functionally illiterate, each questionnaire was personally administered and scored by a native Brazilian research team member in order to overcome this barrier to participation.

This study examined necessity entrepreneurs in only one country, Brazil, and more specifically in two cities within the Northeast region of Brazil. Previous literature acknowledged that culture affects the entrepreneurship development process (Kantis et al., 2002; Lee & Peterson, 2000; Tiessen, 1997). Any interpretation or extrapolation of the results of this study into another region and/or culture must be done with this context in mind.

F. Definitions of Terms

Entrepreneur

The term entrepreneur is used almost exclusively in business and economic settings. The term usually refers to people who start businesses and make them grow (Ardichvili et al., 2003; OECD, 1999). The term “self-employed” is sometimes used to describe an entrepreneur (Eversole, 2003). According to Buck (2000), an entrepreneur is

“someone who has an idea, pursues it independently in the face of adversity and aims to carry it through to success in the uncertain environment of the market” (p. 5). Throughout this study the term entrepreneur referred to an individual who has taken the initiative to start an enterprise.

Entrepreneurship

The term entrepreneurship refers to the behaviors and activities of one who is starting an enterprise. Entrepreneurship involves the behaviors, skills, and attributes that are applied in order to create, cope, and change (Gibb, 2000). Entrepreneurship is composed of the behavioral characteristics of individuals with an input and output side. The input side are the entrepreneurial skills and qualities required to be an entrepreneur and the output side implies participation in the competitive process or market (Wennekers & Thurik, 1999). The term micro-entrepreneurship is normally associated with the behavior of very small scale self-employed business people such as fruit vendors who sell from a cart on a street corner (Eversole, 2003). Throughout this study the term entrepreneurship will referred to the behaviors and activities of entrepreneurs no matter the size of their enterprise.

Opportunity and Necessity Entrepreneur

The main dividing line in classifying an entrepreneur as one of opportunity or one of necessity is the issue of the motivation or catalyst for beginning the enterprise. Yusuf and Schindehutte (2000) state that people are either pulled towards entrepreneurship by an opportunity or they are pushed into entrepreneurship by adverse economic conditions.

An opportunity entrepreneur is drawn towards an attractive or appealing option even if they are currently employed and in a stable financial situation.

The necessity entrepreneur, according to Yusuf and Schindehutte (2000) reacts when there is a sufficiently adverse condition that leaves little alternative other than self-employment. They call the necessity entrepreneur a survivalist entrepreneur. The enterprise that is begun by a necessity entrepreneur is initiated by an “unfriendly push” due to difficult economic situations and the primary goal is that of survival (p. 49).

Eversole (2003) writes that those who create their own employment do so out of choice or necessity. Those who become entrepreneurs out of choice may want to be their own bosses, find more profit in independence, or find a better fit of their occupations to their chosen lifestyle. They make a willful choice to pursue entrepreneurship.

Eversole (2003) says that those who become involved in entrepreneurship out of necessity need income, but within the social or economic systems or geographic area in which they live, work is not available.

According to Reynolds, et al. (2002, 2003) opportunity entrepreneurs are characterized as those who engage in entrepreneurial activity voluntarily. They perceive an opportunity and choose to start a business as one of several possible career choices.

Reynolds et al. (2002, 2003) writes that necessity entrepreneurs are those who turn to entrepreneurship due to the absence of suitable employment options. These individuals are unable for various reasons to participate in the economy as employees. The lack of options could mean that there are no jobs available or that the ones available are unsatisfactory. It could also be that necessity entrepreneurs are unable to compete for the jobs available because they lack the educational or skill qualifications necessary.

These individuals view entrepreneurship as their last or only hope. They feel or believe it is necessary for their survival to begin an enterprise.

In a global context, Reynolds et al. (2002, 2003) estimate that 61% of the world's entrepreneurs are opportunity entrepreneurs while 37% are necessity entrepreneurs and that necessity entrepreneurs make up half of all entrepreneurs with little education, but less than one-quarter of those with post-secondary education or more. Additional findings are that over half of those in low income households are involved in necessity entrepreneurship compared to less than 25% in high income households (Reynolds et al., 2003).

Developed and Developing Countries

The term developed countries normally refers to those countries once called first world countries or western countries. They are characterized as primarily capitalist, industrialized countries. The countries that make up the G7 (Group of 7 - France, United States, United Kingdom, Germany, Japan, Italy, and Canada) are all considered developed countries. Most of the countries that make up the North Atlantic Treaty Organization (NATO), such as Belgium, Norway, Luxembourg, Spain, and the Netherlands, are considered developed countries. In recent years the term developed countries has been used in the place of first world countries.

Developing countries are those once labeled second or third world countries. Developing countries are sometimes grouped into categories such as the least-developed countries (LDCs), low-income countries (LICs), and middle-income countries (MICs) (World-Bank, 2004). The LDCs and LICs are those once considered third world. The

United Nations has set up an office specifically to work with the LDCs. As of December 2003, the U.N. officially recognized 50 least developed countries (i.e. Afghanistan, Chad, Haiti, Nepal, Uganda). The U.N. criteria for a LDC includes: (1) three year average GDP of < US\$900; (2) quality of life index weakness based upon social and health criteria; and (3) economic vulnerability criterion (United-Nations, 2004)

The middle income countries (MICs) are those once thought of as second world countries that were aligned with the Soviet Union as well as other countries such as India, South Africa, and Brazil. Linn (2001) states that middle income countries (MICs) differ from low income countries (LICs) on the following points: (1) MICs are more diversified and integrated with the world economy; (2) MICs have greater physical, financial, and human resources for social and anti-poverty programs; and (3) MICs have greater institutional and administrative capacity for growth and anti-poverty programs.

Throughout this study the term developing country referred to the commonly recognized least developed countries and the middle-income countries. The term developed countries referred to the general understanding of the first world countries.

Multilateral & Non-Governmental (NGO) Organizations

The term multilateral organization is normally used to refer to an organization that is made up of member participants or countries that have come together to work towards a common goal. These member participants are required to provide an input, usually monetary, in order to participate and make decisions in the organization. Examples of multilateral organizations are the World Bank, United Nations, and the Inter-American Development Bank.

Unlike multilateral organizations, non-governmental organizations (NGOs) are not membership organizations. As their name implies, they are not government organizations, although they may be supported with money from government sources in the form of grants or contracts. They are usually a private entity that has been formed to support individuals and communities in activities such as disaster and hunger relief, economic and community development, medical and technical support, and other areas in both developing and developed countries (Edwards, Hulme, & Wallace, 1999; Makoba, 2002; Meyer, 1995; Uphoff, 1993). Organizations such as World Vision, World Neighbors, Red Cross, Feed the Children, and Doctors Without Borders are all examples of NGOs.

CHAPTER II

REVIEW OF LITERATURE

A. Poverty

The term poverty is loaded with assumptions and ideas and can have many different definitions and parameters. How does a person measure poverty? What image comes to mind when one pictures someone in poverty? In reviewing the literature it is evident that the definitions and measurements of poverty vary widely.

At a foundational level each definition involves the lack of basic necessities. The Inter-American Development Bank views poverty as both an economic and human condition (IADB, 1998). In an economic sense, poverty is the lack of daily necessities and the absence of the capabilities and opportunities to change those conditions. Poverty in the human sense includes a lack of justice, equality, and personal safety. Lopez and Valdes (2000) define the poor as those who lack, for whatever reason, human and physical assets and what assets they have are of poor quality and low levels.

Some measure poverty from primarily an economic viewpoint. Most economic definitions set up a certain income level and everyone below that level is considered poor or in poverty. The World Bank uses poverty lines set at \$1 and \$2 per day when measuring global poverty. According to World Bank statistics, in 2001 around 1.1 billion people in low- and middle-income countries world-wide had income levels below \$1 a

day, which is around 21% of the population of the developing world, and 2.7 billion lived on less than \$2 a day (accessed October, 9, 2004; <http://www.worldbank.org>). Those who fall under the \$1 per day level are considered to be in extreme poverty. These measures of poverty include both food and essential non-food needs (David, 2002).

Recent trends in poverty research have sought to develop more comprehensive measures for poverty. The Inter-American Development Bank considers both economic and quality of life indicators when analyzing poverty (IADB, 1998). Since poverty, at a foundational level, is the lack of basic necessities, specific definitions of poverty based upon these basic necessities can also be made. Other poverty measurements include food poor, housing poor, and health poor (David, 2002; Haveman & Berchadker, 2001).

In figuring food poverty, most developing countries choose a representative food basket that will provide the minimum level of dietary kilocalories and estimate the cost of the food basket. This estimate of the cost of the food basket sets the food poverty line (fpl). People would be considered food poor if the estimated per capita income of the target population fell below the food poverty line (David, 2002).

A similar poverty measurement promoted by Khan (2000) is based upon calorie intake. This measurement sets the poverty line at 2,100cal/day. If one has a caloric intake of less than 2,100cal/day then one would be considered in poverty according to this measurement.

Haveman and Berchadker (2001) promote a definition of poverty they call self-reliant poverty, which is based upon individual capabilities. By this definition, those who are considered to be poor in their ability to be self-reliant do not have the capabilities to generate minimum necessary income. The self-reliant poor are “unable to be

economically independent” (p. 336).

B. Human Capital Theory

Human capital theory seeks to investigate how investments of time and various resources into people affect the growth and development of individuals, communities, and economies. It seeks to analyze the reasoning and consequences for activities from an economic viewpoint. Human capital theory looks to particular activities such as investments of time and money into productivity-enhancing skills and knowledge as well as one’s career choices and work characteristics (Gimeno, Folta, Cooper, & Woo, 1997). Sweetland (1996) concludes that human capital theory can be generally explained as the idea that individuals and society gain economic benefits from investment in people. Although it has only been in the second half of the twentieth century that human capital theory has received a great deal of attention, it is not a recent idea. Human capital theory has been present in some form for many years.

Sweetland (1996) relates that in 1776, Adam Smith’s “Inquiry” concerning national wealth prescribed that human effort lies at the base of all wealth. T.W. Schultz (1971) also points to the contribution of Adam Smith by stating that Smith had included all of the acquired and useful abilities of all of the people in a country or region as capital. Other early theorists who recognized the concept of human capital are John Stuart Mill, Alfred Marshall, and Irving Fisher (Piazza-Georgi, 2002; Sweetland, 1996; T.W. Schultz, 1971).

It was during the second half of the twentieth century that human capital theory

became a separate field of study (Sweetland, 1996). In speaking of human capital theory development, Little (2003) writes of the 1960's as a time when the idea of education (human capital) as a form of investment became the missing piece in the jigsaw of economic development. The missing piece accounted for growth that could not be accounted for in traditional manners such as increases in traditional capital (land, labor, physical capital).

T.W. Schultz (1971) was one of the main theorists during this period who advanced the idea that investments in man were integral to explaining economic growth. He began to see gains in productivity between the 1940s and 1960s that could not be completely explained by changes in technology and advances in the sciences. According to T.W. Schultz (1971), economic thinking had neglected investments in man as a factor in explaining growth in the economy. Once he saw the pervasive role of human capital in the functioning of a modern economy, he set out to identify and quantify what kinds of investments in human capital contributed to economic growth.

T.W. Schultz (1971, 1993) found that human capital, and in particular education, was a major source of economic growth. In addition to the high cultural values placed on education, it is closely linked to future earnings. As people receive the human capital investment, their capabilities are increased, which in turn increases their earning potential. T.W. Schultz (1993) stressed that it was human capital rather than nonhuman capital that was decisive in improving the welfare of people and in modernizing economies. T.W. Shultz (1971) distinguishes human from nonhuman capital by the fact that human capital is embodied within man. Unlike nonhuman capital that can be acquired as an asset, human capital is acquired by investment in oneself or others.

Becker (1993), also one of the founders of modern human capital theory, similarly emphasized that human capital is found within people and that its distinctive feature is that one cannot separate a person from his or her knowledge, skills, health, or values. Nonhuman capital such as land, buildings, or dollar bills can be separated from the individual who hold them.

In looking at the economic growth of different countries during the past century, Becker (1993) concludes that it is clear all the countries which have exhibited sustained growth have also had large increases in the education and training of their labor forces. These countries have made concerted efforts to invest in their human capital.

According to Little (2003), human capital theory generally has four propositions: 1) acquired skills are a form of capital; 2) skills are acquired through investments; 3) skills are the capabilities that contribute to economic development; and 4) earnings in labor market resulting from investment are rewards for productivity.

Building upon earlier work by T.W. Schultz and Schumpeter, Piazza-Georgi (2002) offers the definition of human capital as productive assets that are created and maintained at the cost of considerable investment in human time and funds. Piazza-Georgi further breaks down human capital into three forms.

Piazza-Georgi's first form of human capital is human skills capital. This form consists of human knowledge gained through education and stored within an individual. Often times the human skills capital is measured based upon education levels or more direct measures such as numeracy and literacy scores (OECD, 2001b).

The second form of human capital is entrepreneurship, which is also affected by education. Building on Schumpeter's idea that human capital theory places economic

disequilibria at the core of economic growth, Piazza-Georgi argues that it is entrepreneurship that acts as the equilibrating agent in economies. The process of growth both causes the state of disequilibrium and seeks to respond to this state. Disequilibrium comes about due to factors such as relative price changes, supply and demand shocks, and changes in taste. According to Piazza-Georgi (2002), it is the entrepreneur who enters into this condition to respond to the disequilibria.

Piazza-Georgi's third form of human capital is the stock of knowledge or technology available to a society. This stock of knowledge can be found in books, media, blueprints and other documents. The open source computer operating software, Linux, is an example of the stock of knowledge that is available to people.

In addition to the economic benefits of human capital there also appears to be an increase in other important social and societal measures as well. Health, psychological well-being, civic participation, and lower risk of criminal activity have all been linked to investments in human capital (OECD, 2001b).

C. Entrepreneurship

As previously referenced, entrepreneurship is currently seen as a foundational force in building and maintaining economies and societies and it is being promoted as a key to the functioning of market economies and in job creation in transition and developing economies (Becker, 1993; Garavan & O'Connell, 1994a, 1994b; Matlay, 2001; Mueller & Goic, 2002; OECD, 1999; Piazza-Georgi, 2002; Schultz, 1971; Schultz, 1993). According to Ahwireng-Obeng (1993) entrepreneurship is "a type of activity or

practice with implications for generating jobs, fostering innovation and increasing productivity by means of which the creation of incomes and wealth is enhanced” (p. 151).

The term is used primarily in business and economic settings although it is beginning to be seen in discussions of the social aspect of economies. For example, Gimeno et al. (1997) relate that the aspects and characteristics of entrepreneurship come into play when one needs to make a decision about his/her current employment situation. When one is faced with choosing to remain in a situation of employment (or unemployment) or when seeking new or alternative means to provide an income, an entrepreneurial decision making process is utilized.

D. Entrepreneurship & Business Development & Growth

Most often the term entrepreneur is used for people who start businesses and make them grow (Ardichvili et al., 2003; OECD, 1999). Garavan and O’Cinneide (1994a) state that entrepreneurship is independent small business ownership or the development of opportunity-seeking managers within companies.

Matlay (2001) examines entrepreneurship in terms of economic systems by comparing the practical functioning of different economies. In discussing the development of entrepreneurship in Central and Eastern Europe, Matlay sees entrepreneurship exemplified in the current economic regimes being promoted in the region. In the discussion, Matlay references Bateman and Randlesome’s (1997) comparison of the “new entrepreneurial culture – based upon market-led innovations, opportunism and risk” with the “bureaucratic-administrative system (of central and

Eastern Europe) that relied solely upon centralized decision-making and control” (p. 396). It is the functioning of the current economic regimes that, for Matlay, help define entrepreneurship.

Anderson and Miller (2002) go beyond a strictly economic definition to state that entrepreneurship is a socio-economic process due to the fact that entrepreneurs are products of their social environment. They argue that an entrepreneur's social background and social activity influence their entrepreneurial development.

Entrepreneurship is not only viewed as a process, but it is also recognized as an asset and is seen as a form of human capital (Iyigun & Owen, 1997; Piazza-Georgi, 2002; Schultz, 1993). Human capital is recognized to be of high importance in the sustained growth of economies and industries, which leads to an overall reduction in poverty (Benhabib & Spiegel, 1994; Schultz, 1993; Tilak, 2001).

Modern economic theory recognizes entrepreneurship as an independent factor in the economy just as land, labor, and capital are seen as independent factors (Hebert & Link, 1989). Although it has only been within the past few of decades that entrepreneurship has been a primary topic of research, the idea of entrepreneurship and its place in economics goes back many years.

E. Entrepreneurship In History

The word and concept of entrepreneurship can be traced back to Richard Cantillon, who used the word entrepreneur in 1734 (Cuevas, 1994). In the early 18th century, Cantillon specifically included the entrepreneur in the economic process. He

theorized that there were three main economic agents: landowners, entrepreneurs, and hirelings. According to Cantillon's theory, the landowners were economically independent and considered to be at the top of the economic hierarchy while the hirelings worked for others to assure a stable income. The entrepreneurs were those who engaged in exchanges for profit with no guarantee of the outcome of the exchanges. The entrepreneurs were willing to operate in the arena of uncertainty in order to potentially profit from the exchange (Cuevas, 1994; Hebert & Link, 1989).

In addition to coining the term, Cantillon is also credited with providing the theoretical foundation to modern entrepreneurship theories (Cuevas, 1994; Hebert & Link, 1989). Today's modern theories of entrepreneurship have been classified into three general traditions. These are the (1) German, (2) Austrian, and (3) Chicago traditions (Cuevas, 1994; Soto, 2002).

F. Economic Entrepreneurship Theories

The German theory is often referred to as the Schumpeterian theory because of the influence of Joseph Schumpeter. Schumpeter is considered to be one of the first modern economic theorists to emphasize entrepreneurship as a factor in economic development. His theories, developed in the first half of the 20th century, specifically address the entrepreneur as the dynamic element in capitalism and the engine of development. Entrepreneurship, according to Schumpeter, is a crucial factor in economic development, which lies at the heart of economic analysis (Brouwer, 2002; Hebert & Link, 1989; Santarelli & Pesciarelli, 1990). In Schumpeter's economic theory, the

entrepreneur is (1) an active creative factor in the economic process or an innovator; (2) an element of the productive process distinct from the capitalist or supplier of money; and (3) is distinct and fundamentally different from a manager/administrator, although the entrepreneur may function as the manager/administrator as well (Cuevas, 1994).

Where the Schumpeterian or German tradition sees the entrepreneur as an innovator, the Austrian tradition depicts the entrepreneur as primarily an identifier or discoverer of opportunities (Hebert & Link, 1989; Ripas, 1998). The entrepreneur in this tradition looks for or is especially sensitive to money making opportunities because of the difference in buying and selling prices (Cuevas, 1994; Soto, 2002). Two of the main theorists associated with the Austrian tradition are Mises and Kirzner.

The third modern tradition is the Chicago tradition, named after the University of Chicago where some of the primary theorists were based. One of the main theorists in this tradition is Richard Knight. The entrepreneur in this tradition is one who is able to perform and take risks while operating in the field of uncertainty. Knight distinguished risk from uncertainty in that when taking a risk, one can factor in historical data, trends, and probabilities, but when operating in uncertainty these factors are generally absent. The profit for the entrepreneur is the compensation for bearing the uncertainty. The entrepreneur is able to make decisions without being certain of future situations or circumstances in the market (Cuevas, 1994; Ripas, 1998).

These three modern entrepreneurship theories have been developed to seek ways to describe the role of the entrepreneur or entrepreneurship within economic theory. All recognize the entrepreneur as an important part of the economic mix, although each views the entrepreneur in a slightly different light. When moving beyond theory to

determining the strength or importance of entrepreneurship, the literature is beginning to provide empirical evidence that indeed, entrepreneurs and entrepreneurship is vital to economic development.

G. Entrepreneurship & Economic Development

In focusing on women's entrepreneurship, Weeks and Seiler (2001) point to specific research that suggests fostering entrepreneurship in general and women's entrepreneurship in particular is associated with greater economic growth. They draw attention to a report on global entrepreneurship which states that it is critical for long-term economic growth and prosperity that the participation of women in entrepreneurship is increased (Reynolds, Hay, & Camp, 1999). Also referenced by Weeks and Seiler (2001) is a report by the National Foundation of Women Business Owners that suggests that women's entrepreneurial activity is linked to national economic growth and the link is distinct from and stronger than the impact of other types of women's economic activity.

Mueller and Goic (2002) suggest that entrepreneurial activity and economic progress are closely linked. In their study, they focus on entrepreneurship in the transition economies in Central and Eastern Europe. Their findings show that where economic growth and development are the highest, the entrepreneurial potential is also the highest. Conversely, they show that where economic growth lags, the entrepreneurial potential for the country also lags.

Mueller and Goic (2002) define entrepreneurial potential as being

entrepreneurially oriented (innovative with an internal locus of control) and having a strong positive perception about opportunities. In the transition economies that were part of their study, Mueller and Goic note that as economies grow, more resources become available for entrepreneurship. As new enterprises are initiated, they become the catalyst for innovation, which fuels more growth. This creates a virtuous cycle in which entrepreneurial activity stimulates growth, which stimulates more entrepreneurial activity.

Audretsch and Fritsch (2003) found that the degree of entrepreneurship is positively related to growth in the United States. In their study, Audretsch and Fritsch sought to determine if the same relationship can be found in the West German economy during the 1990's. Their findings indicate that the sources of growth in Germany are shifting away from the established incumbent firms, long believed to drive the economy, to entrepreneurial firms. They state that it would appear after German reunification and with the ongoing development of a globalized marketplace, that a convergence is taking place between Germany and the United States. In both Germany and the United States, entrepreneurship is one of the main engines of economic growth.

In assessing the links between entrepreneurship and economic growth, Wennekers and Thurik (1999) surveyed historical views, growth theory, economic history, management literature, industrial economics, and evolutionary economics. They came to the conclusion that entrepreneurship does have an important role to play in economic development. In their analysis, Wennekers and Thurik cite Porter (1990) who stated, "Invention and entrepreneurship are at the heart of national advantage" (p. 125). National advantage, according to Porter, is the result of the combination of interrelated sets of

conditions that determine the competitive strength of a national economy.

Kantis, et al. (2002) relate a study by the Organization for Economic Cooperation and Development (OECD, 2001a) that reveals a positive relationship between business start-up rates in OECD countries between 1988 and 1996 and economic growth between 1989 and 1999. The study outlines how countries with high growth rates, such as the United States, Ireland, and the Netherlands had high business start-up rates. The study also revealed that countries with low growth rates, such as Finland and Italy, had low start-up rates.

In a study that looks at employment growth and entrepreneurship, Adrangi, Allender, and Anderson (2003) suggest employment and entrepreneurial activity are positively related. They conclude that small entrepreneurial firms do have a net positive impact on job creation. In reviewing the literature they state that statistics support the idea that all types of entrepreneurial firms, no matter the motivation behind their start-up, are important sources for employment and growth in the U.S. economy.

Mead and Liedholm (1998) state that entrepreneurship, especially at the small and micro enterprise level, which includes survivalist or necessity entrepreneurs, is particularly appropriate for helping to alleviate poverty. Although entrepreneurship at this level may not expand employment opportunities as quickly as other types of economic activity, these activities are extremely important in helping a large number of poor become less poor.

Entrepreneurship programs aimed at those in poverty not only assist in the initiation of an enterprise, but also contribute the likelihood that the enterprises can survive and earn a somewhat increased income. Mead and Liedholm (1998) note that it

may take only a small influx of working capital to help insure that the survivalist or necessity entrepreneurs are able to maintain their business and move towards economic stability.

H. Entrepreneurship Training & Education

As it has been widely recognized that entrepreneurship is a major source for employment and income in the developing world, it follows that many are focusing their efforts on initiating entrepreneurship training and education programs. Entrepreneurship and microenterprise training and development programs are promoted as crucial in the alleviation of poverty.

The programs created to assist entrepreneurs are set up from many different points of view with differing objectives and outcomes. There are programs that seek to promote entrepreneurship by addressing the constraining factors that hinder people from beginning new businesses. These programs might provide assistance in filling out paperwork and navigating the maze of regulations found throughout the world. Also included would be micro-loan and grant programs that provide start-up capital (Mead & Liedholm, 1998).

Another type of entrepreneurship training and education seeks to confront the issues that cause enterprises to fail while other programs focus on helping existing businesses improve their operation and to grow (Mead & Liedholm, 1998).

The Inter-American Development Bank (IADB) is one example of an organization focusing on entrepreneurship assistance programs. The IADB is convinced

of the importance of entrepreneurship and microenterprises to the extent that it has oriented its policies from a microentrepreneur viewpoint (Orlando & Pollack, 2000). This viewpoint supports entrepreneurship and microenterprise development on three fronts. The first is microfinance. Providing microfinance to individuals helps to overcome one of the biggest hurdles for most microentrepreneurs by providing working capital.

The second front is to promote changes in the regulatory framework of a country so that individuals are able to open and operate businesses without undue red tape and regulations. The third front offers business development services that provide training and guidance for entrepreneurs as they seek to build successful enterprises to support themselves and their families. A recent initiative of the IADB provides \$500 million over five years to financial institutions such as credit unions and commercial banks to help finance microentrepreneurs.

Garavan and O’Cinneide (1994a) conclude that there is clearly a major role for entrepreneurship training, especially during times of economic recession, high unemployment and fluctuation in international trade cycles. They state that there is now wide acceptance in the European Union (EU) that “future prosperity hinges on the creation of vibrant indigenous businesses that are deeply rooted in the local economy” (p. 3). Their belief is that entrepreneurship can be culturally and experientially acquired and that a person’s entrepreneurial capacity may be influenced by education and training interventions.

According to Garavan and O’Cinneide (1994a, 1994b), entrepreneurial learning involves learning by doing, exploring problems from a multiple viewpoints, helping participants gain ownership of learning, building up of networks and contracts, and

encouraging participants to make choices and commitments to actions in conditions of stress and uncertainty. Entrepreneurial activity requires a great deal of risk taking and can be a very creative process. It is these characteristics of entrepreneurial learning and entrepreneurial activity that cause Garavan and O’Cinneide to question the effectiveness of traditional education in preparing individuals for successful entrepreneurial endeavors. They relate that traditional education may not always be helpful or supportive in preparing entrepreneurs or promoting entrepreneurial success.

Bender, Meli, Turnbull, Payne & Russell (1990) view entrepreneurship education as a stimulus rather than an outcome of economic development. They come to this view point through their experiences working with an entrepreneurship training program with low-income individuals. They conclude that entrepreneurship programs must be perceived by the potential participants as realistic and acceptable within the community and worthy of the time investment. They also emphasize that the learning material must fall much more on the practical side rather than the theoretical side and need to be tailored to the specific needs of the participants.

Kiggundu (2002) believes that entrepreneurship education and training should be viewed from the perspective of developing entrepreneurial competency. Some of the aspects to be included in an entrepreneurship program include education, training, work experience, apprenticeships, overseas visits, as well as other human capital development activities. These aspects should lead to the development of entrepreneurial competencies. The competencies are the sum of the entrepreneur’s attitudes, values, beliefs, knowledge, skills, abilities, personality, wisdom, expertise, mindset, and behavioral tendencies. The competencies are dynamic and vary in importance during different stages or phases of an

entrepreneur's career and enterprise development.

Kiggundu (2002) writes that because of the dynamic nature of the competencies, it is important that entrepreneurship development programs target specific entrepreneurial tasks and contexts in order to be successful. Generalized human capital development initiatives often do not lead to their intended outcome of sustained benefit due to their lack of specifically targeted tasks directly related to entrepreneurial competency (Kiggundu, 2002).

A study by Ardichvili, Cardozo, and Ray (2003) suggest that the focus of entrepreneur training programs should be on making or developing opportunities instead of only trying to identify opportunities. Ardichvili et al. relate that while certain elements of opportunities may be recognized, it is more often the case that opportunities are made, not found.

Weeks and Seiler (2001) discuss the most common themes for women entrepreneurs when it comes to training and education regardless of the nationality of the entrepreneur. They identify five areas that are evident in the literature that needs to be addressed by policymakers, NGOs, education and training providers, and the women business owners themselves. The first area is access to information, training, technical assistance, and technology. The second area is access to capital. This area is consistently in the top two needs of all entrepreneurs. Access to both domestic and international markets is the third area that needs attention. The fourth area is access to networks such as business associations and broader industry and regional organizations. The fifth area that requires specific attention to promote the success of women entrepreneurs is that of validation. The women entrepreneurs need to be taken seriously and recognized as a valid

group of important entrepreneurial leaders. For Weeks and Seiler (2001), these five needs should be addressed in any training program directed at women entrepreneurs in any location.

Mueller and Thomas (2000) relate that many entrepreneurship educators work from the philosophy that entrepreneurs are made, not born. This outlook of entrepreneurship clearly indicates that entrepreneurship can be taught and that “an individual’s self-perception and potential for entrepreneurship can be enhanced” (p 68). They go on to emphasize that business education can play an important role in helping students to learn and develop the entrepreneurship skills necessary for successful entrepreneurial activities.

In developed nations, entrepreneurship is often taught in higher education alongside major curriculum such as business and management. According to Charney and Libecap (1999), business school students who specifically studied entrepreneurship were three times more likely to start a new business, three times more likely to be self-employed, and had annual incomes 27% higher than other business school graduates. Their study also found that entrepreneurship education is growing in popularity with over 1,500 colleges and universities in the United States that offer some sort of entrepreneurship training with over 100 active university-based entrepreneurship centers.

Recognizing the importance of entrepreneurship for societies, Gibb (2000) emphasizes the need to mainstream and embed the concepts of entrepreneurship into the standard curriculum as opposed to it being an add-on component in certain classes. According to Gibb, it is the behaviors related to entrepreneurship that should be the focus in educational settings. These behaviors encompass skills and attributes that should be

addressed in educational curriculum in order to develop entrepreneurial students. Some of the behaviors on which to focus are taking initiative, creative problem solving, networking effectively, and taking calculated risks. Some the attributes that support these behaviors are achievement orientation, perseverance, learning by doing, and working hard. Specific skills that are developed which support entrepreneurial behaviors are negotiating, selling, and decision making under uncertainty (Gibb, 2000).

Gibb (2000) asserts that education underpins culture and if a society were to embed within its educational system the behaviors, attributes, and skills that promote entrepreneurial behavior, there would be a rise in entrepreneurial activity as a natural outcome of the educational process. The contention of Gibb is that embedding entrepreneurship within the system of schooling is extremely important because the societies in which we live are being influenced and changed by the current international competitiveness framework. These changes are demanding entrepreneurial behaviors of all kind, not just economic.

Following a similar approach as Gibb, Buck (2000), addresses incorporating entrepreneurship within the specific field of vocational training and education. He states that in the past, entrepreneurship has not been a guiding principal of vocational education. Vocational education has been oriented to train people who would more often than not work for others as employees. Buck (2000) believes that the integration of entrepreneurship skills into vocational education and training is essential if vocational education and training is going to be viable within the process of globalization and market orientation in the information age.

I. Culture & Entrepreneurship

There is a general understanding in the literature that culture does have an effect on entrepreneurship, but there is still much debate about how and to what extent culture effects entrepreneurship (Chrisman, Chua, & Steier, 2002; Hayton, George, & Shaker, 2002; Mitchell et al., 2002; Mueller & Thomas, 2000; Tiessen, 1997). One of the most common definitions of culture use by researchers in this area is that of Hofstede (1980), which states that culture is a set of shared values, beliefs, and expected behaviors. These shared aspects of culture are deeply embedded and often unconscious (Hayton et al., 2002).

Mitchell et al. (2002) approach the issue from the similar aspect of one's cognitions or ways of thinking. They advance the theory that there may be entrepreneurial ways of thinking that are associated with entrepreneurship that are evident across various cultures.

In addition to most researchers looking to Hofstede for their definition of culture, there is also the inclination to look to Hofstede to provide the framework for discussing the cultural dimensions in relation to entrepreneurship. Hofstede's research on broad cultural dimensions provides a concise taxonomy for explaining the behavioral preferences or predispositions of people in business organizations (Hayton et al., 2002; Mueller & Thomas, 2000). Hofstede's cultural dimensions are Individualism/Collectivism, Power Distance, Uncertainty Avoidance, Masculinity, and Long-term Orientation (Hofstede, 2004).

The dimension of Individualism/Collectivism measures to what extent people in a

society look out for themselves and their immediate family and how loose ones social ties and commitments may be. People in an individualistic culture are more likely to look out for themselves and have loose social ties and commitments. People in a collective culture are more apt to emphasize cohesive ingroups and strong social ties and commitments for life (Hofstede, 1980, 2004; Mueller & Thomas, 2000).

The dimension of Power Distance (PD) indicates the extent to which a society accepts that power in institutions and organizations is distributed unequally. A high Power Distance ranking indicates that inequalities of power are more tolerated. A low Power Distance ranking indicates that society may de-emphasize the differences between the powerful and non-powerful (Hofstede, 2004).

Uncertainty avoidance (UA) indicates the level of tolerance for uncertainty and ambiguity within a society. A high Uncertainty Avoidance ranking indicates that a culture has a low tolerance for uncertainty and ambiguity and a low ranking indicates a high tolerance for uncertainty and ambiguity. In a low UA culture members must cope with uncertainty as best they can and in a high UA culture structures have been established to minimize the level of uncertainty faced by members of society (Hofstede, 1980, 2004; Mueller & Thomas, 2000)

Masculinity focuses on the degree the culture reinforces or does not reinforce the traditional masculine work role model of male achievement, control, and power. A high Masculinity ranking indicates a country that experiences a high degree of gender differentiation and a low Masculinity ranking indicates a low level of differentiation (Hofstede, 2004).

The final dimension is Long-term Orientation. This dimension focuses on the

degree a society embraces a long-term devotion to traditional values and long-term commitment. A high Long-term Orientation ranking indicates that a culture subscribes to long-term commitments and respect for tradition. A low Long-term Orientation indicates that a culture does not reinforce the concept of long-term, traditional orientation (Hofstede, 2004).

As a matter of reference, Brazil is similar to many Latin American countries based upon Hofstede's dimensions. Brazil has a relatively high Uncertainty Avoidance ranking (76), which indicates a low level of tolerance for uncertainty. The Individualism ranking of Brazil is slightly higher than the rest of Latin America (38 & 21 respectively), but still within a collectivist culture. Brazil's Power Distance ranking (67) indicates relatively high inequalities of power and wealth have been allowed to grow and are somewhat tolerated. The Masculinity ranking of Brazil (47) indicates that there is some degree of gender differentiation, but not considered extreme. The Long-Term Orientation of Brazil is relatively high which suggests long-term commitments and respect for tradition are valued within the culture (ITIM, 2004).

In their review of the literature concerning culture and entrepreneurship, Hayton, George, and Shaker (2002) identified three broad streams of research that look at national culture and entrepreneurship. The first stream focuses on the impact of national culture on the measurements of entrepreneurship such as innovative output or new business creation.

The research along the first stream shows that there is evidence that broad cultural characteristics are associated with national levels of entrepreneurship. Specifically the research shows that high Individualism, low Uncertainty Avoidance, and high Power

Distance have all been found to be associated with national rates of innovation. Hayton, George, and Shaker (2002) warn that the associations have not been consistent over time and have not been systematically found with aggregate indicators of entrepreneurship.

The second stream of research focuses on the effect national culture may have on individual characteristics of entrepreneurship. Taken as a whole, this second stream of research does appear to indicate that certain entrepreneurial characteristics appear to be influenced by national culture. One example is a study by Mueller and Thomas (2000) that explores the relationship between locus of control and innovativeness and Hofstede's dimensions of Individualism and Uncertainty Avoidance. The findings of Mueller and Thomas (2000) suggest that cultures which are low Uncertainty Avoidance and individualist appear to be more supportive of entrepreneurs than other cultural configurations. This finding leads them to tentatively conclude that certain combinations of cultural dimensions lead to a "supportive" culture for the entrepreneurial potential of a country.

Other studies in this second stream indicate that the reasons for starting a business vary along the dimensions of Individualism, Power Distance, and Masculinity (Scheinberg & MacMillan, 1988; Shane, Kolvereid, & Westhead, 1991). Also in this second stream is a study by Mitchell et al. (2002) that seems to provide evidence that the same cognitive scripts (ways of thinking) that are related to entrepreneurship are also associated with Individualism and Power Distance. This finding suggests a complex interaction between cognition and cultural values (Hayton et al., 2002).

The third stream of entrepreneurship research, which looks at national culture and corporate entrepreneurship, is more diverse and less integrated than the other two streams

(Hayton et al., 2002). Some of the aspects of corporate entrepreneurship that have been investigated in relation to culture are strategic renewal, spin-offs, entry mode, and innovation. In general, these studies reveal a strong influence of national culture upon these aspects of corporate culture.

An example of the third stream of research is a study by Kogurt and Singh (1988) that investigated if national culture is associated with choice of entry mode into the market by an entrepreneurial firm. The study indicates that Power Distance is positively associated with a preference for joint ventures over acquisitions. The study also found that Uncertainty Avoidance is positively associated with a preference for joint ventures and greenfield sites over acquisitions as an entry mode (Hayton et al., 2002). Greenfield sites refer to a completely new business operation.

Hayton et al. (2002) point out that generally, throughout the three streams of research, cultures that are high in Individualism, low in Uncertainty Avoidance, low in Power Distance, and high in Masculinity tend to be more inclined to facilitate/support entrepreneurship.

While not necessarily disagreeing with these findings, Tiessen (1997) contends that entrepreneurship is the outcome of both individualistic and collectivist orientations. What has been missing from the discussion, according to Tiessen (1997), is the differing ways in which individualism and collectivism contributes to entrepreneurial functions.

Tiessen (1997) writes that in general, entrepreneurial functions focus on variety generation or resource leverage. Variety generation occurs when entrepreneurs increase the number of innovations and business start-ups at all levels. Individualism is associated mostly with this function of entrepreneurship as it tends to drive the founding of new

enterprises. Collectivism affects entrepreneurship by fostering corporate entrepreneurship and resource leverage by leading to efficient internal and external relations.

According to Tiessen, the issue is not if one or the other cultural orientation affects entrepreneurship, but how each affects entrepreneurship differently. Although looking at individualism and collectivism at two polar ends on a scale may help in broad analysis, Tiessen believes this approach keeps one from seeing the influence each cultural orientation has on the two functions of entrepreneurship: variety generation and resource leverage.

Based upon the literature it is clear that culture does have an impact on entrepreneurship, but it may be that culture, rather than acting as a causal agent of entrepreneurship, is more correctly described as a catalyst of entrepreneurial outcomes (Hayton et al., 2002).

J. Role of Non-governmental Organizations (NGOs)

One of the main participants in poverty alleviation is non-governmental organizations (NGOs). NGOs may be generally understood to be non-membership support organizations that are involved in relief, rehabilitation, and community development, as well as environmental and cultural protection in both developed and developing areas and nations (Makoba, 2002; Meyer, 1995). They are often classified as part of civil society alongside trade unions, membership organizations, cooperatives, religious-based charitable organizations as well as others (Edwards et al., 1999; Makoba, 2002). Although this is a general understanding, there is such a diversity of political,

economic, civil, and religious missions for NGOs that it is difficult to come to an all encompassing definition (Meyer, 1995).

Although NGOs are not new, their proliferation has greatly expanded over the past two decades. Makoba (2002) reports that during the early nineties there were an estimated 28,900 international NGOs worldwide with at least 20,000 of those operating in developing countries. The member countries of the Organization for Economic Co-operation and Development (OECD) sent US\$2.5 billion of development aid through NGOs in 1992. That amount was up from US\$1.9 billion in 1982 (Meyer, 1995). NGOs tended to be based in the developed world, but they are now developing as grassroots organizations within the specific locations of need in all parts of the world. In their specific social and political contexts, they are assuming the characteristics of genuine civil actors rather than a service delivery contractor based in some faraway country (Edwards et al., 1999).

The importance of NGOs has grown over the past two decades. They are increasingly being utilized as avenues for promoting economic, social, and democratic development. Different factors have led to this emphasis on utilizing NGOs in these manners. One factor is due to changes in the way donor countries and multilateral organizations handle their aid programs (Meyer, 1995).

In the past, major donors and governments undertook large-scale development projects that proved cumbersome and inefficient. The so called top-down approach to NGO funding lost favor and the debt crisis of the 1980s reaffirmed for donors the danger of funding enlarged public sector development (Meyer, 1995). When countries encounter a debt crisis their ability to pay back loans or pay for development activities is curtailed.

Currencies become devalued and the amount of local money needed to repay debt increases. Due to debt crisis, the target countries of the development activity were no longer able to repay or pay for the large-scale development projects leaving the donors to lose their investment.

There is now a shift toward people-oriented programs. Donors have recognized that NGOs are more locally minded, flexible, innovative, and efficient, therefore more cost effective, in carrying out development activities. This innovation and flexibility enables NGOs to more effectively reach the poor (Makoba, 2002; Meyer, 1995).

Another factor that has led to the utilization of NGOs for development is the inability of developing countries to efficiently and quickly meet the demands of both their economic and civil society development (Edwards et al., 1999; Makoba, 2002; Meyer, 1995; Uphoff, 1993). As the developing nations are trying to build infrastructure and stable economic systems, fewer dollars are available for addressing the persistent social ills that abound in the developing world. NGOs are being utilized to fill this gap.

According to Edwards et al. (1999), a general belief of most NGOs is that human rights standards and other social values can be mainstreamed through the power structures that seem to work against certain groups. Edwards et al. (1999) believe that NGOs operate as active civil participants in order to influence or mainstream their standards and values into the economic, social, and political systems of their locations. By working as a civil participant the NGOs can spread their benefits and reduce their costs, whether in markets, politics, or social policy. According to Edwards et al. (1999), the general role of the NGO is to help improve the endowments of the poor so that they can operate effectively and achieve a basic level of economic and societal security. As an

example, those who go through entrepreneurship training will have received endowments of human capital that may be leveraged in order to start an enterprise that will provide an income and future.

K. Entrepreneurship & Microenterprise Development in Latin America

It has been pointed out that entrepreneurship research in Latin America is in its embryonic stages (Kantis et al., 2002; Ripas, 1998; Weeks & Seiler, 2001). What little is known is often spoken of in broad statements and there has been little work specific to the different classifications of entrepreneurs such as opportunity and necessity entrepreneurs.

One study that does seek to address the difference between opportunity and necessity entrepreneurs from a broad numerical standpoint was conducted by Reynolds et al. (2002). This study included more than 74,000 surveys and 900 interviews with in-country experts in 37 countries. Reynolds et al. (2002) estimates the total number of both opportunity and necessity entrepreneurs in the survey countries to be around 286 million people. When looking at the percentages of entrepreneurs in the different regions, Reynolds et al. (2002) found that 9% of all the entrepreneurship activity in their survey was occurring in the Latin American region. When computed, this would mean that of the 286 million entrepreneurs, more than 25 million would be in the specific countries in their study representing Latin America (Brazil, Mexico, Argentina, Chile).

According to Reynolds et al. (2002) Brazil is estimated to have the highest percentage of necessity entrepreneurs with between 7% and 8% of the labor force

involved in necessity entrepreneurship. Both Chile and Argentina had estimates almost as high at around 7% while over 3% of Mexico's total labor force was estimated to be involved in necessity entrepreneurship.

In an assessment of microenterprises in Latin America for the IADB Sustainable Development Department, Orlando and Pollack (2000) report that 54% of the total employment in Latin America was found in the microenterprise sector of the region. When looking at the income level of the microentrepreneurs that make up the workforce in this sector, an average of 26% would be classified as poor. The incidence of poverty is about twice as high for those who work in the microenterprise sector in relation to those who work in the non-microenterprise sector. Of the different demographic groups that make up the microenterprise sector, women are particularly vulnerable with an average poverty rate of 55%, which is more than twice as high as the microenterprise workforce as a whole. According to a report by the United Nations Development Program (UNDP, 2004) women make up the majority of microentrepreneurs in the informal economy of Latin America and the Caribbean and between 25% to 35% of all microenterprises and small to medium enterprises in the formal sectors of the region.

Although the microenterprise sector in Latin America has seen great growth during the past decade, it is clear from the research that many of the individuals are in precarious economic situations. Policies oriented towards the reduction of poverty through the microenterprise sector should seek to help increase the success, productivity, and sales of enterprises in the microenterprise sector through specific development activities (Orlando & Pollack, 2000).

In a review of the current state of women's entrepreneurship in Latin America,

Weeks and Seiler (2001) report the results of surveys in Argentina, Brazil, and Mexico. These surveys, as well as others referenced in their report, indicate that support for women's entrepreneurial development efforts could have a significant impact on economic growth and prosperity.

Specifically, these surveys indicate that women-owned firms are smaller and younger than their male-owned counterparts and the women business owners are also younger in age than male entrepreneurs. Women entrepreneurs in Argentina and Mexico average 44 years of age while the males average 47 and 46 respectively. In Brazil, 56% of the women entrepreneurs are below the age of 40 compared to 48% of Brazilian men.

In regards to types of industries, the surveys found that women entrepreneurs were much more likely to be involved in the service or retail trade sectors than in manufacturing. The most important and challenging issues facing women business owners was access to capital and technology, such as computers. Weeks and Seiler (2001) pointed out that these items show up most often as critical for male and female entrepreneurs in all parts of the world.

In regards to the issue of capital for women entrepreneurs in the region, the Weeks and Seiler (2001) indicate that bank credit is utilized on a limited basis as a form of financing either operations or start-up. The results show that only 23% of women entrepreneurs in Argentina and 14% in Mexico access bank credit to help run their operations. In Brazil, only 10% used bank credit to finance their start-up. It is important to remember that these surveys included entrepreneurs from all economic levels and the access to bank credit for those on the poor end of the scale may be lower than the percentages indicated. In general, women and men entrepreneurs in Latin America use

private financing for their enterprises such as personal saving, friends, and family members (Weeks & Seiler, 2001).

On the issue of technology, all women business owners in Mexico and Argentina are less likely than men to utilize computers in their business operations. Weeks and Seiler point out that this may be a function of the relative size and industry type of the women's businesses.

A study by Kantis et al. (2002) sought to examine the entrepreneurial process of dynamic enterprises and the entrepreneurs involved in these enterprises in Latin America and East Asia. According to this study, dynamic enterprises are defined as those that are between three and ten years old and that increased their workforce to between 15 and 300 workers. The dynamic entrepreneurs would fall into the category of opportunity entrepreneurs because they are more motivated by a need for self-realization and personal development than by economic factors. Self-realization is described as a sense of personal satisfaction as well as contributing to society.

Kantis et al. specifically excluded informal microentrepreneurs who would primarily fall into the necessity category. The rationale given for the exclusion of the microentrepreneurs, who they admit makes up a significant percentage of Latin American firms, is that previous research has identified dynamic enterprises as the ones that contribute the most to employment creation and economic modernization. The following are the findings linked specifically to those dynamic entrepreneurs in Latin America.

The dynamic entrepreneurs are predominately middle-aged males (average age 42) with some university education. In 9 out of 10 cases the entrepreneurs were raised in middle-class homes and in half of the cases the fathers of the entrepreneur worked

independently during the entrepreneur's childhood. Almost half of the entrepreneurs had founded a company at least once before. The majority of the entrepreneurs focused on conventional manufacturing (food, furniture, clothing, and metal work).

The dynamic entrepreneurs learned to become entrepreneurs primarily through their experiences in the workforce as employees. The Brazilian entrepreneurs were the most emphatic as to the importance of previous work experience. The role of traditional education systems were found to be much more limited in providing the entrepreneurs with the skills and competencies needed to start their enterprise. Only 4 out of 100 affirmed that secondary education played a role in acquiring skills and competencies. Although the majority of the dynamic entrepreneurs attended some college, only 20% of those who did mentioned its influence on their decision to start a business. The family was also noted as an important environment to learn the attitudes and work ethic needed to become an entrepreneur.

Although higher education was not mentioned as a primary training ground for entrepreneurship, it is mentioned as a factor in obtaining the necessary resources and building the networks needed to start the business. The workforce is also mentioned as an important location in obtaining the resources and building networks. It is through these two avenues that dynamic entrepreneurs primarily learned how to access intangible resources such as information and technology.

The most common financing method used to start the enterprises of dynamic entrepreneurs was personal savings. Less than 20% used bank financing. The results of the survey found external financing or financing outside personal savings and family members to be very limited.

The main problems encountered by dynamic entrepreneurs during the first years of the enterprise were (1) increasing client base; (2) balancing cash flow; (3) obtaining qualified workers; (4) purchasing adequate equipment; and (5) obtaining adequate supplies.

While Kantis et al. (2002) investigated dynamic entrepreneurs in Latin America, Eversole (2003) specifically looked at entrepreneurs among the poor in Latin America. Eversole points out the different terms that have been used to describe the self-employed poor. The term peasant is traditionally used for those who are in rural areas and may not use money as their primary medium of exchange. They may barter for goods and services. Another term used for the self-employed poor is petty commodity producers. These individuals are often associated with subsistence-level operation of their enterprise. The term microentrepreneur is often used for the working poor who use money and can deal with capitalism on its own terms. This means that they are more likely to seek to expand rather than remain as subsistence-level enterprises. Eversole points out the many international support programs seek to help the “poor microentrepreneurs” who are subsistence-level capitalists on their way up.

There have been arguments in the past over the distinctions and contributions of the different types of self-employed poor. Eversole relates an argument made by Cook and Binford (1990) that the separation of these groups is largely artificial. The distinction between peasants/petty commodity producers and microentrepreneurs/capitalists should be seen in the concept of a single economy with various kinds of production and not where there are separate operational rationalities or logics for different kinds of producers. In general, the literature and international organizations have begun to

recognize all self-employed poor as microentrepreneurs (Eversole, 2003).

Eversole (2003) relates that the Latin American microentrepreneurs in the study generally work by themselves as management and labor and have the goals of improving their business and growing their capital. In the case of the smallest scale microentrepreneurs, one of the early signs and results of growth is an expansion of products offered because, according to the microentrepreneurs, a variety sells better. Eversole also discovered that when some microentrepreneurs seemed to reach a limit concerning how much they could make or produce by themselves, they diversified by saving capital and launching a second business. This diversification is one of the most common modes of growth.

Eversole (2003) indicates that while the microentrepreneurs may have been motivated to begin the business out of necessity, they may operate somewhat as opportunity entrepreneurs once the business gets going. When the microentrepreneur is looking to diversify in order to grow, they often make the move when they see a good market opportunity. The microentrepreneurs are able to move quickly to seize an opportunity because they are flexible, as is evidenced by their ability to switch seasonal markets and products sometimes on a daily basis (Eversole, 2003).

Although most microentrepreneurs in Eversole's study indicated that growth is desirable, the reality is that many do not grow and maintaining the business as a steady source of income is a sufficient outcome of the enterprise. Even though these enterprises are unable to grow, Eversole (2003) does not consider them different in kind, but rather in scale. The difference lies in the availability of free capital to reinvest in the enterprise to finance growth and expansion. It is evident that some microentrepreneurs make

enough to cover their labor and other costs and have additional resources to put back into the enterprise and other microentrepreneurs do not (Eversole, 2003).

Eversole (2003) suggests that in especially poor situations that subsistence enterprises do not fail if they are unable to accumulate capital because they provide a wage-like income in order to survive. The ability for the microentrepreneur to continue at a subsistence level means that the enterprise can retain its place in the market and the opportunity to grow is there when conditions improve. The poorest microentrepreneurs must often be the most entrepreneurial in order to make a living with a very small amount of capital (Eversole, 2003).

The Latin American microentrepreneurs in Eversole's (2003) study acted as management and labor for their enterprises. Eversole writes that they existed not as distinct classes (i.e. peasants or microentrepreneurs), but rather they all are microentrepreneurs that fall along a continuum from subsistence to capital accumulation. Eversole (2003) suggests that understanding why so many lie on the subsistence end of the continuum is where further research needs to be aimed.

Young and Welsch (1993) examined major factors influencing entrepreneurial development in Mexico. Their survey was administered by a Mexican small business specialist to 157 small business owners in a large metropolitan area in Central Mexico with a population of around two million people. The entrepreneurs in their sample had an average age of 35.9 years and had spent an average of 12 years in school (equivalent to high school diploma). The sample was 56% male and 44% female. The men had an average of 10.5 years of business experience in their fields and the women had an average of 9.5 years. Fifty-five percent of the sample had fathers who were entrepreneurs

and 21% had mothers who were entrepreneurs. The businesses averaged 11.7 full-time and 3.3 part-time employees.

Young and Welsch (1993) determined that there were two primary facilitating or positive factors and two primary inhibiting or negative factors influencing entrepreneurship development in central Mexico. The positive factors were (1) entrepreneurial motivation and (2) encouraging support systems. The negative factors were (1) start-up obstacles and (2) recurring problems.

In examining the positive factor of entrepreneurial motivation, Young and Welsch (1993) identified different motivations behind the decision to start a business, but the primary motivations appeared to be financially driven. The two most common motivations listed were financial independence and to supplement family income. Other motivations were to achieve a personal goal, continue career development, and responding to the encouragement of family and friends.

The second positive factor contributing to entrepreneurial development was having an encouraging support group. The Mexican entrepreneurs indicated their family to be a very important factor in the start-up decision as well as their strongest support group. The mother was especially singled out as supportive, with Young and Welsch (1993) calling the mother the foundation and strength the entrepreneur relies on when moving ahead in the business. Other support groups identified were potential customers, suppliers, and professional and business associations.

The first negative factor influencing entrepreneurial development was start-up obstacles. The most often cited start-up obstacle was bearing the entire risk of the start-up alone. Young and Welsch (1993) state that assuming this major responsibility is at the

core of the entrepreneurial process and one that may keep people from entering the process of entrepreneurship. Young and Welsch (1993) state that that this obstacle may be more formidable than gaining the necessary skills and resources required for business start-up. The next few start-up obstacles all related directly to the business. The obstacles were obtaining a start-up loan, finding a good business location, gaining credit from suppliers, and lacking guidance and counsel. Young and Welsch suggest that technical and managerial assistance could be provided to help overcome the obstacles that deal directly with the business itself.

The second negative factor influencing entrepreneurship development were the reoccurring problems faced by the entrepreneurs after the business was underway. Once the start-up obstacles were overcome, there was a proliferation of new challenges or reoccurring problems. The most frequently cited problems were with finance and the business environment. Some of the main finance problems were a lack of working capital, lack of financial information, and slow collection of accounts receivable. Some of the main business environment problems were inflation, recession, government regulation, taxes, and wages for employees. These ongoing problems continued throughout the life of the business.

Young and Welsch (1993) state that the positive and negative factors that influence entrepreneurial development in Mexico should be the focus of strategies and policy to encourage and strengthen entrepreneurial development. They suggest that strengthening family business, setting reasonable aspiration targets, providing encouraging support and information networks, and creating a less hostile business environment are important areas to begin.

CHAPTER III

METHODOLOGY

A. Research Design

This research project was a descriptive study of the learning processes, characteristics, and behaviors of necessity entrepreneurs in the study sample as they learned about and pursued enterprise or business development. The orally administered survey instrument utilized was a self-report cross-sectional questionnaire designed to describe the learning processes, characteristics, and behaviors of entrepreneurs in Latin America and Asia during various stages of the entrepreneurial process.

Research Questions

The research questions put forward for this current study were:

- Q1: What were the general demographic characteristics of necessity entrepreneurs in the study sample?
- Q2: What were the general characteristics of the necessity entrepreneur's businesses in the study sample?
- Q3: How did necessity entrepreneurs in the study sample identify business opportunities?

- Q4: Where did necessity entrepreneurs in the study sample learn the skills to begin an enterprise?
- Q5: Where did necessity entrepreneurs in the study sample obtain the financial resources necessary to start a business?
- Q6: What were the main problems facing necessity entrepreneurs in the study sample after business start up?
- Q7: Given the choice, would necessity entrepreneurs in the study sample have rather worked for others or been self-employed?
- Q8: Did necessity entrepreneurs in the study sample seek growth or subsistence?

Table 1 provides a crosswalk of where the research questions were specifically addressed by the survey instrument for this study.

Table 1 - CROSSWALK OF RESEARCH QUESTIONS TO SPECIFIC SURVEY

QUESTIONS

Research Questions	Specific Survey Questions
Q1: What are the general demographic characteristics of necessity entrepreneurs in the study sample?	A4, A5, A6, A7, A8, A9, B1, B2
Q2: What are the general characteristics of a necessity entrepreneur's enterprise in the study sample?	A1, A2A, A3, B4, B5, B6, B10, B11, C3, C4
Q3: How do necessity entrepreneurs in the study sample identify business opportunities?	B7, B8, B9
Q4: Where do necessity entrepreneurs in the study sample learn the skills to begin an enterprise?	A6, A7, A8, A9, B3
Q5: Where do necessity entrepreneurs in the study sample obtain the financial resources necessary to start a business?	C1, C2, C3
Q6: What are the main problems facing necessity entrepreneurs in the study sample after business start up?	C5, C6
Q7: Given the choice, would necessity entrepreneurs in the study sample rather work for others or be self-employed?	C7A, C8
Q8: Do necessity entrepreneurs in the study sample seek growth or subsistence?	C4, C8

B. Characteristics of Brazil & Sample Region

Brazil is a very large country both in terms of population and size. Brazil's land mass is comparable to the continental United States and at the time of the study Brazil had an estimated population of 182 million people (IBGE, 2004). It is the most populous country in Latin America and the 5th most populous in the world. Economically speaking, it is currently ranked as the 15th largest economy in the world. In economic and development terms Brazil is considered a developing country, but sometimes is listed as a middle-income country or a newly industrialized country. It is often associated in comparisons with India and South Africa. Official statistics cited in this research project on population, income, school attendance, infrastructure, etc. concerning the sample region come from the Instituto Brasileiro de Geografia e Estatística (IBGE, Brazilian Institute of Geography and Statistics) unless otherwise noted.

According to World Bank statistics, the per capita Gross Domestic Income (GDI) in Brazil is US\$2,710, which is lower than the regional average for all of Latin America which is around US\$2,976. As a comparison, the GDI in the countries that make up the Organization for Economic Co-Operation and Development (OECD, i.e. Australia, Denmark, Portugal, Italy, Turkey, France, Korea, Hungary) is US\$25,773. Brazil continued to have one of the highest base interest rates in the developing world which affects the availability and price of capital. High interest rates negatively affect the number of people who can realistically afford to borrow money. The base rate in October 2004 was 16.75% and has been as high as 26.50% as recently as June 2003.

The Brazilian currency is the *real* and has hovered around a 3 to 1 exchange rate with the U.S. dollar. For the purpose of consistency, all U.S. dollar amounts used in this

study were expressed at an exchange rate of 3 Brazilian reals to 1 U.S. dollar.

The minimum wage in Brazil has recently been raised from US\$80/mo. (R\$240/mo.) to US\$86/mo. (R\$260/mo.). According to official statistics (IBGE, 2004), the percentage of people 10 years old or older earning one half a minimum salary (US\$43/R\$130) stands around 9.8% nationally. Those earning between one half and 1 minimum salary is 17.9 percent. Those earning between 1 and 2 minimum salaries make up the largest group at 26.4% of those working. More than half of all workers in Brazil earn somewhere between US\$43 and US\$173 a month. Unemployment statistics show the current national unemployment rate is around 11.4 percent (Sept. 2004), but there are regions of the country that are higher such as São Paulo with an unemployment rate of 17.9 percent (Sept. 2004).

The average monthly salary for those workers with formal employment contracts in August 2004, including self-employed and private household workers, is US\$308 (R\$925). The average monthly salary for those without a formal contract is US\$191 (R\$575), while the average monthly salary for self-employed workers is US\$235 (R\$705).

In the area of education on a national scale, Brazil has an illiteracy rate of 11.8% for those 15 years old or older. When it comes to school completion, Brazil is lagging behind other developing countries. Table 2 shows the percentages of each gender that have completed various years of schooling.

Table 2 – NATIONAL PERCENTAGES BY GENDERS OF YEARS OF SCHOOLING

Years of Schooling	Percentage of Men	Percentage of Women
0 – 1	12.0%	11.7%
1 – 3	16.6%	15.0%
4 – 7	33.6%	32.3%
8 – 10	15.7%	15.7%
11 +	21.7%	24.9%

Basic schooling in Brazil is compulsory through the 8th grade (ages 7-14) and is broken down into two four year segments. Ensino Fundamental consists of 1st through 4th grades (ages 7-10) and Ensino Medio runs from 5th grade through the 8th grade (ages 11-14). General secondary education is not compulsory and may include technical or vocational education. Higher education is organized into undergraduate and post-graduate studies (UNESCO, 2000).

When looking at the infrastructure for the country as a whole, around 68% of the residences are connected to formal sewer networks with 25% utilizing some other method. Those residences with no connection to sewer systems of any type make up 7% of all residences. The percentages of the residences connected to formal water systems stands at 82% and those residences who have access to formal garbage collection services is around 85%. Other infrastructure statistics show that 96% of all residences have access to electricity with 61% having access to traditional land-line telephone service (IBGE, 2004).

When focusing on the Northeast region it is clear that this is indeed the poorest region. Some of the major cities in this region are Recife, Fortaleza, Salvador, and Natal. Periera (1999) relates in the mid-1990's that, according to the United Nations

Development Program, if the south of Brazil (the wealthiest and most industrialized states) were an independent country, its human development index would rank it around 42nd place internationally out of all countries, which is similar to a country such as Portugal. If the Northeast were considered an independent country, its human development index would rank it around 111th place, similar to Bolivia and El Salvador.

Official statistics (IBGE, 2004) reporting infrastructure conditions show that in the Northeast region

- 42.8% (68.1% nationally) of the residences are connected to a formal sewer network;
- 37% (25.1% nationally) use some other form of sewer system; and
- 20.1% (6.8% nationally) have no sewer system of any kind (IBGE, 2004).

The disparity of poverty and infrastructure weakness is even starker when compared to the Southeast region. In terms of sewer networks, the Southeast stands at:

- 85.6% with access to formal systems;
- 13% utilizing some other form of system; and
- 1.3% with no sewer system of any kind.

The Southeast region is considered the industrial and commercial hub for the country with its major cities being Rio de Janeiro, Sao Paulo, and Belo Horizonte.

One of the cities where this research took place was the city of Cabo de Santo de Agostinho in the state of Pernambuco. The city of Cabo de Santo Agostinho has a total population of 152,977 with 134,486 of those living in the urban area of the city. This region exemplifies the Northeast region of the county as it is very poor with a severe lack of infrastructure. Statistics (IBGE, 2004) show there are:

- less than 10,000 residences in the city with attached bathrooms that are connected to the city's sewer network;
- just over 31,000 residences that are connected to the city's water system; and
- less than 32,000 residences serviced by the city's garbage collection system.

The average yearly income of individuals 10 years old and older for the Cabo de Santo Agostinho area is around US\$116 (R\$349/yr). For women the average income is even less at US\$86/yr (R\$258/yr).

In regard to schooling, the number of enrollments in the first four years of elementary school in the city is nearly 40,000. Enrollments in the second four years of elementary school are around 11,000.

The second location this research took place was in Fortaleza. The city of Fortaleza is one of the major urban areas in the Northeast of Brazil. According 2003 estimates, the city of Fortaleza has a total population of 2,256,233. Statistics show there are around:

- 233,500 residences in the city with attached bathrooms that are connected to the cities sewer network;
- just over 458,000 residences that are connected to the city's water system; and
- 500,000 residences serviced by the city's garbage collection system.

The average yearly income of individuals 10 years old and older in Fortaleza is around US\$220 (R\$662/yr). For women the average income is even less at US\$171 (R\$515/yr).

In regard to schooling, the number of enrollments in the first four years of elementary school in the city is nearly 441,000. Enrollments in the second four years of

elementary school are around 150,000.

C. World Vision Brazil

World Vision Brazil is part of the global Christian relief organization known as World Vision. World Vision, founded in 1950, is based in the United States, but has many offices around the world that operate local programs, such as World Vision Brazil. Currently, World Vision operates in 99 counties with programs in health, education, economic development (entrepreneurship), rural development, infrastructure development, justice, and spiritual development (World Vision, 2004).

World Vision Brazil began in 1975. The efforts of the organization are focused on the Northwest, Central, Northeast, and Southeast regions of the country. In 2003, World Vision Brazil directly provided the services listed above to 840,000 individuals with an estimated 4,100,000 reached indirectly. Of the 840,000 directly assisted, 525,000 were children or youth (Visao-Mundial-Brasil, 2003).

One of World Vision Brazil's economic development programs is their PROMICRO entrepreneurship program (Programa de Apoio ao Desenvolvimento de Microempreendimentos – Program for the Support and Development of Micro Enterprises). The PROMICRO program was initiated in 1995 to provide microloans and training to small business entrepreneurs in the World Vision Brazil service areas. The microloan part of the program operates through a rotating fund that is administered by a village bank. A village bank is a community organization comprised of small business people who have joined forces to offer credit and to provide a collective guarantee for the loans.

The training function of the PROMICRO program provides learning opportunities to enhance the business skills of entrepreneurs. Courses are offered to clients of the PROMICRO program and to the community. Some of the topics are management, company and family relations, ethics and citizenship in business, Christian values in business management of small business, quality and productivity, and personal motivation. These courses are voluntary and World Vision Brazil estimated that only around 20% of the PROMICRO clients attend the courses.

The global World Vision organization operates similar entrepreneurship programs in 43 countries around the world, but each is operated locally to more efficiently meet the specific needs of the communities.

In the year 2003 the PROMICRO program issued 7,006 microloans with a total loan valuation at US\$2,891,737 for an average loan amount of US\$412. During 2003, the PROMICRO program helped to generate 1,018 new enterprises and helped maintain 9,971 existing enterprises. Although new business start-ups are one of the goals of the PROMICRO program, the majority of the loans go to assist existing small businesses in providing working capital (Visao-Mundial-Brasil, 2003).

World Vision Brazil uses a four step process in issuing their loans. This process is completed in around 10 days. Step one is to analyze the application of the entrepreneurs to make sure they qualify for the loan. The second step is for a World Vision credit specialist to visit the entrepreneur in order to know first hand the needs of the business. In step three of the process the credit committee of the village bank evaluates the initial application and the information from the credit specialist. The final step is to approve or disapprove the loan and release the finances if approved.

D. Sample

The sample for this study was chosen using a nonrandom purposive sampling technique. Purposive sampling has been referred to as judgment sampling because the sample is selected by the judgment of recognized experts (Gay & Airasian, 2000). Relief and development organizations often work closely with those who may be classified as necessity entrepreneurs and these organizations are considered to be experts in their perspective areas of operation. World Vision Brazil has worked for many years in the field of entrepreneurship and micro-enterprise development and targets various programs at those who can be classified as necessity entrepreneurs. Because of World Vision Brazil's expertise, the purposive sample for the current research project was selected from the World Vision Brazil PROMICRO entrepreneurship program and the project conducted with the judgment and assistance of this international relief and development non-governmental organization. Specifically, this research project was conducted with the assistance of João Helder Diniz, Economic Development Manager and Elza Fagundes Gonçalves, Micro-credit/Microfinance Manager for World Vision Brazil.

In addition to relying on the judgment of recognized experts, sound purposive sampling is based upon clear criteria for participation in a study (Gay & Airasian, 2000). The criteria for this study was that the participants had to be:

- (1) self-identified as becoming an entrepreneur out of necessity, and
- (2) and at least 18 years of age.

The study sample totaled 134 necessity entrepreneurs and was drawn from two geographic areas within the Northeast region of Brazil. The sample size goal for the study

was set at 130 entrepreneurs based upon a similar sample size from the individual countries in the study by Kantis et al. (2002).

Out of the 134 necessity entrepreneurs of the sample for this study, 74 were located in the city of Cabo de Santo Agostinho in the state of Pernambuco. This city is around 35 kilometers (21 miles) to the southwest of Recife, which is the state capital of Pernambuco. The second group of the sample, totaling 60 entrepreneurs, was drawn from the city of Fortaleza, which is the capital of the state of Ceará.

The Northeast region of Brazil is the most poverty stricken region in the country with the lowest social indicators and the center of activity for World Vision Brazil's entrepreneur assistance programs.

E. Instrumentation

The questionnaire utilized for this study was a self-reported questionnaire that was orally administered by two native Portuguese speaking research team members (See Appendix A & B). The questionnaire was developed by Kantis et al. (2002) for a study that was sponsored by the Inter-American Development Bank (IADB). The questionnaire was developed to describe the learning processes, characteristics, and behaviors of entrepreneurs in Latin America and Asia during various stage of the entrepreneurial process.

For the purpose of the current study, permission was granted by the IADB for use of the instrument and the original Portuguese questionnaire was obtained from Dr. Miguel Bacic from the Universidade Estadual de Campinas in São Paulo, Brazil. Dr.

Bacic was the team leader of the Brazilian portion of a study by Kantis et al. (2002) that initially developed and utilized the instrument.

The survey instrument had previously been given to more than 1,220 entrepreneurs in eight different countries (Argentina, Brazil, Costa Rica, Mexico, Peru, Japan, Korea, Singapore, Taiwan). Kantis et al. (2002) state that an extensive literature review was undertaken and more than 130 key informants in eight countries were consulted when developing the questionnaire.

Kantis et al. (2002) addressed the issue of validity of the questionnaire by consulting informed researchers in the literature as well as key informants in the different countries. This process helped determine the proper content and the proper way to present the content to the participants. The questionnaire was designed as a structured instrument utilizing checklists and Likert scales to record the data.

In addressing the reliability of the questionnaire, this researcher ran Chronbach's alpha test on the non-demographic questions that utilized Likert scale answers from the IADB dataset with a sample size of 1,015. The alpha coefficients for these questions are listed in Table 3.

Table 3 - ALPHA COEFFICIENTS FOR ORIGINAL IADB SURVEY INSTRUMENT

Questions from Original Survey	Alpha Coefficients
B1: Questions concerning one's initial motivations	.79
B2: Questions concerning the reaction of others to becoming an entrepreneur	.69
B14: Questions concerning the economic factors affecting the decision to become an entrepreneur	.82
D6: Questions concerning the importance of those who the entrepreneur consulted with during the first years of the start-up	.75

The alpha coefficients ranged from .69 to .82 and indicated a relatively high reliability for these items.

The questionnaire utilized (Appendix A & B) for this study consisted of 30 questions. Twenty-seven questions were quantitative in nature and were scored on the instrument using checkmarks in scales, categories, and/or boxes and by writing in numbers for items such as age, years, and number of employees. Three questions were open-ended with the research team members writing in Portuguese the information spoken by the entrepreneur in the appropriate place on the questionnaire.

The first section of the survey instrument, consisting of questions A1 – A9, focused on the background information of the entrepreneurs and their enterprises. This section gathered the following background information:

- business age
- primary business category
- specific business activity**
- number of founding partners
- age of the entrepreneurs
- gender
- previous work experiences
- number of times previously started a business
- education levels
- parents entrepreneurship activity

** indicates an open-ended question

It must be noted that no data were gathered for the education level category of secondary education due to an error during the preparation and copying of the questionnaire for the study.

The second section of the questionnaire, consisting of questions B1 – B10, focused on the inception stage of the business. This section gathered the following information:

- reactions of others
- specific entrepreneurship training
- type of clients
- novelty of product or service in the market
- market conditions
- information sources
- number and relationship of people consulted
- timeline for start-up

The third section, consisting of questions C1 – C8, focused on the business operation stage. This section gathered the following information:

- use of financing sources
- initial investment levels
- number of sales and people employed
- main problems in first three years of business
- types of support to solve problems
- desire to be self-employed or work for another**
- hopes, dreams, and/or goals for business**

** indicates an open-ended question

F. Researcher Training and Field Test

In July of 2004 this researcher traveled to the World Vision Brazil offices in Belo Horizonte and Recife to begin the field work for this study. The office in Belo Horizonte is the country headquarters for World Vision Brazil and the office in Recife is the headquarters for the PROMICRO entrepreneurship program. In Belo Horizonte this researcher met with the president of World Vision Brazil, Serguem Jessui Machado da Silva, to express my gratitude for his assistance and to gather further information about the organization's programs. In Recife this researcher met with World Vision Brazil management, provided training and guidance to the research team members, and conducted a field test of the questionnaire. Mr. Almada de Abreu assisted throughout the training session, field test, and data gathering stage by providing translations of all correspondence and serving as an interpreter with the research team members. Mr. Almada de Abreu is a university professor, pastor, and former employee of World Vision Brazil. Mrs. Leoni Penno Almada de Abreu translated the consent form used in this study. Mrs. Abreu is an experienced Portuguese and English instructor as well as a recognized English to Portuguese translator with experience translating learning materials and books.

During preparation for the field work, World Vision Brazil arranged for two researchers to assist in gathering data for the study. World Vision Brazil utilizes a non-profit organization known as the Centro de Integração Empresa Escola (CIEE, Center for the Integration of Work and School) to gather data for their projects. The CIEE is a national organization that provides a link between education and work for students of all ages and provides research assistance to various organizations. In the case of this research

project, World Vision Brazil contracted with two individuals from CIEE in order to carry out the data collection for this study. Each research team member worked in separate locations. The two researchers were Francisco Alves, who gathered data in Fortealeza, and Janderson Villar Trigueiro, who gathered data in Cabo de Santo Agostinho. Each researcher was a resident of the cities in which they gathered data and were chosen by World Vision Brazil because of their knowledge of the local areas and their prior experience in gathering data.

Training for the two research team members took place in Recife over a two day period. Mr. Alves traveled from Fortealeza to participate in the training and field test. Training began with a time of introductions and general conversation about our backgrounds. After introductions, there was a time of explanation and a discussion about the purpose of the study and the expectations of the research team members. The reasons and importance of the informed consent document were explained and discussed as well as the need for consistency in the administration and scoring of the questionnaire.

The next activity consisted of going over each of the questions of the instrument one at a time. The research team members read each question aloud and we discussed their understanding of the questions and different ways the question might have been interpreted by others. The intended meaning of each question was discussed and clarified for the research team member.

The second day of the training consisted of field testing the questionnaire and making adjustments based upon the field test. The day began with World Vision management personnel accompanying the two research team members, Mr. Almada de Abreu, and this researcher to Cabo de Santo Agostinho to conduct the field test. Potential

participants for the field test were identified by the World Vision personnel who accompanied us based upon their knowledge of their clients. Three entrepreneurs were interviewed by each research team member for a total of six.

In response to the field test some of the questions were rearranged in order to present a more logical sequence of question topics during each interview. The original order had questions concerning number of employees, amount of sales, and initial investment amount with other background information questions in the first section. There were also other financial questions in section three of the questionnaire. During the field test the researchers found that the sequence of the questions flowed better by putting all of the financial and business operation questions together.

A second change was to use the word *indicar* in place of the word *assinale* on various questions. Although the words have similar meanings the research team found that this change helped clarify the questions that originally use the word *assinale*. Both words give the idea of choosing between possibilities, but the research team members found that the word *assinale* was not as clear to the participants of the field test.

G. Data Collection Procedures

In preparation for the study, World Vision Brazil prepared a list of clients from their PROMICRO program for each of the two locations. World Vision Brazil selected clients who they believed met the criteria for participation in the study.

The data World Vision Brazil keeps is limited to basic information such as client's addresses, ages, types of business operations, and amounts of microloan. World Vision Brazil follows up with their entrepreneurs for 6 months after their initial

enrollment in the program. The World Vision Brazil database currently lacks the additional information that this study sought, such as the background of the entrepreneur, market awareness, and important entrepreneurial influences.

The potential participants of the study were not contacted prior to the day of the interview. Each research team member followed the list given them for their area by World Vision Brazil. As they found entrepreneurs at their places of business the researcher team member determined if the entrepreneurs met the criteria. If the entrepreneurs were not there, did not meet the criteria, or if they declined to participate, the research team members moved on to the next person on the list.

During the course of the research project the research team members wore official World Vision apparel for identification. Each interview began with an introduction and quick explanation of the project. After the explanation, each potential participant was asked if he/she decided to start their business out of necessity or if he/she did so to pursue an opportunity. If the entrepreneur indicated that he/she was primarily motivated by necessity he/she was asked the follow-up question concerning their age.

If the entrepreneur met the criteria for participation, the research team member asked if he/she wished to participate in the study. If he/she indicated an interest in participating, an informed consent script was read to each participant. The subject had to answer positively to the informed consent script in order to participate.

Once informed consent had been granted and documented by the research team members on the informed script page of the research packet, the research team member immediately began the interview. Each participant was assigned a number and was only identifiable by that number. No personal information, such as addresses or telephone

numbers was gathered. The time to complete each survey ranged from around 25 to 40 minutes. Completed instruments were turned into the World Vision Brazil office in Recife and then mailed to this researcher in the United States. The data was gathered between July and September of 2004.

A concern may be raised that the data was not gathered by the principal researcher of the project, but to do so would have introduced many potential errors in the completion of the survey instrument due to the lack of fluency in the Portuguese language by the principal researcher. It has been noted that one of the common characteristics of survey research is that in many cases the researcher will not be present when the respondents are answering the questions on the survey (Gay & Airasian, 2000). This has been the case in major international entrepreneurship studies undertaken recently (Kantis et al., 2002; Mitchell et al., 2002; Reynolds et al., 2003; Reynolds et al., 2002; Yusuf & Schindehutte, 2000) in which the principal researchers of the projects depended on local personnel familiar with the sample group to assist in administering the surveys. Because of these issues, the use of a structured questionnaire helped to limit variations among interviewers and increased the reliability and validity of the responses obtained. Yusuf & Schindehutte (2000) point out that many studies of entrepreneurship use structured questionnaires for these reasons.

H. Data Analysis

The questionnaires were not translated into English during the data analysis, but were left in their original Portuguese form. Although not fluent in Portuguese, this researcher had a proficiency that allowed him to work with the data from this study with

a high degree of accuracy. To assure accuracy when working with each open-ended question, a native Portuguese speaker assisted in the interpretation and categorization of the information. The data from the majority of the questionnaire did not need any particular level of Portuguese ability due to its quantitative nature. This quantitative data required accurate input of the data into the SAS® database.

The analysis of the open-ended questions was done by reading each of the answers and creating descriptive categories based upon the similarities in the answers. For example, question A2A asked the entrepreneurs to describe in more detail their specific business activities via an open-ended question. This allowed the entrepreneurs to tell the research team member in more depth about their business. After reading each of the open-ended answers it was determined that they could be broken down into 6 specific categories. These six categories were assigned a number and input it the SAS® database and analyzed as quantitative data. This procedure was done for each of the three open-ended questions.

Once all the data was entered into the SAS® database the data was organized into frequency distributions so as to impose order and present the data in an organized manner. The frequency distributions were expressed using tables in order to graphically present the data. Once the data was organized into frequency distributions it was analyzed using common techniques associated with descriptive research, namely, percentages and measures of central tendency.

The first section of the instrument focused on the background information of the entrepreneurs and their businesses. When analyzing the data along the lines of frequency, percentage, and central tendency the following information was drawn from the data:

- range, frequency, and percentage of business age;
- frequency and percentage of primary and specific business activities;
- mean number of founding partners and percentage with founding partners;
- mean, range, and standard deviation of age of the entrepreneurs;
- percentage of gender participation;
- percentage involved in different previous work experiences;
- frequency and percentage of the number of times previously started a business;
- frequency and percentage of different education levels; and
- percentage of entrepreneurs whose parents were previously involved in starting a business.

The second section of the questionnaire focused on the inception stage of the business. When this data was analyzed using frequencies, percentages, and measures of central tendency the following information was identified:

- percentage of entrepreneurs encountering different opinions of their entrepreneurial plans;
- percentages of entrepreneurs who utilized different types of entrepreneurship training;
- percentage serving different kinds of clients; percentage of various market impressions;
- frequency and percentage of information sources used to identify business opportunities; range, frequency, and
- percentage of length of time to start business.

The third section of the questionnaire focused on the business operation stage, and the analysis identified the:

- percentage of entrepreneurs who utilized different financing sources for their business start-up;
- initial investment by percentage;
- mean number of sales and employees;
- frequency and percentage of entrepreneurs encountering specific problems during the first three years of their business;
- percentage of different sources used to help solve the problems;
- percentage of entrepreneurs who state they would rather work for someone else or be self-employed; and
- frequency and percentage of the different hopes and dreams for the businesses.

In addition to the analysis described thus far, further analysis was conducted to compare the responses of different subgroups of the sample. Examples of subgroup comparisons were gender to business category and number of employees to different business activities.

Finally, a comparison was made utilizing the information found in the review of the literature concerning other entrepreneurs in Latin America. This comparison helped to identify differences and similarities between types of entrepreneurs in each of the studies.

CHAPTER IV

FINDINGS

A. General

The purpose of this study was to describe the learning processes, characteristics, and behaviors of necessity entrepreneurs in the study sample located in the Northeast of Brazil. These findings were based upon the completion of the survey instrument by 134 necessity entrepreneurs. Of the 134 necessity entrepreneurs, 74 were located in the city of Cabo de Santo Agostinho in the state of Pernambuco and 60 were located in Fortaleza, which is the capital of the state of Ceará.

Although the total number of participants was 134, one may notice a different “n” number in various tables. This is due to the fact that some of the participants did not respond to all of the questions on the survey instrument. As an example, Table 4 shows the age of the businesses, but one of the entrepreneurs did not indicate when his/her business started, therefore this category only has 133 responses.

The data that follows is presented by section following the same order as the survey instrument.

B. Section 1 – Background Information

Question 1A asked the year of current business start-up. The year of business

start-up ranged from the early 1950s to 2004. The oldest business was started in 1953 by a woman in Cabo de Santo Agostinho. The highest percentage of business start-ups were in 1999 with 10.53% initiating their enterprise that year. Only two had initiated their business in 2004. As shown in Table 4, the greatest numbers of businesses (45%) were 5 years old or less. The second largest group of businesses (30%) was 6 to 10 years old with the final 25% being 11 years old or older.

Table 4 - NUMBER & PERCENTAGE OF BUSINESS BY AGE (YEAR OF START-UP)

Business Age (Year of Start-up)	Number of Businesses	Percentage
5 years or less (1999 – 2004)	60	45.11%
6 to 10 years (1994 – 1998)	41	30.83%
11 to 20 years (1984 – 1993)	26	19.54%
20 + years (19xx to 1984)	6	4.52%
n=133		

Question A2 and A2A identified the primary business categories and the specific business activities of the necessity entrepreneurs. Question A2 sorted the businesses into the following four primary business categories: (1) Manufacturing/Artisan, (2) Service/Information Technology (i.e. internet, wireless communications), (3) Commercial, and (4) Agriculture (income via crops or animals).

Manufacturing/Artisans were those who primarily manufactured goods or arts and crafts for a living and then sold those materials to others such as a supplier or an individual. Although members of this group were involved in selling, they were

differentiated from the commercial group because they produced their own goods.

The Service/Information Technology category included anyone who earned an income through service oriented businesses such auto mechanics or hair dressers. The category also included anyone who operated technology focused businesses such as an internet café.

The Commercial category included anyone who operated a commercially focused business that involved the selling of goods not manufactured by the owner of the business.

The Agriculture category was for anyone who earned an income through the raising and selling of animals or crops.

All of the necessity entrepreneurs in the sample fell into the first three categories. There were no entrepreneurs that selected agriculture as their primary business category. The overwhelming majority of the entrepreneurs operated a commercial enterprise with service/information technology being the second category and manufacturing/artisan the third. Table 5 shows the number and percentage of the entrepreneurs in each primary business category.

Table 5 - NUMBER & PERCENTAGE OF PRIMARY BUSINESS BY CATEGORIES

Principal Business Category	Number of Businesses	Percentage
1. Commercial	116	86.57%
2. Services/Information Technology	16	11.94%
3. Manufacturing/Artisan	2	1.49%
4. Agriculture (crops/animals)	0	0.00%

n=134

Question A2A asked the entrepreneur to describe the specific business activity in detail via an open ended question. Upon reviewing the answers written by the research team members, the entrepreneurs were broken down into the following five specific business activities:

- (1) Retail – This activity included those businesses that sold all types of goods such as clothes, toys, household items, or hardware. If a business sold only foodstuffs they were classified in the specific business activity as Food;
- (2) Auto Service – These businesses focused their activities in servicing automobiles and their related parts such as tires;
- (3) Beauty Services – These businesses provided beauty related services such as haircuts;
- (4) Food – These businesses included any that focused their business activity in the making and/or selling of foodstuffs; and
- (5) Arts and Crafts – These businesses made arts and craft products that they sold to individual or to other companies. Of the two manufactures/artisans in the sample one made children’s toys out of wood such as doll houses and little cars and the second made regional artisan products with an emphasis on products made of lace.

The greatest number of entrepreneurs focused their business activities in the retail area with nearly 60% of the total. The second largest area of business activity was in food with around 30% of the sample. Table 6 shows the number and percentage of each specific business activity.

Table 6 - NUMBER & PERCENTAGE OF SPECIFIC BUSINESS ACTIVITY

Specific Business Activity	Number of Businesses	Percentage
Retail	77	58.77%
Food	40	30.53%
Beauty Services	7	5.34%
Auto Service	5	3.82%
Arts and Crafts	2	1.53%
n=131		

These findings show that the greatest number of necessity entrepreneurs in the sample worked primarily in the commercial category with their primary business activities being retail and food.

Question A3 sought to determine how many founding partners were involved in the business start-up. The results of this question showed that necessity entrepreneurs were individual operators when it came to initiating their enterprise. Of the 134 entrepreneurs, only 3 (2.24%) indicated that they had other founding partners and all three of these had only one partner. More than 97% initiated their business alone.

Question A4 looked at the age of the entrepreneurs along the following four distinct lines: (1) Current age, (2) Age when began thinking about becoming an entrepreneur, (3) Age when started their first business, (4) and Age when started their current business. There were some who had started a business previously so their ages in the 3rd and 4th areas were different. The mean current age of the respondents was 39 years old and ranged from 22 to 72. The mean age of the entrepreneurs when they began thinking about starting a business was 28 years old. The mean age of the entrepreneurs when they started their first business was 29 years old. Table 7 shows the four age

categories by mean, standard deviation, minimum age, and maximum age.

Table 7 - AGE CATEGORIES BY MEAN, STANDARD DEVIATION, &
MINIMUM/MAXIMUM AGE

Age Category	Mean	Standard Deviation	Minimum Age	Maximum Age
1. Current Age	39	10.93	22	72
2. Age when began thinking about starting a business	28	8.58	8	65
3. Age when started first business	29	8.18	8	61
4. Age when started current business	31	8.89	18	65
n=134				

In the current age category the age range that included the highest percentage of entrepreneurs was between 31 and 40 years old with 32.84% of the sample. The percentage of the sample between the age ranges of 21 to 30 and 41 to 50 were very similar with 23.88% and 25.37% respectively. The final 17.91% were between the ages of 51 and 72. Table 8 shows the number and percentage of the entrepreneurs in each current age range.

Table 8 - CURRENT AGE BY NUMBER & PERCENTAGE

Current Age	Number of Entrepreneurs	Percentage
21 – 30	32	23.88%
31 – 40	44	32.84%
41 – 50	34	25.37%
51 – 60	19	14.18%
61 – 72	5	3.73%
n=134		

Nearly 50% of the sample began thinking about starting a business when they were between the ages of 21 and 30 while nearly 30% began thinking about this between the ages of 31 and 40. Only around 15% began thinking about starting a business before they were 20 years old. Those who did not begin thinking about starting a business until they were at least 41 years old or older made up the final 7.46%. Table 9 shows the number and percentage of the sample for the ages of the entrepreneurs when they began thinking about starting a business.

Table 9 - AGE BEGAN THINKING ABOUT STARTING BUSINESS BY NUMBER & PERCENTAGE

Age when began thinking about starting a business	Number of Entrepreneurs	Percentage
6 – 20	20	14.93%
21 – 30	65	48.50%
31 – 40	39	29.11%
41 – 50	6	4.47%
51 – 65	4	2.99%
n=134		

Half of the sample (50%) started their first business when they were between the ages of 21 and 30 with nearly 30% (29.85%) beginning their first business between the ages of 31 and 40. When comparing these numbers with when the entrepreneurs began thinking about starting a business we see that they are nearly identical. This indicates that a great many of the entrepreneurs who began thinking about starting a business between these ages were able to do so during this same time frame. Only half (10 of 20 respondents) of those who began thinking of starting a business between the ages of 6 and 20 were able to do so during this time frame. While 7.46% of the sample did not begin thinking about starting a business until they were at least 41 years old, around 12% did not start their first business until they were at least 41 years old. Table 10 shows the number and percentage of the sample for the ages of the entrepreneurs when they started their first business.

Table 10 - AGE STARTED FIRST BUSINESS BY NUMBER & PERCENTAGE

Age when started first business	Number of Entrepreneurs	Percentage
6 – 20	10	7.46%
21 – 30	67	50.00%
31 – 40	40	29.85%
41 – 50	14	10.45%
51 – 65	3	2.24%

n=134

Answers to question A7 indicated that 80% of the sample had not started a business before the one they currently operated. Since most of the sample had never

started a business before, it would be expected that the statistics for the entrepreneur’s ages when they started their current business would be very similar to the statistics in Table 10 for their ages when they started their first business. This was indeed the case with around half of the sample (49.25%) indicating that they started their current business when they were between the ages of 21 and 30 and 31.35% starting their current business between the ages of 31 and 40. Six percent of the sample started their current business between the ages of 6 and 20 while 13.43% started their current business after the age of 41. Table 11 shows the number and percentage of the sample for the ages of the entrepreneurs when they started their current business.

Table 11 - AGE STARTED CURRENT BUSINESS BY NUMBER & PERCENTAGE

Age when started current business	Number of Entrepreneurs	Percentage
6 – 20	8	5.97%
21 – 30	66	49.25%
31 – 40	42	31.35%
41 – 50	14	10.44%
51 – 65	4	2.99%

n=134

Question A5 identified the entrepreneurs by gender. The sample for this project was 62.41% (83) male and 37.59% (50) female.

When looking at gender along the lines of primary business category, the data revealed that women worked in the commercial, service, and manufacturing/artisan categories. The data revealed that 88% of the women operated in the commercial category, 8% of the women in the service category, and 4% in the manufacturing/artisan category.

For the men, the main category was also commercial with around 85% of all men operating in this category. The men only worked in one other category with 15% operating in the service category. Table 12 shows the percentage of men and women in each primary business category.

Table 12 - PERCENTAGE OF MEN AND WOMEN IN PRIMARY BUSINESS

<u>CATEGORIES</u>					
Gender	n	Manufacturing / Artisan	Service	Commercial	Total
Women	50	4%	8%	88%	100%
Men	83	0	15%	85%	100%

Analyzing the genders in relation to specific job activities showed the women in the sample working in all activities except auto service. The majority of women (68%) focused their business activity in retail while 22% of all women worked in activities related to food. Only 8% worked in beauty related activities and around 2% worked in arts and crafts.

The men in the sample worked in all business activities except arts and crafts. Similar to the women, the majority of the men worked in retail activities, but the percentage was lower than the women at 55% of all men working in retail. Also similar to the women, the next highest business activity for men was food, but in this category the men had a higher percentage than the women at 35% of all men working in this category. Of the remaining men, 6% focused their business activities on auto service, and 4% in beauty.

For both women and men the retail and food categories were the major business

activities pursued by the entrepreneurs in the sample. Table 13 shows the percentage of men and women in each specific business activity.

Table 13 - PERCENTAGE OF MEN AND WOMEN IN SPECIFIC BUSINESS

ACTIVITIES

Gender	n	Retail	Auto Service	Beauty	Food	Arts & Crafts	Total
Women	50	68%	0	8%	22%	2%	100%
Men	80	55%	6%	4%	35%	0	100%

In question A6 the entrepreneurs indicated their general work experience before they began their current enterprise. They indicated if they had worked as an employee either in a job similar or different from their current enterprise or if they had been an entrepreneur before in a similar or different enterprise. A fifth choice allowed the entrepreneurs to indicate if their current enterprise was their first work experience.

A large percentage of the sample (47%) indicated that their current enterprise was their first work experience. Around 41% indicated that they had worked as an employee for someone else in the past and around 17% had begun a business before.

It was somewhat puzzling to find that around half of the sample said that their current business was their first work experience. Since over 50% of the sample was between 31 and 51 years old, it seemed improbable that so many did not have work experience before their attempt at self-employment. Based upon the ages of those in the sample and research that estimates 55% of Brazil's total labor force works in the informal sector (Capp & Jones, 2004), it is likely that most of the sample had worked previous

jobs, but many of these may have been in the informal sector of the market that did not provide benefits or official work contracts.

After looking at the data more closely it was discovered that the majority (95%) of those who said their current business was their first work experience were from Cabo de Santo Agostinho. This indicated that the way the question was asked by the research team member and/or understood by those in Cabo de Santo Agostinho did not solicit the intended responses for this question. A possible explanation for this may be that those in Cabo de Santo Agostinho understood the question to be asking about formal work experiences instead of all work experiences. Whatever the reason, the question may have been misrepresented by the research team member and/or misunderstood by the entrepreneurs in Cabo de Santo Agostinho.

Since the data from Cabo de Santo Agostinho appeared to be suspect, an analysis was performed using only the data from Recife, which revealed findings that appeared to be more realistic. Of the 60 entrepreneurs in Recife, only 5% indicated that their current business was their first work experience. Around 81% indicated they had previously been employees before and 26% of the sample in Recife had previously started a business. Eight entrepreneurs in Recife marked experience in more than one category.

Question A7 asked how many times, other than their current business, they had started a business. Nearly 80% indicated that they had never started a business before. Around 10% had started one business before and around 10% has started 2 or more businesses before. Table 14 shows the number of entrepreneurs and percentages of how many times the entrepreneurs had previously begun an enterprise.

Table 14 - HOW MANY TIMES STARTED A BUSINESS BY NUMBER &
PERCENTAGE

General work experience	Number of Entrepreneurs	Percentage
Never before began a business	106	79.10%
Began 1 business before	14	10.45%
Began 2 businesses before	9	6.72%
Began 3 businesses before	4	2.99%
Began 4+ businesses before	1	.75%
n=134		

In Question A8 the entrepreneurs indicated their education levels. Education in Brazil is compulsory only through the 8th grade. Grades 1 to 4 are called ensino fundamental and grades 5 to 8 are ensino medio.

Of the sample, 5.22% indicated that they had no formal education. When looking at the compulsory school completion levels, the survey found that 25% of the sample had less than a 4th grade education while 24% had only completed the 4th grade (ensino fundamental). The remaining 51% of the sample had completed the 8th grade (ensino medio). Of the sample, only half had at least an eight grade education.

The survey also showed that only around 4% attended a formal vocational education training program and only a little over 4% had some college with two people holding a college degree. As previously referenced, no data was gathered for grades 9 to 12 due to an error during the preparation and copying of the questionnaire for the study. Table 15 shows the compulsory education levels of the sample by number and percentage.

Table 15 - COMPULSARY EDUCATION COMPLETION BY NUMBER AND

PERCENT

Grades	Number Finished	Percent Finished
Less than 4 th grade	33	25%
Completed 4 th grade (Ensino Fundamental)	32	24%
Completed 8 th grade (Ensino Medio)	69	51%

n=134

When considering schooling in relation to gender, the data shows that around 74% of the women entrepreneurs had finished the first four years of elementary school while 77% of the men had finished. At the 5th to 8th grade level the completion rate drops to 42% for women and 57% for men. Table 16 shows the levels of education in relation to gender.

Table 16 - LEVEL OF EDUCATION BY GENDER

Gender	n	Percent with less than 4 th grade	Percent Completed 4 th grade (Ensino Fundamental)	Percent Completed 8 th grade (Ensino Medio)
Female	50	26%	74%	42%
Male	83	23%	77%	57%

The final question in the first section of the survey sought to determine how many of the entrepreneurs had parents that were also involved in entrepreneurial activities. Question A9 asked if either the father or mother of the entrepreneurs had started a

business when they were growing up. The results indicated that 31% of the entrepreneur's fathers had begun a business when they were growing up, but only 5% of their mothers.

In summary, the findings from this first section of the questionnaire revealed that 45% of the businesses had been established for less than 5 years while 30% had been established for between 5 and 10 years. The majority of the businesses (86%) operated a commercial enterprise with around 11% working in the services area. The specific business activities centered primarily on retail sales and the making or selling of foodstuffs. The mean age of the entrepreneurs was 39 years old with the mean age of when they began thinking about starting a business being 28 years old. The majority of both women and men worked in the retail sector, but a higher percentage of women operated in this sector (68% vs. 55%). A higher percentage of men than women worked in the food sector (35% vs. 22%). When looking at the sample from Recife, only 5% indicated that their current business was their first work experience, while over 80% had previously worked as employees. Around 80% of the sample had never before begun a business. Educationally, only 51% completed the 8th grade which meant that around half of the sample did not continue formal schooling past the age of 14. Overall, men had a higher school completion rate than women with 77% of the men completing the 4th grade and 57% completing the 8th grade. This compares to 74% of the women completing the 4th grade and 43% completing the 8th grade.

C. Section 2 – Inception Stage

The first and second questions (B1 and B2) in this section of the questionnaire

rated the reaction of those around the entrepreneur when he or she told them about his or her plan to start a business. The question asked specifically about immediate family, extended family, friends, colleagues, previous employers, and instructors/teachers. If the reaction of the immediate family was negative the entrepreneur was asked on question B2 why that was the case.

The entrepreneurs overwhelmingly chose to rate the reaction of their family above everyone else. Of the sample, around 98% ranked the reaction of their immediate family from neutral to strongly positive, with 82% stating that their immediate family was positive. Two of the entrepreneurs said that their immediate family reacted negatively because they believe that society does not respect entrepreneurial endeavors as highly as other careers.

When considering the extended family of the entrepreneurs, more than 90% said their extended family's reaction was neutral, positive, or strongly positive. The reaction of those outside the immediate family and extended family received little attention from the entrepreneurs. Only around 35% of the entrepreneurs indicated their friend's reactions and around 15% or less ranked the reactions of their colleagues, previous employers, and instructors/teachers. See Table 17 for the percentages of reactions.

Table 17 - REACTION OF FAMILY AND OTHERS TOWARDS
ENTREPRENEURSHIP PLAN

Reactors	Strongly Negative	Negative	Neutral	Positive	Strongly Positive	Not Applicable
Immediate Family	0	1.49%	8.21%	82.09%	8.21%	0
Extended Family	0	0	14.18%	71.64%	6.72%	7.49%
Friends	0	.75%	9.70%	23.99%	1.49%	64.18%
Colleagues	0	0	14.18%	1.49%	0	84.33%
Previous Employers	0	.75%	12.69%	0	0	86.57%
Instructors/ Teachers	0	.75%	12.69%	0	0	86.57%

n=134

The third question (B3) in this section looked at where the entrepreneurs learned the skills, steps, and procedures to start their businesses. Out of the ten categories for this question, only one was indicated by more than 75% of the entrepreneurs. This one was “learning on the job” or “day to day activities” with 77% of the sample choosing it as a focal point for entrepreneurship preparation/training. Four of the categories were not chosen by any of the entrepreneurs in the sample, including NGOs, previous attempts to start a business, religious organizations, and school (k-12).

The ten categories are listed in Table 18 by number and percentage. The respondents could check all categories that applied.

Table 18 - WHERE LEARNED ENTREPRENEURSHIP SKILLS BY NUMBER AND PERCENTAGE

Where did you learn the skills necessary to start your business?	N	Number of Entrepreneurs	Percent
On the job/day to day activity	134	104	77.61%
Family	134	30	22.39%
Public agencies (SENAI, SENAC, etc.)	134	15	11.19%
Friends	134	6	4.48%
Federal government programs	134	3	2.24%
State government programs	134	1	.75%
NGOs	134	0	0
Previous attempts to start a business	134	0	0
Religious organizations	134	0	0
School K-12	134	0	0

Considering the low level of education for the respondents as a whole the finding that no one selected school as a place to learn entrepreneurial skills is not surprising. The finding that no one chose NGOs as a location or entity for entrepreneurship preparation is surprising since the sample is made up of clients in an entrepreneurship program that is provided by an NGO.

One possible reason for this may be that World Vision Brazil was viewed by the respondents as primarily a financing resource instead of an entrepreneurship training

program. While learning opportunities are provided by World Vision Brazil, they are primarily aimed at their current clients. The members of the study sample most likely had not have received any entrepreneurship preparation from World Vision prior to their entering the PROMICRO program. Another possible reason may be that the members of the sample may not have understood that World Vision Brazil was an NGO.

Question B4 asked whether the entrepreneur's primary clients were individuals, other businesses, or both. The results show overwhelmingly that the clients of the necessity entrepreneurs were individuals. The respondents indicated that 90% served only individuals, 3% served primarily companies, and 7% served both. These findings are not surprising when considering that the principal business activity of the necessity entrepreneurs was commercial, and more specifically, retail activity.

Questions B5 and B6 addressed the entrepreneur's impressions of their product/service in relation to the market. Question B5 asked the entrepreneurs to classify their product/service along one of three views. The first was if they viewed their product/service as new to the market. The second was if they viewed their product/service as similar to the market, but somehow differentiated or improved. The third view was that their product/service was similar to existing products/services. The data showed that 96% viewed their products as similar to existing products/services with only 4 individuals who thought their products were similar, but differentiated or improved. Only one individual thought their product/service was new to the market.

Question B6 sought to identify how the entrepreneurs viewed the market as they started their business. They were asked to gage the market for their product/service as increasing, stable, declining, or unknown. The data showed that 70% believed the market

for their product/service was increasing while 27% believed the market was stable. There were no entrepreneurs who believed the market was declining, but 3% (4 individuals) indicated that they did not know what the market condition was like.

Question B7 asked the entrepreneurs to identify sources of information that helped in deciding on the focus of the business. The main source of information identified by the sample was interacting and/or discussions with other people with 77.61% selecting this category. Magazines were selected by 20.15% of the sample as the second most used source. Previous work experiences was selected by 14% of the sample, followed by newspapers (8.96%), other (5.22%), trade fair (4.48%), internet (2.24%), and television/radio (.75%).

Table 19 shows the number and percentage of entrepreneurs who utilized the various sources of information in deciding on the focus for their business. The respondents could check all categories that applied which.

Table 19 - SOURCES USED TO IDENTIFY BUSINESS FOCUS BY NUMBER AND PERCENTAGE

Sources that helped to identify business focus	N	Number of Entrepreneurs	Percent
1. Interacting/discussions with other people	134	104	77.61%
2. Magazine	134	27	20.15%
3. Previous work experience	134	19	14.18%
4. Newspaper	134	12	8.96%
5. Other	134	7	5.22%
6. Trade fair	134	6	4.48%
7. Internet	134	3	2.24%
8. Televison/radio	134	1	.75%

The 77% (104 individuals) who selected interacting/discussions with people was important were asked to answer Questions B8 and B9 in order to determine how many people they consulted and the relationship of those people to the entrepreneurs. The data revealed that 94% of the entrepreneurs interacted with 1 to 3 people and the remaining 6% interacted with 4 to 8 people.

Once the respondents selected how many people were involved in their discussions, they were asked to indicate their primary connection to the most important people who provided help in identifying the business idea. The respondents could select up to three individuals. The majority of the entrepreneurs only singled out one or two important people.

According to the data, 49% of the sample chose a friend and 44% chose a relative

as the first most important person consulted when deciding on a business focus. A friend was also chosen over a relative as the second most important person at 24% to 21% respectively. Around 50% did not select a second most important person. Of the sample, 92% did not choose to select a third person consulted, but for those who did they chose friend (4.9%) over family (1.96%) as well.

Table 20 details the percentages and connections of the most important people for the entrepreneurs in determining their business focus.

Table 20 - CONNECTIONS OF MOST IMPORTANT PEOPLE BY PERCENTAGE

Level of Importance	Friend	Relative	Acquaintance	Colleague	Teacher or Instructor	% Not Selected
1 st most important	49.02%	44.12%	4.90%	.98%	.98%	0
2 nd most important	24.51%	21.57%	3.92%	0	.98%	49.02%
3 rd most important	4.90%	1.96%	.98%	0	0	92.16%

n=102

The final question for this section asked about the year the entrepreneur first had the idea for their current business and how long it took to become operational once the final decision was made to start. The years the entrepreneurs first had their idea ranged from 1953 to 2004. Around 4% of the sample had their idea between 1953 and 1978 while around 10% had their idea between 1980 and 1989. The largest percentage (60%) began their business in the 1990s and the final 25% had their ideas after the year 2000.

The number of months it took for the entrepreneurs to become operational once

the decision was made to start ranged from 0 months (immediately) to 144 months (12 years). The mean length of time it took the entrepreneurs to become operational was 14 months with a standard deviation of 18 months.

Once the entrepreneurs in the sample decided to start their business, the majority (72.09%) became operational within 12 months. Only around 2% were able to become operational between 13 to 18 months, but around 16% became operational between 19 and 24 months after they made their decision to start. It took the final 9% of the sample at least 2 years to become operational.

Table 21 shows the length of time it took to become operational by number of entrepreneurs and percent.

Table 21 - LENGTH OF TIME TO BECOME OPERATIONAL BY NUMBER & PERCENT

Number of Months to Start	Number of Entrepreneurs	Percent
0 – 6	51	39.53%
7 – 12	42	32.56%
13 – 18	3	2.33%
19 – 24	21	16.28%
25 – 30	2	1.55%
31 – 36	3	2.33%
37 +	7	5.44%

n = 129

The finding that over 70% of the sample was able to become operational within the first year after they made their decision to start indicated that this first year is a crucial period in which to reach the entrepreneurs with assistance such as capital, skills training,

and networking opportunities.

Was the number of months it took to become operational related to other variables in the study? In order to determine this, Pearson's correlation coefficient was computed to indicate the relationship between the number of months to become operational and the year the entrepreneurs got the idea, the number of times they started a business, and the age of the entrepreneurs when they started their businesses.

A coefficient of -0.18 was computed between the number of months it took to become operational and the years the entrepreneurs got the idea. This coefficient indicated that there was basically no correlation between the two. The years the entrepreneurs got their ideas were not associated with an increase or decrease in the number of months it took for the entrepreneurs to get started. This finding indicated that the speed of starting a business for necessity entrepreneurs did not substantially change over the span of years represented by the sample.

A correlation coefficient of -0.07 was computed between the number of times the entrepreneurs started a business before and the number of months it took to get started. This coefficient indicated that the number of times the entrepreneurs started a businesses was not associated with an increase or decrease in the number of months it took for the entrepreneurs to get started. Having experience in starting a business before did not affect the speed of starting a business for the entrepreneurs in the sample.

In computing Pearson's correlation coefficient to determine the relationship between the age of the entrepreneur when they started their current business and the number of months it took to become operational it was found that there was also no correlation (.085) between these variables. The age of the entrepreneurs was not

associated with an increase or decrease in the number of months it took for the entrepreneurs to get started. Older entrepreneurs in the sample did not appear to have any advantage over the younger entrepreneurs or vice versa when looking at the speed of starting a business.

D. Section 3 – Business Operation

Section three of the questionnaire looked at issues dealing with financing and operation of the business. Question C1 asked about the entrepreneur's utilization of three general financial sources used to start the business. The three sources of financing were broken down into various categories.

The first source of financing was internal sources, which were broken down into three areas: (1) Personal saving/founding partners, (2) Relative/friends, and (3) Selling personal asset/property. The data showed that nearly 90% of the necessity entrepreneurs utilized personal savings as a source for financing their business. Around 9% utilized finances from relatives or friends and around 6% utilized financing from selling personal property or assets.

External sources were the next category investigated. The external sources were broken down into five areas: (1) Private investors excluding family/friends, (2) Banks, (3) Public institutions, (4) Local government programs, and (5) NGOs. The data shows that bank loans and loans from NGOs were the most utilized external source of financing with each being utilized by around 30% of the sample.

It is interesting to note that only 30% of the sample selected an NGO as a primary resource for start-up financing since the sample was drawn from an NGO program. A

point to remember is that based upon World Vision data, the majority of the PROMICRO loans are made to existing businesses and question C1 specifically asks about start-up financing.

The third source of financing investigated was labeled as “other” sources. In this section the data reveals that around 30% of the sample utilized their suppliers as sources for financing while less than 2% utilized their clients.

Table 22 shows the percentage of utilization by the entrepreneurs in the sample for each of the financing sources.

Table 22 - PERCENTAGE OF UTILIZATION OF FINANCING SOURCES

Financing Sources	Used	Did Not Use
1. Internal Sources of Financing		
Personal saving/founding partners	89.55%	10.45%
Relative/Friends	8.96%	91.04%
Selling personal assets/property	5.97%	94.03%
2. External Sources of Financing		
Private investors not related	0	100%
Banks		
Loans	29.85%	70.15%
Grant	.75%	99.25%
Public institutions (federal/state)		
Loans	.75%	99.25%
Local government	0	100%
NGO		
Loans	29.85%	70.15%
3. Others		
Clients	1.49%	98.51%
Suppliers	29.85%	70.15%
n=134		

If an entrepreneur indicated that they did not use external sources of financing they were asked in question C2 to select reasons for not utilizing these sources. Of the 51 entrepreneurs who did not utilize external financing, around 60% said it was because additional capital was not necessary and nearly 40%, said that it was too risky.

Question C3 asked about the initial capital investment in the business during the first year of operation. The entrepreneurs could select one of three initial investment levels: (1) < US\$500 (R\$1,500), (2) US\$500 – US\$5,000 (R\$1,501 – R\$15,000), and (3)

> US\$5,000 (R\$15,000). The data showed that around 60% of the entrepreneurs had an initial investment of US\$500 or less with around 40% investing between US\$500 and US\$5,000. Table 23 shows the initial investment level of the entrepreneurs by percentage.

Table 23 - INITIAL INVESTMENT BY PERCENTAGE OF ENTERPRISES

Initial Investment	Percentage
1. < US\$500 (R\$1,500)	61.65%
2. US\$500 – US\$5,000 (R\$1,500 – R\$15,000)	38.35%
3. > US\$5,000 (R\$15,000)	0
n=133	

The next question (C4) asked about the amount of business sales and number of employees during the entrepreneur’s first year of operation and during the current year of operation. It became clear as the research team members were gathering this information that the necessity entrepreneurs did not know with any certainty how much money their businesses were making. The entrepreneurs provided guesses of amounts that were well out of line with the region’s income level as well as the estimates provided by World Vision Brazil. The entrepreneurs were unable to realistically estimate their sales either in yearly or monthly amounts.

When looking at the number of additional jobs created by the sample of necessity entrepreneurs, the data revealed that during the first year of operation 7 of the entrepreneurs employed a total of 7 people, besides themselves. When considering the number of additional jobs created during the current year of operation the data showed

that the number multiplied more than 6 times from the start-up year with 23 entrepreneurs (17%) creating 43 additional jobs for people in their community. The specific job activity that employed the most people was the food area with a total of 24 additional people employed.

Question C5 investigated the main problems faced by necessity entrepreneurs in the sample during the first few years of operation. The question also asked if the problems had been solved. The entrepreneurs selected from a list of nine problems which ones they found to be their main problems. They were able to mark all problems that applied.

The problem cited most often was to finance and manage the cash flow of the business, which was selected by 77% of the sample. Of those who selected this as their main problem (101 entrepreneurs), only 44% said they had solved this problem.

The next three most often cited problems were getting clients (24%), managing/operating business (23%), and getting suitable supplies (21%). Of those who selected these as problems, 62% said they solved the problem of getting clients, around 42% had solved the problem of managing/operating their business, and 71% said they solved the problem of getting supplies.

The final five problems were selected by around 10% or less of the sample. They were getting market information (10.69%), finding suitable childcare (9.92%), receiving training (9.16%), obtaining suitable equipment (7.63%) and hiring employees (3.05%).

It is interesting that of those who selected getting market information, receiving training, and hiring employees as problems during their first few years of operation, 100% said they had solved this problem. A high percentage of those who selected getting

suitable supplies (71.42), finding suitable childcare (84.61%), and obtaining suitable equipment (90%) also said they solved these problems.

Table 24 shows the main problems by number and percent as selected by the sample as well as the number and percentage of those who selected each problem who said they solved the problem.

Table 24 - MAIN PROBLEMS BY NUMBER AND PERCENT

Main Problems	Number of Total Sample Said Main Problem (n=131)	Percent of Total Sample Said Main Problem	Number of Those with Problem Who Solved Problem	Percent of Those with Problem Who Solved Problem
1. To finance and manage cash flow	101	77.10%	45	44.55%
2. To get clients	32	24.43%	20	62.50%
3. To manage or operate business (day to day)	31	23.66%	13	41.93%
4. To get suitable supplies	28	21.37%	20	71.42%
5. To get market information	14	10.69%	14	100%
6. To find suitable childcare	13	9.92%	11	84.61%
7. To receive training	12	9.16%	12	100%
8. To obtain suitable equipment	10	7.63%	9	90%
9. To hire employees	4	3.05%	4	100%

Question C6 asked where the entrepreneurs received support for solving their problems chosen in C5. Out of the list of nine choices, 60% cited “none of the above.” The next most often cited was “other” with an example of an NGO written into the question. These “other” organizations were cited by around 20% of the sample as helping to solve their problems. Friends/colleagues were selected by around 10% of the sample and family was selected by around 7%. The remaining choices (public institutions, trade associations/unions, consultants, suppliers/clients, universities) were cited by less than 4% of the sample or by none in the sample.

Table 25 shows where the entrepreneurs in the sample said they received support for solving their problems. The entrepreneurs could indicate more than one answer.

Table 25 - WHERE RECEIVED SUPPORT TO SOLVE PROBLEMS

With what support did you solve your problems	N	Number of Entrepreneurs	Percentage
1. None of the above	130	79	60.77%
2. Other (i.e. NGO)	130	25	19.23%
3. Friends/colleagues	130	14	10.77%
4. Family	130	9	6.92%
5. Public institutions (i.e. SEBRAE)	130	5	3.85%
6. Trade association/unions	130	5	3.85%
7. Suppliers/clients	130	3	2.31%
8. Consultants	130	0	0
9. Universities	130	0	0

Questions C7 asked the entrepreneurs, if given the choice, would they rather work for someone else as an employee or for themselves? A large majority, 87.97% (115 entrepreneurs), stated that they would rather work for themselves, while 12.03% (16 entrepreneurs) stated that they would rather work for someone else.

This question was followed up by question C7A which asked in an open-ended question to give a reason for their choice in C7. Upon reviewing the answers written by the research team members, the reasons for choosing to work for someone else or for oneself were broken down into five general categories: (1) Freedom/family, (2) Better opportunity/pay, (3) Stability, (4) Job satisfaction, (5) and Too old.

Of those who said they would rather work for others, 75% indicated there was better opportunity/pay in working for others and 25% indicated that there was more stability in working for others.

Of those who selected that they would rather be self-employed, around 35% stated that there was better opportunity and pay in self-employment. The reasons of freedom or family and satisfaction were each selected by around 27% of those who would rather work for themselves while around 5% selected both stability or that they were too old to be an employee. Table 26 shows the number and percentage of those who would rather work for others or be self-employed.

Table 26 - REASONS RESPONDENTS GAVE FOR CHOOSING TO WORK FOR

OTHERS OR BE SELF-EMPLOYED

Work situation	n	Freedom or family	Opportunity or Pay	Stability	Satisfaction	Too old
Work for others	16	0	75%	25%	0	0
Work for myself	115	27.83%	35.65%	5.22%	26.96%	4.35%
n=131						

The final question (C8) of this section and of the questionnaire was also an open ended question asking the entrepreneurs about their hopes and dreams for their business. Upon reviewing the answers written by the research team members, the responses were broken down into five general categories: (1) To expand the business, (2) To sustain the business, (3) To provide business for children, (4) To move on as soon as possible, (5) and To work as an employee, but keep the company as a second income.

The hopes and dreams of the largest percentage of the sample fit into the “expand business” category. Around 75% of the sample indicated that they hoped that their business would expand. Many of the respondents said they hoped not only to grow their business, but to open new locations. Answers that specifically mentioned growth or expansion were placed into this category.

Of the sample, around 11% specifically said they sought to sustain their current business. These answers did not overtly express a hope or goal of growth and specifically mentioned sustaining what they had.

Around 8% of the sample said they wanted to work for someone else, but they also expressed hope that they could keep their business in order to provide a second

income.

A small percentage (3.79%) expressed hope that they would move on to a different occupation as soon as possible. This group included a student who hoped to move on when he finished school and an individual who hoped to pass a civil servants exam to try to work for the local government.

Only around 3% fit into the category of providing the business for the children of the entrepreneur. Inclusion in this category required the specific mention of passing the business onto the children.

Table 27 shows the number and percentage of the entrepreneurs who fit into each category.

Table 27 - HOPES AND DREAMS FOR BUSINESS BY NUMBER & PERCENT

Hopes and Dreams	Number of Entrepreneurs	Percentage
1. To expand the business	97	73.48%
2. To sustain the business	15	11.36%
3. To work as employee, but keep business as second income	11	8.33%
4. To move on as soon as possible	5	3.79%
5. To provide business for children	4	3.03%

n=132

E. Research Questions and the Data

By answering the research questions from the data gathered for this study, one is able to begin to describe the learning processes, characteristics, and behaviors of

necessity entrepreneurs in the sample located in the Northeast of Brazil. The following information details the findings in relation to the research questions.

Q1: What were the general demographic characteristics of necessity entrepreneurs in the study sample?

Generally, necessity entrepreneurs in this study were around 60% male and 40% female. In reviewing the World Vision Brazil entrepreneurship program it is noted that women make up around 60% of their program. Considering the nature of the purposeful sample, this finding is not necessarily surprising due to the lack of a randomized sample and the availability of entrepreneurs during the days of gathering the data.

The average age of the necessity entrepreneur in the study sample was 39 years old. A little over 30% of the entrepreneurs were between the ages of 31 – 40, with around 25% between the ages of 20 – 30. Around 25% were between the ages of 41 – 50. The average age of the entrepreneurs when they started their first business was 29 with nearly 50% starting their current business somewhere between the ages of 21 – 30.

At least 75% of the necessity entrepreneurs in this sample finished 4th grade, while around 50% finished the 8th grade. This means that half of the necessity entrepreneurs did not received formal schooling beyond the age of 14. Very few (less than 5% combined) of the necessity entrepreneurs attended vocational or university courses. The necessity entrepreneurs indicated that they learned the skills needed to become entrepreneurs on the job during day to day activities. This finding indicated that informal learning was the primary learning process utilized by necessity entrepreneurs in

the sample.

One-third of the entrepreneurs had grown up in homes where their fathers had also begun a business. The number of entrepreneurs that had witnessed their mothers begin a business was very low at only 5%.

The number of entrepreneurs with prior entrepreneurship experience was fairly low with more than three-quarters having never begun a business before. Only around 10% were making their second attempt at starting a business.

The data from Recife indicated that only 5% of the entrepreneurs in the sample from Recife considered their current business their first work experience while around 81% had previously been employees before and 26% of the sample in Recife had previously started a business. The data for Cabo de Santo Agostinho on this point does not appear to be reliable.

The entrepreneurs in the sample seemed to receive a great deal of support from their families as they began their businesses. Almost 9 out of 10 entrepreneurs stated that the reaction of their family was neutral to strongly positive when told about the plans to begin a business and around 8 out of 10 entrepreneurs stated that the reaction of their family was positive.

When considering the extended family, around 92% said their extended family's reaction was neutral (14.18%), positive (71.64%), or strongly positive (6.72%) with 7% not remarking on their extended family. When considering the remaining people around the entrepreneurs, only around 35% indicated their friend's reactions and around 15% or less ranked the reactions of their colleagues, previous employers, and instructors/teachers.

Q2: What were the general characteristics of the necessity entrepreneur's businesses in the study sample?

Around 40% of the businesses represented in this sample were between 1 and 5 years old with around 70% of the enterprises between 1 and 10 years old. In 20% of the cases the businesses were between 11 and 20 years old. Necessity entrepreneurs were almost exclusively lone operators with less than 1% beginning their business with a founding partner. Once the entrepreneurs decided to begin the business most were able to do so within 6 months and 70% were able to do so within 12 months.

Once the business became operational, around 60% reported less than US\$500 (R\$1,500) of capital to operate during their first year of business. Around 40% reported between US\$500 – US\$5,000 (R\$1,500 – R\$15,000). Around 17% of the businesses had at least one employee.

More than 8 out of 10 enterprises were in the commercial category with around 1 out of 10 in the service category. Nearly 6 in 10 enterprises focused their specific business activity on retail with 3 in 10 focused on the food industry. A very small percentage of businesses provided other goods and services such as auto service and beauty salons.

The enterprises of necessity entrepreneurs are primarily focused to serve individual clients rather than other companies. Approximately 9 in 10 necessity enterprises serve individuals with 1 in 10 serving both other companies and individuals. This finding is not surprising when one considers that 60% of the specific business activity is in retail.

The enterprises of necessity entrepreneurs kept with what was known in the market and did not seek to offer new products or services. Around 95% of the enterprises entered the market with a product or service that the entrepreneurs classified as similar to what already existed. Although most did not enter a market with a new product or service, they thought that the market was favorable. Around 7 in 10 entrepreneurs thought their enterprises were begun in a growing market, while nearly 3 in 10 thought the market was stable.

Q3: How did necessity entrepreneurs in the study sample identify business opportunities?

The entrepreneurs in the sample indicated that most often business opportunities were identified through interactions and discussions with individual people. Around 75% said discussions with others were very important. The most important people were friends and family members, with friends being recognized slightly more often than family. While friends were important in identifying business opportunities, only around 35% indicated their friend's reactions when told about the plans to start a business.

A second resource, which one-fifth of the survey found useful, was through reading magazines. Additional resources that the sample selected as useful were previous work experience, with a 15% response, and newspapers, with a 10% response.

Q4: Where did necessity entrepreneurs in the study sample learn the skills to begin an enterprise?

Necessity entrepreneurs learned the skills they needed primarily through informal learning. Specifically, over 75% of the entrepreneurs said they learned the skills on the job through day to day activities. Just over one-fifth of the entrepreneurs said they learned the skills needed to begin an enterprise from their family.

As noted earlier, not one of the entrepreneurs selected school as a place they learned entrepreneurial skills. This is not necessarily surprising since around a half of the necessity entrepreneurs did not finish the eighth grade.

A small minority (1 in 10) indicated they found public organizations similar to a small business administration, to be helpful.

Q5: Where did necessity entrepreneurs in the study sample obtain the financial resources necessary to start a business?

According to the data, necessity entrepreneurs in the sample obtained financial resources generally from five sources. The most heavily relied upon source was through personal savings. Nine out of ten necessity entrepreneurs in this study used their own money to finance their business start-up to some degree. Another source, utilized by 3 in 10 entrepreneurs, was provided by bank loans. Also utilized by 3 in 10 entrepreneurs, were loans through NGOs. A fourth source of financing came from the suppliers of the businesses and like the bank and NGO loans, this source was also used by 3 in 10

entrepreneurs. Family and friends make up the fifth source of financing and was utilized by 1 in 10 entrepreneurs.

Q6: What were the main problems facing necessity entrepreneurs in the study sample after business start up?

The main problem identified by the vast majority of entrepreneurs was financing and managing cash flow. This problem was selected by three quarters of the necessity entrepreneurs. The second problem, cited by around 1 in 4 entrepreneurs, was getting clients. The third problem, also cited by around 1 in 4, was to operate and manage the day to day business. Getting suitable supplies was cited as the fourth most common problem with around 1 in 5 being challenged by this issue. The fifth, sixth, and seventh most common problems were all cited by around 1 in 10 of the entrepreneurs. These last three were getting market information, finding suitable childcare, and receiving training.

Q7: Given the choice, did necessity entrepreneurs in the study sample rather work for others or be self-employed?

When asked this question directly, 88% stated that they would rather work for themselves, while 12% stated that they would rather work for someone else. When questioned further, those who wanted to work for themselves gave five general responses. The most common response (35.65%) was that there was more opportunity and pay in self-employment. The second response (27.83%) was that there was more freedom when

self-employed and one could spend more time with family. The third choice (26.96%), which was almost equal in responses to the second, was that there was more job satisfaction in working for oneself. The final two responses were both at around 5%. The fourth was there was more stability in self-employment and the fifth was the person was too old to go work for someone else.

Of those who would rather work for others, three-quarters said there was better opportunity and pay and one-quarter believed there was more stability in working as an employee.

Q8: Did necessity entrepreneurs in the study sample seek growth or subsistence?

It appeared that to a strong degree the necessity entrepreneurs in this study sought growth over subsistence. When asked about the hopes and dreams of the entrepreneurs, around three quarters specifically said they wanted to expand and grow their business. Around 1 in 10 stated that they hoped only to sustain their business.

The desire for growth was also judged as a function of business growth. Although the specific numeric data was unattainable for sales growth the data did reveal growth in the job creation area. The number of jobs created increased 6 times from the start-up year with 23 entrepreneurs employing a total of 43 people.

F. Comparison From Prior Research

When considering the description of necessity entrepreneurs in Northeast Brazil obtained from this study, it is useful to compare the information to descriptions of other entrepreneurs in prior research. A side-by-side comparison of the various characteristics and processes of other Latin American entrepreneurs and their enterprises assisted in determining similarities and differences.

Tables 28 shows comparisons of necessity entrepreneurs and their enterprises with other Latin American entrepreneurs and enterprises found in prior research. A cautionary note is that these other studies used different methodologies and sample sizes. Although in some aspects there were similarities in each of the studies, due to their different methodologies and sample sizes the comparisons made should be taken with caution.

Table 28 – A SUMMARY OF CURRENT STUDY AS COMPARED TO PRIOR RESEARCH IN LATIN AMERICA

Characteristics	Necessity Entrepreneurs (Duggins, 2004)	Dynamic / Opportunity Entrepreneurs (Kantis et al., 2002)	Self-Employed Poor in Latin America (Eversole, 2003); Qualitative Study	Women Entrepreneurs in Latin America (Weeks & Seiler, 2001)	Entrepreneurs in Central Mexico (Young & Welsch, 1993)
Entrepreneurial Motivation	Necessity	Opportunity / Personal Satisfaction	Primarily Necessity and Supplemental Income		Financial; Personal Achievement
Gender	60% Male 40% Female	90% Male 10% Female		Women Only In Study	60% Male 40% Female
Average Age	39	42		44 in Argentina & Mexico); < 40 in Brazil	36
Education Level	75% Grades 1-4; 50% Grades 4-8	75% Some University; 60% Professional Degree		Majority Finished High School	Average w/High School Diploma
Where Learned Skills to Start Business	Primarily On The Job After Business Start-up	Previous Work Experience			
Parental Entrepreneurship	33% of Fathers 5% of Mothers	50% of Fathers			86% of Fathers 33% of Mothers
Support Structures	Very High Family Support	Family and Friends			Very High Family Support Especially Mother
Entrepreneurial Background	20% Started Business Before	40% Started Business Before			

Characteristics	Necessity Entrepreneurs (Duggins, 2004)	Dynamic / Opportunity Entrepreneurs (Kantis et al., 2002)	Self-Employed Poor in Latin America (Eversole, 2003); Qualitative Study	Women Entrepreneurs in Latin America (Weeks & Seiler, 2001)	Entrepreneurs in Central Mexico (Young & Welsch, 1993)
Founding/Business Partners	99% Without Partners	Primarily Founding Teams(except Mexico)	Primarily Without Partners		Family Operations
Method of Start-up Financing	90% Personal Savings; 30% Loans; 30% NGOs; 30% Suppliers	90% Personal Savings; 50% Suppliers; 30% Loans From Family & Friends	Personal Savings; Microloans Via NGOs	Majority Personal Saving, Family; Bank Credit used by 23% Argentina; 14% Mexico; 10% Brazil	
Amount of Start-up Capital	< US\$500	< US\$100,000	< US\$5,000 with many < US\$100		
Length Of Time For Start-up	14 Month Average	6 – 12 Months			
Type of Business	80% Commercial/Retail	Manufacturing; Knowledge Based (IT)	Manufacturing, Service, Commercial	Service & Retail	
Income/Sales	Not Certain	US\$500,000		< US\$50,000	
Number of Employees	3 Average	15 +			11 Full-time 3 Part-time
Problems / Challenges	Financing; Getting Clients; Day to Day Operation	Getting Clients; Maintaining Cash Flow; Hiring Workers	Scarce Resources; Individual & Household Constraints; Import Competition	Access to Capital; Technology	Financing; Business Environment
Sources of Assistance	20% NGOs	Business & Professional Networks	NGOs, Trade Groups, Guilds		Family; Customers; Suppliers; Professional Associations

The side-by-side comparison showed that there were both similarities and differences between the necessity entrepreneur as describe by this study and other entrepreneurs in Latin America. One of the first similarities recognized was that the average age of entrepreneurs throughout Latin America was relatively close. The average age showed most entrepreneurs in their late 30s or early 40s.

Another similarity was along the lines of entrepreneurial influence from the parents. In the studies that included an investigation into the parents of the entrepreneurs, it was found that at least one third of the entrepreneurs had witnessed their father or mother start a business. The studies also indicated that Latin American entrepreneurs relied on or received a great deal of support from their families.

Latin American entrepreneurs also behaved in similar ways when it came to the financial side of their operation. The similarities were not based upon the amount of money, but rather the source of the funds. The overwhelming majority of all entrepreneurs in Latin America used personal saving to finance their business start-up. A limited amount accessed loans from all potential sources, including NGOs, for their financing.

In addition to the similarities of the source of capital, the comparison revealed similarities in the continuing difficulty of accessing capital for all Latin American entrepreneurs during their business operations. It was also recognized that no matter the motivation for starting their businesses, the majority of Latin American entrepreneurs sought to grow and expand rather than be content with subsistence.

An interesting similarity between the necessity and dynamic/opportunity entrepreneurs was where each group learned the skills to be an entrepreneur. While it is

true that there were major differences in the formal education level of the two types of entrepreneurs, both types indicated that they learned the skills to become an entrepreneur through informal means. Necessity entrepreneurs learned the skills on the job once they began their business and dynamic/opportunity entrepreneurs also learned the skills on the job, but primarily through their previous work situations.

As noted, the level of formal schooling was a major difference between necessity entrepreneurs and the others noted in prior research. This finding is not unexpected considering the level of poverty of most necessity entrepreneurs.

Another interesting difference is the entrepreneurship studies that looked specifically at the poor found that they primarily started and operated their businesses alone. The dynamic/opportunity entrepreneurs, who were not in poverty tended to begin their ventures as partnerships.

Necessity and dynamic/opportunity entrepreneurs also differed when it came to the types of businesses they operated. The necessity entrepreneurs primarily operated commercial (retail) and service businesses, while the dynamic/opportunity entrepreneurs focused on manufacturing and information technology.

When seeking assistance to solve the problems encountered such as financing or managing the business, necessity entrepreneurs seemed to struggle through for the most part on their own and occasionally received help from NGOs. Other types of entrepreneurs in Latin America, especially dynamic/opportunity entrepreneurs, accessed business and professional networks or trade groups when seeking assistance.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

As entrepreneurship continues to be pursued as one of the avenues to help alleviate poverty in developing countries, research needs to be conducted to further investigate the entrepreneurs and the entrepreneurial process of those in poverty. As has been noted in this study, the majority of entrepreneurship research has been conducted in developed countries such as the United States and Western Europe where the incidence of necessity entrepreneurship and poverty is much lower. It has also been noted that entrepreneurship research with the poor around the world, including the Latin American region, is in its embryonic state. While a great deal has been written about the entrepreneurs who would be classified as opportunity entrepreneurs, less has been written about necessity entrepreneurs. The problem, as recognized by this study, is that the processes and policies used by those seeking to assist necessity entrepreneurs may be based upon the characteristics of opportunity motivated entrepreneurs.

In response to the problem, this study was conducted to help identify and describe the learning processes, characteristics, and behaviors of the necessity entrepreneurs in the sample. The following conclusions and recommendations were drawn from the data and the comparison with prior research.

A. Conclusions From Data

The first conclusion, based upon the data, is that most necessity entrepreneurs in the sample did not begin thinking about entrepreneurship or self-employment as an occupational option until well into adulthood. Around 85% of the sample reported that they did not begin thinking about starting a business until after age 21. When considering that 93% reported they started their first business after age 21 and 75% were beginning a business for the first, it appears that most entrepreneurs in the sample did not look to entrepreneurship until they were into adulthood.

The second conclusion from the data is that overall, the necessity entrepreneurs in the sample had very low education levels (50% < 8th grade) which likely contributed to struggles with basic business operation skills. This was evidenced in that the necessity entrepreneurs were unable to realistically account for how much money they made on a monthly or yearly basis. The inability to account for their money may point to a lack of basic numeracy skills required to perform basic business operations such as bookkeeping.

The third conclusion from the data is that the necessity entrepreneurs in the sample were primarily adult learners and relied upon informal learning processes to gain the skills necessary to start their businesses. This conclusion is supported by the finding that an overwhelming majority (75%) of the necessity entrepreneurs learned the skills to start and operate a business while on the job through day to day activities. The data concerning the entrepreneur's ages revealed that, at the time of business start-up, most necessity entrepreneurs in the sample were adult learners.

The fourth conclusion drawn from the data is that necessity entrepreneurs in the sample received strong support from their immediate and extended families. This support

was primarily non-financial. This conclusion is supported by the data that indicated that around 80% of both the immediate and extended family's reactions to starting a business were reported by the necessity entrepreneurs to be positive to strongly positive. Less than 10% of the sample reported they received financing from family when beginning their businesses.

The fifth conclusion from the data is that the first 12 months after an entrepreneur decides to begin his/her business is a crucial timeframe to offer support and/or training to the entrepreneur. This is supported by the data that showed that over 70% of the sample was able to become operational within one year after they made the decision to start.

The final conclusion is that the necessity entrepreneurs in the sample have a desire for self-employment and a mindset for growth and success, but are challenged by low education levels and issues with finances both during and after start-up that may hinder or limit success. The data revealed that most necessity entrepreneurs wanted to remain self-employed and sought to grow and expand their businesses, but their low education levels limit their ability to grow and expand due to a lack of basic business skills such as bookkeeping and long-term planning.

While around 90% of the sample utilized personal funds to help finance their business start-up, only 30% utilized external sources outside themselves or their families. The limited use of external financing sources (banks, investors, NGOs, etc.) indicated a lack of availability or other constraints, such as high interest rates, on accessing the different financing options. The data revealed that 40% of those who did not access external financial sources did not do so because they believed the risk was too high.

B. Conclusions From a Comparison with Prior Research

It should be remembered that the comparison of the findings of the current study with the prior entrepreneurship research from Latin American compares studies that utilized different methodologies and sample sizes. Although in some aspects there were similarities in each of the studies, due to their different methodologies and sample sizes the comparisons made should be taken with caution.

The first conclusion based upon the comparison with prior research is that similar entrepreneurship training methodology might be utilized with both necessity and opportunity entrepreneurs. This conclusion is based upon the findings that both types of entrepreneurs selected informal learning situations as their primary location for learning the skills necessary to start a business. While specific content and aspects of training would be different based on business size, functions, education level, etc. the methodology utilized for both types of entrepreneurs should take into account the reliance of the entrepreneurs upon informal learning processes.

This conclusion directly speaks to the problem presented in this study which was that the processes and policies devised by those seeking to assist necessity entrepreneurs may be based upon the characteristics of opportunity motivated entrepreneurs. The findings of the data and the prior research indicated that this would not necessarily be negative, as long as the characteristic of opportunity entrepreneurs that was considered was that of informal learning. Whereas Reynolds et al. (2002) raised the possibility that organizations seeking to serve necessity entrepreneurs may need to develop a different set of processes and policies, this current study suggests that both necessity and opportunity oriented programs may need to develop new processes and policies based upon the

informal learning processes utilized by necessity and opportunity entrepreneurs.

The second conclusion based upon the comparison with prior research is that the family is one of the most important structures for support for entrepreneurs throughout Latin America. The data from this study on necessity entrepreneurs pointed to family as an important support structure and prior research indicated this is true of entrepreneurs throughout the region. Both the study by Kantis et al. (2002), which involved entrepreneurs from Argentina, Brazil, Costa Rica, Mexico, and Peru and the study by Young and Welsch (1993), which focused on central Mexico, indicated that family was very important for support.

The third conclusion based upon a comparison of prior research is that in general, the financing problems facing entrepreneurs throughout Latin America are similar no matter the motivation for becoming an entrepreneur or the industry focus of the enterprises. Each of the comparative studies from Latin America cited cashflow and financing problems at the top of the list of problems.

C. Recommendations for Practice

The first recommendation for practice is to increase the basic skill level of the potential entrepreneurs by increasing their education levels when they are young. The finding that only around 50% of the necessity entrepreneurs in the sample finished the 8th grade exemplified the problem of a lack of basic education. One of the first steps in assuring a basic level of skills is to keep people in school for as long as possible. Governments, NGOs, communities, families, and others in society must strive to find

ways and develop policies to keep children in school.

A program that is currently being implemented in Brazil is an example of such a policy. This program, called Bolsa Familia, among other things, provides federal financial assistance to families who keep their children in school. By providing the financial assistance there is less pressure on the children to drop out of school in order to help support the family. The long term effect of keeping children in school, while having a positive effect on entrepreneurship, has positive effects throughout all of society.

In addition to programs such as the Bolsa Familia, banks and NGOs might incorporate incentives within their loan programs for their clients who keep their children in school. These incentives might include adjusted interest rates or more flexible terms such as extended repayment schedules.

The second recommendation is to increase the education and skill level of the current necessity entrepreneurs in entrepreneurship programs such as the PROMICRO program. In addition to the data that revealed that only around half of the sample finished the 8th grade, World Vision Brazil estimated that only around 20% of the PROMICRO loan clients participated in the voluntary training programs they offered. An increase in education and skill levels could come through a variety of ways. One would be to require participants of the microloan part of the program to participate in certain targeted education or training programs in order to qualify for the loans. Another way would be to structure the training courses in a meaningful and practical way for the participants, which will be discussed further in the following recommendation.

The third recommendation is for organizations that design and administer entrepreneurship training programs for necessity entrepreneurs to do so with informal

learning processes and adult education methodology as starting points. The training programs that currently exist, such as the courses offered in the PROMICRO program, should also be evaluated along these same lines. This recommendation stems from the conclusion that the necessity entrepreneurs in the sample learned their skills for beginning a business informally and they were primarily adult learners. Entrepreneurship programs that have been developed for formal settings may not be the most effective, not only due to the informal learning processes utilized by necessity entrepreneurs when preparing for entrepreneurship, but also because around half of the sample spent a relatively short number of years in formal education (lower elementary level) and might not have the schema or experience of learning in a formal environment.

Singh (2000) says that informal learning lacks structure, an underlying curriculum, and a particular time set aside for learning. Cairns (2000) characterizes informal learning as learning that fulfills people's own purpose and takes place in forms that are chosen by the learner. Livingstone (2001) calls informal education and training a lifelong process whereby individuals acquire attitudes, values, skills, and knowledge from daily experience such as performing regular tasks at work or through observation.

Knowles, Holton, and Swanson (1998) characterize adult learners based upon the following generally accepted assumptions. The first is that adults have a fundamental need to know why they are engaging in a learning activity before they commit time and effort into the process, whether it is formal or informal. The second assumption is that adults are characterized as self-directed learners who are capable of guiding their own educational process. A third assumption is that adult learning is facilitated and encouraged when the experiences and backgrounds of adults are incorporated into the

learning process. The fourth assumption is that adults tend to be most ready to learn when their life situations create a need to know. The fifth assumption is that adults generally prefer a problem solving orientation to learning and learn best when new information is presented in a real-life context.

Based upon informal and adult learning principals, it is recommended that designers of training programs for necessity entrepreneurs, including PROMICRO, seek ways to incorporate the training into the workday or experiences of the entrepreneurs to make learning practical. As program developers observe the entrepreneurs in their daily routine, the program developers should, along with the entrepreneurs, determine the most important or relevant areas for training based upon the needs or situations of the entrepreneurs. Flexible mini lessons might be developed that could be brought into the businesses that would help teach business processes while utilizing the actual data, products, information, or situations the entrepreneurs deal with on a daily basis.

The fourth recommendation for practice stems from the conclusion that the family plays a very important supportive role in the lives of the entrepreneurs in the sample as well as the lives of the other Latin American entrepreneurs in the prior research. It is recommended that entrepreneurship training programs in Latin America seek ways to reach out to the family and include aspects of family support in the training programs. One of the training topics currently offered by World Vision Brazil deals with company and family relations, but it is recommended that an effort be made to provide guidance to the family members as well as their self-employed relative.

An example of this type of training would be time management training, not only for the entrepreneur, but also for the family as a whole. Training such as this would allow

the family to understand the types of time constraints that self employment imposes on individuals and families and formulate strategies to constructively deal with any potential problems. Other family training might include the use of household budgets in order to assure that money needed for essentials such as food, clothing, and school tuition for the children, is not funneled into the business.

The fifth recommendation for practice is to assign necessity entrepreneurs a local mentor who would offer support and advice to the entrepreneur. This recommendation stems from the data that reveals that the necessity entrepreneurs in the study relied on interactions and discussions with friends and family when making important decisions such as the focus of the business. This indicated a tendency to turn to personally and socially intimate individuals for important advice. In addition to turning to personally and socially intimate individuals, the prior research indicated that other Latin American entrepreneurs turned to perceived experts or those with experience such as trade groups, guilds, and professional organizations for support. In the case of necessity entrepreneurs, a mentor could provide not only a friend to turn to when seeking advice, but also a person who has specific and successful experience in entrepreneurship.

The mentor should be a successful entrepreneur from a similar background who could become a friend and informal teacher for the client. The nature of the mentor relationship would provide an informal learning environment in which the entrepreneur might acquire attitudes, values, skills, and knowledge from the experiences of the mentor. The mentor could share with the entrepreneur specific real-world examples, situations, mistakes, and successes. The human capital investment that was originally made with the mentor when they were starting their business could be reinvested by the mentor into the

lives of the other entrepreneurs.

The sixth recommendation for practice is to target the timeframe of the initial months following the entrepreneur's decision to start a business as crucial for training and assistance. Since 70% of the necessity entrepreneurs in the sample became operational within one year after they decided to start their business, it would be advantageous during this timeframe to provide the training and support that will promote a successful start to their operations. This timeframe would be a good time for the mentoring relationship to be established. An area for assessment and potential training during this period is to be sure an entrepreneur has the knowledge and ability to perform basic bookkeeping so that they will be able to keep track of their money and manage their cashflow.

A seventh recommendation for practice is to increase the availability of capital while decreasing the risk involved in obtaining the capital. The data revealed that 90% of the necessity entrepreneurs in the sample relied on personal savings and research from Specht (1997) indicates that in microenterprises there is a conscious mixing of household and enterprise monies in order to make it possible to cover the running financial obligations. The availability of additional and less risky avenues for financing may reduce the dependence on personal savings or household income which will leave more of the household income available for the purchase of domestic and essential goods such as food, clothing, shelter, and education.

Much of the action for this recommendation comes from the macro-economic policies of a country or the lending policies of banks and other organizations and is difficult for individuals to change. What can be done on an individual or organizational

level is to support economic policies that are friendly to micro and small businesses. These policies include low interest rates, lower and/or fewer taxes, more flexible lending practices, and a focus on reaching smaller clients (IADB, 1998; OECD, 1999).

D. Recommendations for Research

The first recommendation for research is to follow up this study of necessity entrepreneurs with one utilizing a randomized sample, which would facilitate drawing statistically sound inferences to the broader population. Additionally it would be helpful to expand this study with other groups of necessity entrepreneurs in World Vision's worldwide system to assist in determining differences or similarities of necessity entrepreneurs in different cultural or regional contexts.

The second recommendation for research stems from the lack of ability of the necessity entrepreneurs to realistically account for their income. It is very important for businesses that hope to grow to be able to keep track of their income as well as plan and invest for the future. I recommend that detailed research into the money handling practices of necessity entrepreneurs be undertaken to not only help to ascertain valid income levels, but to help in identifying reinvestment practices as well as which types of business make the most money for necessity entrepreneurs. Detailed information in this area should also assist in developing targeted numeracy and bookkeeping training.

A third recommendation for research is to look into why an estimated 20% of the PROMICRO clients participate in the training side of the program, when the data indicates a lack of basic business skills as well as low levels of basic education with a great many of the entrepreneurs. Are the courses too theoretical and removed from

everyday activities or are they offered at bad times? An investigation into the reasons for the lack of participation should provide the PROMICRO program information to begin to better design the training side of their program.

The fourth recommendation for research stems from the conclusion that most necessity entrepreneurs in the sample did not consider entrepreneurship or self-employment as an occupational option until well into adulthood. Were the necessity entrepreneurs not exposed to the concept of entrepreneurship at an earlier age or were there negative connotations associated with self-employment? Research to determine the view of entrepreneurship by potential necessity entrepreneurs and others may assist in determining strategies for educating people about the possibility of self-employment at various ages.

E. Concluding Comments

This study has helped to better describe the learning processes, characteristics, and behaviors of necessity entrepreneurs in Northeast Brazil. This research provided a beginning point for investigating whether or not the processes and policies devised by those seeking to assist necessity entrepreneurs may be based upon the characteristics of opportunity motivated entrepreneurs. The study also provided World Vision Brazil with a better picture and more information on their clients and may lead to improvements in the World Vision Brazil PROMICRO entrepreneurship program.

Based upon the data and from comparisons with prior research it appears that necessity and opportunity entrepreneurs have many characteristics in common but some important differences as well. The programs and policies that stem from the similar

characteristics could be useful for both types of entrepreneurs from a broad approach standpoint. These programs and policies for each group may differ more in level or depth than in approach. For example, when considering education and training approaches for both groups, informal learning processes can be used, but the material must be tailored to the educational level of the target audiences. When considering the access to capital, similar approaches to making capital available could be applied, but the major difference would be in the amount of capital required for each type of entrepreneur.

If programs and policies were devised based upon characteristics of opportunity entrepreneurs that have shown to be quite different from necessity entrepreneurs, these would be likely programs and policies in need of adjustment. For example, the majority of opportunity/dynamic entrepreneurs were found to be operating in the manufacturing or information technology sectors while the majority of the necessity entrepreneurs operated commercial retail businesses. If training programs that have been developed primarily to target the knowledge, skills, and duties required by a manufacturer or an information technology operator are brought into the realm of necessity entrepreneurs, it may be found that the information is not on target for operating a commercial retail enterprise. In this case the specific knowledge, skills, and duties for commercial retail businesses would have to be assessed in order to properly target the audience of necessity entrepreneurs.

As entrepreneurship is continued to be used as a tool for poverty alleviation it is important that the programs and policies are developed based upon the actual characteristic of those entrepreneurs. The characteristics of necessity entrepreneurs described in this study provide a beginning point for developing programs and processes to meet the needs of necessity entrepreneurs for the Northeast region of Brazil.

BIBLIOGRAPHY

- Adrangi, B., Allender, M., & Anderson, R. (2003). An empirical analysis of the relationship between employment growth and entrepreneurial activity. *Academy of Entrepreneurship Journal*, 9(1), 21-30.
- Ahwireng-Obeng, F. (1993). Gender, entrepreneurship and socioeconomic reparation in South Africa. *Review of Black Political Economy*, 22(2), 151-165.
- Anderson, A., & Miller, C. (2002). Class matters: Human and social capital in the entrepreneurial process. *Journal of Socio-Economics*, (32), 17-36.
- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, (18), 105-123.
- Audretsch, D., & Fritsch, M. (2003). Linking entrepreneurship to growth: The case of West Germany. *Industry and Innovation*, 10(1), 65-73.
- Barham, V., Boadway, R., Marchand, M., & Pestieu, P. (1995). Education and the poverty trap. *European Economic Review*, (39), 1257-1275.
- Bateman, M., & Randlesome, C. (1997). *Business cultures in central and eastern Europe*. Oxford: Butterworth-Heinemann.
- Becker, G. (1993). *Human capital*. Chicago: University of Chicago Press.
- Bender, A., Meli, J., Turnbull, L., Payne, W., & Russell, C. (1990). Entrepreneurship education and microbusiness development as part of a program of community revitalization. *Economic Development Review*, Winter, 38-41.

- Benhabib, J., & Spiegel, M. (1994). The role of human capital in economic development: Evidence from aggregate cross-country data. *Journal of Monetary Economics*, (34), 143-173.
- Birdsall, N., & Londono, J. L. (1997). Asset inequality matters. *American Economic Review*, (87), 32-37.
- Brouwer, M., 12, 83-105. (2002). Weber, Schumpeter and Knight on entrepreneurship and economic development. *Journal of Evolutionary Economics*, 12, 83-105.
- Buck, B. (2000). *Introductory paper. In report: Entrepreneurship in education and training*. Torino, Italy: European Training Foundation.
- Cairns, T. (2000). For the sake of informality. *Adults Learning*, 12(3), 16-18.
- Capp, J., & Jones, W. B. (2004). Reining in Brazil's informal economy. *The McKinsey Quarterly*, 2005(1), 9-11.
- Charney, A., & Libecap, G. (1999). *Impact of entrepreneurship education. Insights: A Kauffman research series*. Kansas City: Ewing Marion Kauffman Foundation.
- Chrisman, J., Chua, J., & Steier, L. (2002). The influence of national culture and family involvement on entrepreneurial perceptions and performance at the state level. *Entrepreneurship Theory and Practice*, Summer 2002, 113-130.
- Cook, S., & Binford, L. (1990). *Obliging need: Rural petty industry in Mexican capitalism*. Austin: University of Texas Press.
- Cuevas, J. (1994). Towards a taxonomy of entrepreneurial theories. *International Small Business Journal*, 12(4), 77-88.
- David, I. P. (2002). *On comparability of poverty statistics from different sources and disaggregation levels*. New York: United Nations - ESCAP.

- De Janvry, A., & Sandoulet, E. (2000). Growth, poverty and inequality in Latin America: A causal analysis, 1970-94. *Review of Income and Wealth*, (46), 267-287.
- Deamer, I., & Earle, L. (2004). Searching for entrepreneurship. *Industrial and Commercial Training*, 36(3), 99-103.
- Edwards, M., Hulme, D., & Wallace, T. (1999). NGOs in a global future: Marrying local delivery to worldwide leverage. *Public Administration and Development*, 19, 117-136.
- Eversole, R. (2003). My business pays me: Labourers and entrepreneurs among the self-employed poor in Latin America. *Bulletin of Latin American Research*, (22), 102-116.
- Ferreira, F. (1999). *Inequality and economic performance*. Washington D.C.: The World Bank.
- Fletcher, M. (1999). Promoting entrepreneurship as a career option - the graduate enterprise programme. *Journal of European Industrial Training*, 23(10), 127-140.
- Garavan, T., & O'Cinneide, B. (1994a). Entrepreneurship education and training programs: A review of and evaluation - part 1. *Journal of European Industrial Training*, 8(8), 3-12.
- Garavan, T., & O'Cinneide, B. (1994b). Entrepreneurship education and training programs: A review of and evaluation - part 2. *Journal of European Industrial Training*, 8(11), 13-21.
- Gay, L., & Airasian, P. (2000). *Educational research*. Upper Saddle River, NJ: Merrill.
- Gibb, A. (2000). *What has been discussed, what has been achieved, and what is missing? In report: Entrepreneurship in education and training*. Torino, Italy: European

Training Foundation.

- Gimeno, J., Folta, T., Cooper, A., & Woo, C. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly*, 42, 750-783.
- Haveman, R., & Berchadker, A. (2001). The 'inability to be self-reliant' as an indicator of poverty: Trends for the U.S., 1975 - 97. *Review of Income and Wealth*, 47(3), 335-360.
- Hayton, J., George, G., & Shaker, A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory and Practice*, Summer, 2002, 33-52.
- Hebert, R., & Link, A. (1989). In search of the meaning of entrepreneurship. *Small Business Economics*, 1, 39-49.
- Hindle, K., & Yencken, J. (2004). Public research commercialisation, entrepreneurship and new technology based firms: An integrated model. *Technovation*, 24(10), 793-804.
- Hofstede, G. (1980). *Culture's consequences: International differences in work related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (2004). Geert hofstede homepage. Retrieved October 23, 2004, from <http://feweb.uvtg.nl/center/hofstede/index.htm>.
- IADB. (1998). *The path out of poverty*. Washington D.C.: The Inter-American Development Bank.
- IBGE. (2004). Instituto Brasileiro de Geografia e Estatística. Retrieved from www.ibge.com.br.

- ITIM. (2004). Geert Hofstede cultural dimensions. Retrieved from http://www.geert-hofstede.com/hofstede_brazil.shtml.
- Iyigun, M., & Owen, A. (1997). Risk, entrepreneurship, and human capital accumulation. *The American Economic Review*, 88(2), 454-457.
- Kantis, H., Ishida, M., & Komori, M. (2002). *Entrepreneurship in emerging economies: The creation and development of new firms in Latin America and east Asia*. Washington D.C.: Inter-American Development Bank.
- Khan, S. (2000). Gram Bangla model for poverty alleviation and self-reliance. *International Journal of Social Economics*, 27(7), 878-892.
- Kiggundu, M. (2002). Entrepreneurs and entrepreneurship in Africa: What is known and what needs to be done. *Journal of developmental entrepreneurship*, 7(3), 239-258.
- Knowles, M., Holton, E., & Swanson, R. (1998). *The adult learner* (5th ed.). Woburn, MA: Butterworth-Heinemann.
- Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, Fall, 411-432.
- Lee, S., & Peterson, S. (2000). Culture, entrepreneurial orientation, and global competitiveness. *Journal of world business*, 35(4), 402-416.
- Little, A. (2003). Motivating learning and the development of human capital. *Compare*, 33, 461-479.
- Livingstone, D. W. (2001). *Adults' informal learning: Definitions, findings, gaps, and future research*. Toronto: Ontario Institute for Studies in Education.
- Makoba, J. (2002). Nongovernmental organizations (NGOs) and third world development: An alternative approach to development. *Journal of Third World*

Studies, Spring, 53-63.

- Matlay, H. (2001). Entrepreneurial and vocational education and training in central and eastern Europe. *Education + Training*, 42(8/9), 395-404.
- Mead, D., & Liedholm, C. (1998). The dynamics of micro and small enterprises in developing countries. *World Development*, 26(1), 61-74.
- Meyer, C. (1995). Opportunism and NGOs: Entrepreneurship and green north-south transfers. *World Development*, 23(8), 1277-1289.
- Mitchell, R., Smith, J., Morse, E., Seawright, K., Peredo, A., & McKenzie, B. (2002). Are entrepreneurial cognitions universal? Assessing entrepreneurial cognitions across cultures. *Entrepreneurship Theory and Practice, Summer 2002*, 9-32.
- Mueller, S., & Goic, S. (2002). Entrepreneurial potential in transition economies: A view from tomorrow's leaders. *Journal of Developmental Entrepreneurship*, 17, 226-235.
- Mueller, S., & Thomas, A. (2000). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16, 51-75.
- OECD. (1999). *Stimulating private enterprise in transition economies. OECD observer policy brief*. Washington D.C.: Organization for Economic Co-operation and Development.
- OECD. (2001a). *Entrepreneurship, growth, and policy*. Paris: Organization for Economic Co-operation and Development.
- OECD. (2001b). *The well-being of nations: The role of human and social capital, executive summary*. Paris: Organization for Economic Co-operation and

Development.

- Orlando, M., & Pollack, M. (2000). *Microenterprises and poverty: Evidence from Latin America*. Washington D.C.: Inter-American Development Bank.
- Pereira, A. (1999). God, the devil, and development in northeast Brazil. *Praxis: The Fletcher Journal of Development Studies*, 15, 1-18.
- Piazza-Georgi, B. (2002). The role of human and social capital in growth: Extending our understanding. *Cambridge Journal of Economics*, (26), 461-479.
- Pieck, E. (1999). *Work-related adult education: Challenges and possibilities in poverty areas. Poverty alleviation, work, and adult learning an UIE working paper*. Paris: UNESCO.
- Porter, M. (1990). *The competitive advantage of nations*. New York: Free Press.
- Reynolds, P., Bygrave, W., Autio, E., & Cox, L. (2003). *Global entrepreneurship monitor 2003*. Kansas City: Ewing Marion Kauffman Foundation.
- Reynolds, P., Bygrave, W., Autio, E., Cox, L., & Hay, M. (2002). *Global entrepreneurship monitor 2002*. Kansas City: Ewing Marion Kauffman Foundation.
- Reynolds, P., Hay, M., & Camp, S. M. (1999). *Global entrepreneurship monitor, 1999 executive report*. Kansas City: Ewing Marion Kauffman Foundation.
- Ripas, S. (1998). Towards an interdisciplinary theory of entrepreneurship. *Small Business Economics*, 10, 103-115.
- Robichaud, Y., McGraw, E., & Roger, A. (2001). Toward the development of a measuring instrument for entrepreneurial motivation. *Journal of developmental entrepreneurship*, 6(2), 189-203.

- Santarelli, E., & Pesciarelli, E. (1990). The emergence of a vision: The development of Schumpeter's theory of entrepreneurship. *History of Political Economy*, 22(4), 677-696.
- Scheinberg, S., & MacMillan, I. C. (1988). *An 11 country study of motivations to start a business, in book "Frontiers of Entrepreneurship Research"*. Wellesley, MA: Babson College.
- Schultz, T. W. (1971). *Investment in human capital: The role of education and of research*. New York: The Free Press.
- Schultz, T. W. (1993). The economic importance of human capital in modernization. *Educational Economics*, 1(1), 13-19.
- Shane, S., Kolvereid, L., & Westhead, P. (1991). An exploratory examination of the reasons leading to new firm formation across country and gender. *Journal of Business Venturing*, 6, 431-446.
- Singh, M. (2000). Combining work and learning in the informal economy: Implications for education, training and skills development. *International Review of Education*, 46(6), 599-620.
- Soto, E. (2002). *Understanding self-employment success among participants of microenterprise training programs*. Unpublished Dissertation, The American University, Washington D.C.
- Specht, G. (1997). *Problem area 7: Securing a livelihood by unifying household and enterprise*. Paper presented at the CONFIETA V - Adult Learning and Vocational Training in the Informal Sector in Developing Countries, Hamburg.
- Tiessen, J. (1997). Individualism, collectivism, and entrepreneurship: A framework for

- international comparative research. *Journal of Business Venturing*, (12), 367-384.
- Tilak, J. (2001). *Building human capital: What others can learn*. Washington D.C.: The World Bank.
- UNDP. (2004). *Unleashing entrepreneurship: Making business work for the poor*. New York: United Nations Development Programme.
- UNESCO. (2000). *UNESCO statistical yearbook*. New York.
- United-Nations. (2004). United Nations. Retrieved from <http://www.un.org>.
- Uphoff, N. (1993). Grassroots organizations and NGOs in rural development: Opportunities with diminishing states and expanding markets. *World Development*, 21(4), 607-622.
- Visao Mundial Brasil. (2003). *Visao Mundial Brasil (World Vision Brazil) annual report*.
- Weeks, J., & Seiler, D. (2001). *Women's entrepreneurship in Latin America: An exploration of current knowledge*. Washington D.C.: The Inter-American Development Bank.
- Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13, 27-55.
- Wennekers S. & Thurik, R., 13, 27-55. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13, 27-55.
- World Bank. (2004). The World Bank. Retrieved from <http://www.worldbank.org>.
- Young, E., & Welsch, H. (1993). Major elements in entrepreneurial development in central Mexico. *Journal of Small Business Management*, Oct. 1993, 80-85.
- Yusuf, A., & Schindehutte, M. (2000). Exploring entrepreneurship in a declining economy. *Journal of developmental entrepreneurship*, 5(1), 41-56.

APPENDIXES

APPENDIX A – ENGLISH QUESTIONNAIRE FOR BUSINESS OWNERS

QUESTIONNAIRE FOR BUSINESS OWNERS

Interview #: _____

Date of Interview: ____/____/____

A. BACKGROUND INFORMATION

A1. Year of business startup	
-------------------------------------	--

A2. Primary business activities (Mark only one)

1. Manufacturing	
2. Service	
3. Information Technology*	
4. Agriculture	

*Sectors include electronics, internet, wireless communications, etc.

A2A. Please describe specific activity in detail:

A3. Number of founding partners (enter 0 if no partners)	
--	--

A4. Age

(a) Current age	
(b) Age when began thinking about becoming an entrepreneur	
(c) Age when started your first business	
(d) Age when started the current business	

A5. Gender

1. Male	
2. Female	

A6. Work Experience (mark all that apply)

1. Was an employee in a business similar/related to present enterprise	
2. Was an employee in a business different/unrelated to present enterprise	
3. Was an entrepreneur in a business similar/related to present enterprise	
4. Was an entrepreneur in a business different/unrelated to present enterprise	
5. My first work experience	
6. Other (please specify)	

A7. Other than your current business, how many times have you started a business? (enter 0 if first business)	
--	--

A8. Education (Mark all that apply)

	Unfinished	Graduated
(a) No formal education		
(b) Elementary/Middle school		
(c) High school		
(d) Vocational/Technical school		
(e) University		
(f) Adult education/literacy		

	a. Father	b. Mother
A9. When you were growing up did either your father or mother start a business? (Mark all that apply.)		

B. INCEPTION STAGE

B1. When you told others about your plan to start a business, how did surrounding people react? (1 = strongly negative; 2 = negative; 3 = neutral; 4 = positive; 5 = strongly positive; 9 = not applicable) (Mark only one column per row)

	1 Strongly Negative	2 Negative	3 Neutral	4 Positive	5 Strongly Positive	9 Not Applicable
(a) Immediate family (those living in your home); Nuclear family *						
(b) Other family members not living in your home						
(c) Friends						
(d) Colleagues						
(e) Previous employers						
(f) Instructors/Teachers						

*Husband/Wife, parents, children

B2. If the reaction of your family was negative, in general that was because...

	1. To be an entrepreneur is risky.	2. Society does not respect entrepreneurial endeavors as highly as other careers	3. Both 1 and 2	4. Other
a) Nuclear family				
b) Other family members				

B3. Where did you learn the skills, steps, and procedures to start your own business? (Mark all that apply)

1. Family	
2. School (K-12)	
3. Friends	
4. Previous attempt to start a business	
5. Technical school	
6. Non-governmental organization	
7. Religious organization	
8. State Government program	
9. Federal Government program	
10. On the job / Day to day activity	

B4. Who were your primary clients when you began this business?

1. Individual consumers	
2. Other companies	
3. Both	

B5. Which of the following best describes your company's product/service when you started? (Mark only one)

1. New to the market	
2. Similar to market, but highly differentiated/improved	
3. Similar to existing product/service	

B6. Which of the following best describes the market for your product or service when you started?

1. Increasing demand	
2. Stable demand	
3. Declining demand	
4. Not sure	

B7. Did the following sources provide information that helped you identify your business idea? (*If participant responds yes to (a) please go to B8 and B9, if not go to B10.)

	0. No	1. Yes
(a) Interacting/discussion with other people		*
(b) Internet		
(c) Television, radio		
(d) Visiting a trade fair		
(e) Reading a newspaper/magazine		
(f) Experience from previous work		

B8. How many people were important in providing that information?

1. 0 <input type="checkbox"/>	2. 1 a 3 <input type="checkbox"/>	3. 4 a 8 <input type="checkbox"/>	4. 9 a 15 <input type="checkbox"/>	5. 16 a 30 <input type="checkbox"/>	6. >30 <input type="checkbox"/>
go to B11					

B9. Please indicate your primary connection to the three most important people who provided help in identifying your business idea? (Mark the main role of each individual)

Person	1. Friend	2. Relative	3. Acquaintance	4. Colleague	5. Teacher / Instructor / School official	6. Government Official	7. Other
#1							
#2							
#3							

B10. Timeline

(a) What year did you get the idea?	
(b) How long did it take to start the business after you made the final decision to start?	

CONTINUED ON NEXT PAGE

C. EARLY OPERATIONAL STAGE

C1. Please indicate to what extent you have used the following sources to finance your business during start-up. (Mark one column per row) (A grant is money given that does not have to be repaid.)

	1. Not at all	2. Limited	3. Moderate	4. Great
INTERNAL SOURCES				
(a) Personal savings of founding partners				
(b) Relatives/friends				
(c) Selling personal asset/property				
EXTERNAL SOURCES				
(d) Private investors who are not relatives/friends				
(e) Banks				
(e.1) loans				
(e.2) grants				
(f) Government program				
(f.1) loans				
(f.2) grants				
(g) Non-governmental organization				
(g.1) loans				
(g.2) grants				
(h) Private investor				
(h.1) loans/equity				
(h.2) grants				
OTHER SOURCES				
(i) Clients				
(j) Suppliers (credit/inventory)				
(j) Other				

C2. If you did not use the listed external sources, (Banks, Government programs, Non-governmental programs, Private investors) why not? (Please mark all items that apply)

a) Additional capital was not necessary or relevant	
b) I avoided external financing because of the risk involved	
c) I did not know about the source	

C3. Please mark your initial investment during your first year of your business.

1. Less than US\$500 (R\$1.500)	
2. Between US\$500 & US\$5,000 (R\$1.501 – R\$15.000)	
3. More than US\$5,000 (R\$15.000,00)	

C4. What was your annual income and number of employees during your first year of operation and during your most recent year of operation.

	(1) First Year	(2) Most recent year
a) Sales (R\$)		
b) Number of employees		

C5. (1)What were the main problems in the first three years after you started your business? (2)Have they been solved? (Multiple answers are allowed)

	(1) Main Problem	(2) Solved
a) To get information about the market		
b) To get clients		
c) To get suitable supplies		
d) To hire employees		
e) To have suitable equipment		
f) To manage/operate the business		
g) To finance and manage cash flow		
h) To find suitable childcare		
i) To receive training		

C6. Of the problems solved in C5, with what support was that accomplished?

1. Public institutions (SEBRAE, CEFET, etc.)	
2. Trade associations/unions	
3. Consulting firms	
4. Suppliers/customers	
5. Family/friends	
6. Colleagues	
7. Universities	
8. None of the above	

C7. Given the choice, would you rather work for someone else or be self-employed? (Mark only one)

1. Someone Else	
2. Self-Employed	

C7A. Why?

C8. What are your hopes, dreams, and/or goals for your business?

APPENDIX B – PORTUGUESE QUESTIONNAIRE FOR BUSINESS OWNERS
(QUESTIONÁRIO PARA EMPRESÁRIOS)

QUESTIONÁRIO PARA EMPRESÁRIOS

Número do questionário: _____

Data da entrevista: ___/___/___

A. INFORMAÇÕES GERAIS

A1. Ano de início da empresa	
-------------------------------------	--

A2. Atividade principal da empresa (X) (Marque somente um)

1. Manufaturados/Artesanato	
2. Serviços / Tecnologia da Informação*	
3. Comércio	
4. Agricultura	

* Setores baseados na Tecnologia da Informação, na biotecnologia, etc.

A2A. Por favor, descreva em detalhes a atividade principal da empresa (ex.: produção e comercialização de móveis de escritório):

A3. Numero de sócios fundadores (coloque 0 se não teve sócios fundadores)	
---	--

A4. Idade

a) Atualanos
b) Quando começou a pensar em ser empresárioanos
c) Quando Você iniciou a 1ª empresaanos
d) Quando Você iniciou a atual empresaanos

A5. Sexo

1. Masculino	
2. Feminino	

A6. Por favor, indique sua experiência profissional prévia a esta empresa (marque com um x todas as que correspondam):

“Eu fui empregado em uma empresa...	
1... de um setor <u>similar</u> ou relacionado com a presente empresa (ex.: <i>mesma atividade, ramo fornecedor, ramo cliente</i>)	
2. ...de um setor <u>completamente diferente</u>	
“Eu fui empresário titular de uma empresa...	
3. ...de um setor <u>similar</u> ou relacionado com a presente empresa	
4. ...de um setor <u>completamente diferente</u>	
outra	
5... Esta é minha primeira experiência em negócio.	
6. “Eu desempenhei outra atividade” (distinta das 5 anteriores. Especifique)*	

* Por exemplo empregado público ou autônomo.

A7. Diferente do seu atual negócio, quantas vezes você já começou outro negócio que não o seu atual? (coloque 0 se este é seu primeiro negócio)	
--	--

A8. Educação (marque todos os itens aplicáveis)

	Não completada	Completada
(a) Nenhuma educação formal		
(b) Ensino Fundamental		
(c) Ensino Médio		
(d) Escola Técnica Vocacional		
(e) Curso universitário		
(f) Educação adulta/alfabetização		

	a. Pai	b. Mãe
A9. Quando você estava crescendo seu pai ou sua mãe começou um negócio? (Marque os itens aplicáveis)		

B. ETAPA DE IDEALIZAÇÃO DO NEGOCIO

B1. Quando você comunicou às pessoas próximas que pensava em iniciar-se como empresário, qual foi a reação? (1: fortemente negativa, 2: negativa, 3: neutra; sem qualquer comentário, 4: positiva, 5: fortemente positiva, 9: Não se aplica -N.A.) (Marque apenas uma coluna por linha)

	1 fortemente negativa	2 negativa	3 neutra : Sem qualquer comentário	4 positiva	5 fortemente positiva	9 Não se aplica
(a) Os familiares imediatos (aqueles que viviam em sua casa); Núcleo familiar*						
(b) Os membros da família que não viviam em sua casa						
(c) Amigos						
(d) Colegas de trabalho/escola						
(e) Chefes anteriores						
(f) Professores						

* Esposo/a (se é casado), ou pais (se é solteiro/a)

B2. Se a reação da família foi negativa, no geral ela se deveu a que...

	1. Ser empresário é arriscado.	2. O respeito/valorização social da atividade empresarial é menor em relação a outras profissões	3. Ambas (1 e 2)	4. Outras razões
a) Núcleo familiar				
b) Outros membros da família				

B3. Onde você aprendeu as habilidades, passos e procedimentos para começar seu próprio negócio? (Marque todos os itens aplicáveis)

1. Família	
2. Escola (pré escolar ao ensino médio)	
3. Amigos	
4. Numa tentativa prévia de se começar um negócio	
5. Escola técnica (SENAI, SENAC, SESI, CEFET ou outros)	
6. Organização não-governamental	
7. Organização religiosa	
8. Programa de governo estadual	
9. Programa do governo federal	
10. Na pratica diária	

B4. Poderia indicar quais foram seus clientes:

1. Consumidores individuais	
2. Outras companhias	
3. Ambos	

B5. Por favor, indique qual das seguintes opções caracterizava sua proposta comercial no momento inicial da empresa.

1. Produto/serviço inovador; Novo para o mercado.	
2. Similar ao do mercado, todavia muito diferenciado/aprimorado.	
3. Similar a um produto/serviço já existente.	

B6. Por favor, indique a situação do mercado para o qual se destinou seu produto no momento de iniciar a empresa.

a) Demanda crescente	
b) Demanda estagnada	
c) Demanda decrescente	
d) Não tenho a certeza	

B7. Por favor, indique quais das seguintes ações contribuíram para obter informação relevante para identificar a oportunidade que originou sua idéia de negócio (Se a resposta a B8 a) foi Sim, por favor vá para B8 e B9; se foi Não, passe a B10.)

	0. Não	1. Sim
a) Interação/discussão com outras pessoas		
b) Internet		
c) Televisão, radio		
d) Participação em feiras comerciais		
e) Leitura de jornais		
f) Revistas		
g) Experiências em trabalhos/atividades anteriores		
h) Outros (assinalar.....)		

B8. Quantas pessoas você recorda que foram importantes para obter informações?

1. 0	2. 1 a 3	3. 4 a 8	4. 9 a 15	5. 16 a 30	6. >30
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B9. Das pessoas mencionadas em B9, indique as 3 mais importantes e o seu relacionamento com cada uma delas.

Pessoa	1. Amigo	2. Parente / família	3. Conhecido	4. Colega de escola / serviço	5. Professor / Instrutor/ Oficial de escola	6. Pessoa do governo	7. Organizações Não-governamentais	8. Outro
#1								
#2								
#3								

B10. Eventos do processo de concepção do negócio:

a) Indique o ano em que teve a idéia	
b) Quanto tempo demorou para você começar o seu negócio depois que você tomou sua decisão final para começa-lo?	

CONTINUE NA PRÓXIMA PÁGINA

C. ETAPA DO INÍCIO DA EMPRESA

C1. Por favor, indique quais, e, em que medida, foram utilizadas as seguintes fontes de financiamento para iniciar a empresa (1: nula; 2: baixa; 3: média; 4: elevada)

	1. nula	2. baixa	3. média	4. elevada
Fontes Internas				
(a) Economias pessoais do(s) fundador(es)				
(b) Parentes e amigos				
(c) Venda de bens ou propriedades pessoais				
Fontes Externas				
(d) Inversões privadas (pessoas que não são nem parentes nem amigos)				
(e) Bancos				
(e.1) empréstimos				
(e.2) subsídios				
(f) Instituições públicas nacionais / estaduais				
(f.1) Empréstimos, garantias				
(f.2) subsídios				
(g) Governos locais:				
(g.1) Empréstimos, garantias				
(g.2) subsídios				
(h) Organizações Não-governamentais				
(h.1) Empréstimos, garantias				
(h.2) subsídios				
Outras fontes				
(i) Clientes (adiantamentos)				
(j) Fornecedores (crédito comercial)				
(k) Outro				

C2. Se Você não se utilizou de fontes externas das modalidades d) até h), qual foi a razão?
(X)

a) Não foi necessário / relevante contar com capital adicional	
b) Evitei financiamento externo por causa do risco envolvido.	
c) Não sabia da existência dessas fontes.	

C3. Por favor, indique o investimento inicial que realizou no primeiro ano de atividade da empresa.

1. menos que R\$1.500,00	
2. entre R\$1.501,00 e R\$15.000,00	
3. mais que R\$15.000,00	

C4. Por favor, indique os valores anuais de vendas (em reais), empregados e clientes.

	(1) No primeiro ano	(2) Atualmente
a) Vendas (R\$)		
b) Empregados assalariados		

C5 Quais foram os principais problemas que a empresa enfrentou durante os primeiros momentos de existencia? (X) 2) Quais deles foram resolvidos? (X)

	(1) Principais Problemas	(2) Problemas resolvidos
a) Obter informação de mercado		
b) Conseguir clientes		
c) Conseguir fornecedores adequados		
d) Contratar empregados qualificados		
e) Adquirir máquinas e equipamentos adequados		
f) Gerenciar a empresa		
g) Ter um fluxo de caixa equilibrado		
h) Encontrar alguém para cuidar do(s) filho(s)		
i) Receber treinamento		

C6. Indique que tipo de apoio externo recebeu para resolver os problemas que foram indicados em C5

1. Instituições públicas (p. ex Sebrae)	
2. Câmaras / Sindicatos / Associações	
3. Consultorias	
4. Fornecedores / Clientes	
5. Família	
6. Colegas / Amigos	
7. Universidades / Agências de Pesquisa	
8. Outros (ONG, etc.)	
9. Nenhuma das anteriores	

C7. Se você tivesse a chance de trabalhar para você mesmo ou ser empregado, o que você escolheria? Por que?

1. Alguém outro/empregado	
2. Para Mim Mesmo/patrão(oa)	

C7A. Por que?

C8. Quais são suas esperanças, sonhos e/ou alvos para seu negócio?

Comentários e observações do entrevistador:

Oklahoma State University Institutional Review Board

Date: Thursday, August 05, 2004

IRB Application No ED0511

Proposal Title: The Learning Processes, Characteristics, and Behaviors of Necessity Entrepreneurs in Brazil

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Protocol Expires: 8/4/2005

Principal
Investigator(s):

Ronald Duggins
4108 Westbrook Dr.
Stillwater, OK 74074

Robert Nolan
210 Willard
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact me in 415 Whitehurst (phone: 405-744-1676, colson@okstate.edu).

Sincerely,



Carol Olson, Chair
Institutional Review Board

VITA

Ronald Duggins

Candidate for the Degree of

Doctor of Education

Thesis: THE LEARNING PROCESSES, CHARACTERISTICS, AND BEHAVIORS OF
NECESSITY ENTREPRENEURS IN BRAZIL

Major Field: Human Resource Development and Adult Education

Education: Received a Bachelor of Arts degree majoring in English from Oklahoma Baptist University in May 1994. Received a Master of Education degree majoring in Education/TESOL from the University of Central Oklahoma in May 1997. Received a Graduate Certificate in International Studies from Oklahoma State University in December 2002 from Oklahoma State University. Completed the requirements for a Doctor of Education in Human Resource Development and Adult Education from Oklahoma State University in May 2005.

Experience: Employed since 1999 at the Oklahoma Department of Career and Technology Education in the following positions: Instructional Development Specialist, CareerTech EARN Coordinator, International Education and Program Coordinator. Previously employed in curriculum development and educational publishing with Saxon Publishers and Runkle Publishers from 1997 to 1999. Also previously employed as Director of International Studies at Oklahoma Baptist University from 1996 to 1997.

Professional Memberships: Association of Career and Technical Education, Oklahoma Association of Career and Technology Education