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Success Factors for Small Entrepreneurs in North Carolina

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Abstract

What does it take to be an entrepreneur? The answer to this question has been debated and discussed for centuries. Entrepreneurship programs and courses are taught throughout many secondary and post-secondary educational institutions in this nation. There are also many entrepreneur centers engaged in on-going research and activities. However, most of the information collected and published has been overly theoretical and academic in nature with limited practical application. Unlike quantitative methods of research, like a survey, which focuses on the questions of who, what, where, how much, and how many, and historical analysis, which often situates the participant in some form of historical context, case studies are the preferred strategy when how or why questions are asked. Case studies also extend experience or add strength to what is already known through previous research. Thus, the results from a survey of entrepreneurs operating in North Carolina will be augmented and compared with selected case studies. Thus, the case studies will focus not only on how entrepreneurs survive but more specifically it address and identifies, more in-depth; the institutional, personal, social, and economic factors that can both positively or negatively impact entrepreneurs. Moreover, we can also make an assessment of how much is real and how much is perceived perception of the entrepreneurs.

Background Information

The rural areas of America have deteriorated significantly over the past decade. The population in rural America make-up only 19 percent of the nation population, the rural poverty rate is 17 percent and the unemployment rate is around 11 percent. Thus, the goal of many states and federal agencies throughout the nation is to develop means to revitalize these rural areas. In an article by Hope Yen, he states that "many rural communities could shrink to virtual ghost town as they shutter businesses and close schools. One primary way of revitalizing and sustaining rural America is through the development of entrepreneurship opportunities.

Sustaining and promoting rural growth and development, through the creation of jobs is a high priority of the United States Department of Agriculture (USDA) as well as, a growing number of State governments, educational institutions, and rural development organizations.

The United States Secretary of Agriculture, Tom Vilsack on various occasions has stated that the USDA "must help communities create wealth so that they are self-sustaining, repopulating and thriving economically" (Pender, et. al., 2012). Thus, sustaining and revitalizing America, especially rural America, has become one of the primary goals in the USDA strategic plan as evident by the number of fundable programs cited on its website (www.usda.gov). Moreover, this has been a goal of many institutions, agencies and organizations; a goal that needs to be readdressed or strengthened. One way of revitalizing and sustaining America's economy is through the development of entrepreneur opportunities. An entrepreneur can be defined in numerous ways but according to the Small Business Administration it is a person who organizes and manages a business undertaking, assuming the risk for the sake of profit.

Entrepreneur/entrepreneurship is important to an economy because it is a key vehicle for improving the economy by creating new jobs, generating revenue, advancing innovation, enhancing productivity, and improving business models and processes. It is a nation's best offense for economic progress and its finest defense against the status quo (Price 2011).

Economist would argue that economic growth requires vibrant businesses of all sizes. That is, small businesses need large businesses as customers or role models, and larger business need small businesses as suppliers. Thus, entrepreneurship is important both to the US and North Carolina because of its micro and macro contributions. According to Global Entrepreneurship Monitor, there is an estimated 27 million entrepreneurs in the United States. These entrepreneurs make up a significant portion of nation's business investments which contributes up to 13 percent of the nation's gross domestic product (GDP). In the State of North Carolina there is an estimated 819,038 entrepreneurs employing 1.5 million people with an annual payroll of $51.7 million. Because entrepreneurs are so important to our nation's economy, there has been a great deal of interest in examining the characteristics of entrepreneurs and the factors that make them successful. According to Cuddy, Anstett and Guest, 2007, some of the personal traits and characteristics of small/large businesses/entrepreneurs are that they are self-confident, flexible, passionate, achievers, desire independence and high energy. Even with all these positive characteristics, research has shown that 50 to 70 percent of businesses fail within the first 18 months. The reasons for business failure are numerous and may include such factors as; poor leadership, lack of experience, lack of capital, lack of a strategic plan and growing to fast, to name a few. Notwithstanding, previous research related to entrepreneurs

development suggest that similar factors, such as, the lack of industry experience or knowledge, lack of business planning and lack of marketing knowledge were key inhibiting factors preventing the start-up of new ventures (Cuddy, Anstett and Guest, 2007 and English, Wetzel, Knott and Brandon, 2006). Additionally, it was found that higher markets knowledge levels indicate an increased likelihood of starting a new venture and demonstrated a significant impact on the performance of the new venture. Moreover, the integration of entrepreneurship with core subjects in curriculum design could encourage greater demand.

The relative important of entrepreneurship is even more evident given that one of the 17 United Nations, Sustainable Development Goals (SDGs), aim to encourage sustained economic growth by achieving higher levels of productivity and through technological innovation. They suggest that this goal will be accomplished by promoting policies that encourage entrepreneurship and job creation, Moreover, with this target in mind; their goal is to achieve full and productive employment, and decent work, for all women and men by 2030. This paper can partially assist in achieving this goal by re-examining the success factors of entrepreneurs. That is, why are some entrepreneurs operations sustainable over time? Thus, the two-fold objective of this paper is to determine the factors that have contributed to North Carolina entrepreneurs have obtained their success quantitatively and qualitatively and examine factors that have contributed to their sustained success. This will be accomplished by comparing both employing and comparing both quantitative and qualitative techniques (logistic regression and case studies) to satisfy the objectives.

Literature Review

According to previous researchers (Pender, et.al, 2012; Petrin, 1994; Todaro and Smith, 2010; and Steele, 2013) building sustainable rural communities are linked more to small businesses and local entrepreneurs because more of the wealth they create remain in the community when compared to larger corporations. Moreover, the need for increased entrepreneurs is evident given the current plight of rural America. As further justification for this proposed project, past research suggests it is false to assume that socially and economically depressed areas will transform into fast growing areas by injection of external investment funds and external expertise (Petrin, 1994, and Loveridge, et.al., 2012). Without entrepreneurial capabilities which are well developed or potentially available, external funds will be wasted on projects that will not provide

long term economic growth. Therefore, instead of becoming integrated into the economic fabric of the economy and socially viable areas, such areas will continue to be desolated, rundown, poverty stricken and consequently unattractive to new investments or clients who, given other available resources, would make an impact from a development standpoint. A number of publications have suggested that the best chances for regions to transform their economies through innovations derived from entrepreneurs (Scott and Morrison, 2012; Markely and Low, 2012; Robinson and Sexton, 1994). Further, according to Steele (2012) the future success of "rural" is seen as closely tied to entrepreneurship. That is, small and locally owned businesses that support a family and has one or five or ten additional employees, the heart of rural community through the ages. Many examples of successful rural entrepreneurs can readily be found as one travels throughout the state; such as, food processing and grading, crafts, fruit and vegetable canning, cheese and yoghurt, winery, bakery, livestock equipments and structures, and other value-added enterprises. Additionally, diversification into non-agricultural uses of available resources such as catering for tourists, crafting, carpentry, spinning, and others as well as diversification into activities other than those solely related to agricultural usage, for example, the use of resources other than land such as water, woodlands, buildings, available skills and local features, all fit into rural entrepreneurship (Petrin,1994).

DATA AND METHODOLOGY

Data

The data used for this study was derived from a survey of 57 respondents collected in the Piedmont Triad Prosperity Zone (PTPZ) of North Carolina during the spring and summer of 2015. This zone is one of eight created by North Carolina in 2014 as a mean of enhancing customer service and improving efficiency between governmental agencies at a regional level (Hubbard, 2013) (Figure 1). Additionally, case studies interviews were conducted on three of the respondents completing the survey.

Methodology

A combination of statistical techniques was utilized in analyzing the data. Descriptive statistics was used to provide a socioeconomic and demographic profile of entrepreneurs responding to the survey. Chi-square contingency tables were derived to determine if an entrepreneurs success differ significantly among the selected socioeconomic variables. A qualitative response model,

logistic regression, was used to examine the impact and direction of influence the selected social and demographic variables exert on whether an individual entrepreneur will have a successful operation/business. This quantitative technique will be supplemented with case study (qualitative) analysis. Two reasons for supplementing quantitative survey data with qualitative case study data are: (1) to develop contextual richness that is valuable in model building and (2) to improve internal validity and interpretation of quantitative findings through triangulation.

Since the probability that an individual entrepreneur perceive that they will be successful there response is bound by zero and one, thus, qualitative response techniques using quantitative analysis is most appropriate. Qualitative response models relate the probability of the occurrence of an event to various independent variables. The logistic, probit, and linear probability model are each applicable when trying to determine which response model should be utilized in this study. The linear probability model was excluded, due to possible econometric problems, such as, heteroscadasticity and non-normal residual errors (Amemiya 1981). These problems limit its suitability for empirical work. The differences between the logistic and probit model were miniscule. The logistic model is utilized in this study in order to determine how various social and demographic variables affect an individual's perception of whether their business will expand and be successful. That is, this study utilizes a dichotomous random variable y for which y = 1 if the entrepreneur perceives there business will expand and be successful and y = 0 for otherwise, implying it will not expand and be successful. Assuming that the probability of being successful, P, depends on a vector of independent variables associated with individual, i, x and a vector of unknown parameters β for the logit model, this probability is determined by:

$$F(\beta\chi) = \frac{e^{(\beta\chi)}}{1 + e^{(\beta\chi)}}$$

The statistical model used in analyzing an entrepreneur's perception of being successful is given by:

$$EXP = \beta_0 + \beta_1 GENDER + \beta_2 MSTATUS + \beta_3 RES + \beta_4 EDUC + \beta_5 AGE1 + \beta_6 AGE2 + \beta_7 AGEBUSS + \beta_8 AOB + \beta_9 SOSUP + \beta_{10} OB + \beta_{11} RG + \beta_{12} LS + \beta_{13} BP + \varepsilon$$

The definitions of the variables in the aforementioned equation are given in Table 1.

Table 1: Definition of Variables

Variable Name	*Description*
Dependent Variable	
Expand (EXP)	1 = if respondent perceives there business will expand and be successful; 0 otherwise
Independent Variables	
Gender (GENDER)	1 if respondent is male; 0 female
Marital Status (MSTATUS)	1 if respondent is married; 0 otherwise
Residence (RES)	1 if respondent live in rural area; 0 otherwise
Education Level (EDUC)	1 if College Degree; 0 otherwise
Age One (AGE1)	1 if older than 39; 0 otherwise
Age Two (AGE2)	1 if older than 49; 0 otherwise
Age When Bus Started (AGEBUSS)	1 if older than 35; 0 otherwise
Age of Bus (AOB)	1 if business is 6 years old or greater; 0 otherwise
Source of Start up Funds (SOSUF)	1 if personal funds; 0 otherwise
Operating Budget (OB)	1 if OP is greater than $50,000; 0 otherwise
Annual Revenues Generated (RG)	1 if RG is greater than $50,000; 0 otherwise
Type of Legal Structure (LS)	1 if sole proprietorship; 0 otherwise
Business Plan (BP)	1 if entrepreneur has a business plan; 0 otherwise

Empirical Results

Descriptive analysis was utilized to provide a brief demographic and socio-economic profile of the respondents completing the survey and residing in the PTPZ. Of the entrepreneurs completing the survey, 56% had a business plan, 53% were sole proprietors, 41% have a college education and above, 81% are older than 39, 58% are male, 64% resides in rural area and 56% operate a business that is 6 years or older.

The chi-square test statistics were statistically significant for all the variables included in the study. The results depict that there is significant differences among the variables associated with being a successful entrepreneur. The results of the logistic model are provided in Table 2. The log likelihood estimate is -17.1 and the r square of .56 suggests that the model is appropriate. Moreover, the model adequately predicts 56 percent of the correct responses and the most of the hypothesized signs are as expected. The results in Table 2 indicate that the age variables of the entrepreneur are the most important variable influencing business success. Thus, the younger the business owner, the more likely his business will be successful and expand. An older entrepreneur is more likely not to expand their business but still be successful. Three other variables gender, educational level, and having a business plan, exerted a significant impact on an entrepreneur success and expansion possibilities. Thus, controlling for other factors, an interpretation of the results, suggest that a male is 32 time more likely to have a successful business than a female, also an individual that has a college degree is 8 times more likely to be successful and the individual that has a business plan is 67 time more like to be successful compare to someone without a business plan.

The estimated result can also be used to estimate the probability of a business owner being successful, give certain attributes. For example, assuming an entrepreneur is a male, younger than 39, with a college education and has a business plan, his probability of being successful is .40.

Previous research suggests that case studies add strength and substance to what is already known through empirical research using quantitative data. Thus, the results from the survey of entrepreneurs operating in North Carolina can be augmented and compared with selected case

studies. That is, case studies addresses and identifies, more in-depth; the institutional, personal, social, and economic factors that can both positively or negatively impact entrepreneurs.

Table 2. Estimated Logistic Model of the Factors Influencing an Individual's Perception of Environmental Justice

-2 Log Likelihood	-17.105				
Prob > Chi2	0.000				
Pseudo R2	0.567				
Variables	**B**	**Significant**	**Exp (B)**	**Hypothesis**	**Actual**
Constant	-5.2511	.012		+	-
GENDER	3.4899	.009*	32.7826	+	+
MSTATUS	-3489	.829	.7055	+	-
RES	1.4248	.328	4.1570	-	+
EDUC	2.0750	.054*	7.9645	+	+
AGE1	5.8253	.053*	338.7966	+	+
AGE2	-4.9041	.025*	-0074	+	_
AGEBUSS	-.8439	.603	.4300	+	_
AOB	-1.1628	.284	.3126	+	_
SOSUF	-.8134	.054*	.4473	+	_
OB	23.2763	.993	9E9	+	+
RG	-23.2763	.993	.0000	+	_
LS	-.7986	.462.	.4499	_	_
BP	4.2016	.003*	66.7931	+	+

*Significant at 5 percent level

Moreover, one can also make an assessment of how much is real and how much is perceived perception of the entrepreneurs.

For example, with quantative analysis, closed ended questions may be easier to analyze, but their responses are limited. Conversely, although open ended questions, qualitative data, give greater variety they may be difficult to analyze because data must be coded and reduced in some manner. And, although one often generalized with quantative data, case study conclusion cannot be generalized, it is specific. Provided below are some example of case study responses that can add more validity to the aforementioned descriptive and logistics results. These are case study interviews conducted with three different entrepreneurs.

Case Study Questions and Responses

- ***What are some factors that motivated you to start your own business? How did you decide on this type of business? How was this perceived by your family?*** I started the business because I was broke and needed the income. To supplement my income. I decided on this type of business because I saw that there was a need for a Hispanic operated and owned convenience store because of the growing Hispanic population. When I first started, my family was very discouraging because I worked very long hours (5 Am-11 Pm) and barely made any profit. Thought it was a waste of time.

- ***If you had the opportunity to start over, what are some things you would do differently?*** If I could do it all over again, I would seek more knowledge on the regulations of owning a store, and permits required. Devote more time. I would have developed a business plan and just not follow my mother.

- ***When you started your business, what were the main problems you faced?*** Start up finance, lack of information/advice on how to start a business, inappropriate management skills, lack of entrepreneurial skills, and long hours away from family.

- ***How do you market your business?*** Newspaper ads, magazines, flyers, and government operated websites.

- ***What changes have you made since starting your business to ensure its success?*** Since starting, we have made improvements to the interior of the store, we've added a restaurant, a bakery, diversified our fresh produce selection, and added a check cashing and money wiring service. We try to keep up with trends in the market. We help train other individuals to come into the business.

- ***What are some of your long run plans for the business?*** I plan to work long enough to put my children through college. After they complete school, I plan to franchise our name and open another location in another county and move back to Mexico. Being a celebrity hairstylist. To have other people working for me.
- ***How have you been able to maintain a market for your products?*** By providing customers with quality products at reasonable prices and by having great customer service. Customers love to feel appreciated where they choose to spend their money. I try to treat people with respect, promote healthy hair and provide quality work. By helping others get started in the business and world under me.

Summary and Conclusion

Sustaining and promoting rural growth and development, through the creation of jobs throughout the United States, and specifically in North Carolina, is a high priority. One mean of increasing jobs is through the establishment of entrepreneurs. Past research has suggested that the best chance for regions to transform their economies is through innovation derived from entrepreneurs. Moreover, it's the small and locally owned businesses that support a family and has one or five or ten additional employees that have been the foundation of rural communities for decades. Thus, much focus has been directed toward the revitalization and sustainability of rural area throughout America. This study using a combination of statistical techniques on data derived from a survey of entrepreneurs in the Piedmont-Triad Priority Area of North Carolina derived results that can be used to promote successful entrepreneurs. The study not only provides a profile of entrepreneurs in NC, it also found that the most successful entrepreneurs are those that are male, over 39 years of age, with a college education and has a business plan.

The result also suggests that the success of an entrepreneur depends on more socio-economic factors than demographic factors. Moreover, quantitative data and analysis can be supplemented with qualitative analysis to strengthen overall results by adding a historical perspective. Thus, it is recommended that case study results proceed model building to improve the validity of the research and that more success stories of successful entrepreneurs be used to encourage other entrepreneurs to start a business and avoid specific pitfalls.

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