

EXAMINING GENDER DIFFERENCES IN SMALL BUSINESS MOTIVATIONS AND RISK TAKING

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ABSTRACT

This study examines motivations for operating a business and self-assessed risk taking behavior for 718 male and 308 female owners. Telephone interviews were conducted in eighteen rural Iowa, Nebraska, and Kansas communities. Significant gender differences were found for types of businesses owned, how the business was started, years of ownership, and annual revenue. Ten motivations for operating a business were examined with males motivated to provide financial security for the family and women motivated by flexibility for family life. These ten motivations were analyzed generating a three factor solution of extrinsic, intrinsic, and family motivations. Women reported significantly lower extrinsic motivations and lower risk taking than men. Findings from this study may be useful in shepherding types of nascent business development in rural areas.

INTRODUCTION

Many rural communities in the Plains and Corn Belt states have not seen the same level of growth in business development that has been experienced in other parts of the U.S. These areas of the U.S. face challenges including the deficiencies of natural amenities, remoteness, and lack of good jobs. The recoil from these difficulties is an erosion of public infrastructure, community business base, and skilled workers and young families. All of these are reasons why small communities frequently experience a triple jeopardy of fewer people, with fewer dollars to spend, and fewer purchases of local products and services (Bhat and Fox, 1996). There is, however, an encouraging note in this bleak portrayal. The growth of women owned businesses in rural heartland communities offers possibilities for economic momentum and population increase. Research on small businesses and entrepreneurship suggests that women-owned businesses are often less profitable when compared to similar male-owned businesses (Loscocco et. al., 1991). The disparity in profits is even greater in rural areas (Bird and Sapp, 2004). An analysis of the U.S. Census Bureau data on Characteristics of Business Owners, suggests that women owned businesses are less successful than businesses owned by men because women have less experience and less startup capital than men (Fairlie and Rob, 2009). The same study found evidence that women business owners held different goals for their businesses, which may influence business outcomes. The consensus of these authors is that women who own businesses in rural areas encounter or perceive different challenges than their male counterparts. The purpose of this research is to: determine the motivations and perceptions of risk held by small business owners operating in small sized, rural communities of the U.S. heartland; compare the types of motivations for female and male business owners; examine the relationship of risk and gender in explaining motivation to operate a small community business, and offer insights for enhancing business development and growth for women, particularly those living in small communities. This research is based on data from interviews with 1,030 small business owners living in small communities (having less than 15,000 in population) located in Nebraska, Kansas, and Iowa.

BACKGROUND

The number of women owned businesses across the U.S. has grown at nearly double the rate of all firms established between 1997 and 2004 (Morisseau-Kuni, 2004; Top Factors About Women Owned Businesses, 2004). Changes in traditional agriculture in the U.S. Plains and Corn Belt areas, and the lack of high wage jobs, has forced many living in rural areas into the labor market with some holding down multiple jobs to sustain their families. Nebraska ranks first in the nation, with Iowa second, in the percentage of its workforce working more than one job and in the percent of mothers with young children who participate in the labor market (Edgcomb and Thetford, 2004).

Given these circumstances, the increase in business ownership among women, particularly in rural towns is understandable. However, nationally Nebraska, Iowa, and Kansas rank very low (respectively 43rd, 48th and 49th) in the growth of women-owned businesses (State of Women-Owned Business Report, 2011). Research also suggests that women's and men's experiences and motivations as business owners differ. Women are more likely to start a business to achieve a balance between work and family (Brush et al., 2006) placing more value on nonfinancial dimensions of ownership such as self-fulfillment and job satisfaction than on making money (Buttner and Moore, 1997; Kepler and Shane, 2007). Women are more focused on wage replacement and less oriented toward growth than men who start businesses (Minniti et al., 2005). These studies were, however, conducted with owners in more urban areas of the U.S. The rural community social structure is tightly woven into the economics of the small community's marketplace (Miller, Besser, Gaskill and Sapp, 2003

Given that owning a business is risky both in terms of financial and time commitment, a propensity for taking risks is often seen as an important personality characteristic associated with business ownership. Gasse (1982) distinguished risk takers as entrepreneurs, and risk bearers as managers. Palich and Bagby's (1997) study reported that owners who were more entrepreneurial, were not necessarily more likely to take risks than less entrepreneurial owners; instead, the more entrepreneurial perceived the risky situations more optimistically. Given that location can provide competitive advantages or challenges (Porter and Stern, 2001), we examine gender differences in risk perceptions for small business owners in small, rural communities and the relationship of risk with motivation for operating a business in this type of location.

RESEARCH METHODOLOGY

Data for this analysis were gathered as part of a larger study on rural economic vitality, community amenities, and local businesses. Eighteen rural towns were purposively selected in three states located in U.S. Plains and Midwest. A random sample of businesses operating in the 18 towns was purchased. Closed ended interviews that lasted approximately 20 minutes were conducted by trained staff with 1213 business owners and top managers participating in the study for a cooperation rate of 68.45 percent. A subsample of 1030 respondents who indicated they were the business owner was used for this analysis.

We calculated indices to measure motivations using principal component factor analysis. The items included in the motivation indices were derived from Robichaud, McGraw, and Roger (2001). The relevant statistics and the wording of the component questions are shown in Table 1. The factor scale statistics and alpha reliability levels for these indices are at acceptable levels for exploratory research. All items met the two criteria for inclusion in an index; they each have face validity for the construct being measured and loaded at or above 0.5 (Kim and Mueller, 1978). The first factor was labeled Extrinsic Motivation and created by summing the mean scores for the three items listed in Table 1. The second factor was labeled Intrinsic Motivation, also created by summing mean scores for three items. The third factor was created in a similar manner from four

items and labeled Family Motivation. Alphas above 0.5 are considered to indicate adequate index reliability (Kim and Mueller, 1978).

Risk perception was measured with a question with Likert response categories on a five point scale, with 1=Never and 5= Very Often. The question was phrased, “How often are you willing to take a high (or great) risk in business related matters?” The mean was 3.00 with a 1.08 standard deviation. For ease of analysis, a bimodal variable was created. The Never, Seldom, and Sometimes responses were combined to form the Low Risk score (n= 709), and the Often, Very Often responses were combined to form the High Risk score (n= 307). Of the male owners, 67.2% were in the low risk group; whereas 75.8 % of the female owners were in the low risk group. Significantly more women were in the low risk group than men ($X^2=.007$).

A multivariate analysis of variance was conducted to measure the effects of both gender and risk taking on the three types of motivations for operating a small business. The multivariate approach was deemed necessary because of the significant correlations ($p > .001$) among the three types of motivations.

Table 1. Indices for Motivation Variables (N=1030)

There are a variety of reasons that people decide to go into business. We'd like to understand your motivations for becoming a business owner. Please rate the following possible reasons where: 1 = not important to 5 = very important.	Mean	Standard Deviation	Component Factor Statistic
Extrinsic Motivation Factor			
Cronbach's $\alpha = .70$, variance explained = 12.3%,			
1. Greater financial security for yourself and your family	4.03*	1.13	.794
2. Having a chance to earn great wealth or a very high income	3.02*	1.31	.689
3. To provide an income for yourself or your family	4.04*	.93	.735
Intrinsic Motivation Factor			
Cronbach's $\alpha = .53$, variance explained = 10.3 %			
1. Building business your children can inherit	2.61	1.50	.559
2. Developing new ideas for products or processes	2.63	1.42	.821
3. Challenging yourself	4.09	1.02	.627
Family Motivation factor			
Cronbach's $\alpha = .63$, variance explained = 32.9%			
1. Achieving a higher position in the family	2.83	1.53	.569
2. Having flexibility for personal or family life	3.84	1.34	.606
3. Being respected by your friends and family	3.14	1.39	.713
4. Family tradition	2.60*	1.64	.667

*Males held significantly higher Mean scores

RESEARCH RESULTS

The number of participating male owners was 718 and female owners numbered 308. The average educational attainment was some post secondary education but not a bachelor's degree. The respondents' average age was 53.9 years and they averaged 19.16 years of experience in their business. A t-test for gender differences in years of ownership indicated men had owned their businesses significantly longer than women owners ($M = 20.52$ and 16.11 years, respectively). The ethnic composition of 91.7 percent Caucasian is consistent with U.S. Census data for the states involved in the study.

The businesses owned by the respondents averaged 29.77 years of age, but 22.8% were ten or fewer years of age and 9.2% were five or fewer years old. These were very small businesses as indicated by the number of employees (average 6.68, median 3.0). The average business revenue for FY08 was between \$100,000 and \$300,000; however, 33.6% had revenue less than \$100,000 in FY08 and 37.6% reported revenue of greater than \$300,000. Males generated significantly more revenue (averaging between \$200,000 and \$300,000) than females (averaging between \$75,000 and \$100,000). Crosstabs analysis of how men and women became business owners suggested a significant difference ($\chi^2 < .001$). A larger percentage of males inherited or purchased their business from a family member, whereas the larger percentage of females started the business or purchased from a non-family member.

Eighteen types of business products and services are represented in the study. The majority of respondents operated in three broad industrial groups; retail (20.7 %), finance, insurance and real estate (13 %), and professional, information, health, administrative, and educational services (11.4 %). Almost 18.4 % were in public services, 7.4 % in accommodations and food services, and 9.6 % in agriculture. Chi-square analysis indicated a significant gender difference for types of businesses owned ($< .001$). Women-owned businesses were largely represented by retail, other services, and accommodation/food services categories. Men-operated businesses included the retail and other services categories, but they also operated a proportionally larger number of businesses concerned with agriculture, wholesale trade, finance/insurance, and professional/scientific/ technical services.

Of the original ten questions used to measure motivations for operating a business (see Table 1), the highest mean scores were 'to provide an income for yourself or your family' followed by 'challenging yourself'. Several mean scores were significantly higher for males than females involving financial security, wealth, and income. The finding that significantly more males were motivated by family tradition corresponds to the significantly higher proportion of males than females who purchased or inherited the family business. The results of factor analysis suggesting three motivation types further highlights the gender differences in motivation for deciding to go into business as males were significantly more motivated by extrinsic factors.

The results of a multivariate analysis of risk taking and gender on the three motivations indicate that risk taking does have a significant main effect on both extrinsic and intrinsic motivations. The main effect of gender was found for only extrinsic motivations. There was however no significant main effect on family motivation, or a significant interaction effect of risk and gender on any of the three motivations (see Table 2). T-test results indicated the mean score for higher risk takers was significantly higher for intrinsic motivations than for low risk takers ($M = 3.01$ and 3.35 respectively). However, for extrinsic motivations, the low risk takers were significantly higher than the high risk takers ($M = 3.77$ and 3.35 respectively). T-tests examining motivations by gender indicate significant differences for extrinsic motivations with the mean score for males 3.87 and for females 3.69.

Table 2. Effects of Gender and Risk Taking on Motivations for Operating a Small Business.

Variables	Mean Square for Extrinsic Motivation	Multivariate F-value	Mean Square for Intrinsic Motivation	Multivariate F-value	Mean Square for Family Motivation	Multivariate F - value
Risk Taking	3.08	3.87*	16.74	19.01**	.074	.79
Gender	5.40	6.80**	.400	.454	2.31	2.25
Risk Taking X Gender	.004	.005	.140	.158	.139	.135
Adj R ²	.012		.025		.001	
Wilks' Lambda * <i>p</i> <.05, ** <i>p</i> < .01 (df = 3, N = 970)						

DISCUSSION

Small business ownership is an important mechanism for stimulating economic momentum in rural regions. The increasing numbers of women who start their own business in small, rural communities holds promise, but there are three fundamental issues that must be evaluated and addressed for improving success in startups. First, there are disproportional decreases in business activity rates in rural areas for all small business owners; meaning it is difficult to generate enough revenue to stay in business. Second, there is great disparity in profit between men and women-owned businesses which is partially due to the type of businesses women start. Third, female owners face different challenges and risks than male owners and may have different motivations for going into business.

Participants in this study represented owners of very small businesses that generate between \$100,000 and \$300,000 in revenue annually, and are located in communities of less than 15,000 people. Males constituted 70% of the 1030 participants and had owned their business significantly longer and earned two to three times more in revenue than their female counterparts. A significantly greater proportion of the participating females had started the business or purchased the business from a non-family member whereas males had males inherited or purchased their business from a family member. This analysis of rural small businesses replicated findings from prior studies of women-owned business in that women held less experience (Fairlie and Robb, 2009), and generated less revenue (Loscocco et.al., 1991) than male owners of businesses.

There were also significant differences in the types of businesses owned by males and females in this study. The largest proportions of businesses operated by women were in the areas of retail, public services, and accommodations and food services. Given the rural location of these women-owned businesses and the significantly smaller revenue generation, it is worth comparing their types of businesses to those on a national level. Much of what we know nationally about the number, size and growth of women-owned businesses comes every five years from the U.S. Census Bureau's Survey of Business Owners. A report comparing the census surveys for years 1997, 2002, 2007 and 2011 provides the most current trend information at the state and national level (State of Women-Owned Businesses Report: A Summary of Important Trends, 2011). Nationally, the fastest growth has been in business involved in education (up 54%), administrative and waste services (up 47%), and construction (41%). A comparison of participating rural women owners and national figures suggests low representation of women business owners in these areas of growth. The women owners in rural areas were operating

traditional types of businesses such as retail, public services, and accommodations and food services. These rural women-owned businesses did bear a similarity to the national picture in that they have not matched the men-owned businesses in terms of revenue generation.

Though nationally women-owned small firms are making progress, there is a noticeable lag in the number of women whose businesses become the 100 plus employee and million dollar revenue size. The motivations for business ownership may be at the heart of the growth differences. Males in the participating small, rural regions were driven to a larger degree by financial security, wealth, and income. A significantly higher number of males than females indicated they were high risk takers or perhaps, from Palich and Bagby's (1997) perspective, they viewed risky situations as opportunities. Women were highly motivated to own a business for flexibility in personal or family life. Finding that women place value on nonfinancial dimensions of ownership supports Buttner and Moore's (1997) and Keppeler and Shane's (2007) conclusions. Further exploration is needed to understand the relationship of high risk taking and intrinsic motivation as well as low risk taking and extrinsic motivation. Perhaps it is the intrinsic desire to challenge themselves that drives the owners' willingness to take high risks, versus the extrinsic motivation to provide personal and family income that curtails risk taking. In terms of examining rural small business owners, both males and females were willing to assume some degree of risk in business related matters, and were extrinsically motivated to become business owners.

LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

As with all research, there are certain limitations that should be noted. A diverse group of business owners is not represented in terms of race or ethnicity. Future research is needed to examine business owners who are not Caucasian and perhaps new to the community as recent immigrants. A second limitation arises from the ten items employed to measure motivations for going into business. The high correlation among the three factors of external, internal, and family motivations as well as the acceptability of reliability scores suggests further scale development is warranted. Nevertheless, the knowledge that rural small business owners, both men and women, are extrinsically motivated offers encouraging information for supporting business growth and development in rural communities.

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