

# Human Capital and the Success of Minority Entrepreneurs

**Alexander N. Chen**  
**University of Central Arkansas**

**Chris Tuggle**  
**University of Central Arkansas**

**Michael Rubach**  
**University of Central Arkansas**

**Michael Blanchett**  
**University of Central Arkansas**

*This research contributes to the literature on how human capital can impact the success of minority entrepreneurs in Arkansas. Human capital includes education, work experience, know-how, and skillsets. In the business environment, an important task of human capital is to deliver productive labor, promote commerce, and produce economic prominence. Human capital is irreplaceable and is unlike any other capital. Entrepreneurs must accomplish objectives and remain innovative. Specific human capital involves unique industry competence, self-employment capability, and leadership experience, which lead to goal achievement. A quantitative analysis of a sample of 287 minority male and female business owners was conducted to measure business revenues, company size, and self-reported performance assessment. After analyzing input from minority entrepreneurs in Arkansas, this article contains findings and conclusions which determine how human capital relates to the success of minority entrepreneurs.*

*Keywords: minority entrepreneurship, human factors, human skills*

## **INTRODUCTION**

Entrepreneurs can revolutionize the way we live and work. Entrepreneurship is crucial to life because it is pertinent to all economic undertakings, such as increasing an affluent society and promoting living standards. (Arthur & Hisrich, 2011; Beugelsdijk, 2007; Daft, 2015). Moreover, entrepreneurship is a major player in community economic development and social change (Decker, Haltiwanger, Jarmin, & Miranda, 2014; Van Ness & Seifert, 2016). Likewise, the gains and achievements of entrepreneurs have proven to be significant throughout the U.S. and Arkansas' economic history (Hinson, 2015).

This study focuses on how minority entrepreneurs in Arkansas benefit themselves and their communities. During the 21st century, the economic growth of the U.S. and Arkansas has mainly stemmed from entrepreneurship (Savrul, 2017). It has been the driving force that created a society of self-supporting

individuals and a growing economy (Strom, 2007). Similarly, Bates, Jackson, and Johnson (2007) conclude that entrepreneurship has been an avenue for individuals to lift themselves out of poverty and create job opportunities for others. To explore if Arkansas minority residents have shared these entrepreneurial benefits, the objective of this research is to investigate the association between minority entrepreneur human capital factors and minority entrepreneurs' success

Though entrepreneurship is recognized as a powerful force and minority entrepreneurs have played a role in economic growth, the contribution of minorities remains relatively small. There is a need and opportunity to increase the success of minority entrepreneurs. For example, in 1996, Latinos founded 10 percent of new businesses in the U.S.; notably, by 2015, that percentage had doubled. However, according to the Kauffman Foundation, despite a steady increase in their share of entrepreneurial activity, Latinos, like other minorities by 2015, still received less funding and failed faster than their white counterparts. The Kauffman Foundation is an education and entrepreneurship research nonprofit based in Kansas City, Missouri, which compiled research that highlights challenges faced by minority entrepreneurs (Kauffman Foundation, 2016). The foundation seeks to empower advocates to educate policymakers about why new businesses matter so that the voices of entrepreneurs can influence and inform economic policy debates at the local, state, and federal levels (Kauffman Foundation, 2016).

According to Scott (2016), it is not uncommon for minorities to hit roadblocks related to management, money, and markets which can halt entrepreneurial start-ups, sustainability, and growth. Such problems have a greater impact on minority entrepreneurs, causing their ventures to struggle and fail (Scott, 2016).

The continued disparity in entrepreneurship among people of color requires understanding minority entrepreneurs' unique challenges and broadening private and public sector entrepreneurial opportunities for them. Some reasons for such disparities are a lack of access to financial capital, lack of early entrepreneurial mentorship at a young age, and risk aversion (Blanchett, 2018). For venture funds, Caucasian entrepreneurs can often turn to family, friends, or financiers they know for their first funding source. Minority entrepreneurs are less likely to have the same access to financial capital (Bhide, 1992; De Clerq, Fried, Lehtonen, & Sapienza, 2006). Social networks and entrepreneurial mindsets were also found to be important factors that affect the success of minority entrepreneurs (Blanchett et al., 2019, Chen et al., 2021, Chen et al., 2020).

However, there are some positives to the economic impact minorities provide to the economy. According to the National Minority Supplier Development Council (Vowels, 2018), minority businesses produce more than \$400 billion in annual revenue and actively employ, either directly or indirectly, more than 2.2 million people. Additionally, minority-owned businesses contribute close to \$49 billion in local, state, and federal tax revenues. Thus, minority business translates to more than \$1 billion per day in revenue in the United States (Bradley, 2016). Lastly, more research is needed to demonstrate human capital's influence on national, state, and local economies to policymakers, business leaders, and entrepreneurs.

## **REVIEW OF LITERATURE**

This research aims to examine and understand human capital's (HC) impact on the successful entrepreneurial accomplishments of minorities in Arkansas. There are several examples and definitions of human capital. HC can be defined as known experiences, information, skills, and abilities (Caliendo & Kritikos, 2008; Felicio, Couto, & Caiado, 2012; Praag, Witteloostuijn, & Sluis, 2013). For many, human capital consists of knowledge, habits, and creativity, including the talent to accomplish labor that provides economic value (Backes-Gellner & Moog, 2013; Edvinsson & Malone, 1997; Felicio et al., 2012; Praag et al., 2013). Moreover, human capital can be characterized by education, experience, and learning which play notable roles in determining success (Santarelli & Tran, 2013).

Specifically, human capital involves unique industry capability, self-employment experience, and leadership acumen (Becker & Huselid, 2006; Bowen & Ostroff, 2004; Coff, 1997; Crook, Combs, Ketchen, Todd, & Woehr, 2011; Grant, 1996; Le, Oh, Shaffer, & Schmidt, 2007; Ragone, 2018; Subramony, Krause, Norton, & Burns, 2008; Takeuchi, Lepak, Wang, & Takeuchi, 2007). Human capital is essential to any entrepreneurial venture age, family background, education, work-related capability, and skills that impact

entrepreneurial activities. Age, typically, is a demographic variable. However, age is strongly associated with life experience and cumulative skill level. In this study, we argue it could also be human capital.

Furthermore, the understanding that people generate while embracing exceptional skills and job-related knowledge is human capital (Edvinsson & Malone, 1997; Praag et al., 2013). Human capital is often fueled by time-related attributes such as tenure and turnover. Human capital provides leaders with resources to help them appropriately interact with subordinates (Backes-Gellner & Moog, 2013; Boeker, 1997; Smith, Collins, & Clark, 2005). Minority entrepreneurs can use educational assets accompanied by knowledge and financial resources to improve goal attainments and profits.

Cowling's (2007) findings and empirical evidence strongly suggested that improving work capabilities and skills through self-employment greatly impact entrepreneurs' success and long-term survivability. The findings were from 19 studies related to human capital across five countries, including the United Kingdom, the United States, and the Netherlands (Cowlings, 2007). Researchers also indicated that human capital investments are highly significant in organizational performances and earnings in a competitive atmosphere (Huggins, Prokop, & Thompson, 2017; Le et al., 2007; Subramony et al., 2008; Takeuchi et al., 2007). Human capital contributes to the likelihood of business survival, growth, motivation, and success.

Lastly, human capital theory predicts that individuals or groups with superior knowledge, skills, and other competencies will achieve better performance outcomes than those with lower levels (Becker, 1964; Mincer, 1958; Marvel & Lumpkin, 2007; Ployhart & Moliterno, 2011). Related measures of human capital include the level of education, work experience, upbringing by entrepreneurial parents, and other life experiences (Kolstad & Wiig, 2015; Thomas, 2009). Further literature by Reuber and Fischer (1999) and Davidsson and Honig (2003) has acknowledged the importance of human capital assets, measured as a fixed set of knowledge, skills, and experiences, which currently appear in the scholarly literature.

This paper aims to examine those aspects of human capital that contribute to the success of, or more specifically, will apply to, minority entrepreneurs in Arkansas. To be precise, we examine two crucial parts of human capital: procedural knowledge and competitive skills. Minority entrepreneurs, likewise, need awareness of procedural knowledge, which includes financial planning, developing and incorporating businesses, and grant writing. The area of competitive skills consists of knowing the competitors' services, developing oral and written communications, and understanding the applications of technologies. These are important variables associated with the success of minority entrepreneurs.

## **METHODOLOGY**

### **Methods**

As our study's primary data collection tool, we utilized a survey instrument adapted from prior management literature. The survey instrument addressed human capital and entrepreneurial success. Most questions are in a 1-5 Likert scale format, with a few designed for eliciting short answers. Faculty members in a university's entrepreneurship program reviewed the questionnaire and incorporated their comments (Chen et al., 2020).

Qualtrics Survey Software, an online electronic software package, was used to collect data. This research study gathered information from minority entrepreneurs throughout Arkansas. Since no statewide database can identify minority entrepreneurs, the entrepreneurs were contacted using different types of minority business directories from various sources. A myriad of lists with names and contact information about minority entrepreneurs throughout Arkansas came from state agencies and organizations such as Arkansas Economic Development Commission, Disadvantage Business Enterprise, Arkansas Office of State Procurement, Arkansas Small Business Development Institute, and Institute on Race and Ethnicity. The respondents included some very small minority groups or businesses, so some chambers of commerce were contacted to get additional names of minority enterprises. The data was collected through Qualtrics and analyzed with SPSS software.

## **Participants**

Approximately 250 surveys were electronically submitted to minority entrepreneurs. Another 125 surveys were hand-delivered to businesses and entrepreneurs in relatively small and isolated communities. In addition, 150 surveys were given to minority entrepreneurs as they attended conferences, workshops, or training sessions throughout Central Arkansas (Saline, Pulaski, and Faulkner counties), Eastern Arkansas (Saint Francis, Chicot, and Lee counties), and Northwest Arkansas (Washington and Benton counties). This led to 287 valid responses being collected for this research.

A univariate study was conducted to ensure the normality of the demographic and success variables. We found that the proportions of different ethnic groups in the sample were compatible with the compositions of the ethnic groups in Arkansas. A Cronbach Alpha method was administered to assess the reliability of the two human capital constructs (procedural knowledge and competitive skills); see Table 5 (Means, standard deviations, and Cronbach alphas). The means and standard deviations of the entrepreneurs' skills are presented in Table 3 of the next section. One of the more important demographic variables, ethnic group, was not used in the study due to the factors of potential sampling bias. It was found that Native Americans had relatively high incomes and large numbers of employees. We felt these responses might be aberrational (or outliers) and thus decided not to use this variable in the study. As a result, four demographic variables (gender, age, education, and work experience) and two human capital variables (procedural knowledge and competitive skills) are used as the major independent variables to assess their relationships with the success of minority entrepreneurs in the study.

## **Measures**

Success is a complicated concept and should be considered from multiple aspects; it is appropriate to use multiple measures (Lumpkin & Dess, 1996; Wiklund & Shepherd, 2005). To avoid the potential instability associated with small enterprises, we requested venture revenues and numbers of employees for the past three years. Some businesses have considerable variations in the beginning stage. To secure more stable and accurate data, we used the past three-years average revenues as a measure.

In this study, the success of minority entrepreneurs is measured by two popular objective indicators: business revenues and the size of the establishment. However, the respondents provided self-reported information since the secondary data is often unavailable. For minority entrepreneurs and external success measured by numbers, it is crucial to include self-assessed success more likely to relate to intrinsic success. (Blanchett, Chen, Rubach, & Duggins, 2019).

## **RESULTS AND FINDINGS**

### **Descriptive Statistics**

The study included a convenience sample of 287 minority entrepreneur respondents of diverse ages, backgrounds, and characteristics throughout Arkansas. Tables 1 through 3 and Table 6 set out the descriptive statistics. The correlation matrix is set out in Table 7.

Almost 60% of the survey participants were in two age groups: ages 31-40 (31%) and 41-50 (28%). The ages ranged from 21 to 72, with an average of 42.26 years old. African Americans were the largest minority group in the survey at 51 percent. Hispanic Americans were the second-largest minority group with 23 percent.

**TABLE 1**  
**DEMOGRAPHICS OF PARTICIPANTS**

Variable	N	%	Means*	SD*
<b>Gender</b>				
Male	167	58.2		
Female	119	41.5		
Missing	1	.3		
Total	287	100		
<b>Age</b>				
			42.26*	11.75
21-30	44	15.3		
31-40	88	30.7		
41-50	80	27.9		
51-60	49	17.1		
61-70	23	8.0		
71+	1	.3		
Missing	2	.7		
Total	287	100		
<b>Ethnic Group</b>				
Black or African American	145	50.5		
Hispanic American	65	22.6		
Asian American	43	15.0		
American Indian Pacific Islander	19	6.6		
Other (Indian, Disabled Veteran)	2	.7		
Missing	11	3.8		
Total	2	.7		
Total	287	100		

Note. \*Mid-value of each group was assigned to compute the mean and standard deviation.

The respondents' education and work experience (see Table 2) are vital elements of human capital and assist people with earning a higher income. The survey respondents' education levels ranged from high school, associate, and baccalaureate degrees. For example, 36% of minority entrepreneurs had a four-year college degree. More than 40% had a high school or Two-year associate's degree. The average schooling years of 14.69 indicated minority entrepreneurs had more than an associate degree average level of education.

**TABLE 2**  
**PARTICIPANTS' EDUCATION AND WORK EXPERIENCE**

Variables	N	%	Means**	SD**
Education			14.69*	2.25
Less than High School	3	.1		
High School	61	21.3		
Certification/Self-Taught Experience	34	11.8		
Associates Degree	53	18.5		
College/University Degree	102	35.5		
Advanced/Professional Degree	33	11.5		
Missing	1	.3		
Total	287	100.0		
Experience in Years			12.35*	9.60
0	20	7.0		
1-5	51	17.8		
6-10	73	25.4		
11-15	60	21.5		
16-20	40	13.6		
21-25	17	5.6		
26+	26	9.1		
Total	287	100.0		

Note.

\*Years of schooling were used to compute the average education.

\*\*Mid-value of each group was assigned to compute the mean and standard deviation.

The information in Table 2 identifies the work experience of the respondents. There were 7% of entrepreneurs with missing responses. Zero years of experience were assumed and provided in the data analysis for missing responses. A total of 43% of the entrepreneurs had 1-10 years of work experience. Precisely 35% of respondents had 11-20 years of work experience. There were 15% of respondents with 21 years or more of work experience. The average years of work experience were 12.35.

A summation of 15 special entrepreneurial skills (see Table 3, Importance of Human Skills for Minority Entrepreneurs) was part of an exploratory factor analysis in a Malaysian study (Kassim, Buyong, & Kasmarini, 2014). The study aided the Malaysian government and supporting organizations in identifying how to help Malaysians desiring to be successful entrepreneurs. Table 3 details the skills in three tiers of importance determined by average scores. The information in the table can perhaps be used as a model for U.S. decision-makers and entrepreneurs. An explanation of each skill's relevance is provided.

**TABLE 3**  
**IMPORTANCE OF HUMAN SKILLS FOR MINORITY ENTREPRENEURS**

	Descriptions	Means	SD
Open Communication	Possess awareness that open communication with clients is a priority.	*4.42	.70
Employee Wages	Understand competitive wages are necessary to retain workers in your area.	4.42	.88
Competitors	Recognize the strengths and weaknesses of competitors.	4.35	.77
Business Incorporation	Know the legal differences between a business and a corporation.	4.13	1.02
Technology	Knows the latest technology available.	4.11	.87
Marketing Goals	Ability to reach marketing goals.	**4.06	.91
Business Plan	Aptitude to create business plans.	4.04	.88
Financial Cash Flow	Familiar with cash flow skills.	3.90	1.05
Government Regulations	Awareness of government rules and regulations.	3.88	1.08
Economical Vendors	Familiarity with economical vendors with quality supplies.	3.84	1.06
Financial Plans	Comprehend abilities for creating a financial plan.	***3.83	1.11
Business Forms	Know techniques for processing business forms.	3.81	1.13
Government Services	Possess knowledge of services provided by the government.	3.79	1.12
Entrepreneur Courses	Aware of entrepreneurial courses.	3.76	1.15
Grants and Loans	Familiar with processing grants and loans.	3.65	1.27

**\*Top tier.** A synopsis of the five skills with mean scores of 4.11 – 4.42 indicated that minority entrepreneurs should provide competitive employee wages and maintain open communication with their workers. Entrepreneurs must care for their personal properties by incorporating and protecting the business assets. The use of technology has become a vital tool for businesses to promote merchandise, services, and locations. Top tier implies that these are skills that minority entrepreneurs view as most important.

**\*\*Middle tier.** The five abilities with average scores of 3.84 – 4.06 focused on marketing objectives and business plan development. Marketing objectives include reviving product interest, increasing sales, and creating consumer awareness. Entrepreneurs must know that a business plan includes documents that specify business components, operations, and management.

**\*\*\*Lower tier.** The five competencies had a mean score of 3.65- 3.83. This tier focused on knowledge related to financial planning and services the government provides to entrepreneurs. The entrepreneurs improve their understanding by attending courses relating to entrepreneurship, loans, and recognition of essential business processes.

Factor analysis was undertaken given the number of human skills (15). Factor analysis (FA) is a data reduction method that takes a large set of variables, searches for various items, and combines the factors. Meyers, Gamst, and Guarino (2013) explained that the purpose of a factor analysis is to determine if variables can be summarized into smaller groups of factors and represented by a more common name. The FA allows the examination of concepts that are not easily measured by collapsing many variables into a few interpretable factors. Field (2013) and Nicol and Pexman (2010) explained a FA occurs when factors selected from a more extensive set of variables are related to smaller but similar factors. They call the process an extraction.

The extraction technique, Varimax rotation, illustrated in Table 4, is an analysis that identifies factors that result in more explainable and identifiable clusters (Field, 2013; Nicol & Pexman, 2010). The factors were associated with 15 critical specialty entrepreneurial skills described in Table 4. After the Varimax rotation, two factors from the 15 skills were extracted, leaving 13. Ten skills were categorized as procedural knowledge, and the other three were labeled as competitive skills.

**TABLE 4**  
**FACTOR LOADINGS FOR EXPLORATORY FACTOR ANALYSIS WITH VARIMAX ROTATION ON HUMAN CAPITAL'S SPECIAL SKILLS**

Skills	Procedural Knowledge	Competitive skills
Financial Plans	.93	.14
Grants and Loans	.92	.03
Government Services	.91	.12
Business Forms	.90	.14
Entrepreneur Courses	.89	.16
Financial Cash Flows	.80	.21
Business Plans	.78	.28
Government regulations	.76	.34
Business Incorporations	.70	.36
Economical Vendors	.65	.40
Marketing Goals	.52	.57
Employee Wages	.43	.41
Open Communications	.09	.84
Technologies	.39	.64
Competitors	.09	.89

Human capital was measured in two components, procedural knowledge and competitive skills. The two components were associated with the 15 important specialty entrepreneurial skills previously described in Table 4. In Table 5, Cronbach Alphas, Means, and Standard Deviations for Procedural Knowledge and Competitive Skills set out the two-factor solution. The Cronbach alphas for each component were greater than .70, which were .96 for procedural knowledge and .75 for competitive skills, respectively. Each component suggested good internal consistency (Meyers, Gamst, & Guarino, 2017; Hinkin, 1995, 1998; Pallant, 2016). There is little difference between the means for procedural knowledge, 3.88, and competitive skills, with a mean score of 4.30.

**TABLE 5**  
**CRONBACH ALPHAS, MEANS, AND STANDARD DEVIATIONS FOR PROCEDURAL KNOWLEDGE AND COMPETITIVE SKILLS**

	Cronbach Alpha	Means	SD
Procedural Knowledge	.96	3.88	.92
Competitive Skills	.75	4.30	

The success of minority entrepreneurs was measured by three different indicators, i.e., business revenues, establishment size by the number of employees, and a self-assessment measure. Table 6 (Frequencies, Means, And Standard Deviations of Dependent Variable Success) identified that about 30 percent of respondents make less than \$50,000, and 20 percent make between \$50,000 and \$100,000. It appears that revenues for minority entrepreneurs in Arkansas are low. Using a mid-value for each revenue category, we identified that the average annual revenue was \$129,605 with a standard deviation of



\$128,692. There are some possible reasons which accounted for low revenues. In the initial univariate analysis, two millionaires were identified. To avoid outliers and skewness, these two millionaires were assigned as missing and excluded from this computation. Therefore, the average income was lower with the exclusion of two millionaires. Typically, there are tendencies that self-report revenues or revenues for small businesses are lower. Since no official data is available, self-reported three-year averages were the best measure of revenue success.

These noted reasons suggest why revenues for a minority in Arkansas are relatively low. The average number of employees was 5.9, with a standard deviation of 0.65. Minority entrepreneurs in Arkansas were more likely to run a family business or a small business. Intrinsic success is included in the study as an additional success measurement (Blanchett et al., 2019). Subjective self-assessments are consistent with objective performance data (Dess & Robinson, 1984). The self-assessed scores for entrepreneurs' success were on a scale of 1-5. Two questions on the survey are about self-assessment of success. The first question relates to the entrepreneur's perceived success, and the other question is about her self-confidence in the community.

The majority of responders, 85 percent, were found to be four to five. The average self-assessed score was 4.19, with a standard deviation of .65 (see Table 6).

**TABLE 6  
FREQUENCIES, MEANS, AND STANDARD DEVIATIONS OF DEPENDENT  
VARIABLE SUCCESS**

Variables	N	%	Means	SD
Revenue			\$129,605.60	\$128,692.19
\$1-50,000	87	30.3		
50,001-100,000	58	20.2		
100,001-250,000	88	30.7		
250,001-500,000	24	8.4		
500,001-1,000,000	5	1.7		
Missing	25	8.7		
Total	287	100.0		
Number of Employees			5.90	5.08
0-5	195	67.9		
6-10	63	22.0		
11-20	23	8.0		
21-50	6	2.1		
Total	287	100.0		
Self-Assessment			4.19	.65
1-1.9	1	.3		
2-2.9	5	1.7		
3-3.9	30	10.5		
4 thru highest	245	85.4		
Missing	6	2.1		
Total	287	100.0		

Table 7 (Pearson Correlation among Human Capital and Dependent Variables) shows the Pearson correlation coefficients and significance levels among the major four demographics, two major constructs, and three dependent variables. The matrix reveals a significant association between the human capital factors and entrepreneurial success. Age was correlated with revenues (.20,  $p < .01$ ) and work experience with all three measures: revenues (.21,  $p < .01$ ), number of employers (.13,  $p < .05$ ), and self-assessed success

(.16,  $p < .01$ ). Procedural knowledge was also positively associated with all three success measures: revenues (.20,  $p < .01$ ), number of employers (.20,  $p < .01$ ), and self-assessed success (.34,  $p < .01$ ). For the success measures, revenues were positively associated with age, work experience, procedural knowledge, and competitive skills; the number of employees with work experience and procedural knowledge; and self-assessed success with work experience, revenues, procedural knowledge, and competitive skills. Gender had negative associations with revenues and the number of employees.

**TABLE 7**  
**PEARSON CORRELATION AMONG HUMAN CAPITAL AND DEPENDENT VARIABLES**

Variables	1	2	3	4	5	6	7	8	9
1. Age	1.00								
2. Gender	-.19	1.00							
3. Education	.18**	.03	1.00						
4. Work Experience	.55**	-.17**	.00	1.00					
5. Procedural Knowledge	.27**	-.19**	.19**	.33**	1.00				
6. Competitive Skills	.03	-.07	.21**	1.00	.46**	1.00			
7. Revenues	.20**	-.14*	.13	.21**	.20**	.14*	1.00		
8. Number of Employees	.09	-.15*	-.01	.13*	.20**	.10	.44**	1.00	
9. Self - Assessed Success	.06	.00	.16**	.16**	.34**	.33**	.21**	.13*	1.00

Note. \*\*Indicates significance at .01 level  
\*Indicates significance at .05 level

Regression analyses were utilized across the three performance measures to determine the performance differences among the human capital factors. The regression analyses (see Table 8) revealed only partial support for the hypotheses. The human capital variables of age and education were not significantly associated with any of the three success variables. Work experience was significantly and positively associated with one success measure, self-assessed success (.01,  $p < .05$ ). Procedural knowledge was significantly and positively associated with the number of employees measured (.89,  $p < .05$ ) and self-assessed success (.13,  $p < .01$ ). Competitive skills was significantly and positively associated with self-assessed success (.18,  $p < .01$ ). Self-assessed success has the strongest results, being significantly and positively associated with work experience, procedural knowledge, and competitive skills (all at  $p < .01$ ).

**TABLE 8**  
**REGRESSION ANALYSIS FOR HUMAN CAPITAL ON SUCCESS OF**  
**MINORITY ENTREPRENEURS**

Independent Variables	Revenues		Number of Employees		Self-Assessed Success	
	$\beta$	t	$\beta$	t	$\beta$	t
Constant	-107593.45	-1.51	2.78	.99	2.49	7.77**
Age	545.83	.64	.01	.44	-.00	-.76
Gender	-30810.62	-1.92	-1.16	-1.82	.06	.79
Education	6597.50	1.78	-.11	-.75	.03	1.68
Work Experience	1859.01	1.81	.01	.33	.01	2.40*
Procedural Knowledge	9258.34	.86	.89	2.20*	.13	2.73**
Competitive Skills	15708.80	1.04	.26	.45	.18	2.76**
F-Value	4.59		2.65		8.30	
Significance	.00		.02		.00	
R-Squared	.10		.06		.16	

Note. \*\*Indicates significance at .01 level

\*Indicates significance at .05 level

Gender was negatively or not correlated with the three success measures: revenues (-.14,  $p < .05$ ), number of employees (-.15,  $p < .05$ ), and self-assessed success (not significant). In the regression analysis, gender was not significantly associated with any of the three success measures. Age and education were not significantly associated with any of the success measures.

## DISCUSSION AND CONCLUSION

This study aimed to identify whether human capital was positively associated with the entrepreneur's success. The results show that human capital factors do indeed affect success. While the support is less than overwhelming, human capital factors are significantly associated with the success of the ventures.

The presence of Human Capital does make a difference. While the results are not the strongest, work experience, procedural knowledge, and competitive skills were all associated with the entrepreneur's success. What we term external measures (revenues and number of employees (size) were statistically significant contributors to firm success (revenues were strong contributors to success with an  $R^2 = .10$  and number of employees with an  $R^2 = .06$ ). The self-assessed measure of the entrepreneurs' perceived success was also a significant contributor ( $R^2 = .16$ ).

The study is not without limitations. There are disadvantages to self-report measures, which have been thoroughly addressed in the literature and need not be repeated here. The study used mixed methods for measuring success – two financial in scope measures and one self-assessed measure. Given the sizes of many entrepreneurial firms in Arkansas – nearly 90% had fewer than ten employees (see Table 6), perhaps sustainability/survivability (length of time in business) would be a better measure of success.

Human capital is but one of the determinants of entrepreneurial success. Entrepreneurs need to be encouraged to acquire human capital. They should gain industry experience before they open their ventures.

Working with financial plans, creating business plans, attending entrepreneurship courses, learning to write grants, becoming knowledgeable about government services and regulations, and learning about laws and choice of entity options are all skills that can be acquired. These items are components of the procedural knowledge factor, which significantly contribute to the entrepreneur's success. Entrepreneurs need to be given continued access to these types of activities. The efforts of the Small Business Administration, state and local agencies, incubators, accelerators, colleges, and universities need continuous support within entrepreneurial ecosystems and recognition for and of their efforts. The acquisition and/or enhancement of human capital by minority entrepreneurs should only continue to drive the success of their ventures and the economic development of their communities.

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