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RACIAL DIFFERENCES IN ECONOMIC BEHAVIOR PATTERNS AND MARKET PERFORMANCE IN BUSINESS VENTURES: A COMPARATIVE STUDY OF BLACK-OWNED AND WHITE-OWNED BUSINESS ENTERPRISES

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Abstract

The purpose of this study is to compare entrepreneurial risk and market behavior patterns between BBE and WBE. This study is a continuation of a prior study on SMEs. A majority of the prior research on Black-owned business enterprises (BBE) concluded that they are less successful and have dismal profitability compared to White-owned business enterprises (WBE). Two independent studies are conducted comparing both groups. Both ethnic/SME groups are examined across 11 different industry types. This research examines the market and economic and entrepreneurial risk patterns of BBEs compared to WBEs. A multivariate regression analysis is used to measure ethnicity as a predictor variable. The results indicate that BBEs were not much different or any more risky compared to WBEs. Despite the prior research that states to the contrary, the results indicate that BBEs are equally likely to be as competitive as WBEs in terms of firm dynamics.

Key words

Economic behavior; Market performance; Black-owned business enterprises; Market patterns; Customer turnover.

INTRODUCTION

One of the most interesting aspects of research on black-owned business enterprises (BBE) is their success or failure rates. BBEs have some socioeconomic constraints that interfere with the capability to reach equal with white-owned business enterprises (WBE). Although some of prior research on BBEs compared WBEs has been dismal on their firm behavior and survival rates, this continues to intrigue researchers on black-owned business enterprises and minority-owned business enterprises. Notable researcher has all concurred that BBEs have sociological and economic issues that affect their economic prominence compared to their white-counter parts. The majority of the

prior research on the firm survival of BBEs has been bleak at best. This leaves many researchers to conclude dismal success and failure is a self-fulfilling prophecy concerning BBEs.

Two major key influences in comparing BBEs to WBEs are social and economic constraints. Nevertheless, BBEs have been successful in their own right that may transcend race, socioeconomic factors. Most notable, financing and venture funding has been a challenge (Boden & Headd, 2002; Zajonc, 2003; Handy, 2008; Strang, 2001). However, BBEs can still be competitive in their own marketplaces (Porter, 1995a; Porter, 1995b; Porter, 1995c; Robb, 2002; Renzulli, 2009). Thus, entrepreneurial risk plays a pivotal role in comparing BBEs to WBEs. By examining entrepreneurial risk, we may gain more insights on firm behavior to understand ethnic differences between the two groups.

Most notably, the prior research on BBEs and minority-owned businesses seems to focus on three general areas: (a) psychological studies, (b) sociological and socioeconomic studies; and (c) economic studies. Considering the issues that some BBEs face, there have been some successful firms. Furthermore, a significant amount of the prior research on them has relied on government data or secondary data. Very few of the prior studies used primary data and often yielding generalized results that often supported the conventional wisdom on the vitality and survival of black-owned business enterprises. Furthermore, this leads to an incomplete picture of the underlying factors that influence the success and failure of BBEs.

The purpose of this study is to compare differences between black-owned business enterprises and white-owned business enterprises. This study examines the entrepreneurial and economic behavioral patterns between the two groups. This research has three primary objectives: (a) compare and contrast economic differences between BBEs and WBEs; (b) investigate and explore the firm idiosyncrasies between the two groups; and (c) examine and compare customer turnover analytics between the two groups to estimate profitability levels.

The central contribution of this research is to build on the prior research on black-owned business enterprises and open a new inquiry by examining group differences in terms of entrepreneurial risk behavioral patterns. This study also attempts to challenge the prior studies and the conventional wisdom on black-owned business enterprises. This research attempts to make three contributions to the field. First, provide insight into the firm dynamics of black-owned business enterprises. Second, provide empirical support and foundation for the research. Lastly, extend the research beyond the prior research on black-owned business enterprises.

The paper is structured as follows. First, a review of the literature and prior research relevant to the study was compiled. Next, Section 2 discusses the hypotheses proposed for the study. Section 3 describes the sample, variables and data collection. Section 4 presents the conceptual model of the study. Section 5 presents the results and the statistical analyses of the data. Section 6 presents the discussion of the results, implications, and directions for the future research. Finally, the conclusion and summary are presented.

LITERATURE REVIEW AND PRIOR STUDIES

Prior Research on Black Businesses

A majority of the prior research on comparing black-owned business enterprises to white-owned business enterprises have been varied and mostly focusing on socioeconomic studies. Based on the literature there is a large body of the research has concluded that black-owned business enterprises have not as successful compared to white-owned business enterprises. The major of the prior research on comparing the black businesses with white businesses were three types: (a) psychological studies, that based on research on individual psychological characteristics comparing black businesses with white businesses; (b) sociological studies, that examined sociological factors that impacted successful operations of black businesses compared to white businesses; and (c) economic studies that focused on the economic characteristics of black businesses compared to white businesses (Hornaday & Hunnally, 1987). Also further studies have focused on inner city economic development and black entrepreneurship. Many of the black-owned business enterprises were limited to the inner city (ghetto) communities (Tabb, 1969). Other studies have examined the state of the inner cities and black entrepreneurship (Bates, 1973; Porter, 1995a; Porter, 1995b; Porter, 1995c; Simms & Allen, 1995; Butler, 1996; Boston, 1995; Fairlie & Robb, 2007). Some studies offered possible solutions to developing more black-owned business enterprises in the inner cities (Bates, 1973; Bates, 2006; Bates, 2006; Bates & Bradford, 2009; Bates, 2010).

Some of the research has concluded that many black business owners had fewer years of education and less business experience than their white counterparts. Furthermore, black businesses were also smaller, more labor intensive, located in poorer neighborhoods, less likely to have insurance, visited by fewer customers per day, more likely to rent their shops and to be less profitable than white businesses (Auster, 1988). Christopher (1989) concluded the probability of minority business survival is increased

with the number of years of formal education to some threshold. Furthermore, minority business survival was increased with the utilization of commercial bank financing to enter into business; and there is a slightly higher rate of survival for individuals who use a mix of debt and equity capital in business formation. The following hypothesis was developed from the preceding literature and prior research:

> ***Hypothesis 1:*** There are differences between black-owned business enterprises (BBE) and white-owned business enterprises (WBE) in terms of individual demographics (age, marital status, and education level).

In another study, Bates (1990) concluded that Black enterprises have diversified and grown in size and scope, they have also had added many employees, most of whom have been African Americans, a profound difference from firms that are not owned by minorities. Furthermore, Blacks hire Blacks, while White owners employ a predominantly White workforce. In a follow up study, Bates (1994) reached similar conclusions.

Some of the research examined black-owned business enterprises over a course of time to measure firm survival. In longitudinal study, Boden and Headd (2002) concluded there were differences in firm survival based on race and gender ownership in dissolution rates and factors related to dissolution. Singh, Know and Crump (2008) asserted they found significant differences between the percentage of black and white nascent entrepreneurs, who recognized externally-stimulated versus internally-stimulated opportunities and their projected firm revenues. The following hypothesis was developed from the preceding literature and prior research:

> ***Hypothesis 2:*** There are differences BBEs between WBEs in terms of firm demographics (length of business ownership, entity type, industry type, employee number, and capital investment).

Lastly, black nascent entrepreneurs were more likely to pursue externally-stimulated opportunities with significantly lower expected revenues than their white counterparts. Other studies have examined black businesses and minority economic development were notable research from Bates and Hester (1977), Ekanem (1992), Zajonc (2003), Handy (2008), Strang (2001), and Sonfield (2007).

Racial Barriers to Firm Existence

One of the racial barriers to firm existence has been limited access to capital. Minority-owned businesses and firms with limited access to capital were constrained in their ability to generate sales and production when compared to peer-firms within the same industry. Furthermore, minority-owned businesses face socioeconomic disadvantages

that limited their size and scope (Rodgers, Gent, Palumbo and Wall, 2001). Some of the prior research has also compared firm dynamics and survival chacteristics among subminority groups and genders (Moskowitz, 1983; Miles, 2013; Robb, 2002; Renzulli, 2009). The following hypothesis was developed from the preceding literature and prior research:

> ***Hypothesis 3:*** There are differences BBEs between WBEs in terms of market behavior and entrepreneurial risk factors.

The prior research on economic development and employment segmented by ethnicity has been significant. An interesting fact concerning employment is that most of the nonminority-owned small businesses operating in large urban areas did not employ minorities. Even among the businesses physically located within minority communities, the majority of the workers in the nonminority small firms were white. However, Black-owned business enterprises, in contrast, relied largely on minority workers even when their firms were located outside of minority neighborhoods (Bates, 2006). In another study, Boyd (2006) found that geographical and occupational shifts reflect salient post World War II changes in race relations, most notably the decline of racial segregation in many areas of social life and the increase of opportunities for black entertainers to achieve distinction on a national level.

Another pivotal study on black-owned business enterprises compared to white-owned business enterprises was from Fairlie and Robb (2007). They concluded that based on estimates from the 1992 Characteristics of Business Owners (CBO) Survey indicated that: (a) black-owned firms have lower profits and sales, hire fewer employees, and are more likely to close than white-owned firms; (b) Secondly, black business owners are much less likely than white business owners to have had a self-employed family member owner prior to starting their business and are less likely to have worked in that family member's business; (c) thirdly, black firms and white firms concentrate in different industries; black firms are underrepresented in construction, manufacturing, wholesale trade, agricultural services, finance, insurance, and real estate relative to white firms; and (d) lastly black firms are more concentrated in transportation, communications, public utilities, and personal services than white firms.

These industry differences are associated with worse outcomes among black-owned firms. Interestingly, minority-business startups have some acute proclivities. Black and whites are more likely to own businesses in newer immigration gateways, while Hispanics and Asians are more likely to do so in the more established gateways (Wang, 2010).

Financial and Capital Matters

In terms of financial activity, in terms of lending and venture capital, there differences between black and white businesses with lending policies with the Small Business Administration (SBA). Bates (1973) concluded that in general, for shorter-term loans from the New York SBA average black borrowers generating average levels of cash flow would receive larger loans than whites with identical loan applications. Black borrowers who were weaker than average will, in the absence of especially large cash flow, tended to receive smaller loans than identical firms owned by whites.

Furthermore, due to the fact that loan amount is quite sensitive to the level of a firm's cash flow, extremely weak black firms were considerably penalized and extremely strong. Black borrowers have considerably benefited relative to whites with comparable loan applications. Black business owners were more concerned about growth/expansion and capital as opposed to white business owners (Hornaday & Hunnally, 1987). Many minority-owned businesses and firms with limited access to capital were constrained in their ability to generate sales and production when compared to peer-firms within the same industry. Furthermore, minority firms were stronger in services industries but performed poorly in manufacturing industries such as production function based on measures of efficiency and productivity. This was due to a low level of productivity or possibly access to more fruitful markets and profitable business opportunities (Rodgers, Gent, Palumbo and Wall, 2001). The following hypothesis was developed from the preceding literature and prior research:

> ***Hypothesis 4:*** There are differences BBEs between WBEs in terms of customer turnover analytics and customer behavior.

In a later study, Branchflower et al. (2003) asserted that credit availability for black-owned business enterprises were likely the result of discrimination policies based on race in small business credit markets. As a result, this racial disparity with credit availability was most definitely based on race and discrimination. Coleman (2008) reached similar conclusions. She concluded that black-owned firms were no less likely to have loans than white-owned firms controlling for firm and owner characteristics. Secondly, black-owned firms were still significantly more likely to be turned down for loans and more likely to refrain from applying because they assumed they would be turned down. Lastly, black firm owners who were approved for loans paid significantly higher rates of interest. The problem for black business owners is lack of access of capital that is needed to establish business enterprises successfully (Maudin, 2012). The following hypothesis was developed from the preceding literature and prior research:

Hypothesis 5: There are differences BBEs between WBEs in terms of Entrepreneurial Risk Orientation (ERO) index levels.

Government Involvement and Issues

Government involvement has been a force in developing economic development in the inner cities and black-owned business enterprises. This is was most likely to be at the local, state and federal levels in being an agent in economic development. In most cases, cities with African American mayors were more conducive than other cities to African American economic development with regard to both the numbers and sales activity. Most notably, black mayoral incumbency and significant but not majority black political representation on city councils was most conducive to Black business numbers and level of activity (Hewitt et al. 1987).

Market entry barriers have been an influence on black-owned business enterprises. As an entry barrier, consumer discrimination was found to deter black firm entry in four industrial sectors identified in the Census Bureau's 1992 Survey of Minority-Owned Business Enterprises (SMOBE). The results show that in 1992, consumer discrimination resulted in the lost of $5.6 billion dollars of black producers' surplus (Price, 2005).

Criticisms of the Prior Research

One critical observation that was most apparent is the tendency of the prior research to utilize a significant amount of government agency data or secondary data. What was equally disturbing were some of the prior studies that used data sets that were nearly 10 years old. Thus, the prior research using secondary data seemed to maintain the accepted conventional beliefs about the failure or non-success of black business enterprises. Notably, very few prior studies collected primary data on black business enterprises. Another interesting observation is that some of the prior studies seemed to ignore e-business ventures or internet businesses, which tend to be ethnicity free or color neutral. Another interesting observation is the prior research does not take in consideration on data on black franchise owners. The research methodology for examining on black business-owned businesses and minority owned-businesses needs to be severely updated.

The objective of this study is to conduct comparative research on BBEs and WBEs. The researcher wanted to take an unconventional approach for this study. This study attempts to provide a new inquiry on black-owned business enterprises by focusing on economic models and entrepreneurial risk models. This study did not use any government or secondary data. The researcher attempts to build on the prior research

on black businesses; and thus add to the body of knowledge. Figure 1 illustrates the Literature Review Model:

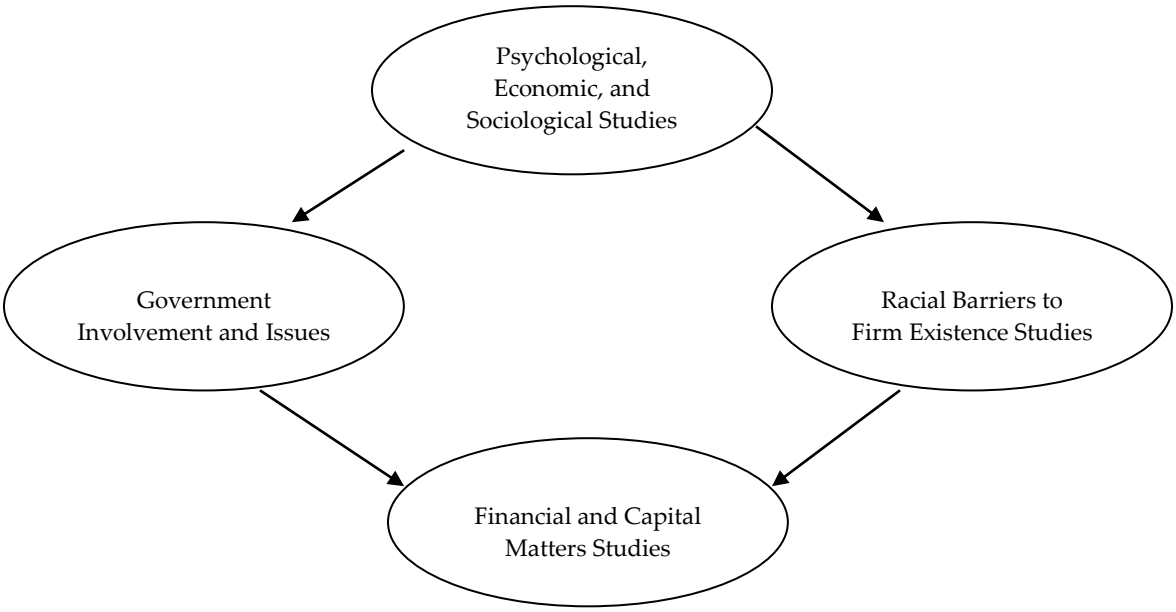

FIG. 1 LITERATURE REVIEW MODEL

THEORETICAL FRAMEWORK AND CONCEPTUAL MODEL

Conceptual Model of the Study(s)

Figure 1 illustrates the conceptual model. The model illustrates that typically risk factors influence small business enterprises (BBEs and WBEs). The conceptual model proposes the entrepreneurial risk factors influence the BBEs and WBEs. Ethnicity is proposed as a moderating influence to the two groups. Lastly, the risk factors are measured, which determine the ERO index levels.

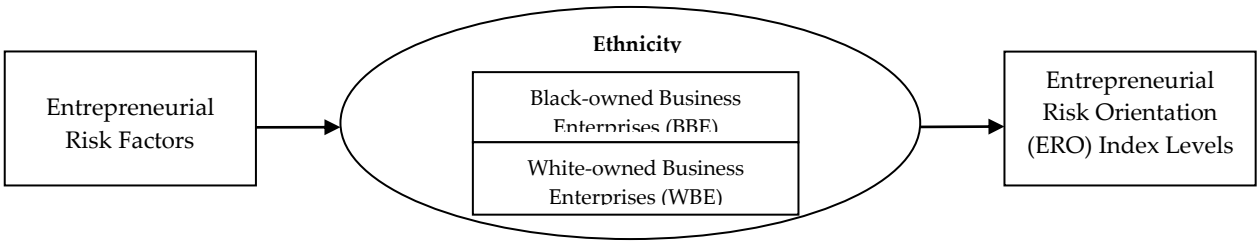

FIG. 2 CONCEPTUAL MODEL FRAMEWORK

Two models were used for both studies. The first model measured eight factors between black business enterprises (BBE) and white-owned business enterprises (WBE) in Study 1. For the Study 2, seven different factors were measured.

Study 1 Model

ERO Index Levels = F1 + F2 + F3 + F4 + F5 + F6+ F7 + F8
Where

F1 = Factor 1: Industry/Economic Forces
F2 = Factor 2: Terrorism/Security Dynamics
F3 = Factor 3: Government/Market
F4 = Factor 4: Market Forces
F5 = Factor 5: Global/Economic Forces
F6 = Factor 6: Internal Forces
F7 = Factor 7: Business Enterprise Intangibles
F8 = Factor 8: Profit and Inflation

Study 2 Model

ERO Index Levels = F1 + F2 + F3 + F4 + F5 + F6+ F7
Where

F1 = Factor 1: Internal Enterprise Operations
F2 = Factor 2: External Enterprise Operations
F3 = Factor 3: Overhead Costs and Operations
F4 = Factor 4: Government and Market
F5 = Factor 5: Profit and Energy Factors
F6 = Factor 6: Globalization and Market
F7 = Factor 7: Economic Forces

METHODOLOGY

The purpose of this study was to conduct a comparative analysis between black-owned business enterprises (BBE) with white-owned business enterprises (WBE). The objective of the study was to measure market behavior and firm behavior patterns based on economic and entrepreneurial risk constructs between the two groups. Based on the prior studies and literature review, the researcher wanted examine if there were differences between BBEs and WBEs. This study was built on a theoretical model developed on measuring economic behavior and market behavior of small business enterprises (SME).

Sampling

This study took place over a three-year period from 2011 - 2014. Both Study 1 and Study 2 were conducted during this period. This study is a continuation of two prior studies on market and economic behavior patterns of SMEs (Miles, 2011); and economic patterns and gender differences with Black-owned business enterprises (Miles, 2013). The sample was drawn from a population of less than 30,000 small-to-medium businesses (SME) in the metropolitan area. The proportionate sample was based on estimated population of SMEs in the area. Participants were recruited from the local Bexar county and San Antonio metropolitan area. A total sample of 248 participants, which included Black-owned business enterprises (n = 112) and White-owned business enterprises (n = 136). For both studies, the researcher estimated that approximately 1,400 participants were solicited, which resulted in a response rate of about 18.0%. Participants selected were identified as black and white business owners from the local area from the surveys. In addition, the study required the respondents to be business owners and be in business at least one year or more. Lastly, the study used control variables such as age, marital status, and education level.

Sampling Frame and Data Collection

The sampling frame consisted of black-owned and white-owned business enterprises. This research utilized systematic random sampling to establish equal distribution from large, medium, SMEs. The researcher used the number of employees in the enterprise (500 or fewer) for qualifying businesses for inclusion in the study.

To test the hypotheses, data was collect through a researcher-developed survey. The study used a random sample from the businesses in the Yellow Pages Directory. Random phone calls to the participants were made from listings for both studies. The data was collected with the assistance of some governmental and non-profit agencies. Those agencies were the following: local Black Chamber of Commerce; Small Business Administration (SBA); local black business directory; Small Business Development Center (SBDC); Service Corps of Retired Executives (SCORE); Greater Chamber of Commerce; and Other local chambers of commerce.

For both studies, data collection strategy consisted of four tactics: (a) telephone cold-calling, through random phone calls to the participants from local chamber listings: (b) personal contacts; (b) web-based/email, administration of the survey instrument via Survey Monkey ®; (c) one-on-one personal survey interviews, administered the survey instrument in-person to the participants; and (d) drop-off administration by leaving the survey with the participants and making arrangements to retrieve it later.

Research Instruments

The Entrepreneurial Risk Survey (ERS). The scale developed by the researcher for the first study. ERS began as a pilot study for collecting data on entrepreneurial risk factors. It consists of a multidimensional scale design. It is a 32-item scale in order to identify and predict market behavior and risk patterns in business enterprises. ERS used a 5-point Likert scale (1 = Low risk to 5 = High risk). Of the 32 items in the survey instrument, 22 items were utilized to compute entrepreneurial risk and ERO index levels. Analyses were made through total scores obtained from the scale. The Entrepreneurial Risk Assessment Scale (ERAS). This scale was also developed by the researcher for the second study. It consists of a 37-item scale that identifies and predicts market behavior and risk patterns in SMEs. After further development of the pilot ERS instrument, three variables were added: (a) line of credit risk, (b) customer credit risk; and (c) economic risk. Analyses were made through total scores obtained from the scale. ERAS used a 5-point Likert Scale ranging from "1" Low risk variable to "5" high risk variable. Of the 37 items in the survey instrument, 25 items were utilized to assess entrepreneurial risk and ERO index levels.

Measures

Dependent Variables

For Study 1, the dependent variables are the factors and variables used for measuring market behavior and risk patterns in the data: Factor 1: Industry/Economic Forces; Factor 2: Terrorism/Security Dynamics; Factor 3: Government/Market Forces; Factor 4: Market Forces; Factor 5: Global/Economic Forces; Factor 6: Internal Forces; Factor 7: Business Enterprise Intangibles; and Factor 8: Profit and Inflation Forces.

For Study 2, the dependent variables are: Factor 1: Internal Enterprise Operations; Factor 2: External Enterprise Operations; Factor 3: Overhead Cost and Operations; Factor 4: Government and Market; Factor 5: Profit and Energy Factor; Factor 6: Globalization and Market and Factor 7: Economic Forces. For of hypotheses testing, these dependent variables were defined as a composite index composed of eight to seven indicators of market behavior and entrepreneurial risk. The combined composite ERO index provides a more robust test of hypotheses for both studies.

Independent Variables

To assess the entrepreneurial risk levels of the small business enterprises (SME) for the study, the ERO levels were examined from the independent variable, ethnicity. Five

independent variables were also used in the study (gender, business entity type, time length of business ownership and industry type, and capital investment amount). However, for the purposes of the study, ethnicity was the primary independent variable used for this comparative study.

Control Variables

Three control variables were used for this study: (a) age, (b) marital status, and (c) education level. To control the dynamics of the study, the black and white business owners were asked to consider all of the survey factors and items that can possibly influence their responses and decisions. The respondents were instructed to complete the survey based on the current state of their business enterprises. First, the control variables were an influence but not the focus in the study. Second, there were no dummy variables used for the study. There were other controlled variables included in the analyses. First, the size of the firm was controlled because firm size is based on the number of employees in the firm. Second, the group represents is controlled for the effect of group membership by ethnicity. Group is a dummy variable, with a "1" indicating membership in an ethnic Group 1: "Black" and "2" indicating membership in Group 2: "White." Last, the researcher controlled for the age of the firm by including the time length of business ownership. The empirical analyses include descriptive statistics; mean and standard deviations comparisons and multivariate regression analysis are illustrated in the forthcoming tables and figures.

RESULTS OF THE STUDY

Data Analysis

The study employed a quantitative methodology. The data of the study were analyzed by means of an independent sample t-test and multivariate regression analysis. In multivariate regression analysis, the hypotheses were tested. The research design employed a two-step process to test the hypotheses. For step one, a descriptive statistical analysis was conducted for both studies. Descriptive statistics were used to measure frequency trends and percentage trends, and compare the scores. This was conducted on personal demographics and firm demographics.

The researcher examined the heterogeneity of such variables such as gender, age, and others. For step two, multivariate analyses were conducted on the data for both studies. These analyses were conducted on market and economic behavioral patterns and firm demographics. Multivariate statistics were used to measure relationships and patterns in the data and make inferences about the samples. The researcher examined the heterogeneity of such variables such as gender, age, and others. Data collected from

both the ERS and ERAS instruments were analyzed using the SPSS ® Version 21.0 software. This was used for establishing central tendencies (mean, median, and mode) and developing the exploratory analysis, and data cleaning.

Descriptive Statistics

The descriptive statistics for demographics of the respondents are presented for both studies with Table 1 and Table 2. For Study 1, Table 1 displays a cross tabulation of the individual demographics with the BBEs and WBEs for Study 1. As indicated, the first column shows the descriptive of the customer turnover variables. The second column shows the two ethnic groups and the frequency and percentage of the respondents. The third column shows the F ratio. The next column shows the t-test ratio. Lastly, the remaining column shows the significance coefficient.

The hypotheses states there are differences between BBEs and WBEs in terms of individual demographics. Table 1 provides a cross-tabulation between ethnicity and the respondents in terms of personal demographics. There were some notable results. First, the results indicate that 63.2% of the BBEs were divorced compared to 36.8% of WBEs. Last, the results indicate that 35.0% of the BBEs had a graduate college degree compared to 65.0% of WBEs.

For Study 2, the results of the cross-tabulation between ethnicity and the respondents are presented in Table 2. There were some notable results for Study 2. First, the results indicate that 34.6% of the BBEs were married compared to 65.8% of WBEs. Conversely, the results indicate that 65.4% of the BBEs were divorced compared to 34.6% of WBEs. Third, 55.6% of the BBEs had a post-graduate degree compared to 44.4% of WBEs. Last, 31.0% of the BBEs were identified as an S or C Corporation had a post-graduate degree compared to 69.0% of WBEs.

TABLE 1. STUDY 1 - COMPARATIVE MEANS AND STANDARD DEVIATIONS OF SMEs BY EHNICITY

	Group 1		Group 2				
	BBEs (n = 54)		WBEs (n = 62)				
Demographic Variables	n	%	n	%	F	t	p
Gender							
Male	19	57.6	14	42.4	8.593	1.503	.004
Female	35	42.2	48	57.8			
Marital Status							
Single (never been married)*	9	81.9	2	18.2	3.093	.098	.081
Married*	28	36.8	48	63.2			
Divorced*	12	63.2	7	36.8			
Widowed	4	57.1	3	42.9			
Separated	1	33.3	2	66.7			
Age							
18 to 24	1	50.0	1	50.0	.140	-1.750	.709
25 to 35*	3	27.3	8	72.7			
36 to 46	15	42.9	20	57.1			
47 to 57	17	60.7	22	55.0			
57 and over	54	46.6	11	39.3			
Education Level							
Did not finish high school	-	-	1	100.0	1.246	-.188	.267
High school diploma	2	20.0	8	80.0			
Some college	20	58.8	14	41.2			
Bachelors	18	48.6	19	51.4			
Graduate degree*	7	35.0	13	65.0			
Post Graduate degree or higher	7	50.0	7	50.0			
Time Length of Business Ownership							
Less than 1 year*	12	37.5	20	62.5	.793	-1.180	.375
1 - 3 years	12	48.0	13	52.0			
4 years or more	30	50.8	29	49.2			
Compensation from Business							
Under $10,000	5	41.7	7	58.3	.005	2.478	.943
$10,001 to $25,000*	13	76.5	4	23.5			
$25,001 to $40,000*	9	60.0	6	40.0			
$40,001 to $60,000	10	43.5	13	56.5			
$60,001 to $100,000	11	44.0	14	56.0			
$100,001 and over*	6	25.0	18	75.0			
Industry Type							
Consumer Monopoly-Type Ind.	14	48.3	15	51.7	.079	-1.34	.779
Consumer Competitive-Type Ind.	8	36.4	14	63.6			
Semi-Commodity Type Ind.	10	58.8	7	41.2			
Commodity Type Ind.	22	45.8	26	54.2			

TABLE 2. STUDY 2 - COMPARATIVE MEANS AND STANDARD DEVIATIONS OF SMEs BY EHNICITY

	Group 1		Group 2				
	BBEs (n = 58)		WBEs (n = 74)				
Demographic Variables	n	%	n	%	F	t	p
Gender							
Male	23	31.1	51	68.9	2.060	-1.425	.154
Female	25	43.1	33	56.9			
Marital Status							
Single (never been married)	11	47.8	12	52.2	.396	1.142	.530
Married*	27	34.2	52	65.8			
Divorced*	9	34.6	17	65.4			
Widowed	1	50.0	1	50.0			
Separated	2	-	2	100.0			
Age							
18 to 24*	2	40.0	3	60.0	.732	-2.003	.394
25 to 35*	4	25.0	12	75.0			
36 to 46*	7	21.9	25	78.1			
47 to 57	17	40.5	25	59.5			
57 and over	18	48.6	19	51.4			
Educational Level							
Did not finish high school	-	-	1	100.0	2.452	-.890	.120
High school diploma	5	41.7	7	58.3			
Some college*	20	35.7	36	64.3			
Bachelors*	11	28.2	28	71.8			
Graduate degree	7	46.7	8	53.3			
Post Graduate degree or higher	5	55.6	4	44.4			
Time Length of Business Ownership							
1 year or less*	18	30.5	41	69.5	6.125	-1.990	.015
2 to 5 years*	9	33.3	18	66.7			
6 to 10 years	7	43.8	9	56.3			
11 to 15 years*	2	18.2	9	81.8			
16 to 20 years*	12	63.2	7	36.8			
Business Entity Type							
Corporation*	13	31.0	29	69.0	.390	-1.418	.533
Limited Liability Corp (LLC/LLP)*	4	26.7	11	73.3			
Partnership*	1	14.3	6	85.7			
Sole Proprietorship	28	45.2	34	54.8			
Other*	2	33.3	4	66.7			

(continues)

TABLE 2. STUDY 2 - COMPARATIVE MEANS AND STANDARD DEVIATIONS OF SMEs BY EHNICITY

	Group 1 BBEs (n = 58)		Group 2 WBEs (n = 74)				
Demographic Variables	n	%	n	%	F	t	p
Industry Type							
Agriculture	1	100.0	-	-	4.689	-.654	.032
Communication*	1	33.3	2	66.7			
Construction*	2	15.4	11	84.6			
Finance	-	-	4	100.0			
Manufacturing*	1	14.3	6	85.7			
Retail*	8	40.0	12	60.0			
Services	24	51.1	23	48.9			
Technology*	3	37.5	5	62.5			
Transportation*	1	16.7	5	83.3			
Wholesale	-	-	6	100.0			
Other Industry	7	41.2	10	58.8			
Number of Employees							
1 to 100*	47	36.2	83	63.8	.376	.298	.541
101 to 200	1	100.0	-	-			
201 to 300	-	-	-	-			
301 to 400	-	-	1	100.0			
Capital Investment Amount							
0 to $50,000*	41	36.9	70	63.1	.099	-.077	.753
$50,001 to $100,000*	1	14.3	6	85.7			
$100,001 to $500,000	6	42.9	8	57.1			
Franchise Ownership							
Yes	7	46.7	8	53.3	3.024	.877	.084
No*	41	35.0	76	65.0			

Comparative Analyses of Means and Standard Deviations: Independent Sample t-Tests

An independent sample t-Test was conducted for both studies to test the hypotheses in terms of market and economic behavioral differences between BBEs and WBEs. Tables 3 and 4 illustrate the results of market behavior and risk factors with BBEs for Study 1. As indicated, the tables illustrate the means and standard deviations, t-values, and degrees of freedom in the data. For Study 1, Table 3 illustrates the results of t-tests, BBE participants displayed similar factor means and standard deviations compared to WBEs. For example, Factor 5: Market Forces revealed similarities in means and standard deviations for BBEs (M = 8.71, SD = 4.895) and WBEs (M = 8.16, SD = 4.829). Overall, the t-tests means and standard deviations of both groups did not reveal any significant differences across the eight factors.

For Study 2, Table 4 illustrates the results of market behavior and risk scores with BBEs. The market behavior patterns and risk patterns of BBEs did not reveal any significant

differences compared to WBEs for Study 2. For example, Factor 2: External Enterprise Operations revealed similarities in means and standard deviations for BBEs (M = 9.36, SD = 5.645) and WBEs (M = 9.98, SD = 5.074). Overall, for both studies, the t-tests means and standard deviations of both groups did not reveal any significant differences across the seven factors. Thus, the hypothesis that BBEs are different from WBEs in terms of the means and standard deviation across seven and eight risk factors was not supported.

TABLE 3. STUDY 1 - COMPARATIVE FACTOR MEANS AND STANDARD DEVIATIONS OF SMEs BY ETHNICITY

Factors and Variables (N = 116)	BBEs (n = 54)		WBEs (n = 62)		
	M	*SD*	*M*	*SD*	*t*-Test
FACTOR 1: *Industry/Eco. Forces*					
• V13-Equipment Risk	2.65	1.246	2.48	1.067	-.765
• V10-Capital Investment Risk	1.37	.831	1.47	1.004	-.757
• V23-Government Reg. Risk	2.56	1.410	2.27	1.381	-1.084
• V24-Social Risk	1.24	.725	1.50	.937	1.649
• V20-Market Entry Risk	3.04	1.479	3.50	1.423	1.716
FACTOR 2: *Terrorism/Sec. Dynamics*					
• V27-Terrorism Risk	2.00	1.360	2.90	1.376	3.546
• V26-Security Risk	1.89	1.176	2.15	1.377	1.069
• V25-Environment Risk	1.80	1.265	2.45	1.445	2.581
FACTOR 3: *Government/Market*					
• V14-Diseconomies of Scale	2.37	1.350	3.23	1.487	3.225
• V29-Globalization Risk	2.19	1.555	3.06	1.991	2.623
FACTOR 4: *Market Forces*					
• V16-Intellectual Capital Risk	3.67	1.614	3.98	1.509	1.093
• V11-Time Intensity Risk	2.24	1.529	3.31	1.655	3.583
• V18-Customer Turnover Risk	3.52	1.587	3.85	1.502	1.172
FACTOR 5: *Global/Economic Forces*					
• V8-Expertise Industry Risk	2.56	1.574	2.60	1.531	.143
• V15-Protection Devices Risk	2.61	1.642	2.69	1.585	.275
• V9-Business Entity Risk	3.54	1.679	2.87	1.713	-2.108
FACTOR 6: *Internal Forces*					
• V17-Velocity of Profit Risk	2.85	1.753	2.81	1.818	-.135
• V28-Inflation Energy Risk	1.67	1.166	1.95	1.151	1.322
FACTOR 7: *Business Enterpr. Int.*					
• V21-Competitive Risk	3.13	1.672	3.02	1.604	-.373
• V19-Market Potential Risk	3.04	1.479	3.50	1.423	-1.303
FACTOR 8: *Profit and Inflation*					
• V22-Business Climate Risk	1.85	.940	2.18	.915	1.888
• V12-Labor Risk	2.78	1.313	3.27	1.528	1.863

**p <.1, **p <.05 and ***p <.01.

TABLE 4. STUDY 2 - COMPARATIVE FACTOR MEANS AND STANDARD DEVIATIONS OF SMEs BY ETHNICITY

Factors and Variables (N = 136)	BBBs (n = 58)		WBEs (n =74)		
	M	*SD*	*M*	*SD*	*t*-Test
FACTOR 1: *Internal Enterp. Operations*					
• V26- Line of Credit Risk	2.75	1.391	2.82	1.291	.297
• V16-Owner Time Dependency Risk	2.94	1.493	2.89	1.576	-.160
• V24-Customer Activity/Turnover	3.56	1.287	3.52	1.207	-.173
• V25-Customer Credit Risk*	2.40	1.317	2.62	1.343	.925
• V21-Experts Team/Advisors Risk	3.02	1.564	3.20	1.429	.678
• V20-Internet/Technology Use Risk	3.48	1.321	3.37	1.269	-.473
FACTOR 2: *External Enterpr. Operations*					
• V34-Security/CrimeVulner. Risk	2.56	1.515	2.56	1.264	-.012
• V35-Terrorism Vulner. Risk	2.63	1.539	2.95	1.307	1.297
• V32-Social Entrepreneurship Risk	1.50	.989	1.83	1.180	1.652
• V33-Environment/Climate Risk	2.67	1.602	2.64	1.323	-.092
FACTOR 3: *Overhead Costs and Oper.*					
• V18-Overhead Costs Risk	2.88	1.196	3.00	1.261	.558
• V17-Labor/Intensity Risk	3.29	1.398	3.37	1.259	.326
• V19-Equipment/Systems Invest. Risk	3.23	1.477	3.18	1.416	.600
FACTOR 4: *Government and Market*					
• V31-Government Regulation Risk	3.54	1.501	3.29	1.358	-1.002
• V28-Barriers to Market Entry/Exit	3.08	1.471	3.01	1.393	-.278
FACTOR 5: *Profit and Energy Factors*					
• V23-Velocity of Profit Risk	4.21	1.110	3.90	1.188	-1.445
• V36-Energy/Dependency Risk	3.67	1.464	3.20	1.369	-1.828
FACTOR 6: *Globalization and Market*					
• V37-Globalization Risk	3.40	1.364	3.81	1.124	1.879
• V29-Competition Intensity Risk	4.04	1.320	4.06	.961	.089
• V27-Market Potential Risk	4.50	1.167	4.25	1.181	-1.175
FACTOR 7: *Economic Forces*					
• V30-Economic Risk	3.83	1.173	3.56	1.079	-1.358
• V22 Intellectual Property Risk*	2.94	1.681	2.74	1.651	-.663

**p <.1, **p <.05 and ***p <.01.

Results of the Multivariate Regression Analysis

To test the third hypothesis, a multivariate regression analysis was conducted to determine the effect of ethnicity on the dependent variables (factors and variables) as a predictor variable. Table 5 summarizes the results of the multivariate regression analysis for Study 1. As shown in the first column of Table 5, the control variables did explain a significant portion of variance in Factors 2, 3, and 4 (adjusted R^2 = .123; F = 5.27; p < .001). The multivariate regression results revealed that ethnicity was significant for Factor 2 (V27-Terrorism, p < .001), Factor 3(V14- Diseconomies of Scale, p < .002), and Factor 4 (V11-Time Intensity risk, p < .001). Ethnicity was not a significant predictor variable for entrepreneurial risk. Table 5 also presents the adjusted and unadjusted group means. The ethnicity of the entrepreneur was not negatively and insignificantly

associated with entrepreneurial risk. For example, Factor 4: Market Forces revealed the following results the variable, Time Intensity ($F = 12.839$, $R^2 = .101$) ($\Delta R^2 = .093$; $p < .001$).

For Study 2, another multivariate regression analysis was conducted to determine the effect of ethnicity on the dependent variables (factors and variables) of market and economic variables. Table 6 summarizes the results of the multivariate regression analysis for Study 2. As shown in the first column of Table 6, the control variables did not explain a significant portion of variance in the Factors and variables (adjusted $R^2 = .123$; $F = 5.27$; $p < .001$). The multivariate regression results revealed that ethnicity was significant for Factors 1 to Factor 7. Ethnicity was not a significant predictor variable for entrepreneurial risk. The table also presents the adjusted and unadjusted group means. The ethnicity of the entrepreneur to the firm was not significantly associated with entrepreneurial risk. For example, Factor 1: Internal Enterprise Operation revealed the following results the variable, Customer Credit Risk ($F = .865$, $R^2 = .004$) ($\Delta R^2 = -.004$; $p < .357$). Therefore, these results do not support the third hypothesis.

TABLE 5. STUDY 1 – MULTIVARIATE REGRESSION USING ETHNICITY AS PREDICTOR VARIABLE

Factors and Variables ($N = 116$)	*SS*	*df*	Mean	*F*	R^2	ΔR^2	*p*
FACTOR 1: *Industry/Economic Forces*							
• V13-Equipment Risk	.779	1	.779	.585	.005	-.004	.446
• V10-Capital Investment Risk	.274	1	.274	.318	.003	-.006	.574
• V23-Government Reg. Risk	2.285	1	2.285	1.175	.010	.002	.281
• V24-Social Risk	1.940	1	1.940	2.718	.023	.015	.102
• V20-Market Entry Risk	6.186	1	6.186	2.945	.025	.017	.089
FACTOR 2: *Terrorism/Security Dynamics*							
• V27-Terrorism Risk	23.546	1	23.546	12.577	.099	.091	.001*
• V26-Security Risk	1.896	1	1.896	1.143	.010	.001	.287
• V25-Environment Risk	12.395	1	12.395	6.661	.055	.047	.011
FACTOR 3: *Government/Market Forces*							
• V14-Diseconomies of Scale	21.120	1	21.120	10.404	.084	.076	.002*
• V29-Globalization Risk	22.317	1	22.317	6.873	.057	.049	.010*
FACTOR 4: *Market Forces*							
• V16-Intellectual Capital Risk	2.904	1	2.904	1.195	.010	.002	.277
• V11-Time Intensity Risk	32.780	1	32.780	12.839	.101	.093	.001*
• V18-Customer Turnover Risk	3.265	1	3.265	1.372	.012	.003	.244
FACTOR 5: *Global/Economic Forces*							
• V8-Expertise Industry Risk	4.904	1	4.904	.020	.000	-.009	.887
• V15-Protection Devices Risk	.196	1	.196	.076	.001	-.008	.784
• V9-Business Entity Risk	12.805	1	12.805	4.445	.038	.029	.037
FACTOR 6: *Internal Forces*							
• V17-Velocity of Profit Risk	5.949	1	5.949	.019	.000	-.009	.892
• V28-Inflation Energy Risk	2.343	1	2.343	1.748	.015	.006	.189
FACTOR 7: *Business Enterpr. Intangibles*							
• V21-Competitive Risk	3.059	1	3.059	3.564	.030	.022	.062
• V20-Market Entry Risk	7.112	1	7.112	3.470	.030	.021	.065
FACTOR 8: *Profit and Inflation Forces*							
• V22-Business Climate Risk	3.059	1	3.059	3.564	.030	.022	.062
• V12-Labor Risk	7.112	1	7.112	3.470	.030	.021	.065

**Note: *p < 0.05, **p > 0.01*

TABLE 6. STUDY 2- MULTIVARIATE REGRESSION USING ETHNICITY AS A PREDICTOR VARIABLE

Factors and Variables (N = 136)	*SS*	*df*	Mean	*F*	R^2	ΔR^2	*p*
FACTOR 1: *Internal Enterprise Operations*							
• V26- Line of Credit Risk	.156	1	.156	.088	.001	-.007	.767
• V16-Owner Time Dependency Risk	6.088	1	6.088	.025	.000	-.007	.873
• V24-Customer Activity/Turnover Risk	4.573	1	4.573	.030	.007	-.001	.863
• V25-Customer Credit Risk*	1.522	1	1.522	.865	.004	-.004	.357
• V21-Expert (Team of Exp./Adv.) Rk	1.007	1	1.007	.460	.002	-.006	.499
• V20-Internet/Technology Use Risk	.370	1	.370	.223	.001	-.001	.637
FACTOR 2: *External Enterprise Operations*							
• V34-Security/CrimeVulner. Risk	2.706	1	2.706	.000	.000	-.008	.990
• V35-Terrorism Vulner. Risk	3.274	1	3.274	1.682	.013	.005	.197
• V32-Social Entrepreneurship Risk	3.394	1	3.394	2.729	.021	.013	.101
• V33-Environment/Climate Risk	1.732	1	1.732	.008	.000	-.000	.927
FACTOR 3: *Overhead Cost and Operations*							
• V18-Overhead Costs Risk	.477	1	.477	.311	.002	-.005	.578
• V17-Labor/Intensity Risk	.183	1	.183	.106	.001	-.007	.745
• V19-Equipment/Systems Invest. Risk	7.819	1	7.819	.038	.000	-.007	.846
FACTOR 4: *Government and Market*							
• V31-Government Regulation Risk	2.001	1	2.001	1.004	.008	.000	.318
• V28-Barriers to Market Entry/Exit Rk	.156	1	.156	.077	.001	-.007	.782
FACTOR 5: *Profit and Energy Factor*							
• V23-Velocity of Profit Risk	2.815	1	2.815	2.089	.016	.008	.151
• V36-Energy/Dependency Risk	6.584	1	6.584	3.341	.025	.018	.070
FACTOR 6: *Globalization and Market*							
• V37-Globalization Risk	5.228	1	5.228	3.532	.026	.019	.062
• V29-Competition Intensity Risk	9.740	1	9.740	.008	.000	-.008	.929
• V27-Market Potential Risk	1.909	1	1.909	1.381	.011	.003	.242
FACTOR 7: *Economic Forces*							
• V30-Economic Risk*	2.290	1	2.290	1.845	.014	.006	.177
• V22 Intellectual Property Risk	1.215	1	1.215	.440	.003	-.004	.508

**Note:* $*p < 0.05$, $**p > 0.01$

Examining Customer Activity in Business Enterprises: Comparing Customer Turnover

Table 7 displays a cross-tabulation of the customer turnover variable with the BBEs and WBEs for Study 1. This metric was used to make estimation on the sales generated for the business enterprises. The profitability of the business enterprises was estimated due the lack of financial data that was available to the researcher. The hypotheses states there are differences between BBEs and WBEs in terms of customer turnover. The results indicate that BBEs (20.4%) had 20 or more customers per day; comparatively WBEs (16.1%) had a similar result. This was also similar with 5 or less customers or less. Thus, in terms of the customer turnover metric, the results of study indicate there were no significant differences between BBEs and WBEs.

TABLE 7. STUDY 1 – COMPARING CUSTOMER TURNOVER METRIC BETWEEN BBEs AND WBEs

	Group 1		Group 2				
	BBEs (n = 54)		WBEs (n = 62)		(N = 116)		
Customer Turnover	n	%	n	%	F	t	p
20 or more customers per day*	11	20.4	10	16.1	.787	1.172	.377
15 customers or less per day*	3	5.6	1	1.6			
Neutral or unknown	11	20.4	11	17.7			
10 or less customers per day	5	9.3	6	9.7			
5 or less customers per day*	24	44.4	34	54.8			
Total	54	100.0	62	100.0			

Results of ERO Index Level Scores for BBEs and WBEs

Table 8 illustrates the results of ERO index scores between the two groups for Study 1. Based on the results, BBEs did display significantly lower ERO index level (M = 54.57, SD = 30.345) compared to WBEs (M = 61.04, SD = 31.422). The results indicate that BBEs have a lower total ERO index level compared to WBEs. Overall, BBEs are slightly less risky than WBEs (or BBEs are slightly higher in risk factor coefficients). However, it is noteworthy that the means in both conditions were quite low given that the scale ranged from 0 to 5. In addition, Table 9 illustrates the results of ERO index scores between the two groups for Study 2. Based on the results, there ERO index levels for the BBEs (M = 66.36, SD = 28.421) compared to WBEs (M = 66.35, SD = 27.609) were even. The results indicate there were not any significant differences between both groups in terms of ERO index levels.

TABLE 8. STUDY 1 – RESULTS OF ERO INDEX LEVEL SCORES FOR ETHNIC GROUPS

Study 1	Group 1		Group 2	
Factor Scores (N = 116)	BBEs (n = 54)		WBEs (n = 62)	
	M	SD	M	SD
Factor 1: Industry/Economic Forces	10.86	5.691	11.22	5.812
Factor 2: Terrorism/Security Dynamics	5.69	3.801	7.5	4.198
Factor 3: Government/Market Forces	4.56	2.905	6.29	3.478
Factor 4: Market Forces	9.43	4.73	11.14	4.666
Factor 5: Global/Economic Forces	8.71	4.895	8.16	4.829
Factor 6: Internal Forces	4.52	2.919	4.76	2.969
Factor 7: Business Enterprise Intangibles	6.17	3.151	6.52	3.027
Factor 8: Profit and Inflation Forces	4.63	2.253	5.45	2.443
*ERO Index Levels (Total)	54.57	30.345	61.04	31.422

TABLE 9. STUDY 2 – RESULTS OF ERO INDEX LEVEL SCORES FOR ETHNIC GROUPS

Study 2	Group 1		Group 2	
Factor Scores (N = 136)	BBBs (n = 58)		WBEs (n =74)	
	M	*SD*	*M*	*SD*
Factor 1: Internal Enterprise Operations	14.39	6.454	15	7.295
Factor 2: External Enterprise Operations	9.36	5.645	9.98	5.074
Factor 3: Overhead Costs and Operations	9.4	4.071	9.55	3.936
Factor 4: Government and Market	6.62	2.972	6.3	2.751
Factor 5: Profit and Energy Factors	7.88	2.574	7.1	2.557
Factor 6: Globalization and Market	11.94	3.851	12.12	3.266
Factor 7: Economic Forces	6.77	2.854	6.3	2.73
*ERO Index Levels (Total)	66.36	28.421	66.35	27.609

DISCUSSION

A comparative analysis of small business enterprises (SME) was conducted to get insights into understanding economic differences between black-owned business enterprises (BBE) and white-owned business enterprises (WBE). This study examines the entrepreneurial and economic behavioral patterns between the two groups. The findings reported in this research suggest that ethnicity and race does not play a major factor in entrepreneurial risk and success. However, the degree of its role in the success or risk factors with black-owned business enterprises is questionable. The majority of the prior research on BBEs has provided some compelling evidence that ethnicity has been a pivotal issue as a basis for their success. However, the majority of the prior research on BBEs has been somewhat negative, dismal and a self-fulfilling prophecy on the likelihood of their success and survival.

According to much of the prior research, it is apparent there are some consistent differences between BBEs and WBEs. The central focus on these differences were along the lines of socio economic issues and most apparent, the issue of race. However, the results of our research reveal that BBEs were not much different from WBEs in terms of firm characteristics. There were minor but not significant differences between the two groups. Furthermore, we also found that BBEs were just as competitive as WBEs. Lastly, we observed the hypothesized relationships between ethnicity and entrepreneurial risk patterns were not significant. We examined these risk factors and patterns in both studies and used ethnicity as construct for the basis of the research. Based on the results of both studies, there were consistent results that indicated that BBEs were not that different compared to WBEs in terms of firm risk factors and market behavior.

A series of hypotheses were tested comparing market behavior and entrepreneurial risk patterns of BBEs and WBEs. The ***first hypothesis*** suggests there are differences between black-owned business enterprises (BBE) and white-owned business enterprises (WBE) in terms of individual demographics. Based on the results of our study, we discovered there were some differences between BBEs and WBEs. In Study 1, the results of the analyses revealed that: (a) black business owners were least likely to be married compared to white business owners; (b) BBEs were twice as likely to be divorced compared to WBEs; and (c) BBEs were equally likely to be as college educated as WBEs. However for Study 2, the results revealed: (a) the statistics on the marital status rates and divorce rates on both groups were consistent with the results of Study 1; and (b) for education, BBEs were least likely to have a bachelors degree compared to WBEs; however, BBEs were equally likely to have a graduate and post graduate degree compared to WBEs. Support for our first hypothesis is in line with Christopher (1989) similarly concluded the probability of minority business survival is increased with the number of years of formal education to some threshold. Based on the results of the study, the hypotheses can be marginally supported.

The ***second hypothesis***, suggests there were differences BBEs between WBEs in terms of firm characteristics. Study 1, the results revealed that: (a) in terms of time length of business ownership, BBEs were equally as likely to own a business one to three years; also BBEs are more likely to own a business four years or more compared to WBEs; lastly, WBEs were more likely to own a business less than one year; (b) in terms of compensation from the business, BBEs were three times likely to earn $10K to $25K compared to WBEs; WBEs were three times more likely to earn $100K compared to BBEs; (c) for industry types, the differences were minimal; WBEs were more likely to own a consumer competitive-type business compared to BBEs. For Study 2, the time length of business ownership results were similar to the Study 1. There were significant differences concerning business entity types. For example, WBEs were more likely to own an S or C corporation, limited-liability Corporation or partnership (LLC/LLP) compared to BBEs. In terms of industry types, BBEs were least likely to be in the industries of communications, construction, manufacturing, technology and transportation. For employee size, WBEs were twice as likely to have 1 to 100 employees in the firm compared to BBEs. In terms of capital investment, WBEs were more likely to invest 0 to $50K compared to BBEs; WBEs invested $50K to $100K compared to BBEs. For franchise ownership, BBEs were equally likely to own a franchise compared to WBEs. Based on the results of the study, the second hypothesis is supported.

The ***third hypothesis*** suggests there were differences BBEs between WBEs in terms of firm characteristics. Multivariate regression analyses were conducted on both studies to determine the relationship between ethnicity and entrepreneurial risk factors. The objective of the multivariate analyses is to identify which entrepreneurial risk factors are significant and then compare them across the two ethnic groups. The results of the Study 1 revealed: (a) the independent sample t-test revealed there were minimal differences between BBEs and WBEs in terms of the eight entrepreneurial risk factors between the two groups; (b) the multivariate regression analyses revealed that were no significant differences between the two groups in terms of the eight entrepreneurial risk factors; and (c) only three factor variables indicated any significant differences between the two groups; those variables were terrorism risk, diseconomies of scale, globalization and time intensity risk. For Study 2, the results of the study were consistent with Study 1. As of a result, the third hypothesis could not be supported.

The ***fourth hypothesis*** suggests there were no differences BBEs between WBEs in terms of customer turnover analytics. The results of Study 1 revealed there were no significant differences between the two groups in terms of customer turnover analytics. For example, BBEs were equally like to have 20 customers or more per day compared to WBEs. There were no significant differences between the two groups. Therefore, the hypothesis could not be supported.

The ***fifth hypothesis*** suggests there were differences between the two groups in terms of ERO index levels that measure entrepreneurial risk. The results of Study 1 and Study 2 revealed there were no significant differences between the two groups in terms of ERO index levels. For Study 1, eight risk factors were examined for the study. The results revealed BBEs had a slightly lower ERO index level (M = 54.57, SD = 30.345) compared to WBEs (M = 61.04, SD = 31.422). For Study 2, seven risk factors were examined. The results revealed BBEs had an equal ERO index level (M = 66.36, SD = 28.421) compared to WBEs (M = 66.35, SD = 27.609). There were no significant differences between the two groups. Therefore, the hypothesis could not be supported. Table 10 displays of summary of the hypotheses tests.

TABLE 10. SUMMARY OF HYPOTHESES TEST

Hypotheses	Measure Used	Supported?
Study 1		
H1: Differences in individual demographics.	t-test/crosstabs	*Yes
H2: Differences in firm demographics.	t-test/crosstabs	Yes
H3: Differences in market behavior/risk factors.	regression analysis	No
H4: Differences in customer turnover analytics.	t-test/crosstabs	No
H5: Differences in ERO Index Levels.	t-test/crosstabs	No
Study 2		
H1: Differences in individual demographics.	t-test/crosstabs	*Yes
H2: Differences in firm demographics.	t-test/crosstabs	Yes
H3: Differences in market behavior/risk factors.	regression analysis	No
H4: Differences in customer turnover analytics.	*None	*N/A
H5: Differences in ERO Index Levels.	t-test/crosstabs	No

*Note: Hypothesis marginally supported; not applicable in study.

CONCLUSIONS AND CRITICAL OBSERVATIONS

The study focused on a comparative study of black-owned business enterprises (BBE) and white-owned business enterprises (WBE). This study examined economic behavior and market behavior between the two groups. This research is based on two studies conducted on both groups that examined seven to eight entrepreneurial risk factors. This study used multivariate regression analyses of the risk factors to conduct comparative analyses of the two groups. The study extends the previous research on BBEs and the influence on entrepreneurial risk factors on firms' vulnerability to business failure.

The study tested five hypotheses related to the individual demographics, firm characteristics, and risk factors linked to the literature. The results of the study reveal there were some important findings. First, there were consistent differences between BBEs and WBEs in terms of individual demographics, such as marital status, education, and divorce rates. Second, there were consistent differences between BBEs and WBEs in terms of firm characteristics such as industry type, franchise ownership, capital investment, employee size and length of business ownership. Most of these firm differences favored BBEs compared to WBEs. Third, most interestingly there were minimal differences between BBEs and WBEs in terms of the seven and eight entrepreneurial risk factors. The data did not reveal any significant differences between the two groups. Fourth, there were minimal differences between BBEs and WBEs in terms of the seven and eight entrepreneurial risk factors. The customer turnover rates

within the firms for both groups were similar. BBEs had equal customer turnover analytics compared to WBEs. Last, there were significant differences between the two groups in terms of ERO index levels that measure entrepreneurial risk.

One clear implication is that BBEs are not that different from WBEs. A second observation is that BBEs were not as bad off as some of the prior research suggests. BBEs are equally likely to have success and profitability compared to WBEs despite the influence of ethnicity and race as an impediment. The results of our study refine and reframe the common perception that BBEs are less profitable and not as successful. Another observation is that BBEs are just as competitive and respond to the same number of ER risk factors compared to WBEs. Therefore, BBEs face similar market forces and ethnicity does not play an integral role as much as the prior research infers. Furthermore, a major flaw with some of the prior research has been the overreliance of government and secondary data. As researchers, maybe we can help solve some of their problems.

In conclusion, the results of our study make a contribution to the field of study. First, this study opens a new inquiry on comparative research on BBEs and SMEs by examining firm dynamics. Second, this study extends the prior research on BBEs by using entrepreneurial risk factors as a basis for examining economic risk patterns and economic behavior. Based on the results of our research, this study will provide a vehicle for examining SMEs and the role of ethnicity and race in the context of economic behavior. This study is one of the few studies in the literature that compares the economic behavior and risk patterns along ethnic and racial lines. This study also makes a comparative analysis along economic and market forces. Another major contribution of this study is that it challenges the conventional wisdom on the success and survival of BBEs. This study provides strong empirical support to challenge some of the prior research on BBEs and their success and economic behavior.

LIMITATIONS

This study had some limitations. First, all the survey data collected for the study was self-reported. As a limitation, this could be subject to some bias. The risk in using self-reported data is always the possibility of respondent bias. There could be challenges because of the data being biased. However, we minimized the issue of bias by the survey designs and questionnaire construction.

Second, both ERS and ERAS surveys were limited because they could not get financial statement data from the respondents. This presented a limitation because there was no way to acquire financial statement data. Thus, the results of the study could only provide general information on the financial activity of the SMEs in the study.

However, we did provide information on capital investment size and customer turnover analytics. Therefore, we could approximate some of limited financial information on both groups.

Last, geographic constraints were a limitation. Because this study used primary data as opposed to secondary data, there were time constraints and geographic limitations. However, the results of this study may support generalizations to populations beyond the scope of this sample or similar demographic characteristic. Despite these limitations, this study represents one of the most comprehensive comparative analyses on black-owned business enterprises (BBE) and white-owned business enterprises (WBE). This study makes an important contribution and thus highlights SMEs' differences and similarities along the ethnic and economic lines.

FUTURE RESEARCH

There are a wealth of opportunities for future research on BBEs in terms of economic pattern analysis, market behavior, and entrepreneurial risk. First, future research should continue to refine the economic factors to examine more firm dynamics on BBEs. For example, one possible inquiry of exploration would be to explain how personal demographics such as marital and divorce rates affect economic behavior and entrepreneurial success for comparing BBEs to WBEs. Furthermore, future research could explore the various ways in which market behavior, economic dynamics, and ethnicity influence business success and survival.

Second, future research could analyze economic patterns in detail and beyond governmental data. For example, future research can be extensive in examining economic patterns such as market entry barriers, market saturation, and competition more extensively on BBEs and WBEs. To exploit this future research opportunity, perhaps examining economic patterns in the capacity of a longitudinal study would be an optimal approach.

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