

Opportunity recognition processes of black entrepreneurs

Robert P. Singh^a and SherRhonda R. Gibbs^{b*}

^a*Department of Business Administration, Earl G. Graves School of Business, Morgan State University, 1700 E. Cold Spring Lane, Baltimore 21251, MD, USA;* ^b*Department of Management and International Business, College of Business, The University of Southern Mississippi, 119 College Drive Box 5077, Hattiesburg 39406, MS, USA*

The reasons for the long-term lagging rate of black American entrepreneurship are not well understood. Rather than look at financial factors, as most of the limited literature that has explored the disparity has done, we examine the opportunity recognition processes of black entrepreneurs. Using data collected from 147 black entrepreneurs, we found the entrepreneurs in our study – all of whom had achieved moderate success – were much more likely to have pursued internally stimulated opportunities than externally stimulated opportunities. The important practical and academic implications are discussed and future research directions are offered.

Keywords: black entrepreneurship; opportunity recognition; entrepreneurial opportunity; Bhave's model of opportunity recognition

Les raisons du taux du retard à long terme de l'entrepreneuriat des noirs américains ne sont pas bien comprises. Plutôt que de regarder les facteurs financiers, comme l'ont fait la plupart des rares travaux qui ont exploré cette disparité, nous examinons le processus d'identification des occasions d'affaires par les entrepreneurs noirs. En utilisant les données recueillies auprès de 147 entrepreneurs noirs, nous avons trouvé que les entrepreneurs de notre étude - qui ont tous connu un succès modéré - avaient beaucoup plus poursuivi les occasions d'affaires stimulées à l'intérieur que celles stimulées à l'extérieur. Les implications pratiques et académiques importantes sont discutées et les orientations futures de la recherche sont offertes.

Mots clés: L'entrepreneuriat des noirs; la reconnaissance d'opportunités; opportunité entrepreneuriale; le modèle de Bhave de reconnaissance d'opportunités

Introduction

Entrepreneurship and new venture creation are major drivers of economic growth (Audretsch and Thurik 2001; Reynolds 2007; Reynolds, Carter, Gartner, and Greene 2004; Schumpeter 1934) and job creation (Birch 1987; Kirchoff and Phillips 1988; Scarborough, Wilson, and Zimmerer 2009; Van Stel and Storey 2004). Cornwall (2008) estimated that about 50% of the United States' GDP now comes from entrepreneurial activity.

The ongoing global economic slowdown has adversely affected many Americans, however, one subgroup of the US population that has been more severely impacted is African Americans. In January 2011, the US Department of Labor reported the nation's unemployment rate to be 9.4%. However, for the black population the unemployment rate was

*Corresponding author. Email: sherrhonda.gibbs@usm.edu

15.8% – nearly twice that of white Americans (8.5%). In fact, the African American unemployment rate has consistently remained about double that of white Americans for the last 50 years (Badgett 1994; Hoynes 2000; Spriggs and Williams 2000). This long-term unemployment difference between black and white Americans is one of the major contributors to the significant disparity in household income and wealth between African Americans and whites. According to the US Census Bureau (2010), 24.5% of the black population now lives below the poverty level (approximately \$11,000/year for an individual and \$22,000/year for a family of four), compared to 10.5% of the white population.

There is a clear economic need for increased entrepreneurial activity within the black community. While research has found that blacks appear to express greater propensity, enthusiasm, and interest in pursuing entrepreneurship than whites (Butler 1991; Köllinger and Minniti 2006; Walstad and Kourilsky 1998), the need and the apparent enhanced level of interest in entrepreneurship have not translated into greater numbers of new ventures. On the contrary, research has consistently found that the new venture creation and self-employment rates of blacks are lower than those of other racial groups in the United States (Bradford 2003; Butler 1991; Ede, Panigrahi, and Calcich 1998; Fairlie 1999; Fairlie and Meyer 2000). Research has also found that blacks exit out of entrepreneurship at higher rates than Americans in the general population (Fairlie 1999). Therefore, not only are there fewer African American entrepreneurs¹ per capita, but these entrepreneurs are less likely to be successful than their white counterparts.

Entrepreneurship represents a viable alternative to unemployment and can provide a path out of poverty for African Americans (Light 1979; Moore 1983; Sowell 1981). Research has shown that black business owners are more likely to hire blacks and other minority job seekers, than are white business owners (Bates 1994). With small businesses creating between 60% and 80% of all net new jobs annually in the United States and employing half of all private sector employees (Birch 1987; Kirchoff and Phillips 1988; See 2006), it is important to find ways to increase the rate of new venture creation among African Americans. Exploring the unique characteristics and challenges, culturally driven behaviors, and entrepreneurial processes of black entrepreneurs (see Crump 2008; Singh, Crump, and Zu 2009) may yield important insights into the reasons for the disproportionately low firm founding rate of blacks. Further, this may help to address the elevated unemployment rate in the black community. Unfortunately, much work remains to be done. In a recent study of the entrepreneurship literature over the 12-year period from 1995 to 2006, Crump (2008) analyzed papers published in 26 leading management and entrepreneurship journals and within three leading entrepreneurship conference proceedings. He found that among the more than 20,000 total papers he analyzed, just 13 of these papers dealt specifically with black entrepreneurship issues.

We focus our attention on the opportunity recognition process of African American entrepreneurs. No matter how one defines entrepreneur, opportunity recognition is the critical first step in the entrepreneurial process (Acs and Audretsch 2003; Hills 1995; Shane and Venkataraman 2000; Singh 2000, 2001). We agree with Lumpkin, Hills, and Shrader's (2004) definition of opportunity recognition as 'perceiving a possibility to create new businesses, or significantly improving the position of an existing business' (p. 74) which results in new profit potential. This broad definition allows for the possibility of different recognition processes and accepts that opportunity recognition does not end with the founding of the firm; it is an ongoing activity undertaken by entrepreneurs. Understanding the opportunity recognition processes employed by entrepreneurs can help explain reasons for start-up and the likelihood of firm survival (Singh and Hills 2003; Singh, Knox, and Crump 2008; Westhead, Ucbasaran, and Wright 2009).

In this paper, we seek to further build on the black entrepreneurship literature by using Bhave's (1994) model of opportunity recognition to explore the implications of choosing internally versus externally stimulated opportunity recognition. Our scope however, is limited to assessing the resulting outcome, in regards to success [among black entrepreneurs], of the opportunity choice. Consequently, we do not attempt to measure the impact of race on opportunity selection (for example, internally or externally stimulated). The paper proceeds with a review focusing on findings related to black entrepreneurs and pertinent opportunity recognition literature followed by the development of three formal research hypotheses. We then describe the sample used to test the hypotheses and present the empirical results. Findings are discussed and practical and research implications offered. We conclude with directions for future research.

Black entrepreneurship: reality and literature review

Although there is a great need for increasing black entrepreneurship, the fact is, African Americans are one-third as likely to be self-employed than whites and abandon their businesses at a higher rate than whites when they do found ventures (Fairlie 1999). The disparity in new venture formation rates between white and black individuals has remained nearly constant over the past 80 years (Bates 1995; Fairlie and Meyer 1996, 2000). What is not fully understood or known is why this disparity continues to exist. While some research has been conducted, there simply is not a robust body of academic literature that has examined the unique issues facing black entrepreneurs – even as significant differences between white and black entrepreneurs appear to exist (see Crump 2008).

One factor may be education. There are differences in the educational attainment levels of blacks and whites, with whites more likely than blacks to earn a high school degree (87.1% versus 83%) and a college degree (29.8% versus 19.6%). Beyers, Johnson, and Stanahan (1987) argued that education is a key factor in economic development and that the quality and quantity of education influences how many entrepreneurs and would-be entrepreneurs there are within a given population. Empirical results have demonstrated a clear link between educational attainment and entrepreneurship (Fairlie 2004; Scarborough, Wilson, and Zimmerer 2009; Singh and McDonald 2004). Greater educational attainment is a path to knowledge and information that those without education do not have. This information may be why many entrepreneurs have the ability to see opportunities that others do not (Kirzner 1973).

Confirming the importance of education, data from the Panel Study of Entrepreneurial Dynamics (PSED) show that educational attainment among black nascent entrepreneurs is significantly higher than the general population of African Americans (Reynolds 2000; Singh, Knox, and Crump 2008; Singh and McDonald 2004). This would suggest that if the education gap between black and white Americans could be closed, the gap in new venture creation rates could also be narrowed and perhaps closed. However, this is contradicted by the fact that over the last 50 years, the education gap between the white and black population has narrowed. In 1960, 20.1% of blacks and 43.2% of whites earned a high school degree. Today, more than 80% of both groups earn a high school diploma (US Census Bureau 2010). We see the same trend with respect to college degrees. In 1960, 8.1% of whites and 3.1% of blacks graduated from college. Today, the figures stand at 30% of whites and 20% of blacks (US Census Bureau 2010). Given the significant closing of the education gap but the continued entrepreneurship gap, there appears to be other factors that depress the entrepreneurship rate of within the black community.

Most of the limited existing literature in leading entrepreneurship and management journals that has looked at the impediments to black entrepreneurship has focused on financial reasons such as lower access to capital, discriminatory lending practices, lower savings, and similar undercapitalization issues (Bradford 2003; Crump 2008; Fairlie 1999; Rhodes and Butler 2004; Squires and O'Connor 2001). Starting a new business requires investment of financial resources – without these resources no opportunity can be pursued. These resources may come from internal and external sources (Dollinger 2003). However, in both cases, would-be black entrepreneurs appear to be at a disadvantage.

With respect to external sources of capital, there is a body of literature which suggests that minority entrepreneurs may have less access to institutional financing than whites (Cavalluzzo and Cavalluzzo 1998; Gabriel and Rosenthal 1991; Munnell, Browne, McEneaney, and Tootell 1996). For example, blacks have fewer community lending institutions and persons who can provide financial aid to new businesses (Bates and Bradford 2004; Rhodes and Butler 2004; Squires and O'Connor 2001). In addition, there is some evidence of discriminatory and restricted access to capital that also serve as external constraints that serve as major impediments to successful black entrepreneurship (Bates and Bradford 2004; Squires and O'Connor 2001).

These external funding challenges may push black entrepreneurs to rely on internal sources of funding. It is known that personal savings are the primary source of initial funding for most new ventures (Dollinger 2003; Hisrich, Peters, and Shepherd 2005; Scarborough, Wilson, and Zimmerer 2009), but as discussed above, the black community suffers from having lower levels of personal financial resources (Bradford 2003; Fairlie 1999; Portes and Zhou 1996; Singh and McDonald 2004), which almost certainly contributes to the entrepreneurship gap that exists between the white and black population. However, there is some research that seems to contradict the proposition that these problematic funding challenges dampen black new venture creation. For example, Crosa, Aldrich, and Keister (2002) found that differences in financial assets of blacks and whites are not a major contributor to differences in the black/white entrepreneurship gap. In fact, they believed that the importance of financial assets may be overstated in the entrepreneurship literature. Crosa, Aldrich, and Keister (2002) reported that any effect of income and net worth in spurring nascent entrepreneurship activity is nullified once human capital, gender, and ethnicity are controlled. They based this argument on the contention that many successful entrepreneurs founded undercapitalized firms. These entrepreneurs often relied on creative bootstrap financing solutions to raise start-up capital. The researchers pointed out that their results showed that age and education were stronger predictors of entrepreneurial success than financial assets.

Beyond educational attainment and access to capital, there appear to be differences between black and white individuals that impact entrepreneurship. As one example of the potential significant differences between black and white entrepreneurs, having a father who is an entrepreneur has consistently been found to be related to becoming an entrepreneur (Hisrich, Peters, and Shepherd 2005; Hundley 2006). However, Hout and Rosen (2000) found just the opposite within the black community; black men whose fathers were self-employed are *less* likely than white men with self-employed fathers to choose self-employment. In a subsequent study which extended Hout and Rosen's (2000) research findings, Singh, Crump, and Zu (2009) found that black men and women were unique in that having an entrepreneurial mother was a strong predictor of entrepreneurship for them. Unlike other racial groups, for blacks, having an entrepreneurial father was not a predictor of entrepreneurship. Singh, Crump, and Zu (2009) used census data trends

to show that over the last 40 years, there have been major changes in the structures of black households. They pointed out that black families are far more likely to be headed by single mothers than are white families, and speculated that this may be a contributing factor to the diminished rate of black entrepreneurship.

If the only issue preventing more black entrepreneurs from founding firms and achieving success was educational attainment or money, the solution would be relatively easy to implement. However, recognizing the results and discussion provided by Crosa, Aldrich, and Keister (2002), Hout and Rosen (2000), and Singh, Crump, and Zu (2009), we believe that more research is needed that focuses on a broader range of issues that limit African American entrepreneurship. More specifically, we focus our attention on the opportunity recognition processes of black entrepreneurs. The following section summarizes relevant literature underlying current opportunity recognition research, including Bhave's (1994) model of opportunity recognition processes that was used to examine black entrepreneurs in this study.

Opportunity recognition and Bhave's (1994) model

Identifying and selecting the right opportunities is an important ability of successful entrepreneurs (Ardichvili, Cardozo, and Ray 2003). Opportunity recognition is a continual process that spans the life of a firm if it is to survive, and it may be the result of serendipity or deliberate search (Chandler, Dahlqvist, and Davidsson 2002). Researchers have offered numerous models of opportunity recognition incorporating factors considered to be antecedents of opportunity recognition, such as entrepreneurial traits, prior knowledge, social networks, cognition, and entrepreneurial alertness (Bhave 1994; Hills, Lumpkin, and Singh 1997; Ozgen 2003; Shane 2000; Singh 2000; Venkataraman 1997). There are many models and constructs that make up the opportunity recognition process, but it appears to be an iterative, nonlinear, cyclical process (Baron 2006; Lumpkin, Hills, and Shrader 2004; Timmons and Spinelli 2007) that consists of identifying new venture ideas that can become entrepreneurial opportunities (Singh 2000).

Bhave (1994) proposed a process model of venture creation with opportunity recognition being the key early stage in the sequence of events leading to the creation of the venture. In the model, Bhave (1994) identified two types of opportunity recognition based on Cyert and March's (1963) earlier typology which divided opportunity recognition into two categories: externally stimulated and internally stimulated opportunity recognition.

An externally stimulated opportunity is one where the decision to start a venture precedes opportunity recognition. In this situation, an individual decides to become an entrepreneur and then seeks out opportunities that can lead to a firm. Entrepreneurs who recognize the opportunities for their businesses through this process engage in an ongoing search for opportunities which they filter, massage, and elaborate on before selecting one and founding their firms.

An alternative venture creation path results from internally stimulated opportunity recognition. Here the entrepreneur discovers a problem to solve, or an unmet market need, and decides to create a venture to address the problem or need. The entrepreneur may not have been actively attempting to create a new venture, but the opportunity presented itself and led to a new entrepreneurial firm.

Using PSED data, Singh and Hills (2003) found significant differences between nascent entrepreneurs who were pursuing internally stimulated opportunities versus externally stimulated opportunities in terms of the financial potential of their opportunities, their motivations for founding new ventures and their expectations for success. The

authors reported that those entrepreneurs whose opportunities were internally stimulated had higher net worth and higher educational attainment levels. In addition, Singh and Hills (2003) found that those who pursued internally stimulated opportunities projected higher revenues for their ventures than those who pursued externally stimulated opportunities. These findings suggest a difference in the types and quality of the opportunities recognized and pursued by entrepreneurs based on the process used to recognize their opportunities. Singh and Hills (2003) speculated that higher levels of education gave individuals better analytical skills to allow them to identify more lucrative unfilled market needs. The higher net worth of those who pursued internally stimulated opportunities may have afforded those individuals the ability to execute on more attractive and financially promising opportunities.

In an extension to Singh and Hills' (2003) research, Singh, Knox, and Crump (2008) explored and found significant differences between black and white nascent entrepreneurs within the PSED with respect to recognizing internally stimulated opportunities versus externally stimulated opportunities. More specifically, Singh, Knox, and Crump (2008) found that black nascent entrepreneurs were significantly more likely to pursue externally stimulated opportunities than white nascent entrepreneurs. The authors speculated that whites may be *pulled* toward entrepreneurship by opportunities they wish to pursue and blacks may be *pushed* toward entrepreneurship due to real or perceived inequities in the labor market. Whatever the cause, the difference in the type of opportunity resulted in black nascent entrepreneurs pursuing lower projected revenue opportunities than white nascent entrepreneurs. Interestingly, there were no differences in educational attainment between black and white nascent entrepreneurs, but regression results provided other insights into the nature of the differences between black and white nascent entrepreneurs. Controlling for age, education, and net worth, choosing to pursue externally stimulated opportunities resulted in lower projected revenue ventures. When race was added to the regression model, there was no difference in projected revenues. The significant difference in the projected new venture revenues (for instance, quality of the opportunities) pursued by black and white nascent entrepreneurs could be explained by the different ages of the two groups, the significant difference in net worth, *and* the opportunity recognition process chosen.

The study by Singh, Knox, and Crump (2008) showed that black and white nascent entrepreneurs differ with respect to the type of opportunity pursued (internally stimulated or externally stimulated), and their results suggest that this difference may play an important role in the potential success of new ventures. Unsurprisingly, Singh, Knox, and Crump (2008) called for further study of the opportunity recognition processes of black entrepreneurs, and research that assists scholars in understanding nonfinancial factors that may be impacting black entrepreneurship.

Theoretical framework and hypotheses

Educational attainment

Again, the literature has demonstrated a clear link between educational attainment and entrepreneurial success (Beyers, Johnson, and Stanahan 1987; Dolinsky, Caputo, and Pasumarty 1994; Fairlie 2004; Hisrich, Peters, and Shepherd 2005; Scarborough, Wilson, and Zimmerer 2009). Education has also been found to increase entrepreneurial intentions as well as opportunity search (Shook, Priem, and McGee 2003), and is considered a key determinant to self-employment (Walstad and Kourilsky 1998).

As stated earlier, PSED data have shown that educational attainment among black nascent entrepreneurs is greater than the average African American and their educational attainment is comparable to white nascent entrepreneurs (Reynolds 2000; Singh, Knox, and Crump 2008; Singh and McDonald 2004). In addition, Singh and Hills (2003) found that nascent entrepreneurs who were pursuing internally stimulated opportunities had significantly higher levels of education than nascent entrepreneurs pursuing externally stimulated opportunities. It is likely that a person's level of education plays a significant role in both the quality of opportunity recognized and the process by which that person identifies or recognizes opportunities (Ramos-Rodriquez et al. 2010). Singh and Hills (2003) posited that entrepreneurs who are more educated have gained analytical skills that allow them to identify and recognize market needs better than less educated entrepreneurs. We sought to test this proposition, and the possible link between education and type of opportunity recognized. More formally, we hypothesized the following:

Hypothesis 1a: Black entrepreneurs with higher levels of educational attainment are more likely to found firms based on internally stimulated opportunities than on externally stimulated opportunities.

Hypothesis 1b: Black entrepreneurs with lower levels of educational attainment are more likely to found firms based on externally stimulated opportunities than on internally stimulated opportunities.

Firm success

Entrepreneurs often see unmet market needs that others do not (Kirzner 1973). This is a result of market knowledge and marketing skills that are developed as a result of analyzing, synthesizing, and applying information from the market (Belich and Dubinsky 1999; Slater and Narver 1995). There is a critical interface between marketing and entrepreneurship that allows entrepreneurs to understand market feasibility of opportunities (Hills and Laforge 1992). The fact is that successful new venture creation requires the ability to recognize market opportunities and to respond by creating strategies to meet marketplace needs (Griffeth, Noble, and Chen 2005). The ability to see a market need is consistent with internally stimulated opportunity recognition.

Based on the findings of Singh and Hills (2003) and Singh, Knox, and Crump (2008) discussed above, nascent entrepreneurs who pursued internally stimulated opportunities were more likely to pursue ventures that were expected to produce larger, higher revenue firms, suggesting the possibility that these are better opportunities. Singh, Knox, and Crump (2008) also found that the majority of both white and black nascent entrepreneurs reported that they had made a decision to start and then sought out opportunities (externally stimulated process), however, black nascent entrepreneurs were significantly more likely than their white counterparts to pursue externally stimulated opportunities. As expected, this resulted in black nascent entrepreneurs pursuing less lucrative opportunities than white nascent entrepreneurs. As a result of these findings in the literature we hypothesized the following:

Hypothesis 2: Black entrepreneurs who founded firms based on internally stimulated opportunities are more successful than those who founded firms based on externally stimulated opportunities.

Research methodology

Sample and data collection

Unlike PSED data that examined nascent entrepreneurs in the process of founding a venture, we were interested in studying actual entrepreneurs. Data used to test the hypotheses came from a larger study that studied entrepreneurial behaviors and opportunity recognition perceptions of novice and habitual minority entrepreneurs. Three entrepreneurial support organizations agreed to distribute the web-based survey to their entrepreneur members. Participating support organizations were members of a national minority supplier development organization with a common mission of increasing business opportunities and business growth for minority business enterprises. The three organizations were located in the south central and southwestern regions of the United States. Because of their reciprocal certification programs, the support organizations' entrepreneur members were located throughout the United States.

The cross-sectional sample of entrepreneur respondents was drawn from a sampling frame of 1321 entrepreneurs. A total of 251 entrepreneurs responded to the survey, yielding an overall response rate of 19%. Of the returned surveys, 19 were found to be incomplete and removed from the sample.

The final sample consisted of 232 entrepreneurs representing a usable response rate of 17.6%. This usable response rate is similar to those obtained in previous opportunity recognition studies which range from 15% to 25%. For example, response rates in studies by Singh (2000), Corbett (2002), Ucbasaran and Westhead (2002), and Ozgen (2003) were 18.3%, 25.2%, 17.6%, and 15.7%, respectively.

For the purposes of this study, we only examined the responses provided by the black respondents ($n = 147$). Of these, 57% were male and only 32% had not earned at least a college degree. The mean age of the entrepreneurs was 47.4 years ($s.d. = 9.9$) and mean firm age was 8.6 years ($s.d. = 8.3$). On average, entrepreneurs in the study reported having 12.6 years ($s.d. = 8.8$) of experience in their business industry prior to starting their ventures. Tables 1 and 2 summarize the firm ages and revenues for the sample.

Nonresponse bias

To calculate nonresponse bias, we employed a procedure used by Forbes (2005) in his study on entrepreneurial self-efficacy. Forbes (2005) postulated that the characteristics of

Table 1. Firm age.

Age	Number of firms	Percent
0–3 years	46	31.3
4–8 years	48	32.7
9 years and older	53	36.1

Table 2. Firm revenues.

Revenues	Number of firms	Percent
Less than \$100,000	49	35.8
\$100,000–\$999,999	49	35.8
\$1 million or more	39	28.4

late respondents are similar to those of nonrespondents. He then determined a midpoint date for data collection as a benchmark to delineate early versus late respondents. Similarly, for the current study, the response date of each survey was recorded, and the responses then divided into two groups based upon a median date. Considering the lack of demographic information that was available *a priori*, this procedure was deemed optimal.

Next, analysis of variance was conducted on surveys received before and after the median date to assess any significant differences on study variables. Early respondents accounted for 67% of completed surveys and late respondents 33%. Analysis of variance indicated no significant differences on study variables between early and late respondents. This result infers that nonresponse bias was not present in the sample.

Analysis

Using *chi*-square analysis of responses, we tested the differences between those black entrepreneurs who had founded their firms using internally stimulated opportunities versus those founded using externally stimulated opportunities. The results are presented in the following section.

Results

Testing Bhavé's (1994) model

The primary focus of this study was an examination of Bhavé's (1994) opportunity recognition processes in his model of venture creation. We measured whether entrepreneurs in the sample decided to first found a firm and then worked to recognize the opportunity for their business (externally stimulated opportunity recognition), versus recognizing an opportunity first and then founding a firm (internally stimulated opportunity recognition).

The question posed to entrepreneurs consisted of the following: 'Which of the following describes how you founded your current firm?' with corresponding answers of (1) 'I first decided to start a business. I then conducted a search for opportunities which led to my firm,' and (2) 'I first recognized an opportunity for my business. I then started my business to take advantage of it.' Entrepreneurs selected item (1) or (2) and were grouped accordingly.

In our sample, the overwhelming majority of entrepreneurs (84%) reported that finding a business opportunity preceded business start-up (internally stimulated opportunity). Just 16% had used an externally stimulated opportunity. This result was surprising because it was significantly different from the breakdown of internally versus externally stimulated opportunities for nascent entrepreneurs in the PSED as reported by Singh and Hills (2003) and Singh, Knox, and Crump (2008). Table 3 summarizes the current study and the breakdown of the samples used in the two prior studies. The implications and potential explanations for these significant differences are discussed in detail in the discussion section.

Educational attainment

Table 4 shows that black entrepreneurs with a college degree or higher were more likely to indicate that their firms were based on internally stimulated opportunities. In total, 77 of the 89 black entrepreneurs with at least a college degree (86.5%) indicated that they

Table 3. Summary of respondent opportunity types.

Opportunity type	This study	Singh and Hills (2003)	Singh, Knox, and Crump (2008) – whites only	Singh, Knox, and Crump (2008) – blacks only
Internally stimulated	121 (84.0%)	174 (46.7%)	289 (46.8%)	34 (31.5%)
Externally stimulated	23 (16.0%)	199 (53.3%)	329 (53.2%)	74 (68.5%)
Total	144 (100%)	373 (100%)	618 (100%)	108 (100%)

Note: Three participants did not respond to this question in our study. Both Singh and Hills (2003) and Singh, Knox, and Crump (2008) used PSED data. Additional Nascent Entrepreneur data were added to the PSED between the two studies.

Table 4. Crosstab of education versus type of opportunity pursued.*

Opportunity type	No college degree	College degree or higher
Internally stimulated	44 (36.4%)	77 (63.6%)
Externally stimulated	11 (47.8%)	12 (52.2%)

**Chi-square test is not significant.*

had pursued internally stimulated opportunities. Those black entrepreneurs who had chosen to pursue externally stimulated opportunities were equally split between not having a college degree and having one. However, there was a decided tilt toward having a college degree among those who pursued internally stimulated opportunities. The direction of the results supported the hypotheses, but the differences were not statistically significant based on *chi-square* analyses. Thus, hypotheses 1a and 1b were not supported.

These results were unexpected; however, it should be noted that the mean level of education for the black entrepreneurs in this sample was above a BS degree. This placed both groups of our sample of black entrepreneurs – those who used internally stimulated and those who used externally stimulated opportunity recognition processes – above the national average for educational attainment for both African Americans and the general population. The implications are elaborated on within the discussion section.

Firm success

Finally, to assess overall firm success we tested the relationship between opportunity type and firm age and company revenue. It was expected that firms founded on internally stimulated opportunities would be more likely to survive over the longer term and that these firms would achieve greater revenues than those firms founded on externally stimulated opportunities. The results showed that there were far more firms in our sample that had survived for at least nine years that were founded based on internally stimulated opportunities than externally stimulated opportunities (see Table 5). Although this is cross-sectional data, the data suggest that internally stimulated opportunities are better suited for longevity. More than half of the firms founded on externally stimulated opportunities were three years old or younger and less than 18% were older than nine years. For the internally stimulated opportunity firms in our sample, 40% were at least nine years old. This may be an artifact of the data, but it is consistent with the possibility that firms based on internally stimulated opportunities are more likely to survive and succeed.

Table 5. Crosstab of firm age versus type of opportunity pursued.*

Opportunity type	0–3 years	4–8 years	9+ years
Internally stimulated	32 (26.4%)	41 (33.9%)	48 (39.7%)
Externally stimulated	12 (52.2%)	7 (30.4%)	4 (17.4%)

*Chi-square test significant at $p < .05$ level ($p = .032$).

With respect to firm revenues, the data did not conclusively show any benefits from internally stimulated opportunities (see Table 6). A smaller percentage of firms that were based on externally stimulated opportunities achieved \$1 million or more in revenues, but the difference was not statistically significant. We also conducted *t*-tests on the mean revenues and found that while the mean revenue for businesses based on internally stimulated opportunities was higher, the difference was again not significant. Thus, based on the results shown in Tables 5 and 6, there was only partial support for hypothesis 2.

Discussion

As discussed earlier, there is still relatively little published within the entrepreneurship literature that focuses on the issues and challenges that have resulted in lower levels of black entrepreneurship. The findings of this study provide much needed insights into the opportunity recognition processes of black entrepreneurs. Our first reaction to the results was surprise because there was only partial support for one of the three formal hypotheses based on our data. However, upon further reflection of our data and prior findings in the literature we were encouraged by the results.

The data and trends in our results were consistent with our hypotheses, even if they were not statistically significant. While prior studies investigating educational attainment and opportunity recognition (Ramos-Rodriguez et al. 2010) report significant results, had we obtained a larger sample, we believe we would have seen significant differences consistent with our hypotheses. Perhaps more important, the respondents in our study were a fairly successful group of black entrepreneurs. On average, their firms had been in existence for almost nine years and the majority of the firms had more than \$250,000 in sales (70% had greater than \$100,000 in sales). Thus, the data collected are from entrepreneurs that have survived the liabilities of newness (Stinchcombe 1965) and achieved a certain level of success. Whereas the PSED shows us what would-be entrepreneurs are like and the types of opportunities they are pursuing, including those nascent entrepreneurs who never go on to found firms or found firms that fail, our sample has already stripped those individuals away and provides a snapshot of those entrepreneurial ventures founded by blacks that have survived and succeeded over time. We are able to draw some important conclusions by comparing our sample with the PSED sample.

Table 6. Crosstab of firm revenues versus type of opportunity pursued.*

Opportunity type	Less than \$100,000	\$100,000–\$999,999	\$1 million or more
Internally stimulated	38 (34.2%)	39 (35.1%)	34 (30.6%)
Externally stimulated	9 (39.1%)	10 (43.5%)	4 (17.4%)

*Chi-square test is *not* significant.

Prior studies such as Singh and Hills (2003) and Singh, Knox, and Crump (2008) which looked at nascent entrepreneurs found that the majority of the nascent entrepreneurs were pursuing externally stimulated opportunities. However, an even greater percentage of black nascent entrepreneurs (68.5%) within the PSED were pursuing externally stimulated opportunities than white nascent entrepreneurs (53.2%) (Singh, Knox, and Crump 2008). Given that most entrepreneurial ventures fail, we believe our results may provide important empirical evidence of the superiority of internally stimulated opportunities. In fact, this study – when combined with results from prior research – may be important to unlocking the secrets of successful entrepreneurship.

Our data show a very clear difference in the types of opportunities pursued by our sample of successful black entrepreneurs compared to nascent entrepreneurs who are in the process of founding a firm. Eighty four percent of our sample was pursuing internally stimulated opportunities. It may be that those individuals who pursue externally stimulated opportunities as nascent entrepreneurs are more likely to abandon their efforts before founding ventures or fail once they start their ventures. Considering the findings from prior research, what the results of this study seem to suggest is that *successful* entrepreneurs within the black community are those who founded their businesses based on internally stimulated opportunities. That is, recognizing an opportunity or market need first, and then founding a venture to take advantage of the opportunity and filling the market need, is preferable to deciding to become an entrepreneur and just seeking out an opportunity.

It should be noted that the black entrepreneurs in our sample were very well educated relative to the general population, and especially compared to the black community more specifically. With such a highly educated group of black entrepreneurs, it was not altogether surprising that they had achieved moderate levels of success with their ventures. This finding further supports prior research which has found positive correlations between education and successful entrepreneurship. Since we did not survey entrepreneurs who had failed, we can only speculate that the black entrepreneurs who failed had lower levels of educational attainment. This is a reasonable conclusion to draw given how well educated our sample was, but it needs to be empirically tested with other samples in future research.

Based on our sample, it appears that higher educational attainment and having a strong market orientation are important factors for entrepreneurial success for black entrepreneurs. By working with would-be black entrepreneurs to teach market analyses/orientation skills, there may be ways to improve the odds of these entrepreneurs identifying internally stimulated opportunities. If these opportunities are, in fact, better quality/potential opportunities, then it would yield greater success for those entrepreneurs who pursue them. Of course, this may also help entrepreneurs of other ethnic backgrounds, but we only focused on black entrepreneurs in our study.

Finally, we want to be clear that it is not our intention to argue that access to capital is not an issue within the black community, but it is not the only issue that depresses the new venture creation rate for blacks and far more research is needed to understand these noneconomic factors. In addition, finding noneconomic ways to improve the firm founding rate among blacks is particularly important at this time with government budgets squeezed at all levels (federal, state, and local) as a result of the ongoing global economic slowdown. Unfortunately, the reality is that the need for increased black entrepreneurship exists, but resources for new public policy initiatives are not available.

Limitations and future research directions

There are several limitations that we should discuss. First, our study relied on self-reported data for which halo effects may have had an impact. In addition, respondents

had to make retrospective assessments of their actions and businesses – in some cases they had to remember things that happened more than a decade earlier. Obviously, the possibility of memory recall issues exists. If more entrepreneurs erroneously reported finding an opportunity first, results may be skewed. Other variables such as educational attainment and firm revenues could very well have been overstated. This is always a risk of self-report survey data collection.

We also relied on a single-item question to determine the type of opportunity pursued. The wording was based on the PSED, but the use of multiple items may provide more meaningful information regarding the opportunity recognition processes of entrepreneurs. It may also be more useful to collect qualitative data through more extensive interviews of individual entrepreneurs to understand their opportunity recognition processes. With the single-item, forced-choice question, it is possible that we are not capturing the actual process that the entrepreneur used to recognize the opportunity. We may be missing important context and/or the entrepreneurs may not have fully understood the difference between internally and externally stimulated opportunities.

The cross-sectional nature of the data limits the overall study results. It would be useful to conduct a longitudinal study to capture the firms that failed over time. Although our data seem to show trends that favor internally stimulated opportunities over time, the only way to verify this is through longitudinal research. Such research could confirm the proposition that internally stimulated opportunities are superior to externally stimulated opportunities as implied by the results of this study.

Finally, we did not compare the black entrepreneurs in our study to other racial groups. Most notably, the data did not include white entrepreneurs. This has implications for the overall generalizability of our research. Crump (2008) has highlighted many of the unique aspects and idiosyncrasies within the black community that need to be better understood in order to better understand entrepreneurial processes. Moreover, the empirical results from this study show that much more research is needed in this important niche area of study within entrepreneurship. However, further research should be conducted on other racial groups and entrepreneurs from various industries. Entrepreneurs and practitioners alike would benefit from in-depth comparative and longitudinal studies of business owners of all types.

Conclusion

The limitations of this study notwithstanding, we believe the results of this study make important contributions to the entrepreneurship literature by advancing knowledge in an understudied area of research: black entrepreneurship. As we have discussed, the black entrepreneurship rate lags behind that of whites in the United States, but there would be great economic and social benefits from improving the firm founding and success rate. The fact remains that there is a paucity of research on minority entrepreneurs. We have added to the literature on the subject, but hope that it opens eyes and makes scholars more aware of this important topic, for much work is still needed.

More broadly, we have also contributed to the base of knowledge about opportunity recognition and added to the empirical results which focus on Bhavé's (1994) model. The opportunity recognition process is an important element of successful new venture creation and entrepreneurship. We found and highlighted some of the contradictions/differences between black entrepreneurs in this study and nascent entrepreneurs from other studies in the entrepreneurship literature. Most notably, the successful entrepreneurs in our study were much more likely to have pursued internally stimulated opportunities than the nascent entrepreneurs studied in prior research. The results of this study suggest that

surviving and successful firms are more likely to be those founded on internally stimulated opportunities. As discussed above, further research is needed to confirm whether the failure rate of firms founded on externally stimulated opportunities is in fact higher. If the link between internally stimulated opportunities and entrepreneurial success can be further verified for black entrepreneurs, as well as entrepreneurs in general, it would be a major finding within the entrepreneurship literature.

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Note

1. This study is limited to examining black American entrepreneurs.

Notes on contributors

Dr Robert Singh is professor of management at Morgan State University and director of the Center for Entrepreneurship and Strategy. His research interests include black entrepreneurship and opportunity recognition.

Dr SherRhonda Gibbs is assistant professor of management at the University of Southern Mississippi. Her research interests include opportunity recognition, black and women entrepreneurs, and informal entrepreneurship.

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