TAILORING ENTREPRENEURSHIP EDUCATION: EXPLORING COMPONENTS OF ENTREPRENEURSHIP EDUCATION FOR UNDERREPRESENTED GROUPS

Phillip C. Bryant  
Columbus State University

Frances Fabian  
The University of Memphis

Eric Kinnamon  
Marshall University

Peter Wright  
The University of Memphis

ABSTRACT

Black-owned businesses represent 7.1% of U.S. businesses. White-owned businesses represent 83.4% of U.S. businesses. Similar gaps occur for Hispanics and women. The authors present two clusters of entrepreneurship education components. Three social facets, posited to be positively related to entrepreneurship self-efficacy, are expected to increase the likelihood of underrepresented groups to start a business. Three technical facets, proposed to be positively related to entrepreneurial and business acumen, are expected to be related to increased lifespan and performance of businesses owned by underrepresented groups. Implications and research recommendations are provided.

INTRODUCTION

The number of women-owned and minority-owned businesses in the United States (U.S.) is disproportionately less than the proportion of women and minorities in the U.S. Although women slightly outnumber men in the U.S. (U.S. Census Bureau, 2007), women-owned businesses represent only 28.7% of U.S. firms while male-owned businesses represent almost twice that many (U.S. Census Bureau, 2007) at 51.3%. Similarly, although Blacks make up approximately 12.8% of the U.S. population (U.S. Census Bureau, 2007), only 7.1% of U.S. businesses are Black-owned (U.S. Census Bureau, 2007). Hispanics represent about 15.1% of US population but Hispanics only account for 8.3% of owned businesses (U.S. Census Bureau, 2007). These statistics, and others, are presented in Table 1.
TABLE 1

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Business</th>
<th>Percent of Business</th>
<th>Population</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>27,110,362</td>
<td>100.0%</td>
<td>301,621,157</td>
<td>100.0%</td>
</tr>
<tr>
<td>Male</td>
<td>13,910,634</td>
<td>51.3%</td>
<td>148,658,898</td>
<td>49.3%</td>
</tr>
<tr>
<td>Female</td>
<td>7,793,425</td>
<td>28.7%</td>
<td>152,962,259</td>
<td>50.7%</td>
</tr>
<tr>
<td>White</td>
<td>22,600,357</td>
<td>83.4%</td>
<td>199,091,157</td>
<td>66.0%</td>
</tr>
<tr>
<td>Black</td>
<td>1,921,907</td>
<td>7.1%</td>
<td>38,756,452</td>
<td>12.8%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2,259,857</td>
<td>8.3%</td>
<td>45,504,311</td>
<td>15.1%</td>
</tr>
<tr>
<td>Asian</td>
<td>1,552,505</td>
<td>5.7%</td>
<td>13,366,154</td>
<td>4.4%</td>
</tr>
<tr>
<td>American Natives</td>
<td>237,386</td>
<td>0.9%</td>
<td>2,938,436</td>
<td>1.0%</td>
</tr>
<tr>
<td>Minority</td>
<td>5,762,940</td>
<td>21.3%</td>
<td>100,565,353</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

1. from U.S. Census, 2007
2. Race category of those who claim only one race

This disparity has long been documented (e.g., Bates, 1995). Although these gaps are decreasing, they remain despite government incentive programs designed to increase entrepreneurship of underrepresented groups.

Although the disproportionately low percentage of women-owned and minority-owned businesses in the U.S. might lead one to conclude that these underrepresented groups do not aspire to business ownership, this is far from the case. When asked the question “Do you think you want to start a business of your own?” 75% of U.S. Black youth answered “Yes” (Walstad & Kourilsky, 1998: 9). More recent research has shown that Black undergraduate college students exhibit stronger entrepreneurial attitudes than do their White and Asian counterparts (Louw, van Eden, Bosch, & Venter, 2003). In fact, Blacks and Hispanics are much more likely to report wanting to start their own business than their White counterparts (Gartner, 2004). Similar research has shown a strong trend of entrepreneurial aspiration in women as well, in that 42% of U.S. teen girls surveyed indicated an interest in entrepreneurship (Wilson, Kickul, & Marlino, 2007). More recently, Shinnar and her colleagues (Shinnar, Pruett, & Toney, 2009) found no statistically significant differences between male and female entrepreneurial aspirations among university students. Together, these studies provide strong evidence that business ownership of these underrepresented groups in the U.S. is far less than many individuals in these populations would desire.

Why is there this disjuncture between entrepreneurial intent and actual entrepreneurship among women and minorities? Certainly a large literature embracing multiple theories has been established to account for the gap in Black entrepreneurship (Fairchild, 2008; Bogan & Darity, 2008), which has been
persistent for over 100 years (Fairlie & Meyer, 2000). Similarly, many theories have been promulgated to explain why women continue to lag significantly in entrepreneurship despite overall gains in employment (Ahl, 2006; Scherer, Brodzinski, & Wiebe, 1990). The resulting range of factors to explain this gap varies widely across macro-structural and economic, collective cultural, and individual cognitive factors. Yet, in the face of these manifold factors, there has been considerably less research into formulating a comprehensive entrepreneurship education model which addresses how underrepresented individuals can overcome these obstacles.

The imperative to lay down a theoretical model for introducing and assessing initiatives in college curriculums that are tailored to the needs of individuals is especially warranted, given that recent research indicates higher education increases rates of entrepreneurship (Gurley-Calvez, Hammond & Thompson, 2010; Weaver, Dickson, & Solomon, 2006). Moreover, entrepreneurship education in particular seems to influence rates of entrepreneurship (Charney & Libecap, 2002; Peteman and Kennedy, 2003). Consistent with prior studies (cf. DeTienne & Chandler, 2007; Scherer, Brodzinski & Wiebe, 1990; Walstad & Kourilsky, 1998; Wilson, Kickul & Marlino, 2007), we contend that targeted efforts in the higher education curriculum should play a contributing role in addressing and closing the startup gap. In general the literature indicates success for specific tailored interventions for Black entrepreneurs (e.g., Mann, 1990) and women entrepreneurs, (e.g., Birley, Moss & Saunders, 1987) but we have yet to identify a propositionary model which would provide a theoretical system for promulgating and testing targeted educational interventions. We suggest there is a critical need to expand our models to cover unique dimensions of educating entrepreneurs from underrepresented groups. In so doing, we follow the lead of Tracey and Phillips (2007) who identified an omission in AMLE’s special issue (2004) on entrepreneurship education in regard to social entrepreneurship.

As noted by Bechard and Gregoire (2005), one of the biggest gaps in entrepreneurship education scholarship is in the area of social-cognitive theories -- which seek to understand how cultural and social environmental characteristics may impact education outcomes. To this end, we offer a model which categorizes educational initiatives according to two criteria: 1) whether they are likely to improve entrepreneurial self-efficacy, which in turn impacts entrepreneurial intent and startups; and 2) whether they are likely to improve entrepreneurial and business acumen, which will improve the survival and lifespan of startups.

A central contribution we make is the emphasis on both entrepreneurial self-efficacy and acumen together in entrepreneurship education, as the reliance on one leg over the other may actually be harmful, and exacerbate the problems in this entrepreneurial gap over time. In our interactions with entrepreneurs and
would-be entrepreneurs, we have coined two terms to encapsulate our ideas about the need for both aspects of the educational components. Without a sufficient store of entrepreneurial self-efficacy, we find that competent, and potentially successful, entrepreneurs never launch a business in the first place: a group we refer to as the “Bitter Nonstarters.” Indeed, considerable recent attention from the DIANA project (investigating women’s entrepreneurship), focuses on the need to dispel certain myths that perpetuate inaccurate explanations for a difference in startup rates for women (Brush et al., 2001); indeed such myths may in themselves discourage women from moving forward if believed (Menzies, Diochon & Gasse, 2004). Conversely, confident and ambitious potential entrepreneurs who jump into launching a business without adequate exposure to technical knowledge and skills are much less likely to succeed: a group we call the “Set-up to Fails.” For instance, Robb (2002) found that Black male-owned businesses are 51 percent more likely to close than White male-owned businesses; similarly women-owned startups have a documented higher failure rate (Carter, Williams & Denzies, 1997). We have found that these heuristic terms (“Bitter Nonstarter” and “Set-up to Fail”) resonate with students and educators alike and help to communicate the ideas presented here.

While we recognize that the specific obstacles for women and minorities differ markedly, we believe our model provides a general template that can then be tailored to underrepresented group evidencing cognitive/social/cultural barriers toward entrepreneurship, and thus we offer these two very different groups -- with associated research support -- to illustrate our model. We will illustrate our points using literature from minority entrepreneurship and women entrepreneurship. Our brief review of the literature on similar underrepresented groups suggests this framework is likely to generalize to other populations as well. For instance, Hispanic entrepreneurs are underrepresented in self-owned businesses (U.S. Census Bureau, 2007) and the literature indicates that education and access to capital (Fairlie & Woodruff, 2010) are barriers reported by other minorities (Wilson, Marlino, & Kickul, 2004). By offering a research-based model of important components in a tailored entrepreneurship curriculum, we open the door for future research to test the efficacy of each of the components, as well as begin the process for identifying best practices in teaching them. The growing recognition that various students may respond differently to educational initiatives provides an important impetus for this article.
BACKGROUND

As far back as 1973, Wilson and Davis noted eight myths that perpetuated the struggle for many Black entrepreneurs in starting their own businesses. They concluded that “each of these myths, when confronted with the facts [through education] can be easily dispelled” (Wilson & Davis, 1973: 1). They also noted that the educational system at the time did little to guide or encourage Blacks into entrepreneurship.

By 1990, Scherer and his colleagues argued similarly that the main cause of the schism between the numbers of male-owned businesses and the numbers of women-owned businesses is the perceived environmental barriers that could be removed through positive educational experiences (Scherer et al., 1990). As the statistics presented in the previous section seem to indicate, four decades later, the current education system has done little to remove the barriers that continue to make it difficult for minorities and women to realize their entrepreneurial aspirations. Wilson and her colleagues showed that although the present pipeline of women entrepreneurs is weak, “providing access to entrepreneurship education is important in fueling the pipeline of aspiring women entrepreneurs” (Wilson, Kickul, Marlino, Barbosa, & Griffiths, 2009: 116). We believe research supports a similar statement regarding entrepreneurship education and the pipeline of aspiring minority entrepreneurs as well. The present educational system has made little or no progress in eroding barriers for these underrepresented groups.

Over the decades, researchers have made some inroads toward understanding what education systems can do to assist nascent entrepreneurs in recognizing their dreams of business ownership. One conclusion from this line of research is that entrepreneurship skills are not fixed personality traits; entrepreneurship skills can be learned and developed through experience (DeTienne & Chandler, 2004; Gibb 1993, Gibb, 2000). As an example, Walstad and Kourilsky (1998) concluded that an educational system that provides potential Black entrepreneurs with access to role models, as well as a knowledge base and comfort level with the market mechanisms of the economy, could prove helpful in increasing Black entrepreneurship rates. They also recommended that existing educational systems be evaluated for their effectiveness in addressing both the cognitive and attitudinal needs of students across different races. More recently, Athayde (2009) found in the UK that when an individual had completed a yearlong “Company Program” to encourage entrepreneurship they were more likely to envision themselves to be either self-employed or work for a small business – moreover, the effect was stronger for Black students.

DeTienne and Chandler (2007) found that men and women use different ways of thinking and utilize different types of human capital in entrepreneurial opportunity recognition. They concluded that because the different genders use
different means for recognizing entrepreneurial opportunities, there may be pedagogies unique to each gender that are more effective at teaching and training entrepreneurship. In support of this, Wilson and her colleagues (2007) found that MBA programs had a significantly more positive impact on women’s sense of entrepreneurial self-efficacy than men’s. They reached a similar conclusion to that of DeTienne and Chandler, that, “We should not assume that identical pedagogical methods would raise self-efficacy for students across gender” (DeTienne & Chandler, 2007: 400). Lamenting the low rate of entrepreneurship among women, Reynolds and his colleagues state that, “There is perhaps no greater initiative a country can take to accelerate its pace of entrepreneurial activity than to encourage more of its women to participate” (Reynolds, Camp, Bygrave, Autio, & Hay, 2001: 5).

The encouragement of underrepresented groups in entrepreneurship is an increasingly important imperative in the current economic downturn. To date, however, there is no generally agreed upon model for what entrepreneurship education actually is or should be (Pittaway & Cope, 2007). In the following sections, we offer the beginnings of a tailored comprehensive entrepreneurship education model based on both theory and our personal observations of the unique needs of underrepresented groups. Consistent with the arguments made by Edelman and colleagues (Edelman, Manalova & Brush, 2008), we believe that entrepreneurship education falls short in reflecting the true activities undertaken by entrepreneurs that are considered to be critical for startup success. We develop this idea further to argue that higher education initiatives need to embrace entrepreneurial support activities beyond textbook concepts, and that such support activities are especially important for underrepresented groups in the entrepreneurship community.

Our model, as depicted in figure 1, organizes two sets of specific educational components that have been identified by prior research. We expect that the employment of these educational components, tailored to specific groups, will increase both the likelihood of starting a new business, as well as their potential viability. Our scheme of organization includes a set of three social components that are expected to increase the critical variable of “entrepreneurial self-efficacy” (ESE). We also identify a set of three technical components that are expected to increase the entrepreneurial and general business acumen of students, thereby increasing the lifespans and improving the performance of their businesses.
A COMPREHENSIVE ENTREPRENEURSHIP EDUCATION SYSTEM

Educational Initiatives to Increase Startups: Avoiding the Bitter Nonstarter

A compelling model for studying entrepreneurship activity generally begins with a strong emphasis on the construct of entrepreneurial intent (Krueger, 1993) as essential to startup activity. The construct of entrepreneurial intent focuses attention on the individual, and emphasizes a conscious effort before taking action toward the decision to establish a new business (Bird, 1992). From this perspective, entrepreneurial self-efficacy (ESE) has been identified as key to gaining active entrepreneurial intent. After a brief review of this construct, we outline three educational initiatives we believe can enhance ESE for underrepresented groups especially susceptible to low ESE.
**Entrepreneurial Self-Efficacy**

Boyd and Vozikis (1994) first proposed the construct of ESE. They posited that an individual’s beliefs that he or she can successfully perform entrepreneurial behavior will be positively related to both entrepreneurial intent and entrepreneurial actions. The ESE construct is also reminiscent of earlier work by Robinson and colleagues (Robinson, Stimpson, Huefner & Hunt, 1991) which emphasized that a general attitude measure of self-esteem was an important predictor of entrepreneurs.

Since the introduction of ESE by Boyd and Vozikis (1994), its positive role in entrepreneurial intent and entrepreneurial activity has been well established. (McGee, Peterson, Mueller, & Sequeira, 2009). For example, it has been shown that high levels of ESE increase the likelihood of both entrepreneurial intentions and startup behavior (Sequeira, Mueller, & McGee, 2007), as well as entrepreneurial interest and entrepreneurship as a career choice (Wilson, et al., 2009).

Importantly, evidence indicates that entrepreneurship education initiatives may be successful at raising entrepreneurial intent and activity through their influence on ESE. Through structural equation modeling, Zhao, Seibert, and Hills (2005) showed that ESE fully mediates the positive relationships among three predictive variables (having had entrepreneurship related courses, having prior entrepreneurial experiences, and scoring high on a battery of risk propensity) and entrepreneurial intent. In addition, an expansive study in four different countries indicates that education can increase ESE, and that ESE mediates entrepreneurial intent (Drost, 2009).

A review of recent literature on educational initiatives that could improve ESE leads us to propose that an entrepreneurship education system tailored to underrepresented groups should include: 1) access to same race and same gender role models, 2) addressing real and perceived environmental barriers, and 3) guidance and encouragement into entrepreneurship.

**Access to Same Race and Same Gender Role Models.** Mentors and role models are generally accepted as important in career choice and career development. Unsurprisingly then, Boyd and Vozikis (1994) prominently included it in their model of entrepreneurial self-efficacy. Specific to Black entrepreneurship, Walstad and Kourilsky (1998) found that an educational initiative that provides access to relevant role models could prove helpful in assisting Black individuals in becoming entrepreneurs. This is particularly important as they are less likely to have a parent that is a small business owner (Hout & Rosen, 2000), which has also been found to increase entrepreneurial behavior (Athayde, 2009, Hundley, 2006). Policy-oriented books on Black entrepreneurship have indeed emphasized cultural barriers in direct relation to entrepreneurial role models (e.g., Green & Pryde, 1990). More recent research
indicates that when neighborhood social pathologies are controlled for, less educated Blacks have increased self-employment behaviors when they reside in more segregated communities (Fairchild, 2008); further research indicates that exposure to a local base of co-ethnic entrepreneurs significantly impacts self-employment (Fairchild, 2010). Thus, consistent with Walstad and Kouriisky (1998), we expect that this same-race role model effect should extend to the context of entrepreneurship education.

Similarly, we also expect that same-gender role models will have a positive effect on women owned business startups as well. Billger (2007) found a general increase of 19.7% in the overall career earnings of women who attended predominantly female high schools over those who attended coeducational high schools. Much of this positive differential may be attributable to the preponderance of same-sex role models. Specific to entrepreneurship, research also indicates women may need more same-sex role models to overcome misperceptions about participating in entrepreneurship. A recent study, for instance, found that entrepreneurship was perceived to be more associated with male characteristics, and that this translated into more women who self-identified with male characteristics eliciting higher entrepreneurial intentions (Gupta, Turban, Wasti, & Sikdar, 2009). We suggest that women who do not self-identify with male characteristics may benefit from the presence of other women who serve as entrepreneurial role models, and raise their own ESE.

Under this perspective, entrepreneurship classes could make sure -- through initiatives such as visiting speakers or field assignments -- that students are directly exposed to entrepreneurs that can serve as relevant role models. Thus we propose the following:

**Proposition 1:** ESE will mediate a positive relationship between an entrepreneurship education system that includes role models from underrepresented groups and business startup activity of underrepresented groups.

**Addressing Real and Perceived Environmental Barriers.** Michael Porter introduced the idea of barriers to entry into an industry in 1980. Barriers to entry make it less likely that potential new entrants will enter the field as competitors in the industry, as they increase the level of difficulty faced by new business startups. Even before Porter (1980), Marris (1968) identified what he termed “social barriers” to African entrepreneurship. Social barriers to entrepreneurship can include, but are surely not limited to: a stigma against entrepreneurship within one’s own culture (Baumol, 2004) or subculture; actual discrimination of members of a particular race or gender participating in entrepreneurship; and even just as important, perceptions that there is discrimination against members of a particular race or gender in entrepreneurship. Our review of the literature indicates that there is very little pedagogy that addresses how to confront the
threefold barriers we indicate above (a cultural stigma by one’s own group; discrimination by the outside group, and perceived discrimination by the outside group), though there is some evidence that these barriers do impact entrepreneurial intent. For instance, Scherer and his colleagues found that women’s perceptions of the expectations that relevant others have, in turn affects their own entrepreneurial career preference (Scherer, et al., 1990). Other research indicates that even after controlling for a wide range of variables, women still are less likely to identify themselves as entrepreneurs (Verheul, Uhlaner, & Thurik, 2005).

One way that these perceptions of social barriers may form may be from experiences of negative feedback, or from messages that reflect lower future performance expectations. Thus historical data that reflects underperforming entrepreneurial outcomes for a particular group might be personalized and act as a perceived continuing barrier to progress (Menzies, et al., 2004). Busenitz and Lau (1996) argued that entrepreneurs and non-entrepreneurs have different schemas about new venture creation. Thus, a targeted effort to change the schemas of underrepresented groups regarding potential in, and obstacles to, entrepreneurship is a potentially effective intervention approach for education. For instance, research indicates that the receipt of positive feedback may increase one’s entrepreneurial self-efficacy. Gatewood and her colleagues used an experimental design to manipulate instances of positive or negative feedback and found that indeed individuals receiving positive feedback about their entrepreneurial abilities had higher entrepreneurial expectancies than individuals receiving negative feedback (Gatewood, Shaver, Powers, & Gartner, 2002).

Other innovative methods may be to design class projects that empirically test the validity of perceived barriers, brainstorm on methods around such obstacles, or consider organized efforts to address and change actual barriers. Regrettably, this particular leg of our model seems the least investigated from an empirical or theoretical perspective. Certainly, though, without explicit confrontation with believed and actual barriers, members of underrepresented groups are unlikely to compensate for internalized defeatism solely through enhanced self-confidence and esteem.

Thus we present our second proposition:

Proposition 2: ESE will mediate a positive relationship between an entrepreneurship education system that addresses both perceived and real environmental barriers of underrepresented groups and business startup activity of underrepresented groups.

Guidance and Encouragement into Entrepreneurship. Much of the disjuncture between entrepreneurial intent and actual entrepreneurship in minorities and women may be attributable to a general lack of guidance and encouragement into entrepreneurship. An acknowledgment of such a lack of
guidance and encouragement for Black individuals in the area of entrepreneurship has been fairly long established (Wilson and Davis, 1973). A considerable amount of research continues to indicate the importance of experience with both entrepreneurship and networks of individuals in entrepreneurship, particularly as conceptualized as a supportive environment of entrepreneurship (Mueller, 2006).

One obvious source for such an emphasis on a personalized guidance through the entrepreneurial process is the classroom environment itself. Some early evidence indicates that education may be more powerful for groups with historically less guidance and encouragement in entrepreneurship. For instance, research has found that MBA programs had a significantly more positive impact on women’s sense of ESE than men’s (Wilson, et al., 2007). This finding encourages educators to think about how a classroom setting might involve itself in self-esteem enhancing guidance. Some obvious candidates would be programs and institutes that might be tapped within the university and college; perhaps more powerful would be activities that encourage involving classroom peers into each other’s ideas and efforts (Macfarlane & Tomlinson, 1993).

Entrepreneurship education programs, though, may have historically been less likely to encourage and access an important source of relevant guidance and encouragement: business and entrepreneurial support groups in the local community. Davidsson and Honig (2003) found significant differences in the use of “bridging capital” – i.e., being a member of a business group like the Chamber of Commerce, Rotary, or Lions – for those nascent entrepreneurs that actually succeeded in bringing about a startup. More specifically, the social capital from participating in business associations and networks has been strongly associated with new business startup activity, and moreover is especially important to compensate for missing normative capital that encourages and approves of entrepreneurship (Declerq & Arenius, 2006), especially likely in the Black community (Green & Pryde, 1990).

Many organizations have been facing a decline in community participation and recruitment (Putnam, 2000), and would welcome visits (and potential membership) from students in higher education entrepreneurship programs. Similarly, many students would be exposed to the practice of meeting in community groups, and get a first hand observation of how “bridging capital” is built.

Thus, our third proposition:

Proposition 3: ESE will mediate a positive relationship between an entrepreneurship education system that includes activities aimed at guidance and encouragement of underrepresented groups into entrepreneurship and business startup activities of underrepresented groups.
Educational Initiatives to Increase Business Viability: Avoiding the Set-up-to-Fails

There is a generally accepted contention that instilling appropriate business knowledge (Wiklund & Shepherd, 2003), and teaching about competitive entry strategies (McDougall & Robinson, 1990) for a new firm is likely to make a nascent venture more competitive and more able to maneuver in a new market. Any educational pedagogy that hopes to influence the success and longevity of startups needs to formulate a theory about the factors that may raise the entrepreneurial acumen of students -- the skills that increase their decision making performance.

Entrepreneurial acumen

We offer here as the second foundation of our education model three educational initiatives that we believe the literature indicates can build entrepreneurial acumen. The first emphasizes conventional business skills and knowledge -- perhaps the more traditional entrepreneurship pedagogy -- in order to improve the viability of new ventures. As important, though, and perhaps underemphasized in the entrepreneurship curriculum, is the need for the sociocultural capital -- a familiarity and comfort with business and economics assumptions -- that supports business acumen, and in turn, encourages the quest for competitive strategies. Finally, although there is some controversy over the value of business planning, (Brinckmann, Grichnik, & Kapsa, 2010), we contend that the process of drafting business plans is especially likely to add value and imaginative discipline for members of underrepresented groups such as minority and women entrepreneurs.

While actual startup rates are important, improved viability, which could be operationalized here either as longevity or performance, is critical to enhancing entrepreneurship investments of underrepresented groups. Research indicates that in general, minority businesses lag behind White owned businesses on indicators such as profits, sales and number of employees (Fairlie and Robb, 2007; U. S. Census Bureau, 2007). Similar performance deficits accompany women-owned firms (Marlow & Carter, 2004) including their lower average longevity (Boden & Nucci, 2000). The three components of an effective entrepreneurship education system aimed at underrepresented groups as discussed above are expected to be positively related to business startup activity as mediated by ESE. The three components discussed below -- 1) a knowledge base of economic mechanisms; 2) a comfort level with these economic mechanisms; and 3) training in writing business plans; -- are expected to positively affect the lifespan and performance of businesses owned by underrepresented groups through the mediating effect of entrepreneurial and business acumen.
A Knowledge Base of Economic Mechanisms. The achievement of a functional level of ESE may be sufficient for increasing the rate at which minorities and women start businesses. However, perceived ability and true ability are different, and the traditional requirement to improve the intellective skills of students remains central. Business confidence and acumen has been associated with the entrepreneurial orientation for some time. For instance, one of the subscales in Robinson et al.’s (1991) entrepreneur attitude orientation instrument is self-efficacy in business. Walstad and Kourilsky (1998) concluded that an entrepreneurship education system that provides minority students with a knowledge base of the market mechanisms of the economy could prove particularly helpful in assisting them in becoming entrepreneurs. Similarly, female youth significantly underperformed male youth (though both groups performed poorly) on responding to certain price/cost and price/demand questions considered basic to understanding business dynamics (Walstad & Kourilsky, 1998). Successful intervention programs have emphasized the importance of basic entrepreneurial acumen in helping startups succeed. For instance, South African accountants volunteer for 30 hour mentorship programs because: “business knowhow – notwithstanding financial support – can make or break a small business” (Makholwa, 2010: 48).

This leads to our next proposition:

Proposition 4: Entrepreneurial and business acumen will mediate a positive relationship between an entrepreneurship education system that assures a knowledge base of economic mechanisms and underrepresented groups’ business viability.

A Comfort Level with Economic Mechanisms. While the previous section argues the importance of inculcating basic facts and knowledge on an intellective level, in this section we consider entrepreneurial initiatives to address the emotional and experiential interventions that may be especially lacking in underrepresented groups. Green and Pryde argued for the need for the Black community to adopt “entrepreneurial approaches with which it is neither familiar nor comfortable (1990: 11).” Similarly, a number of studies indicate that women are more motivated to start new ventures based on a need to balance work and family responsibilities than they are for career advancement and wealth creation (DeMartino & Barbato, 2003), which may indicate that women identify less well with critical economic dynamics than their male counterparts.

Walstad and Kourilsky (1998) explicitly argued for entrepreneurship education to include promoting a working comfort level with economic mechanisms in addition to a simple knowledge base of these same mechanisms. Underrepresented groups may best gain this comfort level with the complexities of the economic system of their chosen industry through experiential practice. Going through an internship or apprenticeship in the industry in which they plan...
to start their own firms is one example of how this experience and ultimately, a comfort level, may be gained, and entrepreneurial apprenticeships in particular, have been prominently advocated for entrepreneurship education (Aronsson, 2004). Also supporting this is the research based assertion by Shane (2008) that entrepreneurs who have experience in their chosen field are more likely to have successful businesses than entrepreneurs without prior experience in their field. A compelling case for a type of “action learning” approach for advanced entrepreneurship management, suggests that the hands-on, experiential decision making approach is likely able to help students become at ease with managing a business (Leitch & Harrison, 1999).

Thus, we propose the following:

Proposition 5: Entrepreneurial and business acumen will mediate a positive relationship between an entrepreneurship education system that produces a comfort level with economic mechanisms and underrepresented groups’ business viability.

Training in Writing Business Plans. A recent study investigated the contrasting roles of perceived preparedness versus perceived passion in entrepreneurs in predicting venture capital funding. To the researchers’ surprise, they found that only preparedness (defined in terms of the quality of the business plan) was significant (Chen, Yao & Kotha, 2009). Other recent research in the finance literature has emphasized the importance of the business model found in business plans over the management team in the success of new firms (Kaplan, Senoy & Stromberg, 2009). Additionally, although new ventures may stray from the tenets of their business plan early in their implementation, the ability to form a convincing business plan seems to be an increasingly important institutional imperative for the success of a new business (Karlsson & Honig, 2009). Finally, a recent study found that of a range of characteristics, only the degree of formalization of the business plan had a highly positive relationship to later firm performance (Kraus, Harms, & Schwarz, 2008). Doganova and Eyquem-Renault (2009) later corroborated the business performance-enhancing role of the business plan.

The final component of an effective entrepreneurship education system tailored to underrepresented groups would thus emphasize training and practice in business plan writing. In contrast to the previous educational initiatives, writing business plans encourages pursuing research directly related to a new venture, and encourages imaginative alternative generation to widen decision making choices. Moreover, the business plan product can provide a foundation for adjusting “the ear” of students who are unlikely to be familiar with the insider recipes that make for a successful business plan.

There may be a linkage between demography and the production of successful business plans based on a couple of potential factors. “High quality”
business plans may be deemed such based on certain institutional recipes known only by “insiders,” and thus new entrants may be unacquainted with important terminology and organizational techniques that lead business plans to be perceived as effective, and thus later, funded. Alternatively, a link between demography and perceived effective business plans may be due to differences in how important business plan evaluators (such as potential investors, creditors, suppliers and customers) and underrepresented entrepreneurs evaluate their market environment. For instance, underrepresented groups may be less aware of different criteria in regard to evaluating the market needs, the product or service that can meet such needs, and the market segments with the greatest potential for demand of their products or services (Chen, et al., 2009) than the more traditional members of the entrepreneurship community. This second explanation would be especially interesting in that it suggests that further education on new launches may not only be needed for entrepreneurs, but that the current systems of support are weak in recognizing the unique kinds of markets that underrepresented groups face, and moreover, may be capable of uniquely serving.

Perhaps one of the most significant contributions the pursuit of business plan training can provide is the discipline of recognizing and assessing business opportunities. Singh and colleagues (Singh, Knox & Crump, 2008) concluded their recent study on the differences between externally and internally generated opportunities. Their results indicated that performance differences between Blacks and White owned businesses may be ameliorated: “the results of this paper suggest that there may be value in helping blacks better understand market needs to identify entrepreneurial opportunities. By doing so, it may be possible to have more Black NEs [nascent entrepreneurs] pursue internally-stimulated opportunities, which could result in higher revenue generating ventures." (Singh, et al., 2008: 69). Thus, our final proposition:

Proposition 6: Entrepreneurial and business acumen will mediate a positive relationship between an entrepreneurship education system that offers training in writing a business plan and underrepresented groups’ business viability.

IMPLICATIONS FOR FUTURE RESEARCH

Walstad and Kourilsky (1998) recommended that educational systems be evaluated for their effectiveness in addressing the needs of students across different races [and genders]. The driving impetus for this paper was to formulate an integrated model of educational initiatives that might be subsumed under a theoretical framework for analysis and testing. Therefore it is necessary that further academic research test initiatives against the expected outcome variables
(increases in the rate of business startups by underrepresented individuals, increased life expectancies for business startups of underrepresented individuals, and improved performance of businesses owned by underrepresented individuals). Unfortunately, time constraints make the truly necessary longitudinal research somewhat prohibitive. We suggest that simulations and experiments may provide one venue for pursuing confirmatory research.

In addition, the model provides an elementary foundation for organizing findings from related research and incorporating extensions to the efforts here. For example, recent research indicates that the necessary self-image needed for entrepreneurship may need to extend past a sense of capability (ESE) to also envelop whether an individual is constrained by a high sense of vulnerability (Mitchell & Shepherd, 2010). It could be informative to replicate this research to identify whether entrepreneurship is more inhibited in underrepresented groups due to a lack of a sense of capability (potential), or a higher sense of vulnerability (fears). The answer to such a question could suggest additional or different educational initiatives to those we have offered here.

**POLICY RELEVANCE**

Premier research journals are increasingly interested in the characteristics that can predict successful business launches, and, in particular, the role of entrepreneurship education. Specifically, given the constrained teaching resources and the importance of these courses, it is imperative that models for improving the efficacy of entrepreneurship education be formulated and tested (Pittaway & Cope, 2007). The demand for effective pedagogy is even more dramatic when dealing with underrepresented groups in entrepreneurship. The initial evidence here indicates that there may be very “teachable” goals that would be key for aiding currently underrepresented communities in improving their ability to gain funding and develop viable businesses.

Specifically, we acknowledge that it is important for any curriculum to address the nuts and bolts of business functions as applied to the entrepreneurial firm. A program does not do any students favors by whetting their appetite for entrepreneurship without follow-through intellectual resources. Yet, as we outline the six initiatives in this research, the need for devoting classroom time to teaching concepts should become less compelling. In other words, a good entrepreneurial education course might consider how to link into materials that students can pursue for self-study, and then consider how to assess progress. Thus, we unwaveringly assert that the intellectual skills of entrepreneurship education must be instilled. On the other hand, prevalent configurations of textbook concept lectures (reflecting a time in which university professors had monopolies on certain arenas of technical knowledge) for entrepreneurship
education likely squanders precious meeting time in which other initiatives advanced here are more productively pursued. In the new web world, there are no limitations on time, or inhibited access to gaining essential explicit, technical information; a rigorous self-study program may be optimal and should be considered (and assessed) as a substitute to technical classroom lectures.

There remains a fundamental role for continued research in structural market obstacles, such as the barrier of working capital requirements for large projects, or limited access to corporate vendors (Bates, 1995). In no way should the recommendations offered here be considered as supplanting efforts to identify and remove discriminatory marketplace obstacles that impede the startup rate or performance of underrepresented groups’ firms. We see this research as complementing efforts in alleviating such obstacles; working at the individual level through providing better-equipped entrepreneurs who can exploit the societal responses to these larger structural problems.

CONCLUSION

Research suggests that as a whole, Black, Hispanic, and women survey respondents either a) desire to start their own businesses at a much greater rate than their respective groups are currently doing so, b) the businesses they do start experience a shorter life expectancy, or 3) both. Although representation of these demographic groups in business ownership has increased, they remain below their respective proportion of U.S. population. Research also suggests that education and training, if designed and administered correctly, may be able to help close this gap between entrepreneurial interests of underrepresented individuals and successful entrepreneurship. As yet, a propositional model providing a theoretical system for promulgating and testing interventions targeted to underrepresented groups in entrepreneurship has not been proposed. With this article we have taken the preliminary steps to begin to fill this void.

Our model proposes that entrepreneurship education tailor its pedagogy for underrepresented groups to assure that entrepreneurial self-esteem and acumen are both explicitly addressed. We have asserted that access to relevant same race and same gender role models, removal of real and perceived environmental barriers, guidance and encouragement into entrepreneurship, a knowledge base of economic mechanisms, a comfort level with economic mechanisms, and training in writing business plans will lead to an improvement in entrepreneurship outcomes (both startup rates and performance) for underrepresented groups. Importantly, the model provides an empirical framework for drafting, organizing, and testing the relative effectiveness, of entrepreneurship education initiatives for underrepresented populations.
REFERENCES


