

Entrepreneurial Environment Dilemma in Puerto Rico: A Challenge of Self and System

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This study addresses the unexplained stagnant entrepreneurial environment in Puerto Rico despite average or above average entrepreneurial potential, capabilities and intentions compared to other high-income countries. Analysis of interviews with public, private and civic sector leaders and both successful and less successful entrepreneurs suggests a pervasive lack of support for entrepreneurs from formal organizations charged with entrepreneurship development and a failure of entrepreneurs themselves to develop networks to support venture startup and sustainment.

INTRODUCTION

Among high-income countries Puerto Rico (PR), at 3.1 percent, has one of the world's lowest rates of early-stage entrepreneurial activity (Bosma, Jones, Autio, & Levie, 2008) – despite a two-decade government effort to spur it. Deemed average or above average in entrepreneurial potential and capabilities but low in opportunity by PR adults (Bosma et al., 2008), the island maintains an “inhospitable business climate” with an underdeveloped private sector (Davis & Rivera-Batíz, 2006).

Experts blame structural problems rather than a lack of entrepreneurial spirit for the failure of entrepreneurship to flourish in PR (Aponte, 2002). The island, long reliant on the presence of multinational corporations to sustain the economy and historically lax in encouraging local business development, was hard hit by the elimination in 2006 of tax exemptions that incentivized U.S. subsidiaries to locate in PR. Despite several attempts to jumpstart the economy in the wake of their departure, reports from worldwide organizations such as the Global Entrepreneurship Monitor (GEM) (Aponte & Rodríguez, 2005; Bosma et al., 2008), the World Economic Forum (Schwab, 2010), and the World Bank (2010) certify the disappointing state of entrepreneurship in PR.

Surprisingly, the literature is lean regarding this problem. In particular, there are no studies that explore the deficit of entrepreneurship from the perspective of organizational leaders and entrepreneurs themselves. To address this gap, we conducted qualitative research based on interviews with twenty-one successful and unsuccessful PR entrepreneurs and fourteen decision-making leaders from civic, private, and governmental organizations. We theorized that how entrepreneurs and organizational leaders perceive the entrepreneurial climate may influence decisions they make about starting or supporting new businesses.

Our data suggest that Puerto Rico's low rate of entrepreneurship stems from two levels of failure systemic and individual. On one hand, government, civic, and private organizations with the potential to assist entrepreneurs appear not to provide optimum support. On the other, entrepreneurs appear not to exploit opportunities to develop professional networks that might help in conceptualizing, initiating, and scaling their businesses. A striking deficit of networks, well documented in the literature as vital to supporting venture creation and sustainment, deters entrepreneurship in PR. Our findings call for strategic initiatives from entrepreneurial support organizations- public, private, and civic – and entrepreneurs themselves to foster network development and utilization.

Literature Review

Extensive research has been conducted on entrepreneurship and its effect on national economic growth (Birch, 1979; Audretsch & Thurik, 2001; Gartner, Shaver, Carter, & Reynolds, 2004; Lundström & Stevenson, 2005; Braunerhjelm, Acz, Audretsch, & Carlsson, 2010). While scholars have long recognized a positive relationship between entrepreneurship and economic development, the literature is not entirely consistent about the factors that drive it. Thus, as Van de Ven (2007) suggests, we need to continue evaluating the entrepreneurship process to advance understanding of its dynamics and development over time.

Entrepreneurship is influenced by the relationships between entrepreneurs, enterprises and the environment (Lundström & Stevenson, 2005). Among external factors that may impact the entrepreneurial environment, researchers point to intra-institutional agreements (Rodrik, 2007), the role of government via legal, political, and economic policies and the country's social structure (Lundström & Stevenson, 2005; Lowrey, 2003; Shane, 2003).

The GEM model suggests entrepreneurial activity responds to internal factors (Entrepreneurial Framework Conditions or EFCs) and external factors (General National Framework Conditions or GNFCs) that intervene between the emergence and expansion of new firms (Bosma et al., 2008). Among the GNFCs, the GEM model includes external trade openness, the role of the government, market efficiency, technology intensity, physical infrastructure, labor market structure, and institutional regulations.

EFCs that may affect the creation and development of new firms, according to the GEM model, include financial support, education and training, research and development (R&D), international market openness, access to physical infrastructure and cultural and social norms. However, internal and external factors can positively or negatively influence entrepreneurship depending on the interpersonal relationships of entrepreneurs (Hoang & Antoncic, 2003) and the relationships between public and private institutions (Rodrik, 2007). This supports Van de Ven's (1993) argument that studies are deficient if they focus exclusively on the characteristics and behavior of entrepreneurs without taking into account the environment and individual interaction.

Individual social networks may affect entrepreneurial intent (Hmieleski and Corbett, 2006), entrepreneurial orientation (Ripolles & Blesa, 2005) and opportunity recognition (Singh, 2000), as well as the decision to become an entrepreneur (De Clercq & Arenius, 2006). Entrepreneurship, hence, is an "inherent networking activity" (Dubini & Aldrich, 1991, p. 306) involving entrepreneurs as actors and/or coordinators of resources in a specific context (Aldrich & Zimmer, 1986; Hébert & Link, 1989).

The network success hypothesis states that network support increases the probability of survival and growth of newly founded businesses (Brüderl & Preisendörfer, 1998). The network compensation hypothesis asserts that networks compensate for shortfalls in other types of capital, such as human and

financial (Light & Karageorgis, 1994), and the network founding hypothesis claims that “network resources, networking activities and network support are vital to new firms and... (to) stimulate entrepreneurship” (Burt, 1992, p. 36).

Social capital literature addresses the contacts, connections and mechanisms that individuals utilize for personal advantage (Adler & Kwon, 2002). Researchers have observed that friends and acquaintances (Birley, 1985), family and relatives (Yoon, 1991), and venture capitalists (Gupta & Sapienza, 1992), among others, may be especially helpful to entrepreneurs’ access to potential customers and suppliers, as well as to information. Family may provide informal credits (Yoon, 1991) and emotional support (Sanders & Nee, 1996), but could overly limit an individual’s circle (Birley, 1985; Renzulli, Aldrich, & Moody, 2000). Professional networks such as advisors, partners, customers, buyers, and employees may add valuable resources such as credibility, reputation, and legitimacy (Klyver & Bager, 2007).

Coleman (1988) suggests that social networks facilitate market exchange and provide insurance and resources to achieve individual goals. Relationships are used to get advice and resources (Granovetter, 1985; Johannisson, 1988; Hansen, 1995) as well as information, knowledge, access to channels and support (Klyver & Bager, 2007) and serve as a source of opportunities (Burt, 1992). How much social capital is available and how it can be used is influenced by social structure, thus differences in culture, degree of social network closure, availability of resources, etc., may all influence how much social capital individuals have and how much of it they can draw upon. Although entrepreneurs must build social networks independently, the building process varies by individual motivation, planning and experience (Greve & Salaff, 2003). This is because entrepreneurs activate their social networks based on different needs (Granovetter, 1985; Burt, 1992). However, how they progress through all entrepreneurial phases using those networks seems to differ and successful ventures appear to depend heavily on individuals’ abilities to develop their networks (Greve & Salaff, 2003). The literature is not clear, however, about the development and composition of an efficient social network structure conducive to a rich environment for entrepreneurship (Greve & Salaff, 2003).

Originally, scholars studied networks as a uni-dimensional concept (Burt, 1992; Coleman, 1988), but, some, such as Nahapiet and Ghoshal (1998) and Hoang and Antoncic (2003), have adopted a multidimensional perspective. The multidimensional perspective of networks considers the overall structural patterns connecting entrepreneurial actors (Burt, 1992) without losing sight of the relational dimension, as manifested in “strong” (Brüderl & Preisendörfer, 1998) and “weak” ties between people (Granovetter, 1983), and the cognitive dimension that allows entrepreneurs to make sense of new information and knowledge (Nonaka, 1994) and share meaning (Nahapiet & Ghoshal, 1998).

The Case of Puerto Rico

PR, like any other country, has unique characteristics that, as Shane (1996) suggests, need to be considered if one wants to motivate people to become entrepreneurs. Those characteristics have been shaped by a history of colonialism in which certain “rules of the game” were formed in PR’s economic, political, and cultural structures (Dietz, 1986). In a culture that is based on the education of excellent employees, rather than entrepreneurs, entrepreneurship represents a great challenge (Romaguera, 2010).

The elimination of Section 936 of the U.S. Internal Revenue Code in 2006 brought an obligatory institutional change to the model that had maintained PR’s economic stability for the prior thirty years. Created in 1976, it provided federal and PR state tax exemption to the repatriated earnings of U.S. subsidiaries doing business on the island. From its origin, Section 936 was the island’s major economic provider and job creator. In 1993, when the phase-out of 936 was announced (commencing in 1996 and ending in 2006), the Puerto Rico Commonwealth Administration proposed a new *Economic Development Model* to replace it (Commonwealth of Puerto Rico, Governor’s Office 1994). This alternative model emphasized native start-up businesses and the development of entrepreneurial skills.

Davis and Rivera-Batíz (2006) point out several barriers in PR’s entrepreneurial environment, including policies and institutional arrangements, special-interest tax subsidies, regulatory and artificial entry barriers, and inefficiencies in the permit process. Aponte (2002), however, challenges their strongly negative conclusions, pointing out that the above mentioned EFCs were not taken into account in Davis,

et al.'s analysis nor were recent tax incentives and support efforts to encourage native entrepreneurship. In contrast, the GEM 2005 shows that although PR's environment is favorable for new businesses, governmental mechanisms fail to integrate, in a logical and efficient manner, the resources for sustainable entrepreneurial growth (Aponte & Rodríguez, 2005). Furthermore, Aponte (2002) showed that despite dependence on foreign capital, there is entrepreneurial desire among the general population. Thus the problem resides in the perception of feasibility based on PR structural problems.

METHODS

Methodological Approach

We chose a grounded-theory approach, described by Suddaby (2006) as most appropriate when wanting to learn how individuals interpret reality— in our case how entrepreneurs and organizational leaders perceive the PR entrepreneurial environment and respond to it. Grounded theory involves the discovery of patterns in the data that build theories directly from “the actual meanings and concepts used by social actors in a real setting” (Gephart, 2004, p. 457). Grounded theorists aim to remain open to the data by resisting *prior* theory or assumptions.

We conducted semi-structured interviews comprised of open-ended questions that maximized respondents' opportunities for free expression while allowing us to guide the general direction of the interviews, avoid implicit hypothesis-testing and facilitate inductive reasoning. Two important characteristics of grounded theory are constant comparison and theoretical sampling. Constant comparison refers to the researcher's continual comparison of data. This implies immediate, active immersion in the data rather than its post-collection management. Theoretical sampling refers to the researcher's recognition that the data, rather than *a priori* design decisions, dictate how data collection should proceed and when it should be terminated. Two main principles under theoretical sampling are appropriateness and adequacy (Glaser & Strauss, 1967). We achieved appropriateness by carefully selecting participants who were knowledgeable about the area being explored, while we addressed adequacy by continuing the sampling and coding until theoretical saturation was reached.

Sample, Data Collection and Analysis

We collected data in two phases. To identify key issues influencing entrepreneurship in PR, we interviewed 14 leaders who influence its entrepreneurial policy – five from civic organizations, four from government, and five from the private sector. The civic organizations were nonprofit organizations that serve as a liaison between public and private businesses to provide aid to entrepreneurs. Governmental respondents worked in programs associated with entrepreneurship, and private sector leaders worked for organizations that support specific membership businesses. These leaders were in top management positions, such as presidents and executive directors. During this initial phase of data collection, we also interviewed seven entrepreneurs identified by our leader respondents as successful.

Having captured key issues of interest to leaders and entrepreneurs, an additional 14 entrepreneurs identified as either successful or unsuccessful were interviewed for a total of 21 11 successful and 10 unsuccessful. To be considered a successful entrepreneur the business had to be currently operating and included in “Apostando a Puerto Rico,” a special report by *El Nuevo Día* (PR's national newspaper) that showcased entrepreneurial initiatives thriving despite the economic crisis. Unsuccessful entrepreneurs were represented either by those who had launched but closed a business or were currently suffering from serious financial difficulty and were on the official bonus exoneration 2009 list (Solicitud de Exoneración Ley 148 DE 30 de junio de 1968, ENM) published by the Department of Labor and Human Resources of Puerto Rico (DTRH). This list includes entrepreneurs who, for economic reasons such as bankruptcy, closing, or a substantial decrease in income, requested to be exempted from paying the annual allowance stated by law.

Successful entrepreneurs included 10 men and one woman, four aged 30 to 40 and six 45 or older. The 10 men had at least a bachelor's degree, while the woman did not. Seven had previous business experience, four in family businesses. Five of the eight with previous jobs related to their businesses had

worked for multinational companies. Two were in retail, four in manufacturing, and five in service industries. One was a start-up business, less than five years old, four had been operating six to 10 years, and six for 10 to 15 years. Unsuccessful entrepreneurs included five women and five men. Five were 35-40 years old, three were 40-45, and two were 45 years plus. Eight had at least a bachelor's degree. Three had previous business experience, one in a family business and two in prior entrepreneurial attempts. Six had previous jobs related to their businesses; two were in multinational companies. Five were in retailing and five in service industries. Seven were in their first five years of operation; two had operated six to 10 years, and one venture between 10 and 15 years.

We conducted semi-structured interviews that lasted about one hour. All 35 interviews were audio-recorded and professionally transcribed. An interview protocol ensured consistency, even when the semi-structured methods followed intuitive leads (Spradley, 1979).

The interview questions were broad and open-ended to allow respondents to narrate experiences and understandings rather than be questioned solely on specific details (Maxwell, 2005). The questions, (See Appendix A) sought to avoid theoretical or hypothetical assessments.

Qualitative data analysis often involves a coding process during which raw data are raised to a conceptual level. This analysis involves comparison of new and previously analyzed data. We conducted open, axial, and selective coding that allowed us to derive concepts and develop properties and dimensions of them (Corbin & Strauss, 2008).

We listened and read the interviews recordings and transcripts repeatedly to develop tentative ideas about categories and relationships (Emerson, Fretz, & Shaw, 1995). The coding process was conducted manually as soon as transcribed interviews were available. We first conducted open-coding, a line-by-line analysis of every transcript to identify “codable moments” (Boyatzis, 1998) or fragments of text with potential significance. We captured over 1,500 of such fragments in 35 interviews and assigned them to 90 categories. Next, we considered the categories independently for each subset of our sample—successful and unsuccessful entrepreneurs— noting first-level similarities and differences.

A second phase of coding (axial) resulted in combining related themes and concepts (Corbin & Strauss, 2008), reducing the previously generated codes to 11 categories (Boyatzis, 1998). Selective coding, a process in which the integration of categories moved from substantive to formal theory, derived an explanatory framework and, more importantly, revealed implications and relevance of this theory in more than one substantive area (Glaser & Strauss, 1967). From this process, three core categories produced three key findings (See Appendix B).

FINDINGS

We invited Puerto Rican entrepreneurs – both successful and unsuccessful – to narrate their start-up and scale-up experiences. The majority attributed difficulties at both stages to insufficient support from external community sources. However, the data also revealed the failure of entrepreneurs themselves to develop support networks and to seek assistance from, or provide assistance to, fellow business founders.

Finding 1: Of public, private and civic organizations charged with promoting entrepreneurship in Puerto Rico, only the latter are considered supportive by most entrepreneurs. Government organizations are deemed least (and private organizations as only somewhat more) helpful to entrepreneurs.

Based on the mission statements of entrepreneurship facilitation organizations (EFOs), Puerto Rican entrepreneurs expect assistance from them to overcome limited resources, reduce costs, explore opportunities, and develop skills. The majority of our respondents, however, revealed that most public and private EFOs fail to fulfill such needs. Half of the successful and seven of 10 unsuccessful entrepreneurs asserted that most public and private EFOs lacked understanding of or sensitivity to the needs and challenges of local entrepreneurs.

All entrepreneurs described negative start-up experiences caused, they claimed, by public EFO disinterest, lack of commitment and competency, bureaucratic processes, and political interests. Similarly,

16 of 21 entrepreneurs described private EFOs as unsupportive and unhelpful during their start-up process. Five of 11 successful entrepreneurs, however, shared some positive experiences with *private* EFOs later in their venture process.

On a more positive note, entrepreneurs described civic EFOs—such as university, sponsored incubators and consulting services, small minority organizations, and other non-profit institutions—as more supportive and responsive to their needs. Seven unsuccessful and six successful entrepreneurs recounted how civic EFOs intervened in a helpful way as they formed or grew their businesses. In particular, entrepreneurs professed that civic EFOs helped them to expand networks, find new opportunities, reshape business ideas, revise business plans, and gain technical knowledge through short courses and professional consulting services.

Finding 2: Entrepreneurs perceive that public and private EFOs prioritize foreign over local businesses and that civic EFOs favor specialized, high impact industries rather than traditional local businesses.

Entrepreneurs—successful and unsuccessful—uniformly concurred that public and private EFOs are more concerned with attracting foreign investment than growing local businesses. Most entrepreneurs expressed the belief that civic EFOs prioritize local entrepreneurs, but focus on specialized, high impact businesses. As one successful entrepreneur said: “We visited a civic agency office, but through their questions and comments I realized that our business was very simple for them; they wanted to hear about technological processes etc. ...but that wasn’t our idea...”

Entrepreneur’s perceptions were confirmed by public and private EFO leaders who see foreign investment as the best way to develop a competitive business environment in PR. Civic EFO leaders confirmed the perceptions of entrepreneurs that they see high-impact companies in such industries as biotechnology, aerospace, and IT as PR’s best competitive entrepreneurial bet. Only a few government, private, and civic EFO leaders emphasized the importance of traditional Small Medium Enterprises (SMEs), self-employed individuals and microbusinesses as important.

Finding 3: Successful and unsuccessful entrepreneurs use different types of networks in different ways during different stages of their venture development. Successful entrepreneurs utilize broader and more diversified networks, develop them more quickly, and rely on them more strategically than unsuccessful entrepreneurs.

The composition and use of PR entrepreneurs’ networks varies by the developmental stage of their businesses and network use appears associated with venture success. Figure 1 illustrates that as their businesses developed, successful entrepreneurs were far more open to working with wider and more varied actors than were unsuccessful entrepreneurs. Both used previous job contacts and family and friends as their primary networks prior to and early in the start-up process. Successful entrepreneurs, however, also availed themselves (even prior to start up) of institutional contacts at universities, institutes, and nonprofit organizations associated with business, reaching out to these sources for advice, information, and guidance.

In the second developmental stage (start-up) successful entrepreneurs were already proactively pursuing strategic relationships with industry executives and/or intermediaries who could expose them to “big” clients. By the third stage (growth) successful entrepreneurs recognized the need for more specialized assistance and reached out to targeted actors such as distribution and export professionals, financing specialists, EFOs, and other entrepreneurs.

In contrast, unsuccessful entrepreneurs were far less proactive in expanding their networks. During startup, for example, they limited their association to professional advisors such as lawyers, accountants, and HR consultants to ensure they were within the law, but hesitated to otherwise expand their networks until they felt more established, that is, in the growth phase. Only then, belatedly in comparison to successful entrepreneurs, did they try to expand their business network by relying on customers.

FIGURE 1
DIFFERENCES BETWEEN SUCCESSFUL AND UNSUCCESSFUL ENTREPRENEURS:
TYPES OF NETWORKS USED THROUGHOUT THE THREE
STAGES OF BUSINESS DEVELOPMENT

Entrepreneur	Concept Development	Start-up>>>>	Growth>>>>
<i>Successful</i>			1. Family/friends
			2. Colleagues
	1. Family/friends	1. Family/friends	3. Institutions
	2. Colleagues	2. Colleagues	4. Market
	3. Institutions	3. Institutions	5. EFOs
		4. Market	6. Specialists
			7. Other Entrepreneurs
<i>Unsuccessful</i>		1. Family/friends	1. Family/friends
	1. Family/friends	2. Colleagues	2. Colleagues
	2. Colleagues	3. Institutions	3. Institutions
		4. Professional Consultants	4. Market / Customers

Even when both successful and unsuccessful entrepreneurs employed the same types of networks during the same phases of business development, they used them for different purposes. Prior to start-up, for example, nine of 11 successful entrepreneurs tapped their previous job contacts primarily as a source of potential clients, while seven of 10 unsuccessful entrepreneurs used job contacts as a source of technical knowledge. Secondly, family members were relied upon by most of the successful entrepreneurs as a source of business know-how. This was useful as most had business experience.

In contrast, most of the unsuccessful entrepreneurs used their family just to validate decisions and provide emotional support. Only two unsuccessful entrepreneurs had family members with business experience. The most remarkable difference was the use of civic EFOs including universities and institutes. Half of the successful entrepreneurs used educational institutions as a key source of business knowledge, information, and contacts; while none of the unsuccessful entrepreneurs did. Moreover, four of 10 unsuccessful entrepreneurs claimed they did not value formal education as important to entrepreneurship. Differences in how successful and unsuccessful entrepreneurs used networks throughout the venture process are illustrated in Figure 2.

While family, friends, and previous work colleagues continued to be relied upon by both groups as their business progressed, successful entrepreneurs added more actors with specific value more quickly than unsuccessful entrepreneurs. Successful entrepreneurs, for example, used their networks early on to build their customer base and during start-up to build legitimacy in their industry and to transcend barriers to success. Our data evidenced no recognition on the part of unsuccessful entrepreneurs about the value of networks in addressing these issues. Unsuccessful entrepreneurs, on the contrary, used their considerably

more limited networks for transactional purposes—to acquire technical information, comply with laws and policies, and acquire clients by references.

FIGURE 2
DIFFERENCES BETWEEN SUCCESSFUL AND UNSUCCESSFUL ENTREPRENEURS:
DIFFERENT WAYS TO USE NETWORKS THROUGHOUT THE THREE
STAGES OF VENTURE DEVELOPMENT

Entrepreneur	Concept Development	Start-up>>>>	Growth>>>>
<i>Successful</i>	1. To obtain business know-how	1. To reach economic, physical, and human resources	1. To gain legitimacy
	2. To ID potential clients	2. To gain recognition in their industry	2. To make strategic alliances
	3. As a source of knowledge and information	3. To expand their contacts	3. To take advantage of opportunities
		4. To overcome barriers & limitations	4. To share experiences, contacts, and ideas
<i>Unsuccessful</i>	1. For emotional support	1. For emotional support	1. For emotional support
	2. For technical knowledge	2. For technical knowledge	2. For technical knowledge
		3. To comply with laws	3. To comply with laws
		4. To assess a limited group of customers	4. To center strategy on customers

While unsuccessful entrepreneurs did not reach or survive the growth stage, successful entrepreneurs took advantage of their better developed networks in this phase by expanding their markets and/or diversifying their businesses. In the growth stage, successful entrepreneurs increased their interaction with existing networks and expanded to include additional EFOs and other entrepreneurs.

DISCUSSION

For more than thirty years until 2006, Puerto Rico offered federal tax exemptions for U.S. subsidiaries. Shortly before FDI exemptions expired, the PR government announced a new economic model based on indigenous business development and the advancement of entrepreneurial skills, but our study shows that little progress has been made in advancing it.

Entrepreneurs point to a lack of entrepreneurial experience, expertise and resources, and the deficient structure of many public, private, and civic entrepreneurial advocacy organizations as deterring entrepreneurship in PR. They also acknowledge failure in change in mindset—from a “colonial” point of view that encouraged foreign investment to a more “independent” one that encourages domestic economic activity based primarily on new firm formation.

PR, which has long fostered an employee mindset, faces a challenge to move to an entrepreneurial one. During the past decade a number of universities and some civic and nonprofit organizations have created educational programs to promote a new entrepreneurship culture. This supports our entrepreneurs' perceptions that civic entities are closer to understanding their needs and challenges than governmental and other private associations.

Our research suggests that low entrepreneurial activity in PR may be related to both institutional and individual networking failures. On the one hand, government, civic, and private organizations with the potential to assist entrepreneurs appear not to provide optimum support. On the other, entrepreneurs themselves appear not to exploit the opportunity to develop professional networks that might provide help in conceptualizing, initiating, and scaling their businesses. Our findings shed light on the role of networks in entrepreneurial success, specifically how the paucity of them dampens small-medium business growth.

Systemic Failure

Our research suggests that bureaucratic and disjointed governmental structure overwhelms new entrepreneurs seeking information, resources, and permits during the start-up phase and onward. Entrepreneurs complain that the lack of an established entrepreneurial network structure provided by the government results in lost opportunities, money, and time necessary to be competitive. These findings support Aponte's (2002) earlier research that addressed the structural problem and the GEM 2005 report which found that governmental mechanisms are not integrated in a logical and efficient manner to provide resources needed for sustainable entrepreneurial growth.

But the weak structural network problem in PR is not limited to governmental organizations alone. Entrepreneurs also identified private entrepreneurial advocacy organizations as bureaucratic, disconnected from each other, and managed by small interest groups. Government administrators and organizational leaders are new to building an entrepreneurial environment based on local entrepreneurs' needs, which Baumol, Litan, and Schramm (2007) pointed out are very different than those of multinational corporations. Local entrepreneurs perceive that EFOs may not today have but need – the know-how, expertise, experience, and organizational structure and capabilities to encourage and sustain a vibrant entrepreneurial environment.

Our research suggests that the absence of a shared vision and commitment to local entrepreneurial growth among entrepreneurship advocates retards its development. Local entrepreneurs argue that EFOs do not understand their needs and challenges; and key decision makers confirmed they are still more concerned with attracting foreign investments and creating high impact local companies than nurturing small traditional businesses.

The challenge in PR is, as Spencer (2008) asserts, to reap not only short term benefits in the form of job creation when hosting foreign firms onshore, but to ensure long term advantage by connecting them and promoting their interaction with local business. PR must create a relational entrepreneurship environment using the presence of big and foreign companies to transfer knowledge and technology to local entrepreneurs as Lowe and Kenney (1999) suggest.

Entrepreneurship is best conducted in an environment where there is diversity (Hatchuel, Lemasson, & Weil, 2006). To achieve this, it is necessary to break the "lock-in" (David, 2005) of a specific industry to avoid losing the diversification perspective, something PR has failed to do. The island's history reflects concentrations within specific industries, such as coffee, sugar, tobacco, leather, and textiles and, more recently, technology industries such as pharmaceuticals and medical devices. Our research points out that even those EFOs currently interested in local entrepreneurs are more focused on developing high impact industries such as aerospace, biotechnology, and IT.

In summary, to address the systemic failure of entrepreneurship in PR, national administrators and organizational leaders need to be aware of all three network dimensions: structural, cognitive, and relational – that currently hinder the entrepreneur. Also, leaders need to be aware of the particular needs of local entrepreneurs, but at the same time develop strategies to ensure that relationships between small-medium local enterprises and large and foreign ones are established to create and share new knowledge.

Individual Failure

Network scholars maintain that entrepreneurship is no longer an individualistic practice (Aldrich & Zimmer, 1986; Hoang & Antoncic, 2003; Anderson & Starnawska, 2008). Networks are essential to attract and extend resources (Jack, Drakipoulou, & Anderson, 2008), as well as to overcome institutional deficiencies (Licht & Siegel, 2006). Our study suggests that “reliance” is not enough. The extent to which the entrepreneur personally and proactively builds, manages, and exploits networks was the differentiator between the successful and unsuccessful ventures in our sample. Entrepreneurs’ cognitive biases about their environments – failure, for example, to appreciate the power and potential of networks– may result in lost opportunity and sub-optimal venture performance. Our study revealed clearly that successful and unsuccessful entrepreneurs reacted differently when faced with the same systemic failure. When disappointed by EFOs, successful entrepreneurs proactively created their own support networks by enlisting family members with business experience, former colleagues, institutions such as universities and other nonprofit organizations, key “big” customers, and older entrepreneurs. Less successful entrepreneurs, on the other hand, remained comparatively isolated, relying on a small number of less effectual supporters, family members and friends often more helpful in the very early stage of business development than in later stages.

To achieve a goal in a specific situation, Matthews, Deary, and Whiteman (2003) suggest that entrepreneurs use self-regulation skills. Self-regulation mechanisms are governed by motivation, self-efficacy beliefs, and emotions (Bandura & Jourden, 1991). Hence, in social situations, perceived self-efficacy might affect venture decisions (Krueger & Brazeal, 1994), especially the movement from intention to action (Boyd & Vozikis, 1994). Our research suggests that successful entrepreneurs make keen assessments of their abilities, often recognizing deficits and are open to third party support and proactively pursue it. In contrast, less successful entrepreneurs often exaggerate their ability to affect outcomes, overestimating their skills (Simon, Houghton, & Aquino, 1999), ignoring contradictory signs and information, and harboring higher expectations of success. Unrealistic beliefs about their potential to control situations will inhibit entrepreneurs’ development of and reliance on support networks and affect the decisions they make. Our study also suggests that entrepreneurs who create ample, diverse, and strategically purposed networks early in the venture process outperform entrepreneurs who do not.

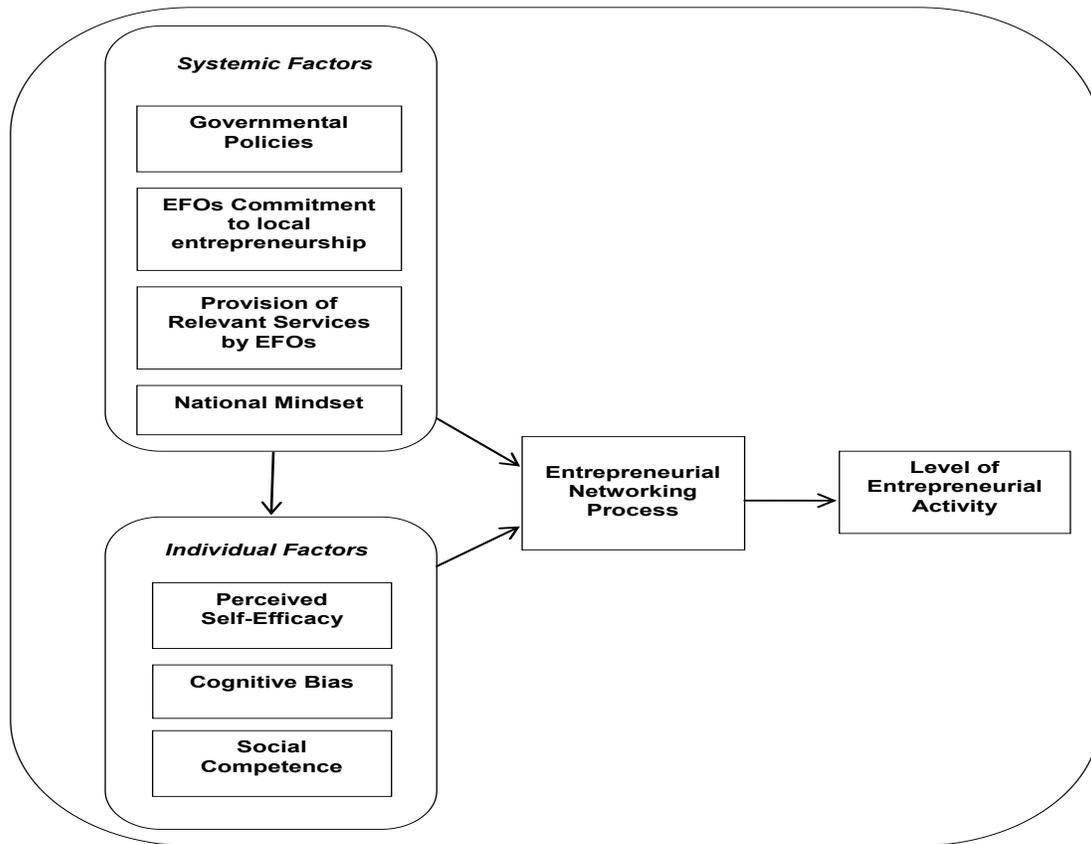
Entrepreneurs’ social competence (Baron, 2000) which refers to the ability to interact effectively with others and adapt to new social situations, may be essential to successful network development. Our study revealed that successful entrepreneurs, from very early in the process, were open to identifying big customers and searched for ways to establish connections with them. During the growth phase when entrepreneurs recognize the need to obtain specialized knowledge, the successful ones in our sample revealed their willingness to re-establish connections with EFOs and to nurture relationships with other entrepreneurs. In this phase we observed successful entrepreneurs purposefully establishing alliances and partnerships as well as making strategic moves with network agents to expand their businesses. In contrast, unsuccessful entrepreneurs opted to wait for their business to become more secure before seeking relationships with big customers, thinking it would be better to offer an established product. Instead of expanding their networks during the growth process, they continued to rely on the close, personal supporters who had advised them during startup.

Our data indicates that how successful and unsuccessful entrepreneurs use their networks varies by business phase. Even if both types of entrepreneurs have connections with the same agents, such as former colleagues, family members, and customers, the successful ones use them more strategically to glean information, contacts, ideas, and knowledge. Our data confirms that entrepreneurs’ networks will enhance their ventures only if entrepreneurs use them “strategically.”

Our findings should be of interest to both entrepreneurs and EFO leaders. Entrepreneurs can better ensure success by realistically self-assessing their strengths and deficits and recognizing the importance of nurturing strong and strategic support networks uniquely appropriate for each stage of venture development. EFO leaders should heed lessons from the entrepreneur network literature about entrepreneurs’ critical need for networks (Brüderl & Preisendörfer, 1998) and our findings about the dramatic deficit of them in PR.

In conclusion, our data suggests that the level of entrepreneurial activity in PR will be, in part, a function of entrepreneurial networking capabilities. Those capabilities in turn are influenced by systemic and individual level factors. The systemic level factors are governmental policies, EFOs' commitment to the entrepreneurship environment, provision of relevant service by EFOs, and a shift of national mindset. The individual level factors include entrepreneurs' perceived self-efficacy, cognitive bias, and social competence. Based on our findings, we developed the conceptual model presented in Figure 3. This model reflects our findings that networks, affected by both systemic and individual factors are essential for a vibrant entrepreneurial environment in PR.

**FIGURE 3
CONCEPTUAL MODEL**



LIMITATIONS

Our sample size was small, but ample and consistent with similar qualitative inquiries using a grounded-theory approach. While the sample included successful and unsuccessful entrepreneurs, they were not pre-selected to represent specific types of business or industry sectors. The strong patterns revealed across our sample cannot, therefore, be strictly interpreted as representative of all or a particular industry set of firms. Moreover, since the sample was limited to small-and-medium sized businesses in PR, our findings may not be generalizable to large companies. While our findings and conceptual model are most certainly not a comprehensive explanation of the lack of entrepreneurship in PR, they do offer a perspective about potentially critical factors that may affect it.

CONTRIBUTION

This study reveals the deficit of entrepreneurial facilitator organizations to support PR entrepreneurs and entrepreneurs' own shortcomings in ensuring their success. Until now, many academics as well as practitioners have focused on specific external or internal variables associated with entrepreneurship, overlooking the interplay between institutional and individual factors. This is true specifically with regard to PR. Our study thus addresses a gap in empirical work on entrepreneurship there. There have been few studies—and, to our knowledge, no qualitative studies—reflecting the perspectives of practicing entrepreneurs and multi-sector business, government, and civic leaders about the well-recognized failure of entrepreneurship to flourish in PR.

IMPLICATIONS FOR PRACTICE AND FUTURE RESEARCH

This study has several important implications for both practice and future research. Our findings reveal insight into a network deficit that appears to constrain entrepreneurship in PR. Both EFOs (public, private, and civic) and entrepreneurs themselves can take steps to build and utilize the kinds of networks that, according to ample research, are vital to venture conceptualization and growth. Government, in particular, should reconsider its commitment to entrepreneurship by ensuring staff competence, expertise, and experience and by pursuing policies and strategies to change the general mindset regarding where economic growth comes from and how a sustainable entrepreneurial environment could be created. EFO leaders might re-evaluate their missions and programs to more effectively support business founders by increasing their own interaction with other entrepreneurial advocacy organizations and purposefully counseling and supporting entrepreneurs on network development.

Our findings demonstrate that entrepreneurs often lack both the skills to build viable networks to sustain their ventures and an appreciation for why they should do so. Until now, PR decision makers have concentrated on the development of technical knowledge and/or economic resources to promote entrepreneurial activity. Our findings indicate entrepreneurs must overcome cognitive biases that affect their decisions about seeking and using outside advice and direction and suggest that more education and training, including specific attention to social competencies is needed. Educational entrepreneurship programs may benefit from improved curriculum designs.

We recommend more targeted research on entrepreneurs' network use (or misuse) to determine if the problem is endemic, industry or related to firm size, business phase, founder characteristics, etc. Case studies of entrepreneurs who have overcome the odds in PR and flourished would provide practical guidance to struggling business founders.

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APPENDIX A: INTERVIEW PROTOCOL

Interview Protocol – 1st Phase

1. What is your background?
2. Can you describe your organization?
3. Can you tell me about successful entrepreneurial events that you remember from the last five years? Explain what happened and how it came about.
4. Do you know of any unsuccessful entrepreneurial events that occurred in the last five years? Tell me what happened and how they came about.
5. If you were given a magic wand that would allow you to add or change something in regard to the entrepreneurial or business environment in Puerto Rico, what would you wish for?

Interview Protocol - 2nd Phase

1. What is your background?
2. Can you describe your firm?
3. Could you tell me about how the idea to start your business came about?
4. Could you tell me what was going on in your life when you made the (final) decision to establish this business?
5. Can you describe the most gratifying/positive moment you had during the time (process) when you were establishing your business? What happened and why?
6. Can you describe the least gratifying/negative moment you had during the time (process) when you were establishing your business? What happened? Why? How did you resolve it?

APPENDIX B: CORE CATEGORIES AND THEMES

Categories	Themes
<p>Support: issues mentioned by entrepreneurs about the lack of support from private, public, and civic organizations.</p>	<p>Networking structure: data shows that entrepreneurs perceive lack of an adequate formal supportive network.</p> <p>Knowledge and competency of supportive organization: entrepreneurs perceive that supportive organizations don't have the entrepreneurial and technical knowledge and expertise to help them start or grow an entrepreneurial venture.</p> <p>Understanding of local entrepreneurs needs: entrepreneurs perceive that supportive organizations don't have an adequate understanding of local entrepreneurial ventures and how their needs and challenges are different from big foreign companies.</p> <p>Bureaucratic processes: entrepreneurs perceive that dealing with supportive organizations involves excessive paperwork and bureaucratic and inefficient processes.</p> <p>Trust and intentions: entrepreneurs believe that supportive organizations are political or motivated by self-interest in personal gain rather than to help entrepreneurs succeed.</p>
<p>Priorities: entrepreneurs perceive that support organizations are focused on high impact companies and attracting foreign MNC rather than them.</p>	<p>Work focus: entrepreneurs perceive that support organizations continue to focus their efforts and resources on attracting and retaining foreign companies and don't give priority to local entrepreneurs.</p> <p>Strategic mindset: entrepreneurs perceive that the strategic mindset at all levels of support organizations continues to be to create jobs by supporting large firms rather than promoting local entrepreneurial activities.</p>
<p>Individual Network Competencies: individual skills and abilities to contact others for their benefit.</p>	<p>Self-efficacy: entrepreneur assessment of his/her ability to start and grow a new business.</p> <p>Cognitive bias: affects the assessment of external situations, personal capabilities, and venture decisions.</p> <p>Network competencies: lack of experience in building social skills necessary to leverage business opportunities and develop strategic partnership and relationships.</p> <p>Business life-cycle dynamics: understanding the dynamics and evolving needs of networking activities for successful business development at different stages.</p>