

Understanding Entrepreneurial Attitudes, Intentions and Activity in Barbados

Paul Pounder* and Dwayne Devonish

University of the West Indies, Cave Hill Campus, Barbados

While the entrepreneurial capability of Barbados is growing, the attributes contributing to this growth are under-researched. Compared to other developed and developing nations, the entrepreneurial population of Barbados has a low fear of failure rate which has lead to further investigating the benefits of entrepreneurial attitudes, intentions and activities. The research questions of this article are to explain these attributes. Based on the Global Entrepreneurship Monitor (GEM) data set, a theoretical framework and expert interviews; an explanation linked to understanding attitudes grouped by age distribution, stage of economic development, gender and education levels is investigated. Overall, the findings established a positive relationship between entrepreneurial attitudes and actual entrepreneurial activity measured by total early-stage activity (TEA). The main points argued in the conclusion of this article are that males and those in the youngest age groups showed the most positive entrepreneurial attitudes and highest TEA rates, and that TEA rates were positively related to educational attainment, with those in the highest educational category (post-secondary level) demonstrating the highest TEA. The implications of the research highlight that more focused entrepreneurship educational training is required for vulnerable groups like women and youth. Also, decision makers need to develop entrepreneurship education programs that inspire and trigger entrepreneurial activity for all age groups.

Keywords: *Entrepreneurship, education, attitude, intention, activity, GEM, Barbados*

Introduction

Barbados is a developed country in the Eastern Caribbean and enjoys one of the highest per capita incomes in the Caribbean and Latin America. Though it has a small population of approximately 275,000 it is one of the efficiency-driven economies in the world, ranking 18th in Latin America and Caribbean countries. Several approaches have been utilised to facilitate the Barbados economy to prevail over the problem of unemployment and to stabilise financial and economic growth. Some of these include encouragement of foreign investments, through the offering of special incentives, especially in tourism industry and offshore business sector. Advancement of entrepreneurship and business development through initiatives support training and access to technology, export markets and financing. Further, many of the Barbados' rules are

*Corresponding Author. Email: paul.pounder@cavehill.uwi.edu

on par with international standards and policies; while laws are transparent and encourage fair competition.

In Barbados, Entrepreneurship programmes are offered at the UWI Cave Hill campus through the Bsc in Entrepreneurship, the MBA in Entrepreneurship at the Cave Hill School of Business and Entrepreneurship courses at the Barbados Community College and the Technical and Vocational Education and Training (TVET) Council, while entrepreneurial development training seminars are facilitated for Micro, Small and Medium-sized enterprises are offered by the Barbados Youth Business Trust, the Small Business Association, the Barbados Manufacturers Association and the Youth Entrepreneurship Scheme.

Understanding entrepreneurship and small businesses started to emerge as a major theme in the Caribbean during the economic recession which started in 2001. Some other major external factors such as the September 11th tragedy (9/11) and the financial crisis of 2007-2008 which were marked by increased unemployment, decline in real GDP, the stock market crash and increased uncertainty also sought to engage practitioners and academics alike in understanding entrepreneurship attitude and activity. The overarching thought is that the government of Barbados, through its offices needs to develop policies that create an economy open to trade and allow for financial investment with the rest of the world; and entrepreneurship is seen as a medium for such enterprising. Therefore, as entrepreneurship education has proven to be a powerful means for countries to promote economic growth, development, and poverty reduction, it makes sense for the government of Barbados to understand the impact of entrepreneurship education on entrepreneurial attitudes, intentions and activity. Though there are studies which speak to entrepreneurial attitude and activity in other regions, what is missing thus far is the understanding of entrepreneurial attitudes, intentions and activity among small island developing states (SIDS) like the islands in the Caribbean.

The Global Entrepreneurship Monitor (GEM) international datasets are used to provide detailed information on entrepreneurial attitudes, intentions and activity. GEM is viewed as a key source of consistent annual data that identifies those active in establishing businesses, denoting the type of businesses formed, and the growth aspirations of the entrepreneur. GEM provides data on the entrepreneurial profile based on attitudes, aspirations and activity. The GEM national surveys encompass 70 economies, cover three quarters of the world's population and 90% of the world's GDP. The annual GEM report consistently states that the highest number of entrepreneurs can be found in the 25-34 age group. The headline measure in the GEM dataset is the number of people in the early stage of setting up their own business (the GEM Total early-stage Entrepreneurial Activity index – the TEA index). The index uses the following approach: the TEA index is the sum of those respondents classified as nascent entrepreneurs and new-firm entrepreneurs. The TEA index does not measure all entrepreneurial activity and is not based on a survey of business entities. It indicates the characteristics of entrepreneurial individuals and the types of entities they establish. As such it is a unique and internationally comparative measure of the cultural propensity of a nation, or region, to be entrepreneurial.

In examining the early-stage entrepreneurial activity in Barbados it can be seen that the majority (58%) of activity in Barbados is driven by the desire to capitalize on an opportunity that is present rather than the individual being forced into it out of necessity (5%) (GEM Caribbean Report, 2011).

In 2011, the level of TEA in Barbados (12.6%) was below the global average for efficiency driven economies (14.1%). During this time, it was also noted that there was a high level of people starting businesses to take advantage of perceived opportunities rather than out of

necessity; while there was a very low rate of businesses surviving past the start-up phase. This can be explained by the challenges faced in accessing adequate amounts of capital and lack of planning on the entrepreneur's part. With respect to gender, the GEM data show that more men than women become entrepreneurs and that gender attitudes are different towards entrepreneurship; both of which are consistent with Barbados. The view here is that males are more confident in taking a leap into entrepreneurship as they believe they possess adequate knowledge, networking resources and experience.

Further, GEM, a comparative international study assessing entrepreneurship's importance to economies worldwide concluded that the correlation between the level of entrepreneurial activity and economic growth is greater than 70% worldwide and nations with high levels of entrepreneurial activity have above-average rates of economic growth.

The purpose of this paper is to develop an understanding for entrepreneurship attitudes, intentions and activity in Barbados. It recognizes entrepreneurial intentions as a dimension of the impact of entrepreneurship education. The focus reflects the challenges attributed to size and resource base, which act both as advantages and disadvantages. The paper is exploratory in nature and presents a correlational examination of the relationships among entrepreneurial attitudes, intentions and activity among individuals in a small island territory in the Caribbean. It does not intend to test a conceptual model but simply seeks to set a context for further empirical work in the same area.

Literature Review

Defining the Entrepreneur and Approaches to Entrepreneurship

In order to investigate entrepreneurial attitudes, intentions and activity, the research starts with a definition for entrepreneurs that highlights, in principle, a relationship to behaviour, conduct, and action. Entrepreneurs are described as people who are creative and ingenious in finding ways to become more successful, powerful and prestigious (Douglas & Shepherd, 2002). Entrepreneurship however, is often difficult to define and as such conceptualising a general framework in this field of study (Shane & Venkataraman, 2000) has proven tedious. Seemingly, previous researchers have defined entrepreneurship solely by an opportunity-based perspective (Shane & Venkataraman, 2000). Further, the characteristics of the entrepreneur and their role (Venkataraman, 1997) have been explored by researchers. The latter approach fails to incorporate the nuclei of two phenomena - the lucrative presentation of opportunity and individuals who are innovative and resourceful (Shane & Venkataraman, 2000).

The cognitive approach to entrepreneurship seeks to explain how entrepreneurs think and why they do the things they do in the ways that they do them (Mitchell et al., 2002). Researchers in this approach believe that entrepreneurs piece together things that were previously unconnected. As such this helps them to invent new products and/or services and assemble whatever resources are necessary for developing and growing new businesses (Mitchell et al., 2002). Cognitive processes are said to contribute immensely to social behaviors and thought (Bandura, 2001; Krueger, 2005). Thus, when relating this theoretical approach to studies of entrepreneurship, Krueger (2005) notes that in order to fully grasp the core concepts of entrepreneurship – what is involved and how it emerges, an understanding of entrepreneurial cognition is important (Esnard-Flavius, 2010).

Recognizing that cognition plays an important role, some researchers have placed emphasis on perceived self-efficacy in relation to entrepreneurial attitudes (Bandura, 2001; Chen, Greene, & Crick, 1998; Krueger, 2007). Bandura defines perceived self-efficacy within

the structure of a person's own judgment of their abilities to organize and carry out specific tasks (Bandura, 1989). This definition of self-efficacy highlights the link between knowledge and human action (Esnard-Flavius, 2010). A correlation between entrepreneurial self-efficacy and entrepreneurial intentions was found by early researchers (Esnard-Flavius, 2010). As a result, entrepreneurial self-efficacy and entrepreneurial intentions developed early in an individual's career eventually lead to high probabilities for entrepreneurial activity in life (Boyd & Vozikis, 1994). According to studies conducted more recently, individuals with higher entrepreneurial self-efficacy have higher entrepreneurial intentions (Krueger, 2007).

According to trait theory, an entrepreneur is assumed to possess a particular personality type – a set way of being (Carland, Carland, & Hoy, 2002). Thus if an individual possesses these traits, they are likely to be entrepreneurial in nature (Carland et al., 2002). However, further research has shown that traits alone are not sufficient when it comes to running businesses (Poon, Ainuddin, & Junit, 2006). At the heart of entrepreneurship is recognizing there is an opportunity (Nybakk & Hansen, 2008). Researchers have identified two different views of entrepreneurship – the outcome of entrepreneurship; that is the creation of worth (Nybakk & Hansen, 2008), and the traits of entrepreneurship (Nybakk & Hansen, 2008) which refers to innovativeness.

The behavioural approach sees many factors influencing the creation of an organisation (Gartner, 1989). The entrepreneur is only a part of the complicated process of the creation of the organisation (Gartner, 1989). The behavioural approach to entrepreneurship treats the organisation as the primary entity viewing the individual as a subsidiary in terms of the activities he/she performs to enable the organisation into existence (Gartner, 1989). The entrepreneur's personal characteristics are secondary to the behaviours that drive the creation of the organisation (Gartner, 1989). According to Cole, the entrepreneur is the adhesive that binds all the entrepreneurial processes together. Thus, the entrepreneur is the labourer utilising the capital of others and eventually benefiting from the production through means of profit (Cole, 1946). This paper focuses on the understanding entrepreneurial attitudes, intentions and activity in Barbados. By entrepreneurial attitudes and intentions, we are discussing the character formed and the impact observed through entrepreneurship education that leads to the desires to own or start a business; while activity speaks to the entrepreneurial practice.

Profiling the Attributes of the Entrepreneurship Process

This section of the literature review aims at defining the process of early stage entrepreneurship as well as the factors that influence the decision of whether to engage in venture creation. In doing so it will follow the GEM methodology where early stage entrepreneurship and the factors driving it are reviewed along two major dimensions. Firstly, an individual's attitude towards entrepreneurship includes his/her perception of business opportunities, trust in his/her knowledge, skills and abilities for entrepreneurial activity, entrepreneurial capability, fear of failure and intention to start a new business. Secondly, entrepreneurial activity measures the percentage of the population aged 18-64 involved in any of the phases of the entrepreneurial process (TEA – nascent plus new entrepreneurs, and established business owners). It also tracks the degree to which entrepreneurial activities are driven by opportunity and necessity.

Entrepreneurial Attitudes and Intentions

From an entrepreneurial attitude perspective, a considerable factor in the formation of the attitude relates to the desires of the entrepreneur. It can be argued that once an opportunity is viewed, the intention to act on it depends on desirability and feasibility (McMullen & Shepherd,

2006). Fiet (2001) suggests that the objective of entrepreneurship theory is to help entrepreneurs to understand the consequences of their decisions and this could be done through education. Also, the risk factor associated with becoming an entrepreneur influences the individual's final decision (Caliendo, Fossen, & Kritikos, 2009). Caliendo et al. (2009) posit that the risk associated with making certain decisions may vary from person to person. Persons working in the area that they want to become self employed in, may feel less pressured because they have the experience and skill in that area compared to someone starting out in the area as a self-employed person (Caliendo et al., 2009). Thus, the perceived risk to the experienced person is lower. Further, the availability of what can be considered good jobs, perceptions of others and culture can influence those considering self employment (Xavier et al., 2013).

In addition researchers have assessed the relationship between entrepreneurial intentions and entrepreneurship education (Dickson, Solomon, & Weaver, 2008; Galloway & Brown, 2002; Peterman & Kennedy, 2003; Pittaway & Cope, 2007). Research has revealed that entrepreneurship education courses contribute to the development of entrepreneurial intentions (Fayolle et al., 2006; Lüthje & Franke, 2003; Peterman & Kennedy, 2003). Supporting research has been done on self efficacy and intentions as elements of entrepreneurship education Chen, (2010), (Zhao, Seibert, & Hills, (2005). Other highlights of research have shown that entrepreneurship education is particularly concerned with attitudes, intentions, and the firm creation process (Liñán, 2008). Others have cited knowledge, habits, social and personality attributes as factors influencing entrepreneurial intentions (Unger, Rauch, Frese, & Rosenbusch, 2011). Holmgren et al., (2004) suggest that entrepreneurship education is mainly about the development of certain beliefs, values and attitudes. In this research, the concept of entrepreneurial intentions is used as a supporting concept that is useful in highlighting the impact of entrepreneurship education.

Due to diverse entrepreneurs having different attitudes and intentions, we look at the nature of these variations. This suggests the following research question, as a dimension of measuring the impact of entrepreneurship education:

RQ1: What is the nature of entrepreneurial attitudes and intentions in Barbados?

Entrepreneurial Activity

The importance of entrepreneurial activity for economic development is established in GEM Report (2008). From the perspective of entrepreneurial activity, the research assesses the literature using varying perspectives (Xavier et al., 2013). Several authors have conducted country studies linking economic and entrepreneurial activity with business dynamism in terms of new venture creation and the closure of businesses (Dumas, 2001; Osborne, Falcone & Nagendra, 2000; and McLarty, 2005). Picot et al. (1998) highlight that new firms enhance employment levels by stimulating economic activity and job creation. While Renolds et al. (1994) allude to the fact that unemployment leads to individuals seeking self employment, thus stimulating entrepreneurial activity. Henry, Hill and Leitch (2005) suggest that entrepreneurship education should be aimed at providing an opportunity to learn about the conditions favoring entrepreneurial activity and new venture creation. Further, Audretsch and Thurik (2000) state that change in business ownership is a causal factor in change in unemployment rate and stimulating entrepreneurial and economic activity. According to the GEMS 2013 report, the payment of wages is the best approach for universal comparisons. As such, GEMS takes the payment of wages for more than three months as the beginning event which constitutes a firm (Xavier et al., 2013). Entrepreneurial activity has many subsets in accordance to stage or

owner/co-owner's input. For example, individuals who are actively investing resources in starting a business in hopes of owning or co-owning but have not yet started yielding wages are referred to as nascent entrepreneurs (Xavier et al., 2013). Individuals who have passed the wages stage but have been in operation for less than 42 months are considered owner-managers according to GEM.

While business ownership can be used as a measure for business stock it is hardly a measure for entrepreneurial activity as it does not take into consideration new start ups. Though these two may correlate in first-world countries, this is not the case in SID countries – such as Barbados where start-up activity is more unpredictable and the impact of entrepreneurship education maybe long-term (Olomi et al. 2009; Galloway and Brown 2002). This concern leads to next research question:

RQ2: What is the nature of entrepreneurial activity in Barbados?

Relationship between Total Early-Stage Entrepreneurial Activity and Attitudes

Entrepreneurial attitudes and entrepreneurial activity are closely related, but there are forces in between (Grilo & Irigoyen, 2006). Linking entrepreneurial attitudes to entrepreneurial activity leads to obvious results: people who are involved in entrepreneurial activity are likely to exhibit positive attitudes to entrepreneurial activity, and people who lack positive attitudes are almost certain not to be involved in entrepreneurial activity.

To understand the relation between entrepreneurship attitudes and entrepreneurship activity, close attention must be given to both the micro and macro phenomena that are intertwined and at play (Bosma & Schutjens, 2011). Individuals are guided by their own set of principles, values and preferences - they assess their own ability, which is conditioned and based on their unique personality (Bosma & Schutjens, 2011). In addition, and at the microcosmic level is the availability of business properties and regional market growth (Bosma & Schutjens, 2011). Essentially, at the micro level, a number of individual and perceptual factors influence the decision to become an entrepreneur (North, 1998).

At the macro level, socio-cultural attitudes towards the ownership of firms and regulatory hindrances must be considered (Bosma & Schutjens, 2011). Additionally, a distinction must be made between formal institutions and informal institutions with respect to how the two could impact attitude and therefore activity (Bosma & Schutjens, 2011). For example, an individual may feel restricted because of the existing regulatory laws which govern the registration of new firms; hence the individual may be deterred even at the thought of registering a new entity (Bosma & Schutjens, 2011).

Despite not being a clear-cut relationship, entrepreneurial attitudes are linked to entrepreneurial activities (Bosma & Schutjens, 2011). The strength of the relationship is made stronger or weakened by influences at the supra-national, national and regional levels (Bosma & Schutjens, 2011). In relation to entrepreneurial activity, regional forces will affect the process before the start up of the firm. This leads to a variation regionally with respect to the prevalence of early stage entrepreneurial activities (Bosma & Schutjens, 2011).

To further understand the connection among attitudes, intentions and activities in the entrepreneurship literature, two major theoretical models are worthy of discussion. Firstly, Reynolds et al. (2004) suggest that the GEMS theoretical model of entrepreneurial activity is a very useful model for testing entrepreneurial activity on the basis of entrepreneurial intentions and attitudes such as perceived capability, perceived opportunities, self-efficacy and other psychological and sociological factors which are consistent with the present study. The model

also looked at demographic factors such as educational status and level of training/experience, as key predictors of entrepreneurial venture creation and economic growth. The research has shown that the literature on entrepreneurship education and training provides evidence demonstrating the influence of entrepreneurship education and training on entrepreneurial activity exists but understanding the level of influence is still lacking (Bécharde and Grégoire, 2005). Greater appreciation is required in understanding best practices in entrepreneurship programmes and learning techniques to enhance skills that are geared towards new venture creation (Garavan & O'Kinneide, 1994). Martínez, Levie, Kelley, Sæmundsson and Schøtt (2010) in a special GEM report highlighted:

Attitudes and intentions are important in boosting the chance individuals will attempt an entrepreneurial endeavor at some point in their lives (Souitaris et al., 2007). Studies on the influence of education and training on attitudes have found a positive link to interest in entrepreneurship, attitudes toward entrepreneurship and perception of the feasibility of starting a business. Examples include post-secondary education in Northern Ireland (Hegarty, 2006), university students in England (Souitaris et al., 2007) and Germany (Walter and Dohse, 2009) and secondary school pupils enrolled in an entrepreneurship program in Australia (Peterman and Kennedy, 2003). However, other studies have observed a decrease in intentions after entrepreneurship education programs, for example, in a Dutch school (Oosterbeek et al., 2009) and a German university (Weber et al., 2009). Other studies show that prior exposure to entrepreneurship and prior intentions can change the effect of entrepreneurship training programs (e.g., Fayolle et al., 2006). (p. 15)

Another model, the Entrepreneurial Intentions Model (Krueger & Brazeal, 1994), based on institutional economic theory discusses the role of social psychological factors in the prediction of economic growth and venture creation potential. The model was developed based on Ajzen's (1991) model of planned behaviour and the Shapiro model of entrepreneurial intentions. Both models combined suggest that entrepreneurial activity is influenced by an individual's perceived desirability (attitudes) and perceived feasibility (self-efficacy, perceived behavioural control and perceived opportunities) and entrepreneurial experience. These models are closely tied to the focus of this present study.

An empirical study (Coduras et al., 2008) that assessed the relationship between these variables revealed that there was no relationship between supportive attitudes of university faculty and entrepreneurial activity but there was a significant relationship between entrepreneurial intentions and attitudes among the university students, demonstrating the importance of higher education. Some literature exists to support universities being part of the entrepreneurial ecosystem and their contribution to the entrepreneurial transformation process; however its mainly based in developed countries (North America: Link & Scott, 2005; O'Shea et al., 2007; and Europe: Guerrero & Urbano, 2012; Kirby, 2006; Wright et al., 2007). However, Bosma and Schutjens (2009) revealed a significant relationship between entrepreneurial attitudes and entrepreneurial activity but no relationship between these attitudes and economic development for 18 European countries. Moreover, Bygrave et al. (2010) also revealed that, among a sample of 29 countries, opportunity-pull entrepreneurial activity was positively correlated with entrepreneurial capacity and perceptions of entrepreneurial opportunities, whereas necessity-driven entrepreneurship had no correlates. This brings us to the third research question:

RQ3: What is the relationship between total early stage entrepreneurial activity and attitudes?

Research Method and Material

Entrepreneurship education, particularly in small island developing states (SIDS), deserves attention, in order to access an underutilised resource and increase economic growth. Thus in order to understand entrepreneurship education, attitude and activity in SIDS and in light of insufficient studies tackling this issue, the authors opted to carry out exploratory research; this type of research is conducted when there are very few studies to which we can refer for information about the issue or problem; and this type of research is the most productive since it yields a large number of ideas (Zikmund et al., 2010).

This research was correlation in nature and used a mixed-method approach which combines both the secondary and primary sources of information retrieval. In order to provide a solid foundation for this research, secondary data were sourced from related literature, journals, the internet, and other publications, while the primary data retrieval was sourced by semi-structured questionnaire either via e-mail or face-to-face interviews. Questionnaires, the main primary data-collection tools, were carried out with 2,355 Barbadian residents (aged between 18 and 64) across the various urban and rural areas of the island. This sample size was deemed appropriate for the population of Barbados (estimated at 270,000 persons) and represented a margin of error of about 2.5%. In 2010 the Cave Hill School of Business in Barbados lead a research team to collect information on a nationally representative minimum sample of 2000 people through the use of a questionnaire about entrepreneurial activity, aspirations and attitudes. The aim of the survey was to collect information about the attitudes and behaviours leading to the creation of entrepreneurial activities, along with a set of socio-demographic and economic variables. Data have been collected on a single sample of the population with an age comprised between 18 and 64 years. Individuals have been randomly selected from a data-base and interviews are conducted using fixed line telephone, face to face interviews and on-line surveys. Sampling was done at the household unit level, and random selection procedures for selecting persons from households. The questionnaire was the based on Adult Population Questionnaire (APQ) used by GEMS to collect entrepreneurial attitude and intentions data and related subjective indicators of entrepreneurship, which are described in the next section.

The author combined a review of the literature pertinent to entrepreneurship education, attitude and activity with the results of the adult population survey (APS), which is the main tool of data collection used by the Global Entrepreneurship Monitor (GEM).

The rationale for this combination is to provide a fuller picture of entrepreneurship attitudes, intentions and activity in Barbados. The validity and reliability of the results were based on the relationship between these factors and conclusions were made with a good sense of judgment and analysis from the respondents' point of view.

The analyses were broken into different segments. Firstly, the extent and nature of entrepreneurial attitudes and intentions were assessed in the total sample, followed by the same assessment broken down by gender and age. Secondly, entrepreneurial activity, measured by total stage-entrepreneurship (TEA), was examined as a composite (and by its individual dimensions of nascent entrepreneurial activity and new business ownership). The assessment of TEA was also broken down by gender, age, and educational attainment. Finally, the relationship between entrepreneurial attitudes, intentions, and TEA was examined using Phi coefficients as

effect sizes (measures of association). All variables were categorical (and dichotomous) in nature (e.g. yes or no).

Results

This section presents the main findings associated with entrepreneurial education, attitudes and activity within a survey of approximately 2,355 individuals in Barbados. Of these individuals, 57 percent were female, and 43 percent were male. The mean age of the sample was 39 years (SD = 12.9), ranging from 18 to 64 years. The majority of participants completed secondary (42%) or post-secondary education (40%). Just over 20 percent indicated that they own or manage a new business, with an average size of five employees.

Entrepreneurial Attitudes and Intentions in Barbados

This section addresses the first research question on the nature of entrepreneurial attitudes and intentions in Barbados. Ferreira et. al. (2012) stated that personal attitude, subjective norms and perceived behavioral control are included in behavioral approach of entrepreneurial intention. It was necessary to examine the nature of entrepreneurial attitudes in Barbados across a number of GEM indicators including *entrepreneurial intention, entrepreneurship as a desirable career choice, fear of the failure rate, high status successful entrepreneurship, know startup entrepreneur rate, media attention for entrepreneurship, perceived capabilities, and perceived opportunities* (see Table 1 for results and definitions).

Table 1

Entrepreneurial Attitudes and Gender Distribution

ATTITUDES	Total Percentage (%)	Male %	Female %
Entrepreneurial intention Rate (% who intend to start business within three years)	23	27	19
Entrepreneurship as Desirable Career Choice (i.e. perceived that entrepreneurship is a good career choice)	68	69	67
Fear of Failure Rate* (i.e. perceived fear of failure will prevent self from starting business)	23	19	27
High Status Successful Entrepreneurship (i.e. perceived that successful entrepreneurs enjoy a high status)	73	73	72
Know Startup Entrepreneur Rate (i.e. personally knew someone who has started a business)	33	34	32
Media Attention for Entrepreneurship (i.e. perceived that the media often highlights stories of new successful businesses)	63	61	64
Perceived Capabilities* (i.e. perceived skills, knowledge and experience in entrepreneurship)	75	80	69
Perceived Opportunities* (i.e. perceived good opportunities in next six months)	45	51	39

Table 1 revealed that although a third of the respondents (33%) reported that they personally knew someone who started a business in the past two years, approximately a quarter of the respondents (23%) reported positive intentions to start a business within the next 3 years. Moreover, although close to half of the respondents (45%) saw good opportunities to start a business in the area where they live, approximately a quarter of them (23%) confirmed that fear of failure is still a deterrent factor for their starting a business.

However, it was interesting to note that more than half of the respondents reported that: (1) entrepreneurship is seen as a desirable career choice (68%), (2) the media highlight stories of successful new businesses (63%), (3) they [respondents] have the requisite capabilities to start a business (75%), and (4) successful entrepreneurs receive high status and respect (73%).

In terms of gender distribution (see Table 1), the findings showed that males generally demonstrated more positive entrepreneurial attitudes than females, especially regarding their perceptions of facilitating opportunities and self-capabilities. Moreover, females were more likely than males to report that fear of failure was a deterrent to starting a business. These findings based on gender were significant based on Chi-square analyses (all $ps < .05$).

In terms of age distribution (see Table 2), respondents in the youngest age groups (i.e., 18-34 years) demonstrated the most positive attitudes with respect to perceived entrepreneurial capabilities as well as the highest entrepreneurial intentions compared to those in the older categories (i.e., 44-54 years). These respondents were also more likely than those in the oldest age category to have some personal knowledge of someone who had started their own business. These findings based on age were significant based on Chi-square analyses (all $p < .05$)

Table 2

Entrepreneurial Attitudes and Age Distribution (%)

ATTITUDES	Under 18	18-24	25-34	35-44	44-54	55-64
Entrepreneurial intention Rate* (% who intend to start business within three years)	38	36	29	21	11	-
Entrepreneurship as Desirable Career Choice (i.e. perceived that entrepreneurship is a good career choice)	79	63	68	61	69	-
Fear of Failure Rate (i.e. perceived fear of failure will prevent self from starting business)	15	27	19	17	9	-
High Status Successful Entrepreneurship (i.e. perceived that successful entrepreneurs enjoy a high status)	71	64	70	67	80	-
Know Startup Entrepreneur Rate* (i.e. personally knew someone who has started a business)	35	42	31	28	17	-
Media Attention for Entrepreneurship (i.e. perceived that the media often highlights stories of new successful businesses)	71	66	55	59	68	-
Perceived Capabilities* (i.e. perceived skills, knowledge and experience in entrepreneurship)	79	73	75	75	53	-
Perceived Opportunities (i.e. perceived good opportunities in next six months)	41	41	38	46	32	-

Entrepreneurial Activity in Barbados

This section addresses the second research question on the nature of entrepreneurial activity in Barbados. Entrepreneurial activity is often measured using total-early stage entrepreneurial activity (TEA) which is a popular measurement indicator used in the GEM studies. This metric is defined as the percentage of the 18-64 population who are either nascent entrepreneurs or owners-managers of a new business (i.e. new business ownership rate). Roughly equal proportions of nascent entrepreneurial activity (11%) and new business ownership (10%) were observed for Barbados. These proportions resulted in a combined TEA index of 21%. In terms of gender, statistical analyses revealed that a significantly higher proportion of males (23%) are involved in TEA compared to females (19%). In terms of age range, TEA index was highest among those in the 'below 18' age group (32%), followed by those in 25-34 age group (23%). These results suggest that significant entrepreneurial activity exists among the younger age groups compared to those in the older groups such as the '45-55' and '55-64' age groups. With respect to educational attainment, TEA was positively related to educational attainment, with those in the highest educational category (i.e. post-secondary level) exhibiting the highest TEA index (52%). These findings were all significant based on Chi-square analyses (all $ps < .05$).

Relationship between Total Early-Stage Entrepreneurial Activity and Attitudes

This section addresses the third research question on the nature of the relationship between entrepreneurial activity, entrepreneurial attitudes and intentions in Barbados. It was necessary to examine how entrepreneurial attitudes and intentions (assessed earlier) were related to TEA using phi coefficients (based on Chi-square tests). Phi correlation coefficients or effect sizes are used to examine the strength of correlations between dichotomous variables (i.e. yes/no). Small, medium and large effects are represented as .1, .3 and .5, respectively. Tests were carried out at the 5% level of significance.

Table 3 revealed that several attitudinal variables were significant correlates of TEA (based on chi-square analyses where all $ps < .05$). Phi effect sizes were reported in parentheses. Together with personal knowledge of entrepreneurial startups and entrepreneurial intentions, perceived capabilities (or the belief that one has the necessary capabilities to become an entrepreneur) had the strongest positive correlation with TEA ($\phi = .21$), suggesting that the majority of those individuals with strong beliefs in their capabilities were among those involved in TEA. Moreover, the majority of those who personally knew someone who started a business ($\phi = .21$) and those who perceived good opportunities for entrepreneurship ($\phi = .20$) were also among those involved in TEA. Fear of failure had a significant negative correlation with TEA ($\phi = -.11$), suggesting those who perceived that fear of failure is a deterrent to starting a business were less likely to be involved in TEA. This finding then highlights that the majority of those who did not perceive any fear of failure were among those involved in TEA. Entrepreneurial intentions were also positively related to TEA ($\phi = .21$), suggesting that individuals who had higher intentions to start their business were more likely to be involved in TEA. Overall, these findings suggest a clear link between entrepreneurial attitudes and actual entrepreneurial activity in Barbados. Liñán (2008) highlights that such attitudes and intentions are concerned with entrepreneurship education and the firm creation process.

It is highly likely that the correlations will be significant given the large sample size, therefore it may be more effective to interpret the significance in terms of effect sizes.

Table 3

Phi Correlations between Attitudes and TEA

ATTITUDES	Phi Correlations with TEA
Entrepreneurial intention Rate (% who intend to start business within three years)	.21
Entrepreneurship as Desirable Career Choice (i.e. perceived that entrepreneurship is a good career choice)	0.04
Fear of Failure Rate (i.e. perceived fear of failure will prevent self from starting business)	-0.11
High Status Successful Entrepreneurship (i.e. perceived that successful entrepreneurs enjoy a high status)	-0.01
Know Startup Entrepreneur Rate (i.e. personally knew someone who has started a business)	.21*
Media Attention for Entrepreneurship (i.e. perceived that the media often highlights stories of new successful businesses)	0.02
Perceived Capabilities (i.e. perceived skills, knowledge and experience in entrepreneurship)	.21*
Perceived Opportunities (i.e. perceived good opportunities in next six months)	.20*

Discussion and Conclusion***Entrepreneurial Attitudes and Intentions in Barbados***

A review of the literature and an analysis of the GEM's findings show that although most respondents in Barbados demonstrated strong positive attitudes towards entrepreneurship as a career choice and positive perceptions of their capabilities to start a business, a relatively modest percentage (23%) expressed intentions to start a business within the next three years. This was divergent to the finding that only a quarter of the respondents expressed fear of failure as a deterrent factor for starting a business in Barbados. It is thought that the high level of education of the population has pushed persons towards a risk-averse form of generating income; the higher the level of education, the less likely a person will start a new venture and the more likely they will join an existing work force, especially if the availability of good jobs exists (Xavier et al., 2013). The finding also goes against the typical GEM results as GEM also argues that the higher the education attainment, the more likely the success and growth of the venture into a high growth entity. Though Barbadians are viewed to have relatively higher levels of education compared to other nationals, the success and growth of the venture into a high-growth entity does not bear out in the findings in terms of attitude, activities and educational attainment as the Barbadian culture is not one for aggressive independent new venture creation which is required for high growth entity success.

Entrepreneurial Activity in Barbados

The Barbadian population placed less emphasis on ownership of a business and more emphasis on seeking employment in the later stages of life (45-55 and 55-64 age group). Barbadians choosing to set up new ventures at an early age as opposed to later years as seen in other countries can be linked to a shrinking employable market on the island, which has forced more young people into new venture creation. This supports Renolds et al. (1994) suggestion that unemployment leads to individuals seeking self employment, thus stimulating entrepreneurial activity. There is also a general feeling that new venture start-up is now more socially acceptable than in the previous decade. Further, there was a significant difference in TEA index for gender as males in all age groups were more inclined to start new ventures. Given that the ownership dimension relates to the utility to network and ones perception of their capabilities, it was expected that all else being equal, males should have higher intentions to be self employed, while females would have a preference for employment. With twice as many females than males seeking higher education, the expectation based on the literature is for females to join an existing work force. The rationale for joining the work force is linked to the risk factor associated with becoming an entrepreneur (Caliendo, Fossen, & Kritikos, 2009). Due to the limits on the job market, the importance of entrepreneurship as a source of employment for women in the Caribbean is high as in other developing countries (Acs & Storey, 2004); especially as women are more vulnerable than men.

Relationship between Total Early-Stage Entrepreneurial Activity and Attitudes

The research has highlighted that entrepreneurial attitudes have a specific effect on entrepreneurial activity. The research shows that there is relevance in distinguishing between components of entrepreneurial attitudes, i.e. fear of failure in starting business, perceptions on start-up opportunities and self-assessment of personal capabilities to start a firm. The findings show that there are different determinants of these components, and this suggests that they reflect different aspects of entrepreneurial attitude in TEA which proved relevant for this explanatory study. This means that at different stages of entrepreneurship, it is paramount to understand the requisite entrepreneurial attitudes that drive activity. Based on the literature, despite not being a clear-cut relationship, entrepreneurial attitudes are linked to entrepreneurial activities (Bosma & Schutjens, 2011). The two pointers of entrepreneurial attitudes, perceived capabilities and high entrepreneur status positively influence entrepreneurship in general in this study. While the fear of failure indicator is low for both males and females, this finding significantly opposes what the literature suggests. The research also showed that males and those in the youngest age groups demonstrated the most positive entrepreneurial attitudes and highest TEA rates. Additionally, TEA rates were positively related to educational attainment, with those in the highest educational category (post-secondary level) demonstrating the highest TEA. Though exploratory, the research lends to the fact that the positive relation between strong entrepreneurial attitudes and subsequent entrepreneurial activity is not straightforward. However, entrepreneurship education positively influences attitude and activity.

It is recognised that this exploratory study has its limitations. Moreover, the research was meant to be correlational as it focused simply on exploring relationships among variables and not on causal model testing (e.g. structural equation modelling and longitudinal data analysis). In future research on explaining entrepreneurial activity it is suggested that researchers undertake to unravel the methodological problem of distinguishing the effect of entrepreneurial attitudes from

other determinants, as the latter also impacts entrepreneurial attitudes. It is also hoped that future research adopts more rigorous analyses and methods to estimate causality.

Implications

Based on the conclusions, the authors would like to suggest a few implications for entrepreneurs, academics and policy makers.

The relatively modest percentage (23%) expressing intentions to start a business within the next three years is a reason for concern for policy makers and entrepreneurs alike. Entrepreneurship training should not be limited to those engaged only in long-term programmes. Currently the entrepreneurial development training seminars facilitated for Micro, Small and Medium-sized enterprises at the Barbados Youth Business Trust, the Small Business Association, the Barbados Manufacturers Association and the Youth Entrepreneurship Scheme are necessary but not sufficient to groom the population size. More is required where vulnerable groups like women and youth are sidelined, deliberate efforts at engendering the entrepreneurial spirit among women remains critical.

The Barbadian population placed less emphasis on ownership of a business and more emphasis on seeking employment in the later stages of life (45-55 and 55-64 age group). This analysis suggests that entrepreneurship self-efficacy, start-up skills, and entrepreneurial intentions seem to diminish in later years as opportunity recognition becomes harder and the need to take risk is reduced. On the contrary, the GEM research suggests that persons step into entrepreneurship around 40-45. There is a need for more research to be done in this area to create a better understanding of the phenomenon as this may be a culturally-bound difference that needs more consideration. Identifying the necessary type of entrepreneurship training required at this stage is paramount. This would enable entrepreneurship to be considered as a viable option throughout all the stages of life and an informed career option for everyone.

The research shows that at different stages of entrepreneurship, it is paramount to understand the requisite entrepreneurial attitudes that drive activity. By building networks and addressing the delivery and advancement of entrepreneurial education, it is envisioned that the spirit of entrepreneurship will thrive. Further, the promotion of entrepreneurial activities in Barbados through media blitz, and having entrepreneurs championed in the education system would create a buzz that will drive entrepreneurial activity.

Suggestions for future Research

Further research might help explain the types of entrepreneurship training required at the various stages of the entrepreneur's life cycle. This could be done as a motion to enhance self-efficacy, attitude, entrepreneurial intentions, and activity. There is also a need for an in-depth recommended approach to support entrepreneurship education, which reduces the fear of failure and uptake of business startups across all demography regardless of gender. The duration of entrepreneurship education is a gap in the area of entrepreneurship research, an understanding of this area can be effectively utilised to assist with resource allocation. Finally, as the duration of entrepreneurship training programs can vary widely, one may need to investigate the different impacts for attitudes, intentions and activities towards entrepreneurship.

Limitations

Though the study contributes to the field of entrepreneurship, some limitations hinder its impact. The sample only consisted of one Caribbean island and its population, as such; the validity of its

claims cannot be generalized to all Caribbean territories, but surely some parts can inform decision making in similar-sized economies. In addition, The GEM data set was collected by another source and any inherent errors would have been passed on from the source.

References

- Acs, J. Z. & Storey, D. J. (2004). Introduction: Entrepreneurship and Economic Development. *Regional Studies*, 38(8), 871-77.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Audretsch, D. B. & Thurik, R. (2000). Capitalism and Democracy in the 21st Century: From the Managed to the Entrepreneurial Economy, *Journal of Evolutionary Economics*, 10(1), 17-34.
- Bandura, A. (1989). Regulation of cognitive processes through perceived self-efficacy. *Developmental psychology*, 25(5), 729.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology*, 52(1), 1-26.
- Bosma, N., & Schutjens, V. (2011). Understanding regional variation in entrepreneurial activity and entrepreneurial attitude in Europe. *The Annals of Regional Science*, 47(3), 711-742.
- Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18, 63-63.
- Bygrave, W., Hay, M., Ng, E., & Reynolds, P. (2003). Executive forum: a study of informal investing in 29 nations composing the Global Entrepreneurship Monitor. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5(2), 101-116.
- Caliendo, M., Fossen, F. M., & Kritikos, A. S. (2009). Risk attitudes of nascent entrepreneurs—new evidence from an experimentally validated survey. *Small Business Economics*, 32(2), 153-167.
- Carland, H., Carland, J. W., & Hoy, F. (2002). "Who is an entrepreneur?" Is a question worth asking. *Entrepreneurship: Critical Perspectives on Business and Management*, 2, 178.
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of business venturing*, 13(4), 295-316.
- Coduras, A., Urbano, D., Rojas, Á., & Martínez, S. (2008). The relationship between university support to entrepreneurship with entrepreneurial activity in Spain: a Gem data based analysis. *International Advances in Economic Research*, 14(4), 395-406.
- Cole, A. H. (1946). An approach to the study of entrepreneurship: A tribute to Edwin F. Gay. *The Journal of Economic History*, 6(S1), 1-15.
- Douglas, E. J., & Shepherd, D. A. (2002). Self-employment as a career choice: attitudes, entrepreneurial intentions, and utility maximization. *Entrepreneurship Theory and Practice*, 26(3), 81-90.
- Dumas, C. (2001). Evaluating the outcomes of microenterprise training for low income women: A case study. *Journal of Developmental Entrepreneurship*, 6(2), 97-128.
- Esnard-Flavius, T. (2010). Gender, Entrepreneurial Self-Efficacy, And Entrepreneurial Attitude Orientations: The Case Of The Caribbean. *International Business & Economics Research Journal*, 9(13).
- Fayolle, A., Gailly, B. & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European Industrial Training*, 30(9), 701-720.

- Ferreira, J. J., Raposo, M. L., Rodrigues, R. G., Dinis, A., & Paço, A. d. (2012). A model of entrepreneurial intention: An application of the psychological and behavioral approaches. *Journal of Small Business and Enterprise Development*, 19(3), 424-440.
- Fiet, J. (2001). The theoretical side of teaching entrepreneurship. *Journal of Business Venturing*, 16, 1-24.
- Galloway, L. & Brown, W. (2002). Entrepreneurship Education at University: a driver in the creation of high growth firms? *Education + Training*, 44(8/9), 398-405
- Gartner, W. B. (1989). Some suggestions for research on entrepreneurial traits and characteristics. *Entrepreneurship Theory and Practice*, 14(1), 27-38.
- Guerrero, M. and Urbano, D. (2012). The development of an entrepreneurial university. *Journal of Technology Transfer*, 37(1), 43–74.
- Hegarty, C. (2006) It's Not an Exact Science: Teaching Entrepreneurship in Northern Ireland. *Education + Training* 48(5), 322–335.
- Henry, C. Hill, F. and Leitch, C. (2005) Entrepreneurship Education and Training: can entrepreneurship be taught? Part I. *Education + Training*, 47(2/3), 98-112
- Holmgren, C., From, J., Olofsson, A., Karlsson, H., Snyder, K., & Sundström, U. (2004). Entrepreneurship education: Salvation or damnation? *International Journal of Entrepreneurship*, 8, 55-71.
- Kirby, D. (2006). Creating entrepreneurial universities in the UK: Applying entrepreneurship theory to practice. *Journal of Technology Transfer*, 31(5), 599–603.
- Krueger, N. F. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship Theory and Practice*, 31(1), 123-138.
- Link, A. & Scott J.(2005). Opening the ivory tower's door: An analysis of the determinants of the formation of U.S. university spin-off companies, *Research Policy*, 34(7), 1106–1112.
- Lüthje, C. & Franke, N. (2003). The 'making' of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management*, 33(2), 135–147. <http://dx.doi.org/10.1111/1467-9310.00288>
- Martínez, A.,Levie, J., Kelley, D., Sæmundsson, R., & Schøtt, T. (2010). Global Entrepreneurship Monitor Special Report: A Global Perspective on Entrepreneurship Education and Training: GEM.
- McLarty, R. (2005). Entrepreneurship among graduates: Towards a measured response. *The Journal of Management Development*, 24(3), 23-238.
- McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of management review*, 31(1), 132-152.
- Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P. P., Morse, E. A., & Smith, J. B. (2002). Toward a theory of entrepreneurial cognition: Rethinking the people side of entrepreneurship research. *Entrepreneurship Theory and Practice*, 27(2), 93-104.
- North, D. C. (1998). Economic performance through time. *International Agricultural Development*, 3, 78-89.
- Nybakk, E., & Hansen, E. (2008). Entrepreneurial attitude, innovation and performance among Norwegian nature-based tourism enterprises. *Forest Policy and Economics*, 10(7), 473-479.
- Olomi, D., & Sinyamule, R. (2009). entrepreneurial intentions inclinations of vocational education students: a comparative study of male and female trainees in Iringa region, Tanzania. *Journal of Enterprising Culture*, 17(1), 103-125

- Oosterbeek, H., Van Praag, M. and Ijsselstein, A.(2009) The Impact of Entrepreneurship Education on Entrepreneurship Skills and Motivation. *European Economic Review*, 54(3), 442-454.
- Osborne, S.W., Falcone, T.W., & Nagendra, P.B. (2000). From unemployed to entrepreneur: A case study in intervention. *Journal of Development Entrepreneurship*, 5(2), 15-136.
- O'Shea, R., Allen, T., Morse, K., O'Gorman, C. and Roche, F. (2007). Delineating the anatomy of an entrepreneurial university: The Massachusetts Institute of Technology experience', *R&D Management*, 37(1), 1–16.
- Peterman, N.E. & Kennedy, J. (2003). Enterprise education: influencing students' perceptions of entrepreneurship. *Entrepreneurship: Theory and Practice*, Winter, 129–144.
- Picot, G., Manser, M., Lin, Z. (1998). the role of self-employment in job creation in Canada and the US. OECD-CERF-CILN International conference on Self-employment, Burlington, Ontario, Canada.
- Poon, J. M., Ainuddin, R. A., & Junit, S. O. H. (2006). Effects of self-concept traits and entrepreneurial orientation on firm performance. *International Small Business Journal*, 24(1), 61-82.
- Reynolds, P. D., Storey, D. J. and Westhead, P. (1994). Cross-National Comparisons of the variation in new firm formation rates. *Regional Studies*, 28(4), 443-456.
- Smith, P. (2001). Action Learning and Reflective Practice in Project Environments that are related to Leadership Development. *Management Learning* , 32(1), 209-224.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Souitaris, V., Zerbinati, S, Al-Laham, A. (2007). Do Entrepreneurship Programmes Raise Entrepreneurial Intention of Science and Engineering Students? The Effect of Learning, Inspiration and Resources. *Journal of Business Venturing*, 22, 566–591.
- Venkataraman, S. (1997). The distinctive domain of entrepreneurship research: An editor's perspective. *Advances in Entrepreneurship, Firm Emergence, and Growth*, 3, 119-138.
- Walter, S., & Dohse, D. (2009) The Interplay Between Entrepreneurship Education and Regional Knowledge Potential in Forming Entrepreneurial Intentions. Kiel, Germany: Kiel Institute for the World Economy, no. 1549.
- Wright, M., Clarysse, B., Mustar, P. & Lockett, A. (2007), *Academic Entrepreneurship in Europe*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing.
- Yin, R. (1984). *Case Study Research, Design and Methods*. Beverly Hills, CA: Sage.
- Xavier, S., Kelley, D., Kew, J., Herrington, M., & Vorderwülbecke, A. (2013). *Global Entrepreneurship Monitor 2012 Global Report*. Global Entrepreneurship Monitor.
- Zikmund, W. G., Babin, B.J., & Giffin, J.C. (2010). *Business Research Methods*, (8th ed.), Sothern-Western Cengage Learning, Mason, OH.