

Factors influencing the development of productive entrepreneurial behaviour among university students

MM MEMANI (University of KwaZulu-Natal)
Z FIELDS (University of KwaZulu-Natal)

Abstract

South Africa experiences high levels of unemployment and there are various policy proposals aimed at addressing this situation. The most dominant policy proposals come from the National Development Plan, which suggests that small and medium enterprises will play a key role in job creation through procurement, access to equity finance, a simplified regulatory environment and support services.

The objective of this paper is to investigate the factors influencing the development of productive entrepreneurial behaviour among university students. The research methodology focuses on the literature review and a survey of 350 students at the University of KwaZulu-Natal (UKZN).

A key finding emanating from the research is that students are positive about starting an own business; however, they cannot translate these intentions into action. A recommendation is that stakeholders need to work together to design focused interventions for potential graduate entrepreneurs.

Key phrases

entrepreneurship; intentions; potential graduate entrepreneurs; productive entrepreneurial behaviour

1. INTRODUCTION

The importance of entrepreneurship, which is the main instrument for the stimulation of innovation is emphasised in many countries striving for the development and growth of their economies (Glinskiene & Petuskiene 2011:179). South Africa is not exempt from pursuing instruments that have worked elsewhere, given that there is more room for the economy to grow, create jobs and reduce poverty.

Peneder (2009:77) points out that entrepreneurship is one of the concepts in economics that is difficult to provide a precise meaning to, given its multiplicity of functions and involvement of various specialists. As this study focuses on productive entrepreneurial behaviours, Stokes, Wilson and Mador (2010:7) provide a definition of entrepreneurship within the behaviours dimension. Stokes *et al.* (2010:7) cite Timmons and Spinelli (2003) who defined entrepreneurship *as a way of thinking, reasoning and acting that is opportunity based, holistic in approach and leadership balanced*. Hence, this article adopts to define entrepreneurs in terms of their behaviour as individuals who perceive and create new economic opportunities (Peneder 2009:88).

This research focused at the way of thinking by university students, using Ajzen's theory of planned behaviour (Ajzen 1991:181) which is about the individual's intention or thinking to perform a given behaviour or start a business. The way of thinking (attitudes) progresses to reasoning, which is about the intentions to start a business. Eventually, the reasoning turns into action and this is where the intentions become behaviour. At this point, the business idea has become a reality – the business is up and running. This is the ultimate goal of seeing individuals running their own businesses as *real entrepreneurs* because they create opportunities and are proactive whereas *quasi-entrepreneurs* are less innovative and less proactive (Rauch & Frese 2000:119).

The research findings warn that a country should create the desired type of entrepreneurs. Baumol (1990:898) indicates that there are three types of entrepreneurs and these are productive, unproductive and destructive. It is important that countries (including South Africa) should aim to create productive entrepreneurs as this presents positive benefits for the entire society; if not so the consequences for the nation may be substantial because crime, rent seeking and other behaviours destroy existing resources. The research deems it vital for university students to understand the importance of entrepreneurship in the economy so that they can consider starting an own business as a career option.

2. PROBLEM STATEMENT

South Africa has a huge problem of structural unemployment where it takes longer to fill certain vacancies that require specific skills. This trajectory dismays most South African unemployed graduates as they consider themselves skilled but forgetting that they possess inappropriate

skills set. They join other job seekers in search of job opportunities as they cannot be absorbed by the industries.

In the first quarter of 2014, Statistics SA (2014:5) recorded an unemployment rate of 25.2% as recorded in South Africa. As is often the case, social ills, such as poverty and unemployment, breed other negative externalities such as crime, disease and death. This problem is linked to lack of productive entrepreneurial training offered to high school learners and university students. Hence, exposure to productive entrepreneurial training and education is essential for creating awareness on the importance of entrepreneurship as well as developing intentions for university students to start a business.

3. RESEARCH OBJECTIVES

The *primary objective* of the study was to investigate the factors that influence the development of productive entrepreneurial behaviours among university students. The problem statement highlighted the fact that university students in South Africa were increasingly becoming unemployed given a mismatch between the skills possessed by graduates and those required by potential employers. It was envisaged that instead of staying at home, graduates had opportunities to start a business and earn an income. However, various factors seem to enhance or hinder the development of productive entrepreneurial behaviours and these could be related to family backgrounds, the education system and the community where individuals live.

The study sought to look into these factors and isolate those that have a positive impact towards developing entrepreneurial behaviours. University students were identified as the most appropriate group within a society that can get out of the unemployment quagmire, given their exposure to critical and analytical thinking within a tertiary institution. The results of the study would be used to influence public policy and the development of appropriate programmes as well as assist universities to be aware of the importance of teaching productive entrepreneurship courses and appropriate methods of teaching.

To unpack the factors that enhance or hinder the development of productive entrepreneurial behaviours, the *secondary objectives* of the study looked at six variables which sought to:

- determine the awareness and understanding of the importance of entrepreneurship as a vehicle for earning a living;
- assess the attitudes of students towards starting a business;

- assess the students' likelihood to consider starting a business after graduation;
- investigate the levels of exposure of students to entrepreneurship;
- determine the perceived factors that enhanced or inhibited the development of new business;
and
- explore government initiatives to support potential graduate entrepreneurs.

4. RESEARCH METHODOLOGY

The study had two phases which were a literature review and an empirical study. The literature review examined the definition of entrepreneurship, the importance of entrepreneurship in the South African economy, the role of tertiary institutions in developing productive entrepreneurial behaviour among university students and factors influencing the development of productive entrepreneurial behaviours. The literature review also viewed the role of families, role models and the education system in relation to entrepreneurship development.

The research followed a survey design with quantitative data collected from participants. The research instrument was designed in order to gather perceptions and views of students regarding their understanding of entrepreneurship, their attitudes towards entrepreneurship, their likelihood to start a business, exposure to entrepreneurship, factors influencing the development of productive entrepreneurial behaviours among university students and what they considered as initiatives from government, the private sector and universities to support potential graduate entrepreneurs, using a five point Likert scale.

The initial questionnaire was piloted to 10 students of the University of KwaZulu-Natal (UKZN). The feedback was used to revise the initial questionnaire. The final questionnaire was administered to students based at three campuses of the University of KwaZulu-Natal. Data was collected randomly from students at these three campuses who were mainly outside lecture buildings and inside the student cafeteria.

The survey took about three weeks to complete and 350 questionnaires were completed and collected from the students in the three campuses under the guidance of the researcher. The breakdown of population and sample sizes in each of the UKZN campuses is shown in Table 1.

Participation was voluntary and anonymous. To ensure validity of results, the criterion validity was maintained as this survey was compared to other similar studies. The equivalence reliability

was used in this research using Cronbach's alpha as a statistical measure where a construct was measured with multiple specific measures. Data collected from a sample size of 350 students was analysed using several statistical tools including descriptive statistics (means, frequencies, Standard Deviation), checking reliability of scales and T-tests.

TABLE 1: Population and sample sizes at participating campuses

Campus	Population	Sample size
Pietermaritzburg	2 557	40
Westville	12 210	210
Howard	2 870	100
Total	17 637	350

Source: Own compilation from survey results

5. FINDINGS

5.1 The importance of entrepreneurship in the South African economy

Hisrich, Peters and Shepherd (2008:14) state that entrepreneurship in economic development is not only about increasing per capita output and income but it is also about introducing change in the structure of business and society. The results of this study revealed that a greater percentage of respondents viewed entrepreneurship as very important for the economic growth of a country (94.9%) rather than those who disagreed (1.4%), with 3.7% of respondents unclear about the importance of entrepreneurship on economic growth of a country.

A striking finding was the respondents' perception that most people in South Africa interpreted crime and rent-seeking (individuals who use their resources to obtain an economic gain from others without reciprocating any benefits back to the society) as means to earning a living. Yet, respondents disagreed with a statement that South Africa had a shortage of entrepreneurs, suggesting that the country had a reasonable number of entrepreneurs. Baumol (1990:894) cautioned that at times entrepreneurs could lead a parasitical existence that was damaging to the economy.

The crucial question to ask would be whether South African entrepreneurs were contributing positively to the economy through constructive and innovative means or as Baumol (1990:894) put it were parasites and therefore damaging to the economy. The suggestion from the respondents was that, perhaps, not every entrepreneur in South Africa was earning a living through constructive and innovative ways.

A t-test was used to compare responses from two groups such as men and women, amongst racial groups (White, African, Indian or Coloured), age groups and levels of study. Using a t-test analysis, there was no significant difference on the importance of entrepreneurship between men and women, different age groups and years of study, but there was a significant difference on the importance of entrepreneurship by different race groups. In other words, different race groups did not equally perceive that entrepreneurship was important. A case in point was that Indian respondents viewed entrepreneurship as more important than African respondents. The sample for Coloured and White respondents was very low to analyse any significant differences.

The majority of respondents viewed the role of tertiary institutions as crucial in supporting the development of entrepreneurship with a mean of 4.03. This statement confirms results of a study by Co and Mitchell (2006:349) which stated that higher education institutions could help create a more entrepreneurial disposition among young people. This could be done by instilling a clear understanding of risks and rewards, teaching opportunity seeking and recognition skills, as well as creation and “destruction” of enterprises. The teaching of students to acquire the ability to recognise opportunities and be innovative in creating and destroying businesses should contribute towards the notion of developing productive entrepreneurial behaviours.

The best way of doing this is through the traditional way of teaching as well as through the business generating (BG) model, which is about students having a viable business concept at least as product embryos (Laukkanen 2000:44). Further, the BG students should grasp and get operationally linked with real business and examples of these are programmes run by graduate business schools in most universities.

5.2 Attitudes of students towards entrepreneurship

The results showed that the respondents viewed entrepreneurship as important to job creation with a higher mean of 4.67 compared to an international study conducted by Davey, Plewa and Struwig (2011:344) which showed a mean of 4.26 for the same statement. The majority of

respondents (73.6%) said they would rather determine their own salary than have job security. Lüthje and Franke (2002:136) observed that business college students and graduates often saw the founding of a company as an attractive alternative to wage or salary employment.

The results were positive as it showed that students were thinking about the prospect of starting a business instead of confining themselves to seeking employment after graduation. It is envisaged that the next process after thinking is reasoning. Thereafter, an action will be expected or converting the business idea into an operational business is ideal. The process from the way of thinking up to the reasoning stage is fairly simple. It gets complex at conversion stage.

Autio, Keeley, Klofsten, Parker and Hay (2001:146) argued that starting up a new firm falls into the category of planned behaviour, as few firms are started by accident. According to Ajzen (1991:179), the intention to embark on any behaviour such as determining an own salary and starting a business could be predicted by three independent antecedents, which were the attitude towards the behaviour, subjective norms and perceived behavioural control. In this theory, students would need to have a positive attitude to start a business, the attitude would lead to intentions, and the intentions would result into the behaviour.

Whilst the majority of respondents agreed that entrepreneurship seemed an attractive alternative to salary employment, 52% of respondents acknowledged that it was not only through self-employment that one could get rich, indicating that employment could provide opportunities for salary earners to also make money and become rich.

Using a chi-square test analysis, there was a significant difference on the attitudes towards entrepreneurship between men and women, as well as between different races groups. The results showed that males had a positive attitude towards entrepreneurship more than females. These results confirmed a Global Entrepreneurship Monitor (GEM) study which stated that males in South Africa were more likely to have entrepreneurial intentions than females (Herrington & Turton 2012:6).

Further, the results showed that the Indian respondents had a positive attitude towards entrepreneurship more than the African respondents. However, Herrington and Turton (2012:9) noted that Black Africans and Indian respondents shared the same score and had the highest rate of entrepreneurial intentions compared to White and Coloured respondents. Overall, the

attitude of students towards entrepreneurship was encouraging, given the high levels of unemployment in South Africa.

5.3 Likelihood of starting an own business

The results showed that 66% of respondents viewed themselves as having their own business at some point in the future, which was in line with the attitudes of respondents to prefer to determine their own salaries than opt for job security. However, a survey conducted by Scheepers, Solomon and De Vries (2009:41) revealed that 61.3% of university students in South Africa were inclined to start their own business five years after graduation.

Overall, the results are encouraging as they showed that there was a thinking process about starting a business, given that Stokes *et al.* (2010:7), citing Timmons and Spinelli (2003) defined entrepreneurship as a way of thinking, reasoning and acting that is opportunity based, holistic in approach and leadership balanced. The honourable thing that students could do would be to take action after thinking and reasoning about starting a business. It was not striking that less than twenty-three percent of respondents (22.9%) were not confident to start a business at any point, given that 58% of respondents admitted that they were not innovative and creative. Even though the majority of respondents (71%) said they would like to start a business after acquiring years of experience or should they become unemployed (73%), it became clear that the fear of inadequate skills and lack of support were factors that hindered their entrepreneurial intentions.

Souitaris, Zerbinati and Al-Laham (2006:585) warned that a high number of students could have a positive intention to start a business due to the effect of an enthusiasm generated by their business-plan project, but it would dissipate soon after, rather than of a serious intention to start a business. The low rate of converting an intention into behaviour was confirmed by Lüthje and Franke (2002:137), citing Brown (1990), that between 2% and 2.5% of students started a business immediately after graduation.

Using a chi-square test analysis, it was found that there was no significant difference on the likelihood of starting an own business between age groups and different years of study. The significant differences were observed between men and women as well as between different race groups. The results showed that male respondents had a high likelihood of starting a business more than female respondents.

A study by Arenius and Minniti (2005:237) showed that male respondents were more likely to be nascent entrepreneurs than female respondents. Further, the results showed that the Indian respondents were more likely to start a business more than the African respondents. Overall, students may have good intentions to start a business but may not do so immediately after graduation due to pressure to support their families, lack of skill to identify opportunities and run a business and lack of support from the private and public sectors.

5.4 Exposure of students to productive entrepreneurship

University students can be exposed to entrepreneurship at various levels such as the family background, the community and throughout the education system.

5.4.1 Family background

The majority of respondents (77%) said that their parents did not own a business, whilst 23% of respondents said their parents owned a business. Pruett, Shinnar, Toney, Llopis and Fox (2008:574) stated that findings of a study on business ownership suggested that having a family member or close relative who was a business owner increased the likelihood of self-employment because these individuals could serve as role models. Results of a t-test showed that there was no significant difference between men and women, places of birth, age groups and years of study regarding the influence of parents owning a business to expose their children to entrepreneurship.

A significant difference in exposure to entrepreneurship as a result of parents owning a business was observed between African and Indian respondents. Indian respondents whose parents owned a business were more inclined to start a business more than African respondents. The influence of an entrepreneurial family was viewed as a strong predictor of entrepreneurial intentions (Ertuna & Gurel 2011:395).

A t-test was used to determine whether there was a difference in exposure to entrepreneurship between race groups. The results of a t-test showed that there was a difference in exposure to entrepreneurship as a result of parents owning a business between African and Coloured respondents compared to Indian respondents. The Indian respondents whose parents owned a business were more exposed to entrepreneurship than the African and Coloured respondents. The t-test results showed that there was no difference in exposure to entrepreneurship between male and female respondents as a result of parents owning a business.

5.4.2 Community

Within their communities, 55% of the respondents said they had worked at a small business and 45% of respondents had never worked at a small business. The results of a chi-square showed that the respondents who had worked at a small business were thinking of starting a business after completing their studies. In addition, seventy nine percent (79%) of respondents mentioned that they had never started and ran their own business. It seemed most respondents had never been exposed to entrepreneurship at a community level. Yet, seventy seven percent (77%) of respondents confirmed that there were entrepreneurs they knew personally.

This was encouraging as it meant that those entrepreneurs known to respondents could be used as role models or points of reference should an opportunity arrive for the respondents to start their own businesses.

5.4.3 Education system

Dhliwayo (2008:334), citing Driver, Wood, Segal & Herrington (2001:43) as well as Foxcroft (2002:24), states that research studies show that the higher the level of education of an individual, the greater the tendency to pursue entrepreneurial activities and the greater the possibility of starting a venture that progresses past the start-up stage. Hence, the development of entrepreneurship should be driven by the education system in general and tertiary institutions in particular. Co and Mitchell (2006:349) agree that universities can help create a more entrepreneurial character among young people by infusing a clear understanding of risks and rewards, teaching opportunity seeking and recognition skills, as well as creation and destruction of enterprises.

With respect to the second objective of this study on attitudes of students to start a business, entrepreneurship education is an important tool to prepare students for the global marketplace and it should be universally available to provide all students with opportunities to explore and fulfil their potential (Bell-Rose & Payzant 2008:25).

Sixty percent (60%) of respondents agreed that tertiary institutions played a key role in exposing them to entrepreneurship education, only 15% disagreed and 25% were neutral. This finding supports Basu and Virick (2008:84) when they concluded that prior exposure to entrepreneurship education has a positive effect on students' attitudes toward a career in entrepreneurship and on perceived behavioural control or entrepreneurial self-efficacy. Scheepers, Solomon and De Vries

(2009:39) agreed when the results of their survey showed that the school and university systems seemed to stimulate students to think about entrepreneurship as a career option. This suggests that tertiary institutions play an important role in influencing students to consider entrepreneurship as a career option if they expose students to entrepreneurship education.

The results of the study revealed that 37% of respondents said the university encouraged its students to see entrepreneurship as a career option, 28% disagreed with this statement and 35% were neutral. It should be noted that not all students at the university were doing management subjects which had a component of entrepreneurship. In some instances, students were doing technical subjects such as engineering, mathematics and science which did not necessarily include areas of entrepreneurship. Overall, students were exposed to entrepreneurship through role models and the education system.

5.5 The factors influencing the development of productive entrepreneurial behaviours

Shabbir and Di Gregorio (1996:508) state that the formation of a business is the result of the interaction of a number of factors, particularly the demographic or personal characteristics and background of entrepreneurs, their reasons for starting up, and the unique environmental conditions they face. An overwhelming percentage of respondents (79%) believed that there was a lack of government support, whilst 21% disagreed. Seventy eight percent of respondents (78%) thought that banks would be reluctant to give loans to start up enterprises, whilst 22% disagreed.

The majority of respondents (70%) mentioned that their parents would support them if they were to start a business, whereas 30% did not think so. Sixty nine percent of respondents (69%) indicated that it was too costly to register a business. Sixty seven percent of respondents (67%) felt that there was a lack of information on what to do to start a business, whilst 23% disagreed. Sixty six percent of respondents (66%) thought that external conditions such as petrol prices and interest rates coupled with government rules and regulation would discourage them from starting a business.

Fifty nine percent of respondents (59%) felt that they lacked exposure to productive entrepreneurship and that it was too difficult to register a business. The same percentage of respondents was of the view that most students were inspired by unproductive and destructive

entrepreneurial activities such as rent-seeking and crime. Fifty seven percent of respondents (57%) admitted that they did not know how to do a business plan. Fifty five percent of respondents (55%) indicated that there was inadequate training and education on productive entrepreneurship provided by the university.

The results of a t-test showed that there was a difference on factors that influence productive behaviours such as how to look for business opportunities between African and Indian respondents. Overall, factors that could be considered to be beyond the control of respondents would need to be addressed as they posed a threat to the respondents' entrepreneurial attitudes and intentions. Key players identified to address these factors included the universities, the private sector and the government.

5.6 Initiatives by government, universities and private sector

Over a third of respondents (40%) were not aware of any government initiatives to support graduates to start their own businesses. This posed a need for more awareness campaigns to be directed at university students by the government. These could be carried out in collaboration with the universities.

Eighty percent of respondents (80%) felt that the government should promote productive entrepreneurship among students, for example, it could host business plan competitions so that winners could be rewarded for their innovative business ideas. Given that students were inspired by unproductive behaviours that harm the society, it was important for key players to emphasise a country made up of productive entrepreneurs.

The majority of respondents (87%) agreed that government should work with universities and other stakeholders to run campaigns that encourage graduates to start own businesses. A further seventy-seven percent of respondents (77%) indicated that government should consider public policy to promote innovation and creativity among university graduates. The role of government was limited to initiating policy and programmes to promote the development of entrepreneurship. However, the respondents (82%) recognised that the private sector could sponsor innovative ideas and encourage university students to consider self-employment as a career option. Further, the respondents (87%) agreed that universities that teach enterprise education should expose students to the theory and practice of starting and running a business.

The results of a t-test showed that there was a difference in the private sector sponsoring innovative ideas and encouraging university students to consider self-employment as a career option between male and female respondents. The emphasis of the tests was to understand the importance of the relationship between key players and the impact of their initiatives on students. Overall, the role of each player was perceived to be instrumental as there was no one player that could develop productive entrepreneurial behaviours on their own.

6. CONCLUSION

This paper highlighted some definitions of entrepreneurship and adopted to define entrepreneurs in terms of their behaviour as individuals who perceive and create new economic opportunities (Peneder 2009:88). However, a pattern emerged that entrepreneurship was about attitudes and skills which lead to an action and the results of the action should not only benefit the entrepreneur but the society as a whole.

Factors that influenced the development of entrepreneurship were highlighted in terms of exposure to entrepreneurship which was objective four of this study. The specific levels of exposure were at an individual or family, community and educational. The research followed a survey design with quantitative data collected from 350 students of the University of KwaZulu-Natal. The findings highlighted that the majority of respondents viewed entrepreneurship as a key vehicle to stimulate the economic growth, job creation and reducing poverty. In terms of attitudes towards entrepreneurship, the results revealed that most respondents would rather determine their own salaries than settle for job security and that they would prefer to work for themselves as opposed to working for someone else.

Despite being positive about starting their own businesses, respondents were cautious that they would not be able to start a business immediately after graduating because they lacked skills and experience of running a business. The majority of respondents indicated that they would like to see the government, the private sector and universities providing the necessary support to university students as a contribution to productive entrepreneurship.

When respondents react like this it could mean that they do not really have the entrepreneurial spirit or entrepreneurial self-efficacy yet and universities need to nurture this especially. Entrepreneurs need to go out and seek the opportunity, use the many avenues available for

assistance and start-up and not rely on government, the private sector or universities only. The country needs self-starters desperately.

However, partnerships are also important and if South Africa can produce productive entrepreneurs working with the government, the private sector and universities, South Africa would become an entrepreneurial society where new innovations would spring into new ventures. These new ventures would create wealth for the owners. The owners would create jobs for others and eventually reducing poverty, which is the overall vision of government.

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