Journal of Economics and Behavioral Studies (ISSN: 2220-6140)
Vol. 11, No. 5, pp. 11-19, October 2019

Perceptions of University Students on Entrepreneurship; A South African Case Study

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Abstract: South Africa currently suffers from high levels of poverty, inequality and unemployment. However, the involvement of citizens in entrepreneurship is still very low for the country to rely on entrepreneurship as a solution to curb its socio-economic crisis. Survival rates of established businesses have also proved to be worrisome in the country with lack of skills cited as one of the most contributing factors. The country is in need of more entrepreneurs with better skills and understanding of business as that can facilitate job creation, poverty alleviation and economic growth. The objective of this paper is to analyse how University students perceive entrepreneurship in South Africa. Using random sampling, the study used a structured questionnaire to gather data from University of Zululand students. Employing the probit logistic regression technique on 152 observations, the study finds Age, family business background, business course and entrepreneurial interest statistically significant on influencing perceptions of students towards entrepreneurship. The study recommends that the South African Universities' curricular be revised so as to start equipping all registered students with entrepreneurship skills as this impact on their perceptions to starting their own businesses after graduation. Also Universities should start acting as innovation and entrepreneurial hubs for both their students and the business community.

Keywords: *Entrepreneurship; Perceptions, Inequality, Unemployment, Poverty, Curricular.*

1. Introduction

This paper seeks to understand and analyse how University students perceive entrepreneurship in South Africa. Graduate unemployment in South Africa contributes to 7% of the total 26.7% average unemployment in the country (Statistics South Africa, 2017). This happens during a period where the economy of South Africa has failed to grow beyond 2% for the past 5 years making it difficult for the majority of the graduates to be absorbed into the labour market. In an much as unemployment continues to appear as a major challenge in South Africa, each and every year institutions of higher learning keep producing and offloading new job seekers. In order to make the situation of unemployment or graduate unemployment better, there have been calls that maybe these graduates need to create their own jobs as entrepreneurs rather than them continuing to be job seekers (Kilian, 2018). Graduate unemployment has been made worse because in most cases where vacancies are available, they will be asking for more years of experience that the recent graduates do not have. However, Kuratko (2005) argue that many employers prefer graduates with entrepreneurship experience when they higher for entry-point jobs. The argument rests on the fact that graduates with entrepreneurship are more accountable and are better team workers compared to those without experience. Unemployment in South Africa is continuing to grow and on the other hand the economy has been facing a large spell of low growth patterns.

From that background, there has been rising literature that seeks to encourage more entrepreneurial activities in order to keep pace with increasing unemployment. However, South Africa seems to lag behind other developing and emerging market economies as far as the supply of entrepreneurs is concerned. On start-ups, the Global Entrepreneurship Monitor (GEM) 2008 figures show that 8 in 100 adult South Africans own a business that is less than 3,5 years old and these figures are significantly behind other low to middle income countries, where on average 15 out of 100 adults are building new businesses. GEM also reports that only 2.3 percent of South Africans own businesses that have been established for over 3.5 years, indicating a high failure rate among start-ups with South Africa ranking 41st out of 43 countries in the prevalence (survival) rate for established business owner-managers (GEM 2015). A substantial literature in South Africa has cited lack of skills as one of the major causes of high failure rates in small businesses (Ntema, 2016; Meagher, 2015 and Tshuma and Jari, 2013). A positive relationship between higher education and entrepreneurial success has been widely accepted in the literature including the Global Entrepreneurship Monitor (GEM) report of 2006.

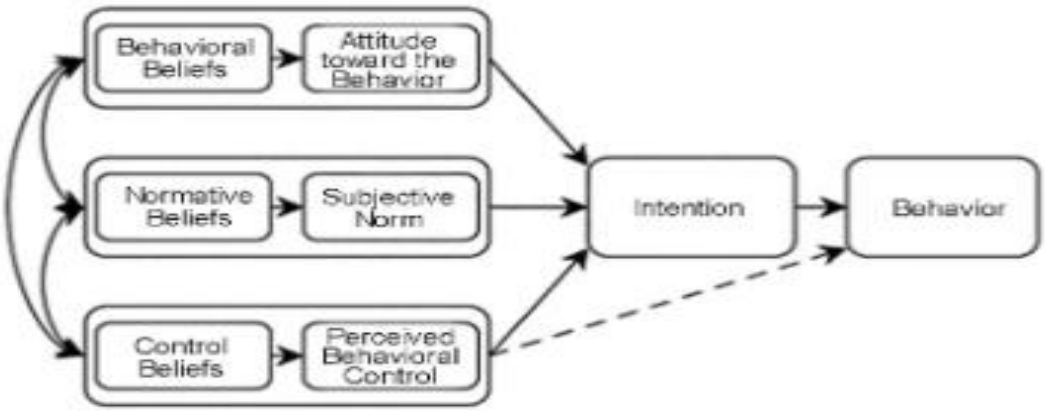
This makes this research very relevant and contributing to those lines of argument by understanding if students in South African Universities are willing to involve themselves in entrepreneurship either when they are still in school or immediately after students graduate. The entry of educated entrepreneurs into the market is argued to help solve the problem of high business failure rates the country is facing. However, Matlay (2008) is contrary to the arguments this paper has raised above. Although Matlay agrees that graduates need entrepreneurship education for them to perform better, there is a disparity between entrepreneurial skills education and real practice. This research contributes to the body of knowledge by analysing the perception of University students on entrepreneurship. Contributing to solutions to remedy high failure rate of small businesses in South Africa, this paper check the propensity to start a business on University students who did an entrepreneurial course and those that did not. Also the paper checks if those students who have not partaken in any course are willing to take any business course in the future.

To the best of the researcher's knowledge, this is the first paper to analyse the perception of students on starting businesses as well as analysing their planned timing on starting a business. The paper analyse if more of those that have taken an entrepreneurial course are willing to start their businesses before or after graduation or after they secure a job. The rest of the paper is in the following order; literature review section analysis theories that are surrounding students or graduates and entrepreneurship. The third part of the paper looks at the data and methodology this paper is going to follow. Discussion of research findings together with conclusion and policy recommendations raps up the paper. Davidson (1995) posits that entrepreneurial intentions can be influenced by conviction that has a relationship with the entrepreneur's personal variables. In understanding the relationship between self-efficacy and intentions towards new venture creation, theory of planned behavior (TPB) and the Shapero's model of entrepreneurial event received great attention (Karali, 2013).

2. Theoretical Framework

There have been attempts from different disciplines to understand human behavior (economics, psychology, sociology). On the same note, entrepreneurship has been understood and researched differently by those different disciplines, economics it was (Schumpeter 1924/36, Kirzner, 1973, Knight, 1916/21), in social sciences (Jenks 1944/49, Cochran 1950/60, Chandler 1962) and lastly studies in management (Birch 1979, Chell et al., 1991, Cooper and Gimeno-Gason, 1992, Landstrom and Lohrke, 2010). Also entrepreneurship studies shifted their interests from investigating the characteristics of already existing entrepreneurs to studying factors that lead to start-ups so that the behavior of entrepreneurs can be better understood (Autio et al., 2001). Further, other scholars suggested and illustrated on many intention models, models that seek to major conceptual and personal factors together with self-efficacy (Bird, 1988, Boyd & Vozikis, 1994). The TPB is rooted on the assumptions that a human being is quite rational in his or her choices and the intentions of individual may lead or may not lead to a certain behavior. Ground firm the TPB theory there are three conceptual factors that determines intentions and those are (1) attitude towards behavior (2) subjective norm and (3)perceived behavioral control as shown in figure below;

Figure 1: Theory of Planned Behavior



Source: (Ajzen, 2005)

According to TPB, the attitude towards behavior reflects the magnitude to which an individual has a favourable or unfavorable evaluation or appraisal of the behavior involved. The subjective norm which is the second arm of the TPB theory means the perceived social pressure to act in a certain behavior or not. Lastly, the perceived behavioral control points to the perceived difficulty or easiness of performing the behavior. It is assumed to be a reflection of the past experiences as well as expected challenges or obstacles (Ajzen, 2005). The theory of planned behavior can be consulted to understand or foresee different kinds of human intentions to behave in certain ways and that can include behaviors related to health for example, using a condom or stopping to smoke, it can be used in natural sciences to understand behavior when it comes to maybe choosing a political party, choosing to vote or school attendance (Armitage & Conner, 2001). The same theory has also been employed in entrepreneurial circles to understand factors that lead to entrepreneurial intentions (Krueger et al., 2000). Also it has been used to understand the impact of gender when it comes to entrepreneurial intentions (Leroy et al., 2009).

Nishimura & Tristan (2011) also used the theory of planned behavior to try and predict the potential of nascent or start-up businesses. However, the use of the TPB in understanding the relationship existing between student entrepreneurial intentions and entrepreneurship education has been minimal but it has started to receive some attention (Izquierdo & Buelens, 2008, Luthje & Franke 2003, Kolvereid & Moens 1997, Souitaris et al., 2007, Fayolle et al., 2006). In trying to understand that relationship, there are studies that found a positive association between entrepreneurial education and entrepreneurial intentions. On the contrary, Lorz (2011) reported a relationship running from entrepreneurial intentions to entrepreneurial education. In relation to entrepreneurial research, the TPB has been complemented to include intentions that get influenced by the individual's attitude towards entrepreneurship, the subjective norms and perceived behavioral control. Finally, Sieger et al. (2011), argues that, when the influence of entrepreneurship education on intentions to venture into entrepreneurship is studied then the educational context through universities becomes of paramount importance.

Graduates and Entrepreneurship Education: It is now widely accepted that entrepreneurship can be learnt from the classroom and researchers have found a positive relationship between higher education and entrepreneurial success (GEM, 2006). As much as those findings can be true, one might argue that entrepreneurship is a talent that one is born with and no matter how much training you might give someone, they might not still be entrepreneurial. Entrepreneurship is now being considered as one of the most needed tools that can facilitate economic growth and continue to push innovation. Countries with more successful entrepreneurs are more likely to see higher economic growth patterns compared to economies with low supply of entrepreneurs (Thurik, 2014). In order to encourage and stimulate the supply of more skilled entrepreneurs, some European economies and United State of America (USA) have been promoting and included entrepreneurship in their school curricula (European commission, 2006; Kuratko, 2005). The supporting arguments behind including entrepreneurship in the education curricula are that entrepreneurship is not always determined by personal attribute or character but students can learn it, get motivated and they can start their businesses.

The assumptions of the European countries and USA are supported by quite a number of empirical evidence that include (Jones and English, 2004; Galloway et al., 2005 and Thurik, 2014). However, Karlan and Valdivia (2006) argues that training people for business works better if the training is being given to people who have committed themselves to starting businesses or those that have already taken loans from banks willing to start a business. They went on to iterate that for business training to bring anticipated results, it needs motivated people who will learn and implement what they learnt. To add, there are other scholars who looked at various aspects of entrepreneurship education ranging from propensity to entrepreneurship which dealt with looking at the chances of students or graduates to start businesses after being trained. Others on the educational process of training business related skills and the structure of entrepreneurship in selected countries (Radosevic and Yoruk, 2013 and Fayolle and Omrane, 2013). According to Hisrich (2008), entrepreneurs have to possess certain skills and competencies for them to succeed in business. Succeeding in business means that a business person has to have high comparative advantage over other participants in the market for the business to succeed. Lack of relevant business skills has been a major problem in the South African context since more than 50% of small businesses to be precise do not survive more than 3 years since their formation (GEM 2015).

The relevant business skills regarded necessary that most upcoming entrepreneurs are lacking for business success range from business management, technical skills and business networking skills which are more of personal business skills (Fitriati and Hermiati, 2010). Kucel et al. (2016) assert that for countries to achieve the objective of having skilled entrepreneurs, students are the best to target whilst they are still studying and motivated to learn. However, he further argues that, for this policy to be as beneficial as countries would want, entrepreneurship education should be complimented with policies that encourage research and development and innovation at all stages in the country (micro and macro). To the contrary of the belief of the importance of training entrepreneurship skills to students, Oosterbeek et al. (2010) analyzed the effectiveness of entrepreneurship training to the youth and students in the Netherlands and find out that the policy never achieved the intended effects. The researchers argue that there is no positive relationship between the supply of skilled entrepreneurs and training in the Netherlands. In the interest of this paper, the author still argue that considering the South African situation, there has been high failure rate of small businesses and skills were mentioned by various researchers as a major problem. Our paper also analyse entrepreneurship training of students in the Philippines.

Also the conclusion of Oosterbeek et al. (2010) is very absurd since it is based on an assessment of a single program in the Netherlands not several programs that were implemented in that country. According to GEM (2014) report for that country, gender plays a huge role in determining the interests to start a business. If students are trained and given business skills, fewer women will take a further step of forming their own business. However, the report suggests that women possess more and better knowledge about business as compared to their male counterparts. The unwillingness of women in the Philippines to start businesses compromises the efforts by governments to have increased supply of skilled entrepreneurs to facilitate high success rates of businesses. Bula (2012) argue that although female participation in business is still lagging compared to men, their involvement has increased over the years. Currently entrepreneurship is still dominated by men as women only contribute to only one third when it comes to business ownership globally (Bula 2012). In the case of South Africa, there are sectors that are dominated by men for example Taxi industry but generally other sectors women do have significant presence and in some cases participating more compared to men. However, the problem revolves around lack of relevant business skills to facilitate their survival whilst they have started business and that forms the biggest contribution of this paper.

3. Methodology and Data Issues

Model Specification: This paper employs a probit regression to model the perception of University students on entrepreneurship. The dependent variable (DV) used by this paper is the propensity start to a business (Gujaratti and Damodah, 2004). The DV is in the form of a dummy, carrying (1) if the students have interests in starting a business and (0) if the student is not interested in business. This research uses a probability model because we are trying to find out the probability of students to start their own businesses using gender, age, family business background and if a student has done a business course as independent variables (IV).

Probit regression models the probability that $Y = 1$ using the cumulative standard distribution function, evaluated at $z = B_0 + B_1X$:…… (1)

$\Pr(Y = 1 \text{ condition } X) = \emptyset(B_0 + B_1X)$…….. (2)

$\emptyset$ is the cumulative normal distribution function

z is the index of the probit model

This paper will model the following equation:

$\Pr\,(ptb = 1 condition\ X) = \emptyset(B_0 + B_1Age + B_2fbb + B_3buscos + B_4genger + B_5ei)$…… (3)

Data and Sampling Issues: To address the objectives of this paper, 154 questionnaires were distributed using systematic random sampling prescribed by Creswell (2010) to South Africa's University of Zululand students. In order to reduce as much bias as possible, this paper used clustered random sampling in order to get a sample of all the students at the University (Foddy, 1993; Creswell, 2010). The University of Zululand has an estimated student population of 18000. The study targeted residences which first years and returning students stay, questionnaires were issued in each and every second room of all the residences visited until all the questionnaires were issued out, for example, room 2, 4, 6 etc.

4. Empirical Findings: Correlation Results

The empirical stage of the paper was to determine the relationship that exist between the propensity to start a business by University students, their family business background and if they had partaken a business course before. Propensity to start a business was measured through a dummy variable with 1 if the student is willing to start a business and 0 if the student is not willing. Questionnaires were allocated between first years and returning students based on the percentage of each group hence 24% of the questionnaires were issued to first years and the rest were distributed to returning students. The students contacted represent all the four faculties at the University which are faculty of arts, faculty of commerce, administration and law, faculty of science and lastly faculty of education. On the other side family business background was measured by checking if the participant's family owns any business or not. Prior to running the regression model for this paper, correlation tests were done through the correlation matrix. The correlation matrix showed that business course (buscos) and family business background (fbb) have a relatively strong relationship of 42% whilst the propensity to start a business (ptb) and entrepreneurial interests (ei) have a quite strong relationship of 59% with ptb and fbb also showing a strong relationship of 39%. Gender (gend) and the propensity to start a business (ptb) are not showing a strong relationship since they have a paltry 8%. Interestingly student background (studb) and ptr does not show any strength in their relationship too as it would be expected by the literature.

Table 1: The Correlation Coefficient Matrix

	age	gend	studb	Fbb	Ptb	buscos	Ei
Age	1.0000						
Gend	0.1046	1.0000					
Studb	0.0102	0.1610	1.0000				
Fbb	-0.0117	-0.0529	0.0069	1.0000			
Ptb	0.0992	-0.0874	-0.0545	0.3931	1.0000		
Buscos	-0.1230	0.0521	-0.1042	0.4222	0.2511	1.0000	
Ei	-0.0844	-0.1872	-0.0375	0.3178	0.5980	0.2242	1.0000

Source: Author

Regression Results: Probit regression results are presented based on the five independent variables which are age, family business background (fbb), business course (buscos), gender (gend) and entrepreneurial interest (ei). These independent variables were regressed against propensity to start business (ptb). The results are presented in table 2 below;

Table 2: Probit Regression Results

Ptb	Coef.	Std. Err	Z statistic	P value
Age	.1237	.0611	2.03	0.043*
Fbb	1.3899	.5085	2.73	0.006**
Buscos	.5964	.3491	1.71	0.088*
Gend	.00177	.3134	0.01	0.995
Ei	1.6791	.3492	4.81	0.000***
_cons	-3.6952	1.5157	-2.44	0.015

Note (Prob > chi2= 0.0000, R^2 = 0.4703)
Source: Probit regression

Our findings indicated that there exists a positive relationship between propensity to start a business and all the variables that were involved. We find age, family business background, business course and entrepreneurial interest significant in explaining propensity to start a business except for gender. It is in line with the conventional knowledge finding that students who studied a business course have better understanding and are more likely to be more interested to start a business compared to those that have never studied (Karlan and Valdivia, 2006). However, it has not been always the case especially with all the

successful business people. Some of them had to study business after they had already established one (Lorz 2011). We also found interesting findings about a positive relationship that exists between family business background (fbb) and propensity to start a business (ptb). The rationale behind that kind of a relationship has been justified on the background that children that are born from families that are into business have a better understanding of business or they are more likely to be involved into business more than those without a business background (Kuratko, 2005). If more students are taught business courses either during their secondary school or undergraduate stages that can help to influence an increase in supply new businesses. That can have multiplicative effects and expanding the number of young people who are involved in business or willing to start businesses that are desperately needed by the South African economy which is struggling to create jobs, reduce poverty and inequality.

5. Conclusion and Policy Recommendations

Given the recurrent difficulties faced by the South African economy to create sufficient jobs to absorb new graduates, there is need for entrepreneurs to take responsibility. However, the success rate and willingness to start businesses has been reported very low in Africa with South Africa included. Also given the fact that entrepreneurship is now an important pillar to job creation, the President of South Africa (Cyril Rhamaphosa) advised new graduates to start thinking of being job creators rather than being job seekers (Kilian 2018). Findings from our study identify age, family business background, business course and entrepreneurial interest as variables that can explain propensity to start a business in South Africa. Although we argued in this paper that graduates should be exposed to business courses before they graduate, it is not all successful entrepreneurs that have business courses. There are people who have inherent entrepreneurial skills which make them succeed without par taking a course (Lorz, 2011). Cognizant of the former, we recommend that more faculties if not all faculties should be exposed to entrepreneurial courses so that more students can be enthused to start businesses.

In our findings, we find a strong positive relationship between family business background and business interest. Having more graduates starting and owning businesses may have a multiplicative and causal effect on new business entries. Graduates will be developing positive business interest and propensity to start their business through the influence of their families who own businesses. To increase the supply of new entrepreneurs and the propensity to start businesses in South Africa is an important objective. This paper finds a positive relationship between propensity to start a business and business course. We conclude this paper by arguing that more students need to be involved in business courses so as to cultivate entrepreneurial interests and propensity to start businesses in the country. This point to a policy and University curriculum shift in South Africa. All faculties in all Universities in the country should at least include a course related to entrepreneurship in their programmers so that students can be enthused to start businesses. More to that, Universities should work as innovation and entrepreneurial hubs for both their students and business communities surrounding them so that more successful businesses can be created for sustainable job creation and economic development.

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Appendix

1. Doornik-Hansen Test for Normality

```
. mvtest normality age gend studb fbb ei em ptb buscos

Test for multivariate normality

    Doornik-Hansen                  chi2(16) =  321.609   Prob>chi2 =  0.000
> 0
```

2. Goodness of Fit Test

```
. estat gof

Logistic model for ptb, goodness-of-fit test

       number of observations =      110
 number of covariate patterns =       99
             Pearson chi2(91) =       95.70
                  Prob > chi2 =        0.3477
```

3. Omitted Variable Test

```
. ovtest

Ramsey RESET test using powers of the fitted values of ptb
       Ho:  model has no omitted variables
                  F(3, 88) =      0.77
                  Prob > F =      0.5139
```

4. Heteroskedasticity Test

```
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of ptb

         chi2(1)      =    16.28
         Prob > chi2  =   0.0001
```