The Entrepreneurial Intention of University Students: The Case of a University of Technology in South Africa

Chux Gervase Iwu¹, Ikechukwu O Ezeuduji², Chuks Eresia-Eke³, Robertson Tengeh⁴

Abstract: This quantitative study was executed from a realist's ontological perspective and its epistemological leaning is towards that of an empiricist. The study essentially sought to determine the existence or otherwise of entrepreneurial intentions among the students. Ample emphasis needs to be placed on entrepreneurship education and practical entrepreneurship schemes (such as mentorship programmes) if developing countries are to realise the goal of having a productive and virile youth population, which would represent a significant shift from today's yawning youth unemployment position. The study collected data in a cross-sectional manner from a random sample of 150 students drawn from a leading South African University of Technology. In analyzing the data, there was recourse to the use of descriptive as well as inferential statistics. Interestingly, results show no statistically significant relationships between students' entrepreneurial intention and selected sociodemographic variables such as age, gender, culture, etc. While we acknowledge that the results of this study emerged from a sample of 150 students of a particular university and therefore betray the concept of generalization, we are equally confident that the findings have significant implications for developing economies around the world including South Africa.

Keywords: entrepreneurship; entrepreneurship intention; entrepreneurship education; self-employment; sub-Saharan Africa

JEL Classification: L260; O550; R110

¹ Professor, PhD, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, South Africa, Address: Symphony Way, Bellville, Cape Town, 7535, South Africa, Tel.: +27 21 959 6767, Corresponding author: IwuC@cput.ac.za; chuxiwu@gmail.com.

² PhD, Department of Recreation and Tourism, University of Zululand, South Africa, Address: Private Bag X1001, KwaDlangezwa, 3886, South Africa, Tel: +27 73 562 0926, E-mail: EzeudujiI@unizulu.ac.za; ezeuduji3@yahoo.com.

³ PhD, Department of Business Management, University of Pretoria, South Africa, Address: cnr Lynnwood Road and Roper Street, Hatfield, South Africa, Tel.: +27 12 (0) 420 4111, E-mail: Chuks.Eresia-Eke@up.ac.za.

⁴ PhD, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, South Africa, Address: Symphony Way, Bellville, Cape Town, 7535, South Africa, Tel.: +27 21 959 6767, E-mail: TengehR@cput.ac.za.

1 Introduction

Engaging in entrepreneurial activity is considered one of the ways of becoming self-employed. Becoming self-employed is seen as a means of sustaining oneself and consequently providing an income for others through employment of those with the capacity to add value to the business. The foregoing is partly what entrepreneurship is about. As reported by Global Entrepreneurship Monitor (GEM, 2014), most sub-Saharan African countries (especially those characterized as factor-driven economies) have recorded relatively impressive total early-stage entrepreneurial activity (TEA) in recent times. Unfortunately, South Africa is excluded from this list, largely because the extent of entrepreneurial engagement in South Africa is considered to be very low (see Table 1). The reasons for this are related to the issues of insufficient capital, poor business management ability and a general lack of infrastructural support (Gwija et al., 2014). With reference to the issue of poor business management acumen, very much like other competencies, it has been argued that education is necessary. However if the intervention of education, in this case specific to entrepreneurship is to belch reasonable results, then a pre-knowledge of the state/nature of entrepreneurial intentions of students will be critical. Perhaps in very few countries is this need more amplified than it is in South Africa where as has been revealed by the Global Entrepreneurship Monitor (GEM) reports, entrepreneurial activity is quite low across the entire spectrum (see Table 1)

Table 1. Phases of entrepreneurial activity in the GEM economies in 2014; by geographic region (% of population Aged 18-64)

Region and economies		Nascent entrepreneurship rate	New business ownership rate	Early-stage entrepreneurial activity (TEA)	Established business ownership rate	Discontinuation of businesses (% of TEA)
	Angola	9.5	12.4	21.5	6.5	15.1
Africa	Botswana	23.1	11.1	32.8	5.0	15.1
	Burkina Faso	12.7	9.7	21.7	17.7	10.8
	Cameroon	26.4	13.7	37.4	11.5	17.7
	South Africa	3.9	3.2	7.0	2.7	3.9
	Uganda	8.9	28.1	35.5	35.9	21.2
	Average (unweighted)	14.1	13.0	26.0	13.2	14.0

Source: Global Entrepreneurship Monitor Report. 2014. p. 34 (Adapted)

To be sure, entrepreneurship education is not the only factor that spurs entrepreneurship intention. There are others. These include cultural factors (European Commission, 2012); a range of person-related infrastructural and socioeconomic issues (Matlay, 2005) as well as an individual's overall personality (Ciavarella et al., 2004). Cultural characteristics and how they impact the place of work and entrepreneurial engagement have for long been the focus of several studies. The common denominator in these studies is that the culture of one's locale has a significant influence on one's worldview. Essentially, certain communities are known to explore opportunities and are more driven to achieve goals than others. This seems to be the premise upon which it has been argued that an individual's cultural context can influence his intention to become entrepreneurial (Liñán & Chen, 2009). Flowing from this is the likelihood of a 'more inspired individual' taking an interest in an entrepreneurial activity that may be considered as a challenging venture by another individual. In fact, Shinnar et al (2012) note that it is possible for an individual to perceive institutional, political, economic and or personal obstacles as insurmountable and opt for stable employment rather than pursue a career in entrepreneurship.

While entrepreneurship intention studies have gained traction in the last few years, there is no empirical evidence of its status among University of Technology (UoT) students especially in South Africa. The significance of this kind of study in a UoT can be derived from the purpose of UoTs in South Africa. UoTs are among others expected 'to be the place where practice-based learning takes place with the aim of producing job creators and addressing society's problems' (Gibbon, 2008; Scott, 2005; Asmal, 2002)². It is important to note that UoTs (previously Technikons) are relatively a new phenomenon in South Africa's public university system. They offer practice based learning in the fields of technology as well as vocationallydriven diplomas and degrees in engineering, and business. Thus, UoTs have a fundamental role to play in alleviating pressures of poverty, inequality and unemployment. Research by Pihie and Akmaliah (2009) posited that 'there is a need for universities to enhance their teaching strategies in order to improve entrepreneurial self-efficacy and desire among students to opt for entrepreneurship as a career choice'. The purpose of this study is therefore to investigate factors related to the entrepreneurial intention of students of a University of Technology in South Africa. To this end, the study poses the following research questions:

166

¹ See (Hofstede, 2001; McClelland, 1961; Weber, 1930).

² This description paraphrases the different aims of universities of technology in South Africa. Sources: http://www.che.ac.za/sites/default/files/publications/d000101_UofT_Scott_22Sept2005.pdf; http://www.cepd.org.za/files/pictures/Vol16%20No1.pdf.

http://www.dhet.gov.za/Reports%20Doc%20Library/New%20Institutional%20landscape%20for%20Higher%20Education%20in%20South%20Africa.pdf.

- 1. Do relationships exist between the socio-demographic characteristics of students and their entrepreneurial intention?
- 2. What 'meanings' do students attach to entrepreneurship and its development?
- 3. What do students perceive as the prime motivators and inhibitors of entrepreneurial intention?
- 4. Is there a relationship between entrepreneurship education and students' decision to become entrepreneurs?
- 5. Is it likely that the students' perceived entrepreneurial inclinations and 'enablers' have relationships to their entrepreneurial intentions?

2. Literature Review

The need for the continued emergence of entrepreneurs in developing economies cannot be over-emphasized. Young people often described as the future of a society, present a veritable pool of individuals that may invariably become entrepreneurs. This may be the reason why studies have investigated the concept of entrepreneurial intentions (Drennan, Kennedy & Renfrow, 2005) among students (Wu & Wu, 2008) in universities across the world. The trend is also noticeable in Africa.

According to Eresia-Eke and Gunda (2015), the current complexion of the global socio-economic landscape suggests that national economic success particularly in Africa tends to be dictated by the extent of entrepreneurial activity. Indeed, economies need to be entrepreneurial (Amos & Alex, 2014) and this is only possible through the emergence of individual entrepreneurs (Gurbuz & Aykol, 2008). This to a large extent underlines the value of studies on entrepreneurial intentions.

Fayolle and Liñán (2014) opine that entrepreneurial intention has become 'a consolidated area of research within the field of entrepreneurship'. Due to this, a number of studies have been conducted on entrepreneurial intentions in both developed and developing economies (Amos & Alex, 2014). Expectedly, with these studies, new knowledge emerges but more questions arise that need to be addressed (Fayolle & Liñán, 2014).

Entrepreneurial intention is defined by Bird (1988) as a state of mind that directs an individual's attention and action towards self-employment as compared to pursuing employment prospects in an existing organisation. Essentially, the notion of entrepreneurial intention is therefore related to the desire to own a business or become self-employed (Thompson, 2009). This desire for business start-up or self-

employment may be associated with issues unlimited to individual and societal factors among others. Regardless of what the underlying reasons may be, Krueger and Brazeal (1994) contend that entrepreneurship-oriented intentions can be considered as useful precursors of entrepreneurial action. This is the premise upon which models of planned behaviour become instructive as they cement the founding rationale for any study of entrepreneurial intentions. Indeed, Eresia-Eke and Gunda (2015) argue that intentions precede and can predict behaviour. So the knowledge of the entrepreneurial intentions (EI) of students should contribute to the determination of the extent to which they are likely to opt for entrepreneurship as a career option. Among other models, Ajzen's (1991) model of planned behaviour is quite predominant (Fayolle & Liñán, 2014). Generally, Ajzen's model and Shapero-Krueger's entrepreneurial event model (Krueger, Reilly & Carsrud, 2000) have been useful for the EI discourse.

Ajzen's (1991) model proposes that there is some interplay between subjective norms, perceived behavioural control and attitude towards a behaviour that are associated with the development of EI which in turn then informs the entrepreneurship behaviour of the individual. While subjective norms describe societal expectations of individual conformance to 'acceptable' standards, perceived behavioural control is concerned with the individual's perception of the level of control that an individual can exercise over resources required to become self-employed. Attitude towards a behaviour points to the extent to which the individual views a particular behaviour as favourable or otherwise.

Shapero-Krueger's entrepreneurial event model suggests that EI is dependent on five constructs namely those of specific desirables, perceived self-efficacy, perceived desirability, propensity to act and perceived feasibility. Even though the constructs from the two models may be somewhat different, they are quite compatible and overlapping (Piperopoulos & Dimov, 2015). Both models seem to suggest that intentions are formed on the basis of certain individual or societal factors. This is the line towed by this study as it seeks to examine the existence of relationships (or lack of it) between selected individuals and societal independent variables and the dependent variable, EI among students in a South African university.

The approach of examining the relationship between factors associated with the individual and how they relate to EI has been applied in previous studies with each researcher opting to focus on certain variables that were deemed useful for that particular study. According to Lee and Wong (2004), the intention to display 'certain behaviour is shaped and affected by a plethora of factors such as needs, values, wants, habits and beliefs'. This position is supported by Ajzen (1991) as well as Liñán and Chen (2006) who relate intention to cognitive variables and situational factors respectively.

Given the peculiar idiosyncrasies of countries and societies, and the fact that intentions seem to be shaped by a number of different factors, it would seem inappropriate to imagine that factors that are found to be significantly related to EI in one environment would necessarily demonstrate the same association in another environment. It is therefore not surprising that though many studies have focused on EI, the production of mixed results has been the trend. In other words, there is no clear congruence in the results generated by EI studies. This underlines the need and value of EI studies, that are specific to particular populations in particular countries.

3. Research Method and Design

The research questions required individual and quantified responses from students; therefore questionnaire survey was an ideal means of getting such information (Veal, 2011). A respondent-completed structured questionnaire¹ method was employed to obtain information from 150 students at a South African university of technology. Simple random sampling of students was done in their recreational spaces. Respondents were students within business and non-business programmes. Of the 150 administered questionnaires, 115 completed questionnaires were suitable for analysis.

The questionnaire was designed to investigate response heterogeneities amongst students. Items were introduced to investigate entrepreneurship 'meanings', motivations, barriers, intents, 'influencers', inclinations, 'enablers' and students' profile. Questions were set as categorical and ranked variables, based on the type of question being asked, with ranked variables set mostly on a 5-point Likert scale. The scale ranged from 1 (strongly agree/very positively/very likely/very highly) to 5 (strongly disagree/very negatively/very unlikely/very lowly). The students' profiles were sorted into categorical variables.

IBM's SPSS version 23 software (IBM Corporation, 2013) was used for statistical analysis. The first stage of data analysis employed descriptive statistics to derive percentage frequencies of responses. Pearson Chi-square tests, Spearman's correlation tests, and Mann-Whitney tests were later used at the second stage of analysis, to reveal relationships between variables to answer research questions. Pearson Chi-square test was used to check for relationships between categorical variables; Spearman's correlation test was employed to check for relationships between ranked variables; and Mann-Whitney test was used to explore relationships between categorical and ranked variables (Veal, 2011). All statistical tests were done at a 95% confidence interval.

-

¹ Adapted from Bateman and Crant (1993) Proactive Personality Scale.

3.1. Results and Discussion

3.1.1 Respondents' Profile and Entrepreneurial Intention

Table 2 below depicts participants' profile as well as their responses to items in the questionnaire which addressed entrepreneurial intention. The reporting of participants' profile is in line with the first research question which was: Do relationships exist between the socio-demographic characteristics of students and their entrepreneurial intention?

Table 2. Profile of the respondents (n=115)

Variable	Category	Frequency (%)
Age group	< 21	25.7
	21-24	63.7
	> 24	10.6
Gender	Male	38.1
	Female	61.9
Cultural group	Black South African	32.1
	Coloured South African	30.3
	Indian South African	2.8
	White South African	20.2
	Black Immigrant	10.0
	Other Immigrant	4.6
Level of study	National Diploma	80.6
	Bachelor	15.0
	Masters	4.4
Study discipline	Entrepreneurship & Business	38.3
	Non-Business	
		61.7
Taken any	Yes	50.4
entrepreneurship-	No	49.6
specific course?		
Expected year of	2014 - 2015	61.4
graduation	2016 - 2017	37.7
	2018 - 2019	0.9
Society's level of	High or very high	47.4
entrepreneurship	Neither high nor low	38.5
encouragement	Low or very low	14.1
Society's entrepreneurial	Low or very low	26.3
failure level of tolerance	Neither high nor low	51.0
	High or very high	22.7
Entrepreneurial	Yes	62.7
intention during study	No	24.5
	I do not know	12.8

Entrepreneurial	Yes	53.1	
intention just after	No	28.1	
graduation	I do not know	18.8	
Entrepreneurial intention	Yes	55.4	
long after graduation	No	32.6	
	I do not know	12.0	
Respondents who started a	Yes	39.8	
new venture during their	No	60.2	
studies			
Work experience	Yes	73.6	
	No	26.4	
Family member who owns	Yes	67.9	
a business	No	32.1	

Two questions were asked in the questionnaire to determine a clear entrepreneurial intention: a. 'do you wish to eventually start your own business or to become self-employed? ('during your studies, just after graduation, or a long time after graduation'); and b. 'while studying, have you started a new venture, an organisation, or a business?'. Students' responses to these questions are also shown in Table 2. Results reveal no statistically significant relationships between students' entrepreneurial intention and socio-demographic variables. This research outcome supports the finding of Mohd et al (2015) and Mat et al (2015) that no significant relationship exists between students' family business background and gender on the one hand and EI on the other hand. However this is not in line with the findings of Zhang et al (2014) who stated that males have higher EI than females.

Respondents also indicated their choice of business size or sector for career advancement. About 57% of them prefer a large company, about 35% of them prefer a small or medium-sized company, while about 12% of the respondents prefer to work in the public sector, and about 5% prefer to advance their careers in a non-profit sector. Black South Africans and other Black students prefer large companies (Chi-square, p=0.009), while Coloured and White South Africans prefer small or medium-sized company for career advancement (Chi-square, p=0.014).

Results also indicate that respondents of age group 21 - 24 have more work experience (Chi-square, p=0.018) than other age groups. Those expecting to graduate in 2016-2017 also indicated that they had more work experience (Chi-square, p=0.001) than those who intend to graduate in other years. Those expecting to graduate in 2014-2015 and 2016-2017 were more positive that work experience influenced their intention to embark upon an entrepreneurial career (Chi-square, p=0.000) than those who intend to graduate in other years. Coloured and White South African students are more inclined to start a new venture during their studies, than other cultural groups (Chi-square, p=0.05). Black

South Africans and other black students admitted to having work experience (Chisquare, p=0.008) than other cultural groups. White South African students within the sample indicated that they had family members who own a business than other cultural groups (Chi-square, p=0.004). Respondents were also asked if they were likely to get financial help from family members if they need help. About 27% of the respondents said this is 'very likely', about 37% of them stated it is 'likely', about 17% of them were neutral, stating 'neither likely nor unlikely', about 9% of them stated this is 'unlikely', and 11% of them declared this 'very unlikely'.

3.1.2. Meanings Attached to Entrepreneurship and Factors Influencing its Development

In order to answer research question 2: what 'meanings' do students attach to entrepreneurship and its development?, Table 3 below indicates the students' percentage of agreement to different questions posed by this study to ascertain 'meanings' that they have of entrepreneurship.

Table 3. Percentage of respondents' association of entrepreneurship 'meanings' (n=115)

Statements of entrepreneurship 'meanings'	Percentage of agreement
Creating an own business	74.1
Launching and developing a project or an activity	34.8
Organising and managing own business	48.2
Taking risks	50.0
Creating a non-profit association or a co-operative	14.3
Increasing capital and wealth	36.0
Developing a new product or service	43.8
An entrepreneur is a man or woman of action for whom	24.1
knowledge is a secondary concern	
An entrepreneur is an inventor	50.0
Money is the only thing that an entrepreneur needs	7.1

From the foregoing, most students view entrepreneurship as creating an own business, and half the student sample view entrepreneurs as inventors and as a risk-laden process. Essentially, the notion of entrepreneurial intention is related to the desire to own a business or become self-employed (Thompson, 2009).

Table 4 below shows the students' percentage of agreement to different questions posed by this study to ascertain their perceptions of factors influencing the development of entrepreneurship in the world economy.

Table 4. Factors influencing the development of entrepreneurship in the world economy (n=115)

Statements	Percentage of
	agreement
The characteristics of people (potential	48.2
entrepreneurs)	
The political situation (political system, ideologies,	39.3
etc.)	
The economic conditions (level of inflation, tax	48.2
system, state of economy, etc.)	
The educational system (the availability of	50.0
appropriate courses, recognition of creativity, etc.)	
A positive climate for innovation in businesses and	37.5
institutions, easy access to resources, motivational	
systems, etc.	
A system of support (mentoring, advice,	42.9
personalised support, sponsorship, etc.)	

Among other factors, students perceive the educational system, the characteristics of people and economic conditions as the most important factors influencing the development of entrepreneurship in the world economy. Research results from Hattab (2014), Solesvik et al (2014), and Zhang et al (2014) suggest that entrepreneurship education is very important for EI. Eresia-Eke and Gunda (2015) posit that the current complexion of the global socio-economic landscape suggests that national economic success particularly in Africa tends to be dictated by the extent of entrepreneurial activity. Economies need to be entrepreneurial (Amos & Alex, 2014) and this is only possible through the emergence of individual entrepreneurs (Gurbuz & Aykol, 2008).

In this research, respondents of age group less than 21, agreed more to the statement 'a system of support (mentoring, advice, personalised support, sponsorship, etc.' as being an important factor influencing the development of entrepreneurship in the world economy (Chi-square, p=0.035). Those that expect to graduate in 2014 - 2015 agreed more than others to the statement 'a positive climate for innovation in businesses and institutions, easy access to resources, motivational systems, etc.' as being an important factor influencing the development of entrepreneurship in the world economy (Chi-square, p = 0.013). White South African students agreed more to 'the educational system (the availability of appropriate courses, recognition of creativity, etc.)' as being an important factor influencing the development of entrepreneurship in the world economy, than other cultural groups (Chi-square, p=0.033). Coloured and White

South African students agreed more to the statement 'a positive climate for innovation in businesses and institutions, easy access to resources, motivational systems, etc.' as an important factor influencing the development of entrepreneurship in the world economy, than other cultural groups (Chi-square, p=0.028).

3.1.3. Motivations and Barriers to Becoming An Entrepreneur

With regard to question 3, we found that about 52% of the participants perceive motivations for entrepreneurship to be 'personal fulfillment', about 35% view it as a way to 'become own boss', 34% see it as an avenue 'to make money', and about 29% consider it as a way of 'taking up a challenge'. Coloured, White South Africans and other Black students were more inclined to consider entrepreneurship as an avenue for 'personal fulfillment' than other cultural groups' respondents (Chi-square test, p=0.026).

Regarding the main barriers to becoming an entrepreneur, about 61% of students surveyed view 'a lack of financial resources' as a major barrier, while about 41% perceive 'a lack of support and assistance', as major barriers. Other barriers indicated by the subjects include 'unfavourable economic conditions' (about 39%); 'a lack of profitable opportunities' (about 24%), and about 13% perceive 'complex procedures for creating and managing a business' as main barriers. Black immigrants agreed more to 'a lack of support and assistance' to be a main barrier to becoming an entrepreneur, than other cultural groups' respondents (Chi-square test, p=0.000).

According to Lee and Wong (2004), the intention to display certain behaviour (EI for example) is shaped and affected by a plethora of factors such as needs, values, wants, habits and beliefs. This is supported by Ajzen (1991) who relates intention to cognitive variables. Liñán and Chen (2006) are also of the view that intentions are dictated by situational factors.

3.1.4. Academic Influencers and Entrepreneurship

To be able to answer research question 4: Is there a relationship between entrepreneurship education and students' decision to become entrepreneurs?, we asked the students to indicate their disciplines and also to rate the degree of influence their academic activities exerted. We found that about 38% of the respondents were from Entrepreneurship and Business Management, compared to about 62% of respondents in non-business management related courses. Table 5 depicts respondents' ratings in percentage of entrepreneurial influencers. Interestingly, results reveal no statistically significant relationships between business students' and non-business students' entrepreneurial intentions. In a broad sense, students who take entrepreneurship-specific courses (whether business or non-business students) agreed more to wishing to eventually start their own

businesses just after graduation, than a long time after graduation (Chi-square, p=0.000). This result points out that entrepreneurship education has a high significant stimulation towards students' decision to become entrepreneurs.

Table 5. Respondents' ratings in percentage of entrepreneurial influencers (n=115)

Influencers	Very positive	Positive	Neither positive nor negative	Negative	Very Negative
Lectures	32.2	52.5	13.6	0.0	1.7
Views of a Professor	25.0	42.9	25.0	7.1	0.0
Team exercise	8.9	41.1	37.5	8.9	3.6
Business simulation or case studies	20.7	48.3	25.8	5.2	0.0
Views of classmates	15.8	29.8	42.1	12.3	0.0
Guest speakers	19.3	36.8	29.9	10.5	3.5
Independent or individual exercises	29.8	43.9	24.5	1.8	0.0
Work experience	32.7	37.6	26.7	2.0	1.0

Lectures, views of an academic, business simulation or case studies, guest speakers, individual exercises and work experience, all contribute highly to influence students to become entrepreneurs. These results also point out that entrepreneurship education has a high significant stimulation towards students' decision to become entrepreneurs.

Students who declared that they wish to eventually start their own business 'just after graduation' also agreed that 'guest speakers' at the university are quite a positive influence to their entrepreneurial intentions (Mann-Whitney, p=0.042).

3.1.5. Entrepreneurial Inclinations and Enablers

In order to answer research question 5: is it likely that the students' perceived entrepreneurial inclinations and 'enablers' have relationships to their entrepreneurial intentions? Respondents were asked to rate their level of agreement to entrepreneurial inclination statements (Table 6) and entrepreneurial thinking and enablers' statements (Table 7). Essentially, the notion of entrepreneurial intention is related to the desire to own a business or become self-employed (Thompson, 2009). This desire for business start-up or self-employment may be associated with issues unlimited to individual and societal factors among others. Regardless of what the underlying reasons are, Krueger and Brazeal (1994) contend that entrepreneurship-oriented intentions can be considered as useful precursors of entrepreneurial action.

Table 6. Respondents' ratings in percentage of entrepreneurial inclination statements (n=115)

Chahamanta	C4mamalar		Unsure	Diag and a	C4
Statements	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
I am constantly on the	59.6	38.5	1.9	0.0	0.0
lookout for new ways to	39.0	36.3	1.9	0.0	0.0
improve my life					
I feel driven to make a	45.9	35.8	17.4	0.9	0.0
difference in my	43.9	33.8	17.4	0.9	0.0
community, and maybe in					
the world					
I tend to let others take the	16.7	34.3	24.0	21.3	3.7
initiative to start new	10.7	34.3	24.0	21.3	3.7
projects					
Wherever I have been, I	18.1	46.7	30.4	3.8	1.0
have been a powerful force	10.1	10.7	30.1	3.0	1.0
for constructive change					
I enjoy facing and	38.0	49.1	11.0	1.9	0.0
overcoming obstacles to my	30.0	17.1	11.0	1.5	0.0
ideas					
Nothing is more exciting	70.6	26.6	2.8	0.0	0.0
than seeing my ideas turn	, 0.0	20.0		0.0	
into reality					
If I see something that I do	29.0	48.6	17.7	4.7	0.0
not like, I fix it					
No matter what the odds, if	37.1	38.1	22.9	1.9	0.0
I believe in something, I					
will make it happen					
I love being a champion for	34.6	44.9	18.6	1.9	0.0
ideas even against others'					
opposition					
I excel against others'	20.4	43.5	30.6	4.6	0.9
opposition					
I am always looking for	39.6	47.2	9.4	3.8	0.0
better ways to do things					
If I believe in an idea, no	32.7	49.0	17.3	1.0	0.0
obstacle will prevent me		1			
from making it happen					
I love to challenge the	37.4	38.3	23.4	0.9	0.0
status quo					
When I have a problem, I	22.6	53.8	19.8	2.8	1.0
tackle it head-on			1		
I am great at turning	20.4	48.1	30.6	0.9	0.0
problems into opportunities					

18.7	42.1	30.8	8.4	0.0
38.5	52.3	9.2	0.0	0.0

Results generally show that respondents strongly agreed or agreed to entrepreneurial inclinations' statements. However, turning these inclinations into reality (starting a new business) is a challenge (as 'a lack of financial resources', 'a lack of support and assistance', and 'unfavourable economic conditions', show themselves in this study to be major barriers). Results show a positive correlation between the statement 'home country encourages entrepreneurship' on the one hand, and

- 'wherever I have been, I have been a powerful force for constructive change' (Correlation, p=0.013);
- 'I am great in turning problems into opportunities' (Correlation, p=0.012), and
- 'if I see someone in trouble, I help in any way I can' (Correlation, p=0.026), on the other hand.

There are also positive correlations between the question 'to what extent has your work experience influenced your intention to embark upon an entrepreneurial career?' on the one hand, and

- 'I feel driven to make a difference in my community and maybe the world' (Correlation, p=0.043);
- 'wherever I have been, I have been a powerful force for constructive change' (Correlation, p=0.014);
- 'I enjoy facing and overcoming obstacles to my ideas' (Correlation, p=0.002);
- 'I excel against others' opposition' (Correlation, p=0.022);
- 'if I believe in an idea, no obstacle will prevent me from making it happen' (Correlation, p=0.006), and
- 'I love to challenge the status quo' (Correlation, p=0.001) on the other hand.

The results of this study show statistically significant relationships between some of the students' perceived entrepreneurial inclinations and 'enablers' on the one hand, and clear entrepreneurial intentions on the other. Respondents who agreed to

start their own business 'during their studies' also agreed to the statement 'if I believe in an idea, no obstacle will prevent me from making it happen' (Mann-Whitney, p=0.039). Respondents who agreed to start their own business 'just after graduation' also agreed to the statement 'I can spot a good opportunity long before others can' (Mann-Whitney, p=0.049). Also, respondents who agreed to start their own business 'a long time after graduation' agreed to the statement 'I can spot a good opportunity long before others can' (Mann-Whitney, p=0.044).

Table 7. Respondents' reflection on entrepreneurial thinking and enablers (n=115)

Statements	Yes	No	
I am in general, creative, full of ideas and open to change	87.7	12.3	-
In the creation of a business. I appreciate the independence and self-confidence			
Do you impose upon yourself difficult and ambitious tasks?	93.0	7.0	
I am a born entrepreneur	22.3	77.7	
	Yes	No	Difficult
			to say
Would you be willing to take some risk (personal, financial) to increase your social and professional status?	70.2	6.1	23.7
Could certain academic activities encourage the development of entrepreneurship amongst students (e.g. projects, initiatives, competitions, placements, simulations, etc.)?	88.7	0.9	10.4
Do you think you are an entrepreneurial individual?	57.0	13.2	29.8
Do you think that the modules (courses) offered by the University motivate the students to become entrepreneurs?	56.5	22.6	20.9

Respondents expecting to graduate in the year 2016-2017 agreed more to the statement 'do you think you are an entrepreneurial individual?' (Chi-square, p=0.026). Black South Africans are more inclined to think that they are entrepreneurial individuals than the other cultural groups (Chi-square, p=0.046). Black South African students were also more inclined to think that the modules (courses) offered by the university motivate the students to become entrepreneurs, than the other cultural groups' (Chi-square, p=0.033). This finding somewhat contradicts a previous study by Reuben and Bobat (2014), who, on the pervasiveness of the negativity that surrounds Affirmative Action, characterised Black South Africans as lazy. While this seem not to be directly related to the aim of this study, interestingly, the necessary deduction to make here is that perceptions

of the Black South African as lazy and uninspired may no longer be the case as this study has shown.

4. Conclusion

South Africa's entrepreneurial level has been described by this study as very low. This study further reveals no statistically significant relationships between students' entrepreneurial intention and socio-demographic variables. Most students perceive entrepreneurship as creating an own business, and half the student sample view entrepreneurs as inventors and the practice of entrepreneurship as a risk-laden process. Largely, the participants suggested that their main motivations for desiring to turn to entrepreneurship were linked to the factors of 'personal fulfillment', 'becoming one's own boss, 'making money', and 'taking up a challenge'. The study has also revealed that the main barriers to entrepreneurship quest from a student's perspective include 'a lack of financial resources', 'a lack of support and assistance', and 'an unfavourable economic climate'. However, the results of this study show statistically significant relationships between some of the students' perceived entrepreneurial inclinations and 'enablers' on the one hand, and clear entrepreneurial intentions on the other hand. In any case, a portion of the findings of the study points to the fact that entrepreneurship education acts a significant stimulant for students' decision to become entrepreneurs.

We are aware that obtaining data from 150 students of a single university poses a challenge with respect to generalizing the findings. However, we believe that the results of this study have strong implications not only for South Africa but also for developing nations. For instance, the results show that students are willing to become entrepreneurs after their studies. This is therefore a call for developing nations to focus their attention on improving the economic situation of their countries as well as enable job creation, by:

- Placing emphasis on entrepreneurship education and practical entrepreneurship schemes(such as mentorship programmes) to help foster the desire of students to become entrepreneurs and increase students'/graduates' business management capabilities and job creation propensity; and
- Enlarging financial support for the youth who are willing to become entrepreneurs, especially university graduates with entrepreneurship education, to help improve access to financial resources, support and assistance perceived by students as a barrier to becoming entrepreneurs.

5. References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, Vol. 50, No. 2, pp. 179-211.

Amos, A., & Alex, K. (2014). Theory of planned behaviour, contextual elements, demographic factors and entrepreneurial intentions of students in Kenya. *European Journal of Business and Management*, Vol. 6, No.15, pp. 167-175.

Asmal, K. (2002). Transforming and restructuring: a new institutional landscape for higher education.

Available at

http://www.dhet.gov.za/Reports%20Doc%20Library/New%20Institutional%20landscape%20for%20 Higher%20Education%20in%20South%20Africa.pdf. [Accessed October 13, 2015.]

Bateman, T.S & Crant, J. M. (1993). The proactive component of organizational behavior: a measure and correlates. *Journal of Organizational Behavior*, Vol. 14, No. 2, pp. 103-118.

Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *Academy of Management Review*, Vol. 13, No. 3, pp. 442-453.

Ciavarella, M. A., Buchholtz, A. L., Riordan, C. M., Gatewood, R. D., & Stokes, G. S. (2004). The big five and venture survival: is there a link? *Journal of Business Venturing*, Vol. 19, No. 4, pp. 465–483

Drennan, J., Kennedy, J., & Renfrow, P. (2005). Impact of childhood experiences on the development of entrepreneurial intentions. *The International Journal of Entrepreneurship and Innovation*, Vol. 6, No. 4, pp. 231-238.

Eresia-Eke, C & Gunda, C. (2015). The entrepreneurial intentions of University of Botswana students. *Problems and Perspectives in Management*, Vol. 13, No. 3, pp. 55-65.

European Commission (2012). Effects and impact of entrepreneurship programmes in higher education. European Commission: Brussels.

Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, Vol. 67, No. 5, pp. 663-666.

Gibbon, T. (2008). Straddling the knowledge divide in the new comprehensive universities. *Education monitor*, 16(1). Available at http://www.cepd.org.za/files/pictures/Vol16%20No1.pdf. [Accessed October 13, 2015.]

GEM (2014). Global entrepreneurship monitor. 2014 Global report. Available at http://www.baruch.cuny.edu/news/documents/GEM2014.pdf. [Accessed October 13, 2015.]

Gurbuz, G., & Aykol, S. (2008). Entrepreneurial intentions of young educated public in Turkey. *Journal of Global Strategic Management*, Vol. 4, No. 1, pp. 47-56.

Gwija, S.A., Eresia-Eke, C., & Iwu, C.G. (2014). The link between entrepreneurship education and business success: evidence from youth entrepreneurs in South Africa. *Journal of Economics*, Vol. 5, No.2, pp. 165-174.

Hattab, H.W. (2014). Impact of entrepreneurship education on entrepreneurial intentions of university students in Egypt. *The Journal of Entrepreneurship*, Vol. 23, No. 1, pp. 1-18.

Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. Thousand Oaks, CA: Sage.

IBM Corporation (2013). IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.

Krueger, N.F. & Brazeal, D.V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, Vol. 18, pp. 91-91.

Krueger, N.F., Reilly, M.D., & Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, Vol. 15, No. 5, pp. 411-432.

Lee, S.H., & Wong, P.K. (2004). An exploratory study of technopreneurial intentions: A career anchor perspective. *Journal of Business Venturing*, Vol. 19, No. 1, pp. 7-28.

Liñán, F. & Chen, Y. (2006). Testing the entrepreneurial intention model on a two-country sample. *Document de Treball d'economica dell'empresa, num 06/7.* Universitat Autooma de Barcelona.

Liñán, F. & Chen, Y.W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, Vol. 33, No. 3, pp. 593-617.

Mat, S.C., Maat, S.M. & Mohd, N. (2015). A descriptive analysis on entrepreneurial intention among Engineering Technology students. *Asian Social Science*, Vol. 11, No. 24, pp. 286-292.

Matlay, H. (2005). Researching entrepreneurship and education part 1: what is entrepreneurship and does it matter. *Journal of Education and Training*, Vol. 47, No. 8-9, pp. 665-677.

McClelland, D.C. (1961). The achieving society. Princeton, NJ: Van Nostrand Reinhold.

Mohd, N., Maat, S.M. & Mat, S.C. (2015). A study on entrepreneurial intention among Engineering Technology students. *Mediterranean Journal of Social Sciences*, Vol. 6, No. 4, pp. 348-355.

Pambault-Enombo, J.G., Hassan, S.L., & Iwu, C.G. (2015). Rationalizing the introduction of entrepreneurship education in Gabon. *Environmental Economics*. Vol.6, No.4, pp. 8-14.

Piperopoulos, P. & Dimov, D. (2015). Burst bubbles or build steam? Entrepreneurship education, entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Small Business Management*, Vol. 53, No. 4, pp. 970-985.

Scott, G. (2005). What is a university of technology? Paper presented at a workshop on universities technology at the Tshwane University of Technology, Pretoria, 22 September. Available at http://www.che.ac.za/sites/default/files/publications/d000101_UofT_Scott_22Sept2005.pdf. [Accessed October 13, 2015].

Shinnar, R.S.; Giacomin, O. & Janssen, F. (2012). Entrepreneurial perceptions and intentions: the role of gender and culture. *Entrepreneurship Theory and Practice*, Vol. 36, No. 3, pp. 465-493.

Solesvik, M., Westhead, P. & Matlay, H. (2014). Cultural factors and entrepreneurial intention: The role of entrepreneurship education. *Education + Training*, Vol. 56, No. 8/9, pp. 680-696.

Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, Vol. 33, No. 3, pp. 669-694.

Veal, A.J. (2011). Research methods for leisure and tourism: A practical guide (4th Ed.). Harlow, UK: Financial Times Prentice Hall.

Weber, M. (1930). The Protestant ethic and the spirit of capitalism. Harper Collins: New York.

Wu, S., & Wu, L. (2008). The impact of higher education on entrepreneurial intentions of university students in China. *Journal of Small Business and Enterprise Development*, Vol.15, No. 4, pp. 752-774.

Pihie, L. & Akmaliah, Z. (2009). Entrepreneurship as a career choice: An analysis of entrepreneurial self-efficacy and intention of university students. *European Journal of Social Sciences*, Vol. 9, No. 2, pp. 338-349.

Zhang, Y., Duysters, G. & Cloodt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, Vol. 10, pp. 623-641.