

## Triggers and Barriers to Latent Entrepreneurship in High Schools in South Africa

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**ABSTRACT** The primary objective of this study was to investigate the perceived triggers and barriers to latent entrepreneurship amongst high school students in South Africa. The respondents were selected using simple random sampling method. Self-administered questionnaire was used for data collection. Five-point Likert scale was used to measure the responses. Descriptive statistics, principal component analysis, Pearson's correlation, ANOVA and T-test were used for data analysis. The results indicated that youth latent entrepreneurship is low in South Africa. The results also indicated that high school students perceived a combination of push and pull factors such as extrinsic rewards, market opportunities and independence/autonomy as triggers of latent entrepreneurship. The barriers to youth entrepreneurship included lack of capital, skill and support as well as lack of market opportunities and risk.

### INTRODUCTION

According to Statistics South Africa (2012), unemployment in South Africa is one of the highest in the world at 23.9 %. The highest level is amongst those in the 15 to 24 age group (mainly high school and university graduates). Youths bear the largest share of unemployment problem; 3.1 million young people between ages of 15-34 are unemployed, accounting for 72% of the total unemployed. In addition, the rate of discouragement is much higher amongst youth; 15-34 years old account for 71% of all discouraged. Nearly 40% of those who have never worked are between 15-34 years, representing 2.4 million individuals. Youth unemployment rate is 2.5 times higher than that of adults. The National Treasury of South Africa (2008) notes that the socio-economic costs associated with high

youth unemployment include significant poverty, crime, violence, loss of morale, social degradation and political disengagement. Other negative consequences are loss of productive resources, deterioration of human capital, loss of income for the country through decline in savings and aggregate demand and loss to the society of educational investment.

The International Development Association (2010) points out that entrepreneurship can be a promising career option for youth as they seek to make a smooth transition from school to work, especially when the economic growth of their home country fails to keep pace with the growing number of school leavers entering the labour force, and where career opportunities are limited in the labour market. The National Youth Development Agency (2010) agrees that South Africa has enormous youth unemployment challenge. Government cannot do it alone. Therefore, it is necessary for the youth to be entrepreneurial. This implies that entrepreneurship is one of the solutions to youth unemployment in South Africa. Van Stel et al. (2006) suggest that there are five impetuses behind youth entrepreneurship: (1) it promotes innovation (2) it creates jobs (3) it increases competition in the market place (4) young entrepreneurs are responsive to new opportunities and trends (5) with entrepreneurship

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goes increased self-reliance and well-being. In addition, young people are more likely to believe that entrepreneurship represents a good career choice and that it brings status.

Literature has failed to come up with one specific definition which totally describes entrepreneurship. In addition, entrepreneurship is often used interchangeably with small medium and micro enterprises (Mutezo 2005). Herrington et al. (2009) cite the following definitions of entrepreneurship: “An entrepreneur shifts economic resources out of an area of low productivity into an area of higher productivity and greater yield.” (Jean-Baptiste Say). An entrepreneur is: “...one who organises, manages and assumes the risk of a business enterprise” (Oxford Dictionary). Hitt et al. (2002) also noted the definitions of entrepreneurship (and their authors as follows): “Entrepreneurship is seen as new combinations, including the doing of new things that are already being done in a new way. New combinations include introduction of new goods, new method of production, opening of new markets, new source of supply, and new organizations” (Schumpeter 1934). “Entrepreneurship is the ability to perceive new opportunities” (Kirzner 1973). “Entrepreneurship is the creation of new enterprise” (Low and MacMillan 1988).

One unique feature in entrepreneurship discourse is that entrepreneurship holds the promise for future growth, expansion and long-term financial gain. However, in South Africa, entrepreneurship as measured by the Total Entrepreneurship Activity (TEA), which is an estimate of the number of working age adults involved in starting or operating businesses up to 3.5 years old, is one of the lowest in the world (Orford et al. 2003). This was supported by the findings in the 2008 Global Entrepreneurship Monitor (GEM) report on TEA where South Africa ranked 23<sup>rd</sup> out of 43 participating countries. The total early stage entrepreneurship activity of South Africa according to the GEM report of 2008 was (7.8%) which is significantly below the average for all participating middle to low income countries of (13.2%) (Herrington et al. 2009). This implies an alarmingly low level of entrepreneurship in South Africa. The low TEA signifies low new firm formation. Low TEA rate hinders economic growth and increases unemployment and poverty.

According to Herrington et al. (2009), the influence of age on entrepreneurial activity tends to be very similar throughout GEM. The prevalence of early-stage entrepreneurial activity tends to be relatively low in the 18-24 years cohort, peaks among 25-34 year olds, and then declines as age increases with the sharpest decrease after the age of 54. This reflects the interaction between desire to start a business, which tends to reduce with age, and perceived skills, which tends to increase with age.

Table 1 shows that in 2005, 2006 and 2008, youths’ entrepreneurial participation within the age 18-24 years was lower as compared to those in the 25-34 years range.

**Table 1: Involvement in early stage entrepreneurial activity by age**

Age category	2005	2006	2008
18-24 years	16%	22%	17%
25-34years	30%	31%	27%
35-44years	25%	24%	23%
45-54 years	14%	13%	24%
55-64 years	15%	10%	9%

Adapted from Herrington et al. 2009

According to Herrington et al. (2009) the majority of school leavers in South Africa do not pursue tertiary studies and therefore form part of the potential labour and entrepreneurial force. In addition, youth entrepreneurship has been declining in South Africa as evidenced by Table 1. Entrepreneurship declined for youths in the 18-24 and 25-34 age groups between 2006 and 2008. This is dire for South Africa where youth unemployment is very high. According to Von Broembsen et al. (2005) youths in South Africa were far less likely to start their own businesses as compared to those from other countries. The low entrepreneurial activity among youths was found to be the primary reason for the low overall rate of entrepreneurial activity in South Africa. Thus, an investigation of the possible triggers and barriers to youth entrepreneurship is essential.

This study focused on high school students. Lam et al. (2010) point out that the critical education margins for most South Africans today are completion of secondary school and entry into post-secondary schooling. The proportion of high school graduates that had gone on to post-secondary education was 21% for Africans and

47% for whites in 2000 with declines for both groups between 2000 and 2007. This implies that only a few youths that completed high school will go to the university. This further suggests that improvement in education, employment (which is difficult to get) and entrepreneurship offer the way out of the problem for high school students. Alsos et al. (2006: 669) agree that youth entrepreneurship is one of the ways to improve entrepreneurship. Therefore, it is important to encourage youth enterprises in primary, secondary, college and universities. This is consistent with the view of Peterman and Kennedy (2003: 132) and Kazela (2009) who point out that post-university based entrepreneurship has attracted the bulk of research within the care of youth entrepreneurship. However, entrepreneurship development in primary and secondary schools is very important. The ideal stage to acquire basic knowledge about entrepreneurship and to develop a positive attitude towards entrepreneurship is during childhood and adolescence years.

According to Pihie (2009: 341), entrepreneurship can be measured in two ways. Actual entrepreneurship (that is, people that have actually started business) and latent entrepreneurship or entrepreneurial intention (that is, people that intend to start business) (latent entrepreneurship is the focus of this study and will be used interchangeably with entrepreneurial intention).

Vesalainen and Pihkala (2000: 145) define latent entrepreneurship as "... a conscious state of mind that directs attention (and therefore experience and action) toward a specific object (goal) or pathway to achieve it (means)". Henley (2007), Pihie (2009: 341) and Choo and Wong (2009) note that intention is the state of mind or attitude which influences entrepreneurial behaviour. A strong association exists between the entrepreneurial intention and actual behaviour. Because entrepreneurship occurs over time, entrepreneurial intentions might be viewed as the first step in an evolving, long-term process.

A meta analysis of studies on entrepreneurship in South Africa revealed that no South African study has investigated empirically the triggers and barriers to youth entrepreneurship from the view point of high school students.

### Objectives of the Study

The objectives of the study are two-fold: (1) To measure the latent entrepreneurship of high

school students in South Africa and (2) to investigate empirically the triggers and barriers to latent entrepreneurship of high school students in South Africa. The rest of the study is organised as follows.

### Literature Review

Theories of latent entrepreneurship or entrepreneurial intention as cited by Linan and Chen (2006) include Ajzen and Fishbein's 1975 theory of reasoned behaviour, Shapero and Sokol's entrepreneurial event theory of 1982, Bandura's process driven theory of 1986 and Ajzen's theory of planned behaviour of 1991. The theory of planned behaviour by Ajzen in 1991 forms the theoretical foundation of this study but the other theories of entrepreneurial intention will also be discussed. Ajzen and Fishbein's (1975) theory of reasoned action was of the opinion that behaviour is greatly influenced by one's intention to engage in that behaviour and intentions are influenced by attitude towards the behaviour. This implies that intention comes first before the actual behaviour.

Another theory of entrepreneurial intention is the process driven theory developed by Bandura in 1986. Bandura reasoned that, behaviour is dependent upon an individual's perception that they can carry out the intended action. According to the process driven theory, external environment influences thoughts, which shape attitude and form intention, which if strong enough leads one to action (Bird 2001). Shapero and Sokol's (1982) introduced the entrepreneurial event theory. These theorists looked at life path changes and their impact on individual desirability and perceptions of feasibility related to new venture formation. The underlying assumption of the entrepreneurial event theory is that, critical life changes (displacement) precipitate a change in entrepreneurial intention and subsequent behaviour. Displacement can occur in a negative form such as job loss or a positive form such as financial support. The intention to become an entrepreneur therefore depends on the individual perceptions of desirability and feasibility in relation to that activity (Ashley-Cotleur et al. 2009).

This study will focus on Ajzen's (1991) theory of planned behaviour. This theory focuses on intentions by an individual which will determine the actual behaviour towards something. Since

the present study focuses on the perceived triggers and barriers to youth entrepreneurship, such perceptions can be explained by the intention of becoming or not becoming entrepreneurs by the youths. Linan and Chen (2006) point out that the theory of planned behaviour can be applied to almost all voluntary behaviour. According to Ajzen's theory of planned behaviour, there is a relationship between the intention to be an entrepreneur and the act of becoming one. Thus, one's intention greatly explains the behaviour. This was also supported by Lee and Wong (2004: 15) that entrepreneurial intentions are the first step in the evolving and sometimes, long-term process of venture creation. The underlying assumptions in this theory are that: Much human behaviour is planned and therefore preceded by intention towards that behaviour; human beings are rational and make systematic use of information available to them when making decisions; and intention predicts planned behaviour (Ashley-Cotleur et al. 2009)

Previous empirical studies have been identified as playing a major role in influencing entrepreneurial intentions. These factors which influence entrepreneurial intention can be regarded as either triggers or barriers to the behaviour. For triggers to entrepreneurial intention, Ashley-Cotleur et al. (2009) identify two main categories, which are (1) demographic variables and (2) attitudes, values or psychological factors. Demographic factors include gender, family background, having role models and self employed parents. However, these motivators can also be categorised as (1) extrinsic rewards (2) independence/autonomy (3) intrinsic rewards and (4) family security. Extrinsic motives are the economic reasons that entrepreneurs work whilst intrinsic motives are related to self-fulfilment and growth. For a new entrepreneur, expected monetary rewards form part of the extrinsic triggers. Intrinsic reward will centre around the satisfaction of being one's own boss as well as having ultimate control and responsibility for the success of the venture. If the perceived intrinsic and or extrinsic rewards are great, such that they influence an individual's behaviour towards entrepreneurship, then such factors can be explained as triggers to entrepreneurship.

However, low entrepreneurial activity in South Africa, especially amongst the youths is a sign that barriers to entrepreneurial intention exist. Barriers refer to those factors which prevent in-

dividuals from engaging in entrepreneurship. In a survey on United Kingdom, GEM 2002 noticed that social and cultural attitudes in this country posed the strongest barrier to entrepreneurship due to the negative attitude towards wealth creation, self employment and business failure (Robertson et al. 2003: 310). In South Africa, the same barrier is evident, where wealth creation is not regarded but rather more emphasis is on attaining an academic qualification to be employable. According to Louw et al. (2003: 5), an entrepreneurial culture, which should be the driving force for successful small business enterprises, seems to be missing in South Africa as well as the broader presence of entrepreneurs as initiators and innovators. There is a culture of dependence in South Africa so much so that all people including the youths expect the government to do everything. This idealism is greatly influencing youth intention on entrepreneurship (Herrington et al. 2009). This was supported by findings in a study by Agupusi (2007) that, the attitude of South Africans in Alexandra, a township in South Africa, towards entrepreneurship is similar to that in other parts of the country and formal employment is generally preferred to business creation.

Most youths in South Africa are not willing to take risks. These risks associated with owning a business include the failure of the business as well as the prevailing high rate of crime in the country. High crime rates are a serious challenge to new business formations. Agupusi (2007) points out that South Africa has a low TEA rate and that is attributed to high crime and violence. Crime on business in South Africa is not only alarming but also growing as reviewed by the South African Police Service Crime Statistics (2009) that, while the incidences of virtually all major categories of crime has fallen during the past year, business related crime is on the increase.

Lack of business skill is also affecting entrepreneurship in South Africa. Louw et al. (2003: 6) note that South African entrepreneurs lack managerial skills. In the GEM report, Maas and Herrington (2006) note that, lack of education and training has reduced management capacity in new firms in South Africa. In addition, lack of finance poses a challenge to youth entrepreneurship. In South Africa, financial support is identified as the second major barrier leading to the low TEA rate in the country. Herrington et al.

(2009) argue that the government of South Africa, faced with high youth unemployment has introduced a lot of small business and entrepreneurial initiatives such as the National Youth Development Agency. However, most youths are not aware of the available government support schemes. The general belief of entrepreneurs is that, there is no government support for entrepreneurship in South Africa.

### RESEARCH METHODOLOGY

The study focused on twenty high schools in the Mthatha area, in the Eastern Cape province of South Africa. The population was obtained from the school principals and clerks. The population of high school students was seven hundred and sixty. The sample size was determined through the use of RAOSOFT sample size calculator. RAOSOFT is statistical software used in the calculation of sample size. RAOSOFT takes into consideration four factors in determining sample size. These factors include the margin of error, the confidence level, the population and the response distribution. Using Raosoft sample size calculator, the minimum recommended sample size was two hundred and fifty six respectively. The questionnaire predominantly made use of Likert scale questions to determine entrepreneurial intention and the triggers and barriers to latent entrepreneurship. Close-ended questions were used for demographic variables. The instrument was developed taken into consideration other similar studies such as Wong and Choo (2009), Benzing et al. (2009) and Phie (2009). Five point Likert scale with 1 meaning strongly disagree to 5 meaning strongly agree was used to measure entrepreneurial intention and the triggers and barriers. The questionnaire was pre-tested using 30 final year high school students. The Cronbach's alpha was used as the measure of reliability. The normality of the data was determined by using the Kolmogorov-Smirnov test. The pairwise deletion method was used to treat missing values. The data analysis was done using descriptive statistics, principal component analysis, T-test, ANOVA and Pearson's correlation. This research study uses varimax orthogonal rotation method developed by Kaiser (1958). Principal components with Eigenvalues greater than one are usually retained. Items with factor loading lower than 0.300 were removed as suggested by Leech et al. (2005).

### RESULTS AND DISCUSSION

256 questionnaires distributed and 161 returned. The response rate was 62.9%. 97% of the respondents were below 24 years and 3% between 24 and 29. 57% of the respondents were males and 43% females. To measure the entrepreneurial intention of university and high school students, a ten-item scale was developed after the review of the literature such as Choo and Wong (2009) and Pihie (2009: 338). Frank et al. (2005) also used the same ten item scale to measure entrepreneurial intention of high school students in Austria and Malaysia respectively. Entrepreneurial intention was a dependent variable in this study, which was believed to be influenced by certain triggers and barriers. Table 2 shows the results of the measures of entrepreneurial intention for high school students.

**Table 2: Measures of latent entrepreneurship**

<i>Items</i>	<i>Mean</i>	<i>Standard deviation</i>
I'll put all effort to start and run my own business	1.02	.219
I'm determined to create a firm in the future	1.39	.654
My professional goal is to become an entrepreneur	1.05	.224
I wish to start my business in the next five years	1.20	.318
I prefer to be an entrepreneur than to be an employee in a company	1.03	.197
I will start my business in the next ten years	1.21	.320
I have thought seriously to start my own business after completing my study	1.02	.219
I am prepared to do anything to be an entrepreneur	1.06	.229
I want to be my own boss	1.15	.165
I have a strong intention to start a business someday	1.22	.322
<b>Scale mean</b>	<b>1.14</b>	

The scale mean is 1.14 which indicates a low level of latent entrepreneurship amongst high school students. This suggests that most youths prefer to work for private firms and government establishments. This is one of the reasons for the low TEA rate in South Africa as pointed out by Herrington et al. (2009). The results are consistent with the findings of similar studies such as Frank et al. (2005), Choo and Wong (2009) and Pihie (2009: 340).

The control question used to measure entrepreneurial intention as related to triggers and barriers was 'Do you intend to start your own business when you leave school'. A 'Yes' answer was used to determine triggers and a 'No' answer was used to determine barriers. If the answer was 'Yes', the respondents were asked for the triggers and if the answer was 'No', the respondents were asked for the barriers. 20.1% of the respondents answered yes and 79.9% answered no. This further confirms the low level of latent entrepreneurship of high school students in South Africa.

### Triggers

Table 3 depicts the descriptive statistics (means and standard deviations). The results (means) indicated that to provide employment (4.80), to earn a reasonable living (4.29) and to invest personal savings (3.95) had the highest means while to support myself (1.22), to challenge myself (1.23) and to increase my prestige and status (1.24) had the lowest means. The results indicated that to provide employment is the most important trigger of entrepreneurial intention for high school students in South Africa. This is understandable in the light of high youth unemployment in South Africa. The principal component analysis was used for data reduction and secondly for the detection of structure (underlying dimensions) in the set of both the trigger and the barrier variables. To ensure the use of the principal component analysis, the Barlett Test of Sphericity (BTS) and Kaiser-Meyer-Olkin (KMO) test of appropriateness were carried out accordingly. The results (BTS = 530.653; sig. = 0.001) indicated that the data were appropriate for the purpose of factor analysis. Table 4 depicts the total variance explained and the rotated factor matrix for triggers.

According to the results of the principal component, five factors with Eigenvalues greater than one account for (83.66%) of the total variance. The five factors are further explained by the rotation sum of squares after Varimax rotation. Seven items namely to enjoy myself, to challenge oneself, availability of support, to follow examples of someone I admire, to increase my prestige and status, entrepreneurial family culture and to support my family were removed because they had factor loadings lower than 0.300. The factor analysis therefore resulted in

the reduction of the twenty item questionnaire to thirteen items and five underlying factors for high school students.

**Table 3: Triggers of latent entrepreneurship**

<i>Items</i>	<i>Mean</i>	<i>Standard deviation</i>
To take advantage of my creative talent	3.53	0.774
To use the skill learned at school	2.96	0.801
For my own satisfaction and growth	3.20	0.855
To provide employment	4.80	0.967
To challenge myself	1.23	0.761
To be my own boss	3.75	0.943
To provide job security	3.89	0.658
To earn a reasonable living	4.29	0.937
I enjoy taking risks	3.62	0.739
To enjoy myself	1.41	0.734
Entrepreneurial family culture	1.44	0.822
Availability of support for potential entrepreneurs	1.35	0.511
To follow the example of someone I admire	1.32	0.799
To invest personal savings	3.95	0.438
To increase my prestige and status	1.24	0.672
Existence of opportunities in the market	2.89	0.730
To support my family	1.22	0.698
To have personal freedom	3.00	0.654
Good economic environment	3.31	0.701
To realise my dream	3.52	0.827
I'll put all effort to start and run my own business	1.02	.219
I'm determined to create a firm in the future	1.39	.654
My professional goal is to become an entrepreneur	1.05	.224
I wish to start my business in the next five years	1.20	.318
I prefer to be an entrepreneur than to be an employee in a company	1.03	.197
I will start my business in the next ten years	1.21	.320
I have thought seriously to start my own business after completing my study	1.02	.219
I am prepared to do anything to be an entrepreneur	1.06	.229
I want to be my own boss	1.15	.165
I have a strong intention to start a business someday	1.22	.322
Scale mean	<b>1.14</b>	

The five factors for triggers for high school students are presented as follows:

- ❖ Factor one was labelled as *extrinsic rewards*. The Eigenvalue for the factor is 15.001. The factor includes three items.

Cronbach’s alpha for the factor yielded a value of 0.865, indicating the reliability of the factor.

- ❖ Factor two was labelled *intrinsic rewards*. The Eigenvalue for the factor is 4.310. The factor includes three items. Cronbach’s alpha for the factor yielded a value of 0.822, indicating the reliability of the factor.
- ❖ Factor three was labelled *capital*. The Eigenvalue for the factor is 2.205. The factor includes two items. Cronbach’s alpha for the factor yielded a value of 0.796, indicating the reliability of the factor.
- ❖ Factor four was labelled *independence and autonomy*. The Eigenvalue for the factor is 1.348. The factor includes three items. Cronbach’s alpha for the factor yielded a value of 0.753, indicating the reliability of the factor.
- ❖ Factor five was labelled *market*. The Eigenvalue of the factor is 1.453. The factor includes two items. Cronbach’s alpha for the factor yielded a value of 0.741, indicating the reliability of the factor.

**Table 4: Rotated factor matrix for triggers of latent entrepreneurship**

Factors	1	2	3	4	5
To provide employment	0.976				
To earn a reasonable living	0.923				
To provide job security	0.811				
To be my own boss		0.715			
I enjoy taking risks		0.566			
To take advantage of my creative talent		0.541			
To invest personal savings			0.795		
To use the skill learned in the high school			0.614		
For my own satisfaction and growth				0.649	
To have personal freedom				0.582	
To realise my dream				0.525	
Existence of opportunities in the market					0.602
Good economic environment					0.566
Eigenvalue	15.00	14.310	2.205	1.348	1.453
Percentage of variance explained	41.23	21.78	9.05	6.79	4.81
Cronbach’s alpha	0.865	0.822	0.796	0.753	0.741

Factor loading less than 0.300 have been omitted

**Table 5: Pearson’s correlation between trigger variables and latent entrepreneurship**

Factor	R	p-value
Extrinsic rewards	0.824	0.02
Market opportunities	0.612	0.01
Intrinsic rewards	0.767	0.02
Independence and autonomy	0.699	0.01
Capital	0.710	0.01

Sig. 0.05 (2-tailed)

**Table 6: T-test and ANOVA of age and gender and the trigger factors**

Factors	Age		Gender	
	F	Sig.	T	Sig.
Capital	1.837	0.192	1.589	0.291
Skill	1.822	0.218	1.983	0.921
Support	1.399	0.318	1.589	0.363
Market	1.729	0.482	1.938	0.382
Risk	1.472	0.392	1.478	0.538

**Table 7: Barriers to latent entrepreneurship**

Items	Mean	Standard deviation
Lack of skills	3.79	0.987
Difficulty in obtaining finance	4.20	0.868
Can’t write business plan	3.89	0.888
No family member did it	1.06	0.523
Fear of crime	4.51	0.914
No opportunity in the market	3.63	0.605
Future uncertainty	3.04	0.664
Repaying school loans	1.03	0.552
Right partner difficulty	1.79	0.525
Weak economic environment	3.36	0.603
Lack of funding information	3.78	0.671
Lack of savings	4.79	0.834
Lack of family and friends support	1.98	0.673
Lack of collateral	3.79	0.775
No one helping	2.03	0.625
Lack of business experience	3.72	0.894
Fear of risk	3.66	0.922
No people encouraging	2.55	0.793
No management and entrepreneurial knowledge	3.68	0.980
Don’t have a good idea	4.96	0.918
Don’t have the right contacts	3.81	0.771
Want to further education	4.20	0.982
I am too young	3.98	0.621
Involves too much work and effort	3.44	0.658

The Pearson’s correlation was used to test for the direction and strength of relationship between entrepreneurial intentions and trigger variables as depicted by Table 5. The results indicated significant positive relationships be-

tween entrepreneurial intention and the trigger factors. Table 6 presents the results of the T-test and ANOVA used to investigate if there are significant differences in the mean scores with respect to gender and age. The results of the ANOVA and the T-test in table 6 indicated that there are no significant differences between the two demographic variables and the five trigger factors.

**Table 8: Rotated factor matrix for barriers to latent entrepreneurship**

Factors	1	2	3	4	5
Lack of savings	0.98				
Lack of collateral	0.71				
Difficult bank finance	0.67				
Don't have a good idea		0.81			
Can't write business plan		0.79			
Lack of skills		0.76			
Lack of business experience		0.72			
No management and entrepreneurial knowledge		0.61			
Want to further my education			0.78		
Fear of crime			0.73		
I am too young			0.69		
Fear of risk			0.62		
Involves too much work and effort			0.55		
Future uncertainty			0.53		
Don't have the right contacts				0.72	
Lack of funding information				0.65	
No opportunity in the market					0.74
Weak economic environment					0.65
Eigenvalue	5.223	4.5022	2.9262	2.774	2.971
Percentage of variance explained	32.23	12.8115	8.06	14.91	12.04
Cronbach's alpha	0.844	0.8120	0.8070	0.792	0.518

Factor loading less than 0.300 have been omitted

## Barriers

The descriptive statistics (Table 7) indicated that do not have a good idea (4.96), lack of savings (4.79) and fear of crime (4.51) had the highest means for barriers while while repaying school loans (1.03), no family member did it (1.06) and right partner difficulty (1.79) had the lowest means for barriers.

Table 8 depicts the rotated factor matrix for barriers. According to the results of the princi-

pal component analysis as indicated above, five factors with Eigenvalues greater than one account for (87.05%) of the total variance. The five factors are further explained by the rotation sum of squares after Varimax rotation. Six items namely nobody in my family has ever gone into personal business, need to repay school loans, lack of support from family and friends, no one to turn to for help, right partner difficulty and convincing others that it is a good idea were removed. The factor analysis therefore resulted in the reduction of the twenty six item questionnaire to twenty items item and five underlying factors for high school students.

The five factors for barriers for high school students are presented as follows:

- ❖ Factor one was labelled as *lack of capital*. The Eigenvalue for the factor is 15.223. The factor includes three items. This is the most important factor according to the factor analysis. Cronbach's alpha for the factor yielded a value of 0.844, indicating the reliability of the factor.
- ❖ Factor two was labelled *lack of skill*. The Eigenvalue for the factor is 4.502. The factor includes five items. Cronbach's alpha for the factor yielded a value of 0.812, indicating the reliability of the factor.
- ❖ Factor three was labelled *risk*. The Eigenvalue for the factor is 2.926. The factor includes six items. Cronbach's alpha for the factor yielded a value of 0.807, indicating the reliability of the factor.
- ❖ Factor four was labelled *lack of support*. The Eigenvalue for the factor is 2.774. The factor includes two items. Cronbach's alpha for the factor yielded a value of 0.792, indicating the reliability of the factor.
- ❖ Factor five was labeled *lack of market opportunities*. The Eigenvalue of the factor is 2.971. The factor includes two items. Cronbach's alpha for the factor yielded a value of 0.518, indicating the reliability of the factor.

Table 9 depicts the results of the Pearson correlation. The results indicate significant positive relationships between lack of entrepreneurial intention and the barrier factors. The results of the ANOVA and the T-test as depicted by Table 10 indicated that there are no significant differences between the demographic variables (age and gender) and the five barrier factors.



**Table 9: Pearson's correlation between barrier variables and latent entrepreneurship**

<i>Factor</i>	<i>R</i>	<i>p-value</i>
Capital	0.822	0.01
Skill	0.741	0.03
Support	0.627	0.02
Market	0.548	0.02
Risk	0.719	0.04

Sig. 0.05 (2-tailed)

**Table 10: T-test and ANOVA of age and gender and the barrier factors**

<i>Factors</i>	<i>Age</i>		<i>Gender</i>	
	<i>F</i>	<i>Sig.</i>	<i>T</i>	<i>Sig.</i>
Capital	1.873	0.231	1.552	0.177
Skill	1.390	0.463	1.735	0.381
Support	1.210	0.261	1.865	0.228
Market	1.628	0.419	1.462	0.282
Risk	1.229	0.483	1.320	0.162

## CONCLUSION

The results indicate that there is a low level of latent entrepreneurship among high school students. The triggers of latent entrepreneurship include extrinsic rewards, intrinsic rewards, capital, independence and autonomy and market opportunities respectively. The barriers include lack of capital, lack of skill, risk, lack of support and lack of market opportunities respectively.

## RECOMMENDATIONS

The empirical findings of this research show that youths consider extrinsic rewards as an important factor which positively influences their entrepreneurial intentions. The perception of availability of extrinsic rewards is high amongst those who intend to start their own business. It is therefore of utmost importance that the government and education system in South Africa educate youths of the existence of such rewards as a way of encouraging entrepreneurial intention. Extrinsic rewards refer to the economic gains that one gets from entrepreneurship.

To take advantage of my creative talent is one of the major intrinsic reward items that trigger entrepreneurial intention. It is therefore important that education curriculum include the encouragement of creativity within the students. From the results it can be noted that when one is

creative, he/she would develop self confidence and would want to implement such creativity in entrepreneurship. Entrepreneurs are known to be creative and innovative, thus if one is taught to be creative, chances are that he/she would try to implement that talent through entrepreneurship. Youths need to learn and have enough knowledge in different aspects of management, finance, marketing and other business related issues so that they will be able to possess the positive attitude such as ability to make decisions. Such would give self confidence and result in youths having a need for independence/ autonomy. Hence, they would prefer self employment in place of looking towards being employed by someone.

Availability of capital is also a trigger of entrepreneurial intention. Capital involves both human and financial resources. More youths should be educated so that they would offer their services in newly established enterprises. Youths should also prepare themselves for credit facilities. That is they should have their own savings and have some collateral which they would use as security for borrowing. However, though it would be difficult for youths coming from school that had never had employment before to have such savings and collateral, government should intervene and be the surety for youths when they seek support from private sector. Also, government support programmes such as Technology of Women In Business (TWIB), Small Enterprise Development Agency (SEDA) and National Youth Development Agency (NYDA) should be made easily accessible to intended beneficiaries especially youths who struggle with start-up capital. Conclusively, it is very important to understand the trigger to entrepreneurial intention so as to use them positively to promote intention.

The findings also revealed some barriers to entrepreneurial intention of high school students. The perceived reasons why South African youths are unwilling to get into entrepreneurship are lack of access to capital, lack of business skills, government support, risk and weak market opportunities. To reduce these barriers, there is the need to have an integrated approach that will involve various stakeholders including students, teachers, schools, government, non-governmental organisations and business. To improve business skills, it is recommended that policy makers should ensure that:

The educational curriculum incorporates the teaching of management skills (for example, financial management and marketing management) and entrepreneurship skills (for example, the identification of opportunities and how to undertake a venture) from the first to the last year of high school. This can be done by teaching entrepreneurship as an independent module or substantially increasing the teaching of entrepreneurship in other subjects such as Economics, Commerce and even history (that is, the history of successful entrepreneurs and innovators). In addition, educational curriculum should include vocational education and attachment of high school students to SMEs during long holidays for students to develop entrepreneurial intention, attitude and skills.

Teachers have a big role to develop the entrepreneurial mindset of high school students. National governments should strive to make entrepreneurship education a part of the curricula in teacher education. This will help to build the capacity of teachers for entrepreneurship education. Teachers need to be equipped with the skills, knowledge and attitudes to be able to provide their students with entrepreneurial education. This requires significant changes in the ways teachers are educated, trained and evaluated. Student teachers need to be taught by the same new innovative methods that they are supposed to master after graduation. Teachers continuing professional development should incorporate entrepreneurial education. Thus, teachers become entrepreneurial teachers and schools become entrepreneurial schools. Teachers also need training, coaching and mentoring in entrepreneurship.

Schools and teachers need to develop partnerships with local business organisations such as Chambers of commerce, non-governmental organisations and government agencies responsible for the promotion of entrepreneurship in South Africa such as the National Youth Development Agency (NYDA) and the Small Business Development Agency (SEDA). Business leaders can be invited to give talks in high schools about the advantages of entrepreneurship and also act as mentors to student entrepreneurs. At a strategic level, high schools should develop plans which define the actions needed for entrepreneurship education with inputs from the various stakeholders such as stu-

dents, teachers, parents, government and business

Government agencies responsible for youths such as NYDA and SEDA should have online entrepreneurial materials and resources that should be specifically directed to high school students. These organisations can organise business plan competitions for high school students and successful students are coached and mentored. To achieve these recommendations, it is important to equip teachers with the resources, training and mentoring to teach entrepreneurship. In addition, organisations such as NYDA and SEDA have a lot of resources directed at youth entrepreneurs in general on their websites. However, there is the need for sustained awareness campaign through the media to ensure that high school students and teachers are aware of these resources. In addition, access to computers and the internet is still very weak especially in previously disadvantaged high schools in South Africa. For students to be able to access online materials, there is the need for government, business and NGOs to commit more resources to technology in high schools. An integrated approach involving all the stakeholders is also necessary to improve access to finance by high school students. In addition, access to finance and possession of business skills are needed to take advantage of market opportunities.

First, students must be made to understand through entrepreneurial teaching by teachers that it is impossible to start a business without owners' contribution. Therefore, students need to save money to have funds to be able to start a business. Even, if students do not have money to save as it is difficult for most high school students to save, this will embed in them the savings culture that they will need to start and grow other business later in life.

Teachers must be able to inform students of the sources of finance available to students and how to get the required funding including business plan preparation. The education of teachers in this respect is paramount. Commercial banks and government agencies such as NYDA and SEDA should visit high schools for talks on entrepreneurial finance and how to write business plans.

To achieve these recommendations, government agencies and commercial banks must engage in sustained awareness campaign. Visits

by the authors to the websites of government agencies such as NYDA and some commercial banks revealed that products and supports that can help entrepreneurs including young entrepreneurs are in existence, but the issue is whether young entrepreneurs are aware of these resources. This will improve the weak perception of government support which is one of the findings of this study. Technology, especially access to computers and the internet is very important to achieve these recommendations. In addition, training of teachers on entrepreneurial finance is paramount.

To reduce risk and the fear of failure: Students need to be taught that risk and failure are part of business and personal development. Without taking risk, opportunities cannot be exploited. Each failure is a trial in an experiment and an opportunity for growth. In addition, students should be taught to consider the cost of missed opportunities and how to develop business plans that will take into consideration all the possible outcomes of entrepreneurship. To achieve these recommendations, successful business leaders should be invited to give speeches about what they went through before becoming successful. Schools need to network with Chambers of Commerce and business to achieve this objective. In addition, teacher education on entrepreneurship and risk management is important.

In addition, there is the need to develop an entrepreneurial culture in South Africa and reduce the culture of dependency. An entrepreneurial culture is defined as one that presents enterprise as a realistic choice for the individual and in which the value and status afforded to being an entrepreneur is high. Developing an entrepreneurial culture is important in encouraging youth enterprise in South Africa. This culture will reinforce entrepreneurial attitudes in the youths through socialization at home or school. The culture of dependency should be reduced through awareness campaign by the government. Therefore, youths should take entrepreneurship as a career rather than depending on government grant. One of the ways to achieve this recommendation in South Africa is to link social grants to entrepreneurship and entrepreneurial education. Youths that get government grant must be forced to go for entrepreneurial training in small businesses or go to

schools for entrepreneurship education to be able to retain the grant.

Crime against business is still a major problem in South Africa. More effective policing is needed including better police visibility, area coverage and faster response times to reduce crime. Partnerships need to be strengthened by the government with businesses and local communities to reduce crime. However, it is also important to understand the root causes of crime in South Africa including poverty and unemployment. In the long-run government should make serious effort to reduce poverty and unemployment. This study recommends that excessive and over complex regulations should be loosened in the case of first time registration for business. This will encourage the youths to register for business. Entrepreneurship awareness day could be organised where individuals will be informed about how to register a business, what you need to have in order to be registered and how much it costs to register a business.

#### **LIMITATIONS OF THE STUDY**

The study was mainly based on the perceptions of the youths, a limitation might arise in that possible differences may exist between “perception” and “reality”. Thus perceptions of youths who have not engaged in entrepreneurship might not reflect the actual triggers and barriers in the real entrepreneurial world. Another limitation of this study is that it investigated the triggers and barriers to youth entrepreneurship from students who are in the education system. However, there are some youths who are out of school, who are jobless or have opened their businesses that would have qualified for this study but were not included. Such youths were omitted to avoid the problems associated with convenience sampling such as bias and under-representation of some groups.

#### **AREAS FOR FURTHER RESEARCH**

Business culture is lacking in most university graduates hence this should be explored further in a study. Further studies can investigate the barriers faced by actual entrepreneurs (that is, youths that have actually started their business). This could help to reduce the high failure rate of small entrepreneurial firms in South Africa.

## REFERENCES

- Agupusi P 2007. Small Business Development and poverty Alleviation in Alexandra, South Africa. From <http://www.pagupusi@uea.ac.uk> (Retrieved September 07, 2009).
- Ajzen I 1991. The theory of planned behavior. *Ogn Behv and Hum Decs Proc*, 50: 179-211.
- Ajzen I, Fishbein M 1975. *Belief, Attitude, Intention and Behavior. An Introduction to Theory and Research*. Boston: Addison Wesley.
- Alsos G, Isaksen E, Ljunggren E 2006. New venture financing and subsequent business growth in men and women-led businesses. *Entrp Thy and Prac*, 30(5): 667-686.
- Ashley-Cotleur C, King S, Solomon G 2009. Parental and Gender Influences on Entrepreneurial Intentions, Motivations and Attitudes. From <http://usasbe.org/knowledge> (Retrieved February 27, 2009).
- Bandura A 1986. *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall. ISBN 0-13-815614-X. From <http://en.wikipedia.org/wiki/Albert\_Bandura> (Retrieved February 14, 2012).
- Benzing C, Chu MH 2009. A comparison of motivations of small business owners in Africa. *J Sml Bus and Ent Dvpt*, 16(1): 60-77.
- Bird B 2001. Implementing entrepreneurial ideas: The case for intention. *Acad Mgt Rev*, 13(3): 442-454.
- Choo S, Wong M 2009. Entrepreneurial intention: Triggers and barriers to new venture creation in Singapore. *Sing Mgt Rev*, 28(2): 47-64.
- Frank H, Korunka C, Leuger M, Mugler J 2005. Entrepreneurial orientation and education in Austrian secondary schools. *J Sml Bus and Ent Dvpt*, 12(2): 259-273.
- Henley A 2007. From entrepreneurial aspiration and transition to business start up: Evidence from British longitudinal data. *Entrp and Reg Dvpt*, 19(3): 253-280.
- Herrington M, Kew J, Kew P 2009. Tracking Entrepreneurship in South Africa: A GEM perspective. From <http://www.gemconsortium.org/article> (Retrieved September 06, 2010).
- Hitt M, Ireland RD, Camp SM, Sexton D 2002. *Strategic Entrepreneurship: Creating a New Mindset*. Cornwall: Blackwell Publishers.
- International Development Association 2010. IDA Receives Record Replenishment. From <http://www.worldbank.org/ida/> (Retrieved September 12, 2010).
- Kazela N 2009. The Roadmap of Youth Entrepreneurship (MDGs). From <http://www.wcf2009.org/program> (Retrieved September 20, 2009).
- Kizner IM 1973. Austrian Theory of Competition and entrepreneurship. From <http://www.fff.org/freedom/0801b.asp> (Retrieved February 14, 2012).
- Lam D, Ardington C, Branson N, Goostrey K, Leibbrandt M 2010. Credit Constraints and the Racial Gap in Post-Secondary Education in South Africa. From <http://sds.ukzn.ac.za/files> (Retrieved August 31, 2010).
- Lee SH, Wong PK 2004. An exploratory study of entrepreneurial intentions: A career anchor perspective. *J Bus Vent*, 19(1): 7-28.
- Leech NL, Barrett KC, Morgan GA 2005. *SPSS for Intermediate Statistics, Use and Interpretation*. New Jersey: Lawrence Erlbaum Associates Inc.
- Linan F, Chen Y 2006. Testing Entrepreneurial Intention Model on a Two Country Sample. From <http://www.emeraldinsight.com/journal> (Retrieved February 15, 2009).
- Louw L, Van Eeden SM, Bosch JK, Venter DJL 2003. Entrepreneurial traits of undergraduate students at selected South African tertiary institutions. *Int J of Entrp Behv Res*, 9(1): 5-26.
- Low I, MacMillan C 1988. Entrepreneurship: Past research and future challenges. *J of Mngt*, 14(2): 139-161.
- Maas G, Herrington M 2006. The Global Entrepreneurship Monitor (GEM) South African Report. From <http://budgetspeechcompetition.co.za> (Retrieved June 29, 2009).
- Mutezo A T 2005. Obstacles in the Access to SMME Finance: An Empirical Perspective on Tswana. From <http://www.etd.unisa.ac.za/ETD-db> (Retrieved September 03, 2009).
- National Treasury 2010. Addressing Youth Unemployment in South Africa. From <http://www.treasury.gov.za/> (Retrieved, September 07, 2010).
- National Youth Development Agency 2010. SME Funding. From <http://www.nyda.org.za/> (Retrieved November 15, 2010).
- Orford J, Wood E, Fischer C, Herrington M, Segal N 2003. South African Executive Report. From <http://www.gemconsortium.org/articles> (Retrieved July 20, 2010).
- Peterman NE, Kennedy J 2003. Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrp Thy and Prac*, 28(2): 129-144.
- Pihie ZAL 2009. Entrepreneurship as a career choice: An analysis of entrepreneurial self efficacy and intention of university students. *Eur J of Soc Sci*, 9(2): 338-349.
- Robertson M, Collins A, Medeira N, Slatter J 2003. Barriers to start up and their effect on aspirant entrepreneurs. *EduTrain*, 5(6): 308-316.
- Schumpeter J A 1934. *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. New York: McGraw-Hill.
- Shapero A, Sokol L 1982. The social dimensions of entrepreneurship. *Encpda of Ent*, 4(2): 72-90.
- South African Police Service Crime Statistics 2009. Crime Statistics. From <http://www.saps.co.za/> (Retrieved August 15, 2010).
- Statistics South Africa 2012. Quarterly Labour Force Survey: Quarter 4 (October to December, 2011). From <http://www.infor.gov.za/speech> (Retrieved February 12, 2012).
- Umsobomvu Youth Fund 2008. Investing in Sustainable livelihoods. From <http://www.youthportal.org.za/ur> (Retrieved August 31, 2010).
- Van Stel A, Storey D, Thurik R, Wennekers S 2006. From Nascent to Actual Entrepreneurship: The Effect of Entry Barriers. From <http://publishing.eur.nl/ir/repub/asset/9714/EIM\_20070\_208008\_N200508.pdf> (Retrieved July 31, 2010).
- Vesalainen J, Pihkala T 2000. Entrepreneurial identity, intentions and the effect of the push-factor. *Int J of Ent*, 3(2): 145-151.
- Von Broembsen M, Wood E, Herrington M 2005. Global Entrepreneurship Monitor South Africa Report. From <http://www.gsb.uct.ac.za/gsbwebb/userfiles/gem2005.pdf> (Retrieved September 10, 2009).