

Antecedents of Entrepreneurial Intent: A Cross-Country Comparison of Generation Y University Students

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Abstract: This paper convey the findings of a study carried out to compare the antecedents of entrepreneurial intentions of students from two universities within the Southern African continent. A cross-sectional survey, based on 400 students from two universities of two different countries (South Africa and Zimbabwe) was conducted using a self-administered questionnaire. Using the theory of planned behavior, personal attitude, subjective norms and perceived behavioral control, and entrepreneurial education were used to predict entrepreneurial intentions. Personal attitude and subjective norms and entrepreneurial education seem to positively influence behavioral intentions. Behavioral control showed insignificant predictive relationship with behavioral intentions. It is recommended that entrepreneurial education should be made a core and integral component of study at universities so that universities as social institutions can create an impetus with a holistic approach including all role players with adequate resources to support students in entrepreneurial ventures.

Keywords: Entrepreneurial intentions, entrepreneurship, Generation Y, South Africa, Zimbabwe, entrepreneurial education.

1. INTRODUCTION

In the last two decades entrepreneurship has gained momentum, forging itself as an emerging research field, enjoying noticeable attention from researchers and policy makers in developed and developing countries alike (Urban, 2006; Moriano, Gorgievski, Laguna, Stephan & Zarafshani, 2011; Farrington, Gray & Sharp, 2011; Maina, 2011 & Duval-Couetil., Gotch & Yi, 2014). Alongside this momentum, an eclectic field of study has emerged; drawing on scholars to reflect on issues from broad-based entrepreneurship research (Taatila, 2010; Su, Zhai & Landström, 2015), start-ups (do Paço, Ferreira, Raposo, Rodrigues & Dinis, 2011), entrepreneurial education (Urban, 2006; Haase & Lautenschläger, 2011; Ekpoh & Edet, 2011; Matsheke, Dhurup & Joubert, 2015), social entrepreneurship (Viviers, Visser & Soloman, 2012) and recently corporate entrepreneurship (Fini, Grimaldi, Marzocchi & Sobrero, 2012).

From an analysis of the above research, this impetus is largely due to entrepreneurship's potential in addressing issues of economic growth, the propensity to create jobs in reducing unemployment levels within economies (Nieuwenhuizen & Swanepoel, 2015; Ozaralli & Rivenburgh, 2016). Whilst developing

nations have embraced entrepreneurship to accentuate economic growth and reduce unemployment, countries like South Africa and Zimbabwe are still grappling to address the twin problems of poverty and unemployment within the Southern African region. In South Africa, unemployment was recorded as high as 24% in the first quarter of 2016 (Yekaterina, 2016:1) while last recorded percentages in 2014 was as high as 94% in Zimbabwe (Mangena, 2014:78). Against the background of high unemployment rates, higher education institutions have been involved in encouraging entrepreneurial activities as possible solutions to address these challenges. Plagued with these problems, entrepreneurship is ensued as a catalyst of economic growth and the development of an entrepreneurial spirit among students who may wish to start up their own businesses (Mahadea, Ramroop & Zewotir, 2011).

The majority of entrepreneurial intention studies were undertaken with reference to non-African nations and those that were done in Africa were more attentive to existing entrepreneurs (Mahadea *et al.*, 2011; Farrington, *et al.*, 2011; Dabale & Masese, 2014). Moreover, with the current rates of unemployment in South Africa and Zimbabwe being high, the development of an entrepreneurial spirit among potential students who may wish to start up their own businesses could possibly assist in the reduction of unemployment rates; providing some comfort to alleviate poverty in both countries (Mahadea, *et al.* 2011). Louw, Van Eeden, Bosch and Venter (2003)

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further attests that the demand for an entrepreneurial-driven economy in South Africa has increased, particularly because of the employment creation benefits it offers, and they maintain that it is essential to develop and equip potential students with the skills required to become employers rather than solely relying on existing entrepreneurs.

This research focuses on South Africa and Zimbabwe because they are culturally different and they differ in their economic history. Zimbabwe as a country was chosen for the study as it is experiencing hardships which are characterized by a high inflation rate, with a dire need for economic growth and reforms especially in the SME sector (Zindiye, Chiliya & Masocha, 2012). Furthermore, larger firms have withdrawn their investment from the country because of the high investment cost, high cost of borrowing and access to finance which places SMEs in the limelight to foster economic growth (Karedza, Sikwila, Mpofu & Makurumidze *et al.* 2014). Overall, the economic outlook looks bleak with a sluggish economy, continued liquidity crunch, policy inconsistencies and their current high debt distress (African Economic Outlook, 2015). In Zimbabwe very little research has been done to investigate the antecedents and the relationship with entrepreneurial intentions (Mauchi *et al.*, 2011; Dabale & Masese, 2014).

Moreover, on the African continent, entrepreneurship research is predominantly South African. An analysis by Naudé and Havenga (2005) revealed that of all the research done on entrepreneurship in Africa, 61.2 per cent was done in South Africa, 5.0 per cent in Zimbabwe, 3.84 per cent in Nigeria and 3.65 per cent in Kenya. This study contributes to the growing conversation on entrepreneurship education in universities, particularly on entrepreneurial learning outcomes and how they are being achieved. This study therefore adds to the body of existing research literature in countries like South Africa and Zimbabwe.

Generation Y students was the focus in this study because as they are considered the most educated, diverse, tech-proficient, and soon-to-be the largest generation ever (Martin, 2005). Born between 1986 and 2005, these are the children of the baby boomers with an estimated 14.5 million people (Lehohla, 2009), in South Africa. In 2013, Generation Y constituted more than 5 per cent of the Zimbabwean population (Chinamasa, 2013). The study examines the influence of the antecedents of entrepreneurial intentions of

generation y university students from South African and Zimbabwe.

2. LITERATURE REVIEW

2.1. Entrepreneurship and Entrepreneurship Education

Researchers refer to entrepreneurship as a way of thinking that is creative (Henry *et al.* 2005; Makgosa & Ongori, 2012) through the process of risk-taking (Casson & Godley, 2005) by creating new businesses (Louw *et al.* 2003). Some researchers also view entrepreneurship as an opportunistic pursuit of economic wealth through the creative initiatives of an individual operating within an uncertain environment which is constrained by limited tangible resources (Nga & Shamuganathan, 2010). Despite its varied definitions, entrepreneurship researchers tend to agree on elements such as opportunity, innovation, organising, creating and risk-taking a process, action or an activity to convert an idea into profitable opportunities (Ozaralli & Rivenburgh, 2016). Entrepreneurship therefore entails attributes in people with the ability to recognize opportunities in order to create value through economic achievement, emanating from creativity in ideas and innovation that mirror people's enthusiasm.

Entrepreneurship education refers to a formal structured instruction that transmits and instils entrepreneurial knowledge, skills and qualities to students so that they stay abreast in the business world by recognizing opportunities in the creation of new ventures (Gouws, 2002; Global Entrepreneurship Monitor Report, 2010). It is a continuous procedure taken to simplify the development of required skills for starting a business (Politis 2005) and a means through which entrepreneurship skills are imparted; developed through the creation of knowledge and attitudes required for graduates to go out and build their own futures and provide possible solutions to problems (De Faoite *et al.* 2003). Moreover, it incorporates courses and lectures that are part of the curriculum scope that offer entrepreneurial capabilities, expertise and understanding to students, so that students can follow the entrepreneurship path as a career (Ekpoh & Edet, 2011; Keat *et al.* 2011). Arising out of these definition entrepreneurial education is viewed as pedagogical process involved in the encouragement of entrepreneurial behaviours and mind-sets that seeks to provide students with knowledge, skills and inspiration towards entrepreneurial success in a variety of settings where opportunities arise.

2.2. Entrepreneurship Education in South Africa and Zimbabwe

North's (2002) analysis shows that in the early 1990's, entrepreneurship education evolved in South Africa whereby curriculum and academic professionals came together to explore the viability of including entrepreneurship as a subject in the future. These professionals formed a committee. Officially, in South Africa, entrepreneurship education was initiated in 2000, with the application of the Curriculum 2005 programme (North, 2002).

South Africa's entrepreneurial activity rate is the low compared to all other developing countries (Von Broembsen *et al.* 2005). According to Farrington *et al.* (2011), South African students learn the importance of security of employment, therefore making them prefer to be more career oriented and position themselves to take advantage of lucrative packages offered by big corporations and government departments. Moreover, this phenomena is precipitated by the poor schooling in many schools as enunciated by Mashipata (2006) who argues that teaching Economic and Management Sciences (EMS) is still a challenge in South Africa, since teachers lack confidence, as they do not have the necessary business training and capabilities as some schools principals even influence teachers who really do not even know how to teach the learning area to teach entrepreneurship which is not within their area of specialization or within the broad domain of EMS for which they have been qualified to teach. (For example, a history teacher will be called upon to teach entrepreneurship to make up ("fill" the workload of the teacher). As a result, students do not develop a positive attitude towards entrepreneurship. Mashipata (2006), further attest that the implementation of EMS as a Learning Area (LA) is not fully accomplished by several schools, even though there is a policy considering it as one of the compulsory Learning Areas. In South Africa, the public higher education institutions are twenty-six in number, consisting of conventional Universities, Comprehensive Universities and Universities of Technology. Most conventional Universities offer modules related to entrepreneurship. Some of these Universities now focus on entrepreneurship education and entrepreneurship as a research field (Tau, 2012).

Entrepreneurship education in Zimbabwe is still in its infancy despite the Zimbabwean government's desire for the country to have more entrepreneurs who initiate business start-ups, innovate and create new technologies and create business opportunities

(Dabale & Masese, 2014). Academics are also challenged in conveying and teaching entrepreneurial skills to students as most of the academics have no formal training in teaching entrepreneurship (Mauchi *et al.* 2011). Most higher education institutions in Zimbabwe offer one entrepreneurship module primarily restricted to business students. Given that the Zimbabwean economy, in the foreseeable future, will not be able to create enough jobs for many university entrants into the labour market, graduates will increasingly have to develop their entrepreneurial skills and abilities to enable them to deal with life's current challenges and uncertain future (Henry, *et al.* 2005).

2.3. Entrepreneurial Intentions

Entrepreneurial intentions is viewed as a state of mind directing and guiding the actions of individuals towards the development and implementation of new business concepts or create new core values in existing organisations (Remeikiene & Startiene, 2013). The intention to carry out a behavior can be predicted by an individual's attitudes towards that behavior (Maina, 2011). These attitudes converge with situational factors such as prior experience to entrepreneurship, availability of role models and social mindsets, personality traits which drive or hinder the establishment of new businesses (Khuong & Nguyen, 2016). Intentions are an integral part of human behavior and one of the most widely used psychological theories to predict and explain human behavior in recent years is the Theory of Planned Behavior (TPB). This theory is an extension of the theory of reasoned action, developed by Ajzen and Fishbein in 1980 (Ajzen & Cote, 2008). Further, Ajzen and Cote (2008), maintain that TPB is considered a useful and effective instrument for human behavior predictions. In the TPB, when the behavior is under volitional control (conscious willingness), intentions are considered to be excellent forecasters of behavior (Ajzen & Fishbein, 2005). The TPB advocates that the instant cause of action is an individual's intention to act or not to act. The TPB includes three components that predict behavioral intentions: 1) personal attitude towards the outcome of the behavior, 2) perceived social norm (subjective norms) or pressures to perform the behavior and 3) perceived behavioral control i.e. the perception of ease or difficulty of performing certain behavior.

3. CONCEPTUAL FRAMEWORK

The study draws from TPB and entrepreneurial education to provide an approach to the study. Hence,

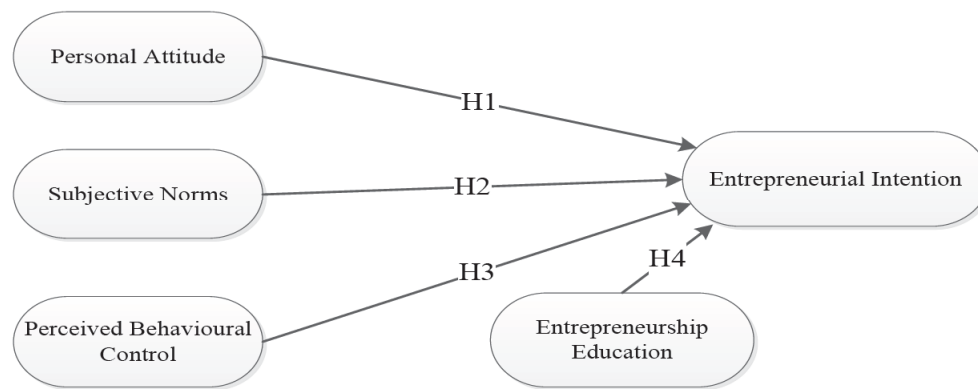


Figure 1: Conceptual framework of the study.

four antecedents were postulated in the study, namely personal attitude, subjective norms, perceived behavioural control and entrepreneurial education as independent constructs and entrepreneurial intention was the dependent construct in this as illustrated in Figure 1.

Ajzen (1991) argues that intentions in general depend on perceptions of personal attractiveness, social norms, and feasibility. Herrington and Kelley's (2012) analysis of previous research shows a general picture that emerges is that the intention to become an entrepreneur is influenced by different beliefs that could be grouped in the following three categories:

- Personal attitudes toward the enterprise-creation behavior. It refers to whether people have a positive or negative perception about this behavior (most importantly attractiveness of entrepreneurship). Thus, a high positive attitude towards creating an enterprise will lead to a higher intention to become an entrepreneur.
- Subjective norms. It consists of the perceived social pressure to carry out entrepreneurial behaviors. This concept includes parental role-modelling, parental support and opinions of important others. A more positive subjective norm about becoming an entrepreneur will lead to a higher intention of becoming an entrepreneur.
- Perceived control is the perception about the capability to successfully execute specific firm-creation behaviors. A high sense of self-efficacy will determine a higher probability to take the decision to start an entrepreneurial activity.

Further, Steenekamp, van der Merwe and Athatde (2011) are of the view that early formal

entrepreneurship education moves the attitudes of students, which in turn directs them towards certain future careers. This noticeably specifies the importance of entrepreneurship to society, but also the nation's global competitiveness and economic development. Sowmya, Majumdar and Gallant (2010) hold that without an entrepreneurial attitude societies can decay, which can delay the long-term growth and success of a region. The society and the business world necessitate and demand entrepreneurial competencies, which place more pressure on the individual's attitudes and skills than before (Taatile, 2010). It is therefore of interest to study how entrepreneurial education affects entrepreneurial intentions among university students.

In the light of the TPB and literature on entrepreneurial education, the study aims at investigating the following hypotheses:

Hypotheses of the Study

- H1: There is significant positive relationship between personal attitude and entrepreneurial intention.
- H2: There is significant positive relationship between perceived behavioral control and entrepreneurial intention.
- H3: There is significant positive relationship between subjective norms and entrepreneurial intention
- H4: There is significant relationship between entrepreneurship education and entrepreneurial intention.

4. RESEARCH DESIGN

4.1. Sample and Sampling

Participants in the study consisted of undergraduate students of North-West University, Vaal Triangle

Campus (South Africa) and the Great Zimbabwe University, Mashava Campus (Zimbabwe). From the North-West University, the students from the Faculty of Economics and Information Technology were selected. From the Great Zimbabwe University, the students were selected from the Faculty of Commerce. A convenience sampling method was used and 400 students were selected from the two institutions, 200 from each. The sample size was chosen based on Pallant (2010) broad analysis of sample size selection for regression analysis. This type of sampling method was used because it made it easier to access the students, as they were readily available at the right place and time. The study followed a single cross-sectional design, because data was collected from each of the sample groups only once (Malhotra, 2010). It was difficult for the researchers to employ a probability sampling technique as students were approached during their non-contact times in both locations (South Africa and Zimbabwe) which required extensive travelling between both campuses due to their geographical locations. Furthermore, it was difficult to obtain accurate sample frames from both universities.

4.2. Questionnaire and Data Collection

The questionnaire used for this study was an adapted version of the Entrepreneurial Intention Questionnaire (EIQ), designed by Liñán and Chen (2009). The authors developed this questionnaire as a standard for measuring entrepreneurial intentions and its antecedents. The questionnaire comprised 6 sections. It also included a covering letter, requesting students to participate in the study, explaining study purposes and providing instructions on how to answer the various sections of the questionnaire. The cover

letter also emphasized issues of confidentiality and anonymity. The researcher collected data until 200 fully completed questionnaires from each university were realized.

4.3. Pre Analysis Tests

Before proceeding with the analysis of the data, reliability analysis check (Cronbach's alpha) was undertaken as reported in Table 1. Moreover, validity assessments were undertaken. Statistical Package for Social Sciences (SPSS) version 25.0 and Analysis of AMOS version 25.0 were used to carry out the statistical analysis. Confirmatory factor analysis (CFA) was performed to examine the reliability and discriminant validity of the multi-item construct measures. All the factor loadings (>0.50) were considered satisfactory for validity of the measurement instruments (Anderson & Gerbing, 1988). Overall acceptable CFA model fit indices used in this study included the $\chi^2/(\text{df})$ (chi-square/degree of freedom) value equal to or less than 3.00, the CFI (comparative fit index) value equal to or higher than 0.90, Tucker and Lewis index (TLI) value equal to or higher than 0.90, the incremental index of fit (IFI) value equal to or higher than 0.90 and the root mean square error of approximation (RMSEA) value equal to or less than 0.08 (Hu & Bentler, 1999). Recommended statistics for the final overall model assessment showed an acceptable fit of the measurement model to the data, namely $\chi^2/(\text{df}) = 1.673$; CFI= 0.944; TLI= 0.935; IFI = 0.945; and RMSEA = 0.058 for the SA sample. Recommended statistics for the final overall model assessment for the ZIM sample also showed an acceptable fit of the measurement model to the data, namely $\chi^2/(\text{df}) = 1.870$; CFI= 0.916; TLI= 0.905; IFI = 0.917; and RMSEA = 0.066.

Table 1: Reliability and Validity Analysis for Study Constructs

Constructs	South African sample				Zimbabwean sample			
	Description	Cronbach's alpha	CR	AVE	SV	Cronbach's alpha	CR	AVE
Attitudes towards being an entrepreneur	0.845	0.85	0.63	0.53	0.884	0.87	0.63	0.41
Subjective norms	0.811	0.82	0.62	0.20	0.853	0.86	0.68	0.17
Perceived behavioral control	0.825	0.81	0.42	0.26	0.853	0.84	0.46	0.26
Entrepreneurial intention	0.929	0.92	0.66	0.53	0.886	0.89	0.58	0.41
Entrepreneurial education	0.897	0.89	0.62	0.20	0.844	0.83	0.50	0.14

CR= Composite reliability; AVE=Average variance extracted; SV=Highest shared variance.

The five constructs (attitudes towards being an entrepreneur, subjective norms, behavioral control, entrepreneurial intention and entrepreneurial education) were deemed reliable and acceptable because the coefficient values were all more than 0.80 which is above the acceptable value of 0.70 (Maholtra, 2011).

Content validity was assessed to check if the scale variables adequately covered the constructs under study. This was done by an extensive review of literature and by the item-total correlations of each scale item that comprised the construct. Scale items showing item-total correlations <0.50 were deleted from the scales. The study constructs were assessed for convergent validity through correlation analysis. Moderate to strong correlations were observed between entrepreneurial intentions and personal attitudes, entrepreneurial intentions and behavioral control, entrepreneurial intentions and entrepreneurship education thus confirming the convergent validity of the measuring instrument. Predictive validity was assessed through the computation of regression analysis. In this study personal attitudes and behavioral control showed a strong and significant ($p < 0.01$) predictive relationship with entrepreneurial intentions. Further, entrepreneurship education showed a strong predictive relationship ($p < 0.01$) with entrepreneurial intentions, thus providing evidence of predictive validity of the measuring instrument. Discriminant validity requires that "a test not correlates too highly with measures from which it is supposed to differ (Campbell, 1960:548). Pallant, (2010) suggest that correlation (r) should not be >0.90 . Discriminant validity was further established by checking if the AVE value was greater than the highest shared variance (SV) value (Fornell & Larcker, 1981). Table 2 affirms that all the correlation are <0.90 and AVE values (Table 1) are above the SV values for the research constructs; therefore, further confirming the existence of discriminant validity.

5. RESULTS AND DISCUSSION

5.1. Sample Description

The majority of the respondents for both samples were aged between 21 and 23 years (SA=56%; ZIM=43%). Slightly more males constituted the Zimbabwean sample (males = 56%) compared to South African sample which constituted of slightly more female participants (females = 57%).

5.2. Correlation between Entrepreneurial Intention and Personal Attitudes

The linear association between personal attitudes, subjective norms, perceived behavioral control, entrepreneurial educations and entrepreneurial intentions was undertaken. The results of the correlation analysis are reported in Table 2.

The correlation results show that there is a strong positive relationship between **entrepreneurial intentions and personal attitudes** of students in both the samples ($r = 0.734$; $p = 0.000$; <0.05 and $r = 0.643$; $p = 0.000$; <0.05). These results resonate with the findings of other researchers who found significant relationship between entrepreneurial intention and personal attitudes (Souitaris *et al.* 2007; Volery & Mueller, 2006). Wu and Wu (2008) also tested this relationship on Chinese university students and they found that personal attitudes positively influence entrepreneurial intention.

Significant positive relationship between **entrepreneurial intention and subjective norm** for both South African and Zimbabwean samples ($r = 0.147$; $p = 0.037$; < 0.05 and $r = 0.414$; $p = 0.000$; < 0.05) were established. In a German sample of students, Volery and Mueller (2006) found that subjective norms have a significant positive relationship with entrepreneurial intention, although its influence is minimal, compared to personal attitudes and perceived behavioral control. However, the relationship between

Table 2: Correlations between Study Constructs

South African sample		Zimbabwean sample	
Constructs	EI	Constructs	EI
Personal attitude	0.734*	Personal attitude	0.643*
Subjective norm	0.147*	Subjective norm	0.414*
Behavioral control	0.511*	Behavioral control	0.512*
Entrepreneurial education	0.429*	Entrepreneurial education	0.321*

EI = Entrepreneurial intentions * Correlation is significant at the 0.05 level (2-tailed).

entrepreneurial intention and subjective norm was stronger among Zimbabwean students compared to South African students. The difference between these two samples might be because Zimbabwean students value the opinions of influential people such as parents and peers in their lives about their career choices (Fini *et al.* 2012).

There is a significant relationship between **entrepreneurial intention and perceived behavioral control** for both South African and Zimbabwean samples ($r = 0.511$; $p = 0.000$; $p < 0.05$; and $r = 0.512$; $p = 0.000$; $p < 0.05$). These results corroborates with the findings of some researchers who found that there is a significant relationship between entrepreneurial intention and behavioral control (Souitaris *et al.* 2007; Wu & Wu, 2008). A test on Russian students confirmed a significant relationship between entrepreneurial intention and perceived behavioral control (Tkachev & Kolvereid, 1999). Liñán and Chen's (2009) study on Taiwanese respondents also found that there is a positive association between perceived behavioral control and entrepreneurial intention.

There is a significant relationship between **entrepreneurial intention and entrepreneurial education** for both South African and Zimbabwean samples ($r = 0.429$; $p = 0.000$; $p < 0.05$; and $r = 0.321$; $p = 0.000$; $p < 0.05$). However, in the South African sample, the relationship seems stronger when compared to the Zimbabwean sample. Positive associations were also found in previous studies between entrepreneurial intentions and entrepreneurial education (Raposo & do Paço, 2011). Kolvereid and Moen (1997) found that among Norwegian business school students, those who took entrepreneurship as a major are likely to possess more entrepreneurial intention and showed propensity to venture into new businesses creation. Moreover, a study on Malaysian students attested that participation in entrepreneurship education inclined students towards an entrepreneurial career path (Keat *et al.* 2011).

5.3. Regression Analysis

The predictive relationship between personal attitudes, subjective norms, and perceived behavioral control with entrepreneurial intentions was further undertaken. Stringent examinations were conducted with a view to corroborate the assumptions of linear regression models along with co-linearity diagnostics' checks. Field (2009) further suggested that if the variance inflation factor (VIF) is greater than 10 then

the predictor variables are correlated among themselves hence co-linearity is a cause for concern. In this case, the regression model was deemed appropriate for the data as the VIF values ranged between 1.031 and 1.395. Moreover, tolerance levels that fall below 0.1 indicate serious co-linearity problems whereas those tolerance values that are below 0.2 may potentially cause co-linearity problems. The tolerance statistics for the predictor variables ranged from 0.942 to 0.970 indicating that there was no co-linearity within the data set.

Table 3 presents the regression model 1 and model 2 summary of entrepreneurial intention with age, gender (control; confounding variables) personal attitude, subjective norms and perceived behavioral control as predictors of entrepreneurial intention in the South African and Zimbabwean samples. Hierarchical multiple regression analysis (sequential regression), a variant of the multiple regression procedure was used that allowed for a fixed order of entry for variables in order to control for the effects of covariance or to test the effects of certain predictors independent of the influence of others (Pallant 2010) such as age and gender. In both the models (Model 1 and 2) age and gender was entered into the regression equation as independent variables. In model 1 (SA sample), the results did not display any statistical significance with regard to the effects of the control variables on entrepreneurial intentions ($p = 0.812$; $p = 0.768$; $p = 0.166$) where $p > 0.05$. In model 2 (ZIM sample) age and gender were also entered into the regression equation as independent variables. The results also did not display any statistical significance with regard to the effects of the control variables on entrepreneurial intentions ($p = 0.458$; $p = 0.603$; $p = 0.339$) where $p > 0.05$.

In both the samples, it seems that personal attitudes (SA sample: $p < 0.05$; $\beta = 0.620$; ZIM sample $p < 0.05$; $\beta = 0.554$) and perceived behavioral control of students (SA sample: $p < 0.05$; $\beta = 0.270$; ZIM sample $p < 0.05$; $\beta = 0.287$) appear to be strong predictors of students' entrepreneurial intentions. These results resonate positively with findings from previous researchers (Tkachev & Kolvereid, 1999; Autio *et al.* 2001; Volery & Mueller, 2006; Wu & Wu, 2008; Liñán & Chen, 2009; do Paço *et al.* 2011; Fini *et al.* 2012), whereby it was revealed that attitudes toward entrepreneurial behavior and perceived behavior control are strong predictors of entrepreneurial intentions whereas subjective norms (SA sample: $p > 0.05$; $\beta = -0.096$; ZIM sample $p > 0.05$; $\beta = 0.079$) did not manage to reach the acceptable statistical significance (path not significant) in predicting

Table 3: Regression- Gender, Age, Personal Attitudes, Subjective Norms and Perceived Behavioral Control as Predictors of Entrepreneurial Intention

South Africa Model 1 summary: dependent variable (entrepreneurial intentions)	Beta	T	Sig.	Tol.	VIF
Age	-0.014	-.296	0.768	0.968	1.033
Gender	-0.084	-1.849	0.166	0.970	1.031
Factor 1: Personal attitudes	.620	11.687	.000*	.717	1.395
Factor 2: Subjective norms	-.096	-2.048	.055	.919	1.088
Factor 3: Perceived behavioral control	.270	5.169	.000*	.742	1.347

R=0.781; R squared=0.611; Adjusted R squared=0.601; Sig P<0.01; Tol=Tolerance; VIF-Variance inflation factor.

Zimbabwe Model 2 summary: dependent variable (entrepreneurial intentions)	Beta	T	Sig.	Tol	VIF
Age	.025	.521	.603	.945	1.058
Gender	-.045	-.959	.339	.945	1.048
Factor 1: Personal attitudes	.554	10.331	.000*	.729	1.372
Factor 2: Subjective norms	.079	1.551	.123	.812	1.231
Factor 3: Perceived behavioral control	.287	5.407	.000*	.744	1.344

R=.771; R squared=.595; Adjusted R squared=.584; Sig. P<0.01; Tol=Tolerance; VIF-Variance inflation factor.

entrepreneurial intentions. **Hypothesis H1 and H3 are therefore supported and hypothesis H2 is not supported.** Even in different cultures, attitudes toward entrepreneurship and entrepreneurial perceived behavioral control were found to be robust in predicting students' entrepreneurial intentions (Autio *et al.* 2001) and subjective norms seemed least to predict entrepreneurial intentions of students of different cultures (Moriano *et al.* 2011). Conversely, the common weak predicting effect of subjective norms towards entrepreneurial intentions may be because youth career decisions are mostly centered on personal attitudes and perceived behavioral control, not subjective norms (Moriano *et al.* 2011). Steenekamp *et al.* (2011) are of the view that early formal entrepreneurship education affects the attitudes of students, directing them towards certain future careers. Taatila (2010:48) affirms that 'without an entrepreneurial attitude societies can stagnate, which can hinder the long-term growth and prosperity of a region'. This noticeably specifies the importance of entrepreneurship in society, but also the nation's global competitiveness and economic development.

Table 4 presents the regression model 3 and model 4 summary of entrepreneurial education as a predictor of entrepreneurial intention in the South African and Zimbabwean sample.

The results show that students in both countries, South Africa and Zimbabwe are motivated by

entrepreneurial education. With regard to attention given to entrepreneurial education in these countries, South African students (mean= 3.9430) seem to have better perceptions of entrepreneurial education compared to their Zimbabwean (mean= 2.7317) counterparts. With the high rates of unemployment in Zimbabwe, coupled with the economic recession, low salaries paid in the public and private sectors people may be forced into entrepreneurship by necessity (Dabale & Masese, 2014).

In both countries entrepreneurial education seem to be significant predictors of entrepreneurial intentions (SA sample: $p<0.05$; $\beta=0.270$; ZIM sample $p<0.05$; $\beta=0.281$). **Hypothesis H4 is therefore supported.** Overall, these results are not surprising as Kolvereid and Moen (1997), Keat *et al.* (2011) and Zhang *et al.* (2014) also found in their studies that entrepreneurial education positively influences students' entrepreneurial intentions. Furthermore, entrepreneurship education could be pertinent in generating a positive entrepreneurial culture in the society and instrumental in generating students' career choices (Kolvereid & Moen, 1997; Peterman & Kennedy, 2003; Liñán, 2008). Moreover, previous research has demonstrated that those students who are exposed to entrepreneurial education show a greater propensity to engage in entrepreneurial activities (Gorman *et al.* 1997; Volery & Mueller, 2006). Studies further demonstrate that entrepreneurship

Table 4: Regression - Entrepreneurship Education as a Predictor of Entrepreneurial Intention

South Africa: Model 3 summary: dependent variable (entrepreneurial intentions)	Mean	Beta	T	Sig.	Tol.	VIF
Factor 1: Entrepreneurship education	3.943	.270	3.951	.000*	1.000	1.000

R=.270; R squared=.075 Adjusted R squared=.068; Sig 0.01; Tol=Tolerance; VIF-Variance inflation factor.

Zimbabwe: Model 4 summary: dependent variable (entrepreneurial intentions)	Mean	Beta	T	Sig.	Tol.	VIF
Factor 1: Entrepreneurship education	2.731	.281	4.114	.000*	1.000	1.000

R=.281; R squared=.079; Adjusted R squared=.074; Sig 0.01; Tol =Tolerance; VIF=Variance inflation factor.

education does play a significant role in cultivating an entrepreneurial spirit among university students (Mason, 2011; Iacobucci, *et al.* 2012; Duval-Couetil, *et al.* 2014). Therefore it seems that students who are exposed to an entrepreneurship course or programmes have a higher propensity and a more favourable view of starting their own business at some point in their career (Mohan-Neill, 2001; Carter & Collinson, 1999).

However, the predictive power of entrepreneurial education seem to be low in both countries as approximately 8% of the variance in entrepreneurial intentions is predicted by entrepreneurial education in both samples. This may point to the content of entrepreneurial-related programmes in both countries. Traditionally, higher education institutions have not prepared students for self-employment as a career option, resulting in the loss of many potential entrepreneurs (Matsheke *et al.* 2015). As a result of this educational bias and lack of information on self-employment as a career option, many HEIs are now offering courses related to entrepreneurship and small business through business schools and short learning programmes (SLP's). However, "... the skills traditionally taught in business schools are essential but not sufficient to make a successful entrepreneur" (Rae, 1997:199). Furthermore, different countries are at different pedagogical levels of entrepreneurship education, hence different outcomes from education (Haase & Lautenschläger, 2011). The study showed that students from both countries possessed entrepreneurial intention, but chose to be salaried workers rather than entrepreneurs. This might be because, since these students are from developing countries, they fear taking risks that are difficult to calculate due to unstable economies.

6. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The research study is not without its limitations. The first limitation of this study was the sample location

bias. Generalisation of the results must be viewed with caution, because the study used samples drawn only from only two Universities in two countries. Therefore the study results cannot represent the perceptions of all the students in South Africa or in Zimbabwe. Future researchers should draw their sample from more than one University in each country so that further comparisons could be made. The use of students may also underestimate the psychological diversity of the general population. The second limitation of this study was the sample size. The study sample does not represent the population of all Universities in both countries. In South Africa, a sample of 200 students was drawn and the same number was drawn from Zimbabwe. Hence, it is difficult to ascertain whether the population was homogeneous. A larger sample size is therefore warranted for future research. The third limitation of this study was the race bias. The designated respondents did not represent every race fairly. The majority of the respondents were African/Black students in both the samples. Therefore, the study results cannot be representative of all races because some groups were not adequately represented. For example, the study could be expanded to other campuses that contain a more diverse student population.

This study provided a snapshot of students' entrepreneurial intention as it was located within a quantitative research paradigm. Future research could be extended through a qualitative study or longitudinal study which may generate further information on students' entrepreneurial intentions. Moreover, researchers should test other variables that affect entrepreneurial intention, such as parents' occupation especially those engaged in family businesses.

7. RECOMMENDATIONS

Research undertaken by the Global Entrepreneurship Monitor (GEM) has singled out

problems in the education system as being the root cause of low levels of entrepreneurial activity in South Africa (Acs, *et al.* 2004). Inadequate education and training often head the list of factors hindering entrepreneurial capacity in South Africa (Driver, *et al.* 2001). Education and training is needed to increase entrepreneurial activity. Greater effort to create an entrepreneurial culture is required. There is also a need to develop theoretically rigorous and practically meaningful entrepreneurial programmes. Moreover a constructivism approach is needed to address the social dimension of learning. This means that learning should take place in interaction with others. This paradigm can be applied to the teaching of entrepreneurship in HE. Past research indicates that one of the key mechanisms to increase entrepreneurial attitude of students is entrepreneurship education and the inculcation of a range of skills and attributes aimed at leveraging the entrepreneurial behaviour among students (Liñán, *et al.* 2011). It is an important effect on students' propensity to start-up a business and increase their interest in entrepreneurship as a career choice.

8. CONCLUSION

Successful entrepreneurship education requires an education approach directed at changing the behaviours and attitudes of students. With entrepreneurship as a pillar and driver of economic development, it is important for different nation's governments and Universities to find innovative ways to stimulate an entrepreneurial spirit among their students. Such actions will in the long run address problems such as unemployment and poverty. Developing countries like South Africa and Zimbabwe should improve ways to enhance entrepreneurial intention, through their education systems by revisiting the curriculums. Nations can only protect themselves from the dynamic, ever-changing economic situations by having strong entrepreneurial economies that are competitive with other nations. In circumstances where graduate employment projections are never guaranteed, the chance of becoming self-employed remains an employment option in developing countries. Hence, entrepreneurship and entrepreneurial ethos among students should be fostered which may allow graduates to become masters of their own destiny. Despite its limitations, this study offers insights for academics, practitioners and government officials who may want to review the effectiveness of current systems of their country and make changes in order to foster the entrepreneurial mindset among students.

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