

Determinants of Entrepreneurial Intention among TVET students in North Rift Region, Kenya.

Jepchirchir, J.*, Prof. Korir, M.,^a and Dr. Lagat, C.^a

* Graduate student, Moi University, P.O Box 3900 – 30100 Eldoret, Kenya

^a Lecturer, School of business, Moi University, P.O Box 3900 – 30100 Eldoret, Kenya

Corresponding Author: Jepchirchir, J

Abstract: Entrepreneurship education is critical in giving an opening to students the knowledge and skills needed for new venture creation among TVET students in developing countries, however, despite its prominent roles only a small number of TVET graduates become entrepreneurs after graduation. There are limited numbers of studies on entrepreneurial intentions in TVET institutions in Kenya thus creating a gap of existing literature. The general objective of the study was to examine the determinants of entrepreneurial intentions of technical and vocational training institutions students in North Rift Region, Kenya. The study employed the explanatory research design and used 2935 students from TVET institutions in the north rift region. The study used systematic random sampling technique to select a sample size of 352 final-year students. The data used were from self-responding questionnaires which were analysed through the use of descriptive and inferential statistical methods. The study found that attitudes toward the entrepreneurial behaviour, subjective social norm and perceived behavioural control had a positive effect on entrepreneurial intention. The $R^2 = 0.580$ implying that the antecedents of TPB explained 58% of the variations in students' entrepreneurial intention with perceived behavioural control ($\beta_3 = 0.448$) having the highest effect, followed by attitudes towards entrepreneurship ($\beta_1 = 0.441$) while subjective social norm ($\beta_2 = 0.104$). Therefore, the study concludes that students need to be made aware of the benefits of being an entrepreneur and how they can work towards being entrepreneurs. Furthermore, students need to be encouraged to associate themselves with reference to entrepreneurship since social norms had the lowest significant influence on entrepreneurial intention. Students need to be aware of the process of creating a new business and how to deal with external factors that impede them from starting a business.

Key words: Entrepreneurial intention, Antecedents of TPB, TVET education, TTIs in Kenya

Date of Submission: 03-08-2019

Date of Acceptance: 19-08-2019

I. Introduction

Entrepreneurial Intention

Entrepreneurial intention is seen to be the most appropriate construct that can predict entrepreneurship to which the theory defines it as a planned behaviour where new businesses are created on the basis of planning (Lo, 2011). Thus, the entrepreneurial intentions of students are very similar in each economy but the perceived barriers to entrepreneurial intentions vary between more or less developed countries (Ferreira, Loiola & Gondim, 2017). Entrepreneurs have specific characteristic features which are distinct from the normal population, thus the surge in attempts to measure this behaviour (Souza *et al.*, 2017). This fact indicates that entrepreneurial intention has many definitions which all centre on conscious state of the mind (Shook, Priem & McGee, 2003); personal conviction (Thompson, 2009); personal projection (Finiet *et al.*, 2009) which is directed towards the new business venture creation (Ferreira *et al.*, 2017). However, the challenge in the origination of the entrepreneurial intention. Jie and Harms (2017) acknowledges that educational initiatives such as entrepreneurship education serve as an effective way of developing entrepreneurial intention in students. Thus, entrepreneurship education is key and will likely increase attitudes towards entrepreneurship attitudes of both potential and budding entrepreneurs (Liñán *et al.*, 2011). It is also critical in enhancing the individual's entrepreneurship attitudes at tertiary level of education by, first, increasing the consciousness and the interest of the student to consider entrepreneurship as a career option and secondly providing the student with experience of mastery, role modelling, social persuasion and support (Mehari & Belay, 2017). There are two divergent views on the effect of entrepreneurship education on entrepreneurial intention and subsequent activity. One line of thought intimates that people with low education levels can only actualize themselves through entrepreneurial activity, the other suggests that individuals with high education levels can thrive in either paid employment or entrepreneurial activity (Mehari & Belay, 2017). The entrepreneurial intentions seem to draw on from the entrepreneurial educational programmes that a student partakes in. And as suggested by Von Graevenitz *et al.*,

(2010), entrepreneurial education distinctly affects the mind of a student in three important ways: firstly, by influencing knowledge and skills; secondly, by shaping the attitudes and perceptions which consequently affects on entrepreneurial intention and action and lastly it allows the student to engage in entrepreneurial activity in an experimental setting. Thus, entrepreneurial education seem to support the entrepreneurial intention of the students (Pouratashi, 2015). Calls for studies on entrepreneurial intentions of students in institution of higher learning have been on the rise, particularly, students are tertiary education level. Applying the Theory of Planned Behaviour (TPB) (Ajzen, 1991) suggested that attitudes, subjective norms (SNs), and perceived behavioural control (PBC) determine the entrepreneurial intentions, the study focuses on the following research objectives:

RO1: To determine the effect of attitudes towards entrepreneurship on entrepreneurial intention of TVET students in North Rift region, Kenya.

RO2: To establish effect of subjective social norm on entrepreneurial intention of TVET students in North Rift region, Kenya.

RO3: To determine the effect of perceived behavioural control about entrepreneurship on entrepreneurial intention of TVET students in North Rift region, Kenya.

The study reviews existing literature while deriving the hypotheses, the looks at the theoretical framework, next is the methodology section which describes the sampling and sampling procedures as well as reliability. Lastly, the study tests the hypothesis using hierarchical regression analysis using STATA 11.0. Results are then presented and discussion section follows before theoretical implications and practice are highlighted.

Entrepreneurial Intention In Tvet Institutions In Kenya

Many policy makers in several African countries have seen the critical role played by TVET in the national development (Union, 2007) and thus entrepreneurship education and training has been given prominence in secondary and tertiary education systems (Mat *et al.*, 2015). In Europe and the US, entrepreneurship education is ranking high in policy decisions and agendas (Von Graevenitz *et al.*, 2010) while in Kenya it is seen as an anchor to economic pillars of science, technology and innovation (Ngure, 2013). Many African government, Nigeria included has introduced mandatory and compulsory entrepreneurship education and training programmes in institutions of higher learning in order to improve the likelihoods of the graduates of pursuing entrepreneurship (Adekiya & Ibrahim, 2016). In Ethiopia, entrepreneurship education is offered by Technical and Vocational School (TVS) training, however, the statistics show that majority of the youth do not participate in the in technical and vocational school (Mehari & Belay, 2017). In Kenya, the ministry of education, science and technology, initiated the teaching of entrepreneurship in tertiary institutions under the Technical Vocational and Entrepreneurship Training (TVET) programmes (Otuya, Kibas & Otuya, 2013). TVET is an elaborate education and training programmes with five levels: at lowest level, an artisanship certificate at a youth polytechnic (YP); a craftmanship certificate at technical training institutes (TTIs) and institutes of technology (ITs); a diploma certificate at the national polytechnics (NPs) and specific TTIs and ITs; technology degree at (NPs) and Technical Universities (TUs); and masters' degree (advanced technology degree) at the Technical University (Ngure, 2013). This system with over 600 public and private TVET institutions is managed by a state corporation called the Technical and Vocational Education and Training Authority (TVETA) that was created under the Technical and Vocational Education and Training (TVET) Act of 2013 (TVETA, 2017).

Though with significant differences in approach towards the TVET education and training, most TVET education systems are geared towards entrepreneurship development (Simiyu, 2010) which is achieved through two ways; the business management courses which teaches the learner aspects of management of a business and the human capital investment which induces the learner to create new ventures by integrating knowledge, skills and experience to create and expand business (Wright & Plasterer, 2012). Further, entrepreneurship education is critical to the performance of three tasks: first it confers the students with the ability to successfully perform entrepreneurial tasks such as conducting a market analysis, pitching an idea, or writing business plan; Second, exposes student to role modelling or case studies; and third, provides social persuasion through discussion, feedback or assignments (Shinnar *et al.*, 2014). Eventually, entrepreneurship education can be said to confer the student the ability to gauge and pursue a career in entrepreneurship (Von Graevenitz *et al.*, 2010) but, entrepreneurship education can implant the intention and activate the trigger that the entrepreneurial event theory considers as the interaction between contextual factors to influence the perceptions of the individual towards entrepreneurship (Liñán, 2004).

II. Theoretical Framework

The study adopted the Ajzen's (1991) theory of planned behaviour (TPB) because it has been proven to be robust across national contexts (Shneor, Metin & Bayhan, 2013). Further, the study utilizes the Shapero and Sokol's (1982) model of the entrepreneurial event (EE) because in the educational setting it is expected that the end of the learning should trigger the TVET graduate to develop the entrepreneurial intention.

Theory of Planned Behaviour

The theory was first developed by Fishbein (1967) who was first to recognize that several factors can be included into the predictive power of attitudes on behaviour in a systematic order (Wicker, 1969). This model became the basis of Ajzen and Fishbein's theory of reasoned action (1974), which basically integrated the concepts of normative beliefs and willingness to comply into one, subjective norm. The theory of theory of reasoned action later led to Ajzen's theory of planned behaviour (TPB) (1991). The TPB theory states that the behaviour of an individual is determined by that person's intentions and in turn these intentions are cumulatively predicted by attitudes, subjective norm and perceived behavioural control over that behaviour (Ajzen, 1991). TPB is seen to be appropriate on the theoretical basis in that it provides wholistic information touching on the formation process of entrepreneurial intention at both personal and social level (Lo, 2011).

The theory of planned behaviour was proposed by Ajzen in 1991 and states that an individual's intention is determined by three components: attitude towards behaviour (ATB), subjective norm and perceived behavioural control (PBC). The theory assumes that, ATB, subjective norm, and PBC determine the intention to perform a behaviour and that each of these determinants provides the motivational foundation for forming an intention (Schlaegel & Koenig, 2014). However, the TPB theory cannot be generalized in all country context in that its model elements and the variance explained by the model differs from country to country as foreseen by Ajzen (Bizri, 2017). Further, it falls short on measurement of entrepreneurial intent; the simultaneous measurement of beliefs, attitudes, and expectations runs counter to the assumptions of the TPB which may lead to significant errors in interpretation; and secondly it overlooks other significant avenues that may explain and/or justify the entrepreneurship process other than the intent to start a business (Valliere, 2014). Lastly, Schlaegel & Koenig, (2014) assert that TPB only describes the intention but lacks the pathway towards the creation of the business and that individual's desire to follow certain behavioural attributes may be mediated by the relationship between attitude and intention.

Entrepreneurial Event Model

The model is referred to as the entrepreneurial event model (EEM) (Shapero & Sokol 1982) and is used to describe the intentionality of the overall entrepreneurial process (Zhang *et al.*, 2014). Shapero and Sokol (1982) claimed that feasibility, desirability, and propensity to act influence the intention to start a venture. The perceived desirability and feasibility then relatively determine credibility to alternative behaviours, and thus entrepreneurial intention (EI) arises partially from exposure to entrepreneurial activity (Shapero & Sokol 1982).

The EEM assumes that human behaviour is in inertial state and can be interrupted or replaced by something (Zhang *et al.*, 2014). The displacement occurs through events which were conceptualized as situation, positive or negative that are necessary to break people out of their normal routines that they have developed over time (Kuehn, 2008). Inertia in human action requires trigger or precipitating event that either pushes or pulls and individual to change the course (Kuehn, 2008). Shapero and Sokol, thus proposed that transition stages forms the event, in the case, learning involves the transition from the classroom as an event where the person is open to different paths in life and career options. Liñán *et al.*, (2011) assert that perceived feasibility seem to be quite analogous to PBC while perceived desirability is synonymous to the inclination to carry out the entrepreneurial behaviours and is exemplified by personal attitude and perceived social norms. Further they consider start-ups as a complex behaviour that cannot be said to be under control of the would-be entrepreneur.

III. Scope of the Study

The study was limited in geographical scope to the TVET institutions in the North Rift Region, Kenya. These institutions comprised of Rift Valley Technical Training Institute (RVTTI), Ol'Lessos Technical Training Institute (OTTI), Kitale Technical Training Institute (KITTI), Kaiboi Technical Training Institute (KaTTI) and The Eldoret National Polytechnic (ENP). The region was chosen for the study because of presence of homogeneity in culture. The study targeted 2935 final year students from five TVET institutions because the subjects possessed the definitive traits and attributes that the study sought to determine i.e. entrepreneurial orientation. The study only assessed the determinants on entrepreneurial intention among students of TTIs in North Rift Region and it sought to establish the influence between attitudes toward the entrepreneurship, subjective social norm and perceived behavioural control on entrepreneurial intention. The units of analysis were final year TVET students pursuing entrepreneurial course as a unit. This was due to the fact the study

subjects could exhibit the intentional and behavioural processes that are sensitive to entrepreneurial aspects. Further, final students can be said to hold measurable vocational inclinations at a time when they will soon be required to make important career choices, and such a sample includes subjects with a broad spectrum of intentions and attitudes towards entrepreneurship.

IV. Methodology

The study employed the explanatory research design in that the study sought to test the antecedents of the TPB on student's entrepreneurial intention. Explanatory design is more appropriate when the study is seeking to establish causal relationships between the variables (Saunders, Lewis & Thornhill, 2009) and goes beyond description and attempting to explain the reasons for the phenomenon being observed. The study utilized the survey as a data collection procedure. Surveys are perceived to be authoritative in general and that it allows economical for the collection of a large amount of data from a large population.

V. Sample and Data Collection

The study used Kent sample size formula to select 352 final year students as shown below $n = \frac{N}{1+Ne^2}$ Where: n = Sample size, N = Population size and e = the error of sampling. This study allowed the error of sampling on 0.05. Thus, the samples size for the population was 352 final year students. Further, with Neyman allocation, the sample size for stratum, n_h was calculated as: $n_h = \left(\frac{N_h}{N}\right)n$ Where, n_h - sample size for stratum h ; n - Total sample size; N_h -The population size for stratum h ; N - The total population. The sample was distributed proportionally among the five strata. Systematic random sampling was then used to select the respondents and involved regularly drawing thenth element from the population but after a randomly chosen element between 1 and n .

Measurement of variables

First, the study sought to identify and the define what is to be measured; and secondly, developed an operational definition of the concept in questions (Depoy& Gitlin, 2011). The study first identified and defined the measures to be used and then adopted indicators from earlier studies as follows. The study adopted six items from Liñán and Chen (2009) to measure the entrepreneurial intention. Other items were taken from Kolvereid (1996) and Armitage and Connor (2001); five items from Linanand Chen (2009) to measure the attitudes of students toward entrepreneurship; three items from Kolvereid (1996), which had been used in Krueger *et al.* (2000) and Souitaris, Zerbinati& Al-Laham, (2007); and eight items from Linan and Chen (2009) and Kolvereid (1996) to measure perceived behavioural control.

VI. Validity And Reliability

Content validity was obtained through pilot testing on 30 Bachelor of Business Management final year student from the West Campus, Moi University. Further, Depoy& Gitlin, (2011) suggest the use of indicators from past studies as a form of validation. Internal consistency was examined through the most popular test of inter-item consistency reliability i.e. Cronbach's coefficient alpha with a cut off criteria being 0.70 indicating the adequacy of the instrument for confirmatory purposes (Garson, 2013). The Cronbach alpha test values ranging from 0.702 (Attitudes of students toward entrepreneurship), 0.743(perceived behavioural control), 0.749(subjective social behaviour) and 0.749 (entrepreneurial intention).

VII. Data Analysis

Data preparation was carried out in several significant steps which include data editing, coding and entry, before the data is analysed. The data collected were checked for errors before being sorted, classified and coded into a statistical analysis software, SPSS version 20.0. After these data was then be analysed through descriptive and inferential statistics and presented in tabular format.

VIII. Results

The study managed to collect a total of 328 respondents, a response rate of 93% indicating an excellent response rate that could be attributable to the data collection tactics used in the study.

Table 1 Demographic Characteristics

		Frequency	Percent	Means	t-test	Sig
Gender	Female	93	28.4	1.915	4.761	0.03
	Male	235	71.6	2.163		
	Total	328	100			
Age bracket	Below 25yrs	311	94.8	2.1315	1.552	0.214
	Between 26-30	17	5.2	1.9664		
	Total	328	100			

Source: Field Data (2017)

The gender distribution in the Table 1 shows that male respondents represented 71.6% (235), on the other hand 28.4% (93) were female. As far as age of respondents is concerned, 94.8% (311) of the respondents are below 25 years while 5.2% (17) are in the range of 26-30 years. The indications are that, there are more male TVET students in Kenya than there are female ones. Ngure (2013) suggest that the female participation rate is generally lower than that of their males counterparts, partly due to societal beliefs which discourage women from enrolling in technical courses. Though majority of the respondents were below 25 years, Mehari & Belay, (2017) suggest that the entrepreneurial intentions increases with age with optimum age being between 25 and 34 years. The statistic, $t = 4.761, p < 0.05$ indicates that male students have significantly higher entrepreneurial intention than their female counterparts. In Africa, entrepreneurship is depicted as a form of masculinity (Mehari & Belay, 2017) and that's probably why there is gender differences in entrepreneurial intentions. Further, Shinnar, Hsu & Powell, (2014) indicates that the entrepreneurship education seem to have a positive effect on the male students than female students, while Gird (2005) reported South Africa males students had significantly higher entrepreneurial intentions than their female counter parts. However, there are statistical differences between the ages, $t = 1.552, p > 0.214$.

Descriptive statistics

Table 2 Descriptive statistics

	N	Mean	SD	Entrepreneurial intention	Attitudes toward entrepreneurship	Subjective social Norm	Perceived behavioural control
Entrepreneurial intention	328	2.123	0.532	1			
Attitudes toward entrepreneurship	328	2.343	0.650	.615**	1		
Subjective social norm	328	1.970	0.507	.282**	.138*	1	
Perceived behavioural control	328	2.810	0.375	.632**	.356**	.262**	1

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level.

The results show that the students have low levels of entrepreneurial intentions (Mean = 2.123, SD = 0.532), with considerable lower levels of subjective social norm (Mean = 1.970). The students had moderate levels of perceived behaviour control (Mean = 2.810, SD = 0.375) with lowered attitudinal levels towards entrepreneurship (Mean = 2.343, SD = 0.650). The Pearson Correlation coefficient results indicated in table 2 showed that Attitudes of students toward entrepreneurship is positively related with entrepreneurial intention ($r = .615, p < 0.01$) while subjective social norm positively related with entrepreneurial intention ($r = 0.282, p < 0.01$) with, PBC positively associating with entrepreneurial intention ($r = 0.632, p < 0.01$). The results indicate significant relationship between the variables with PBC having the correlation coefficient indicating that it would likely indicate the direction and strength of the relationship.

Factor analysis

Table 3 Factor analysis

	Component			h ²
	1	2	3	
If I had the opportunity and resources, I would love to start a business.		0.711		0.714
Amongst various options, I would rather be anything but an entrepreneur.		0.872		0.808
Being an entrepreneur would give me great satisfaction		0.781		0.874
Being an entrepreneur implies more advantages than disadvantages to me.		0.830		0.927
To start entrepreneurship activities, I will benefit from experience consultant	0.548			0.942
My friends members will give me emotional support if I decide to become an entrepreneur	0.771			0.936
To start entrepreneurship activities, I will get enough benefit from country entrepreneurship network.	0.635			0.922
To start entrepreneurship activities, I will benefit from customer and suppliers' network.	0.799			0.937
To establish business plan, I will get benefit from agencies related to formal entrepreneurship activities.	0.552			0.789
I am able to control the creation process of a new business			0.739	0.622
If I tried to start a business, I would have a high chance of being.			0.791	0.584
I know all about the practical details needed to start a business.			0.706	0.605
for me, developing a business idea would be easy.			0.731	0.739
				Total
Sum of squares(eigenvalue)	3.316	3.197	2.905	9.418
Percentage of trace	17.452	16.825	19.289	53.566

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization.

From Table 3, a total of 19 items were factor analysed using Principal Component Analysis while the Kaiser’s criterion for retention of factors was followed with eigenvalues > 1.0. The sample size was large enough for the factor analysis, at least based on the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO = 0.614). The three antecedent to TPB contribute over 50 % variance in entrepreneurial intentions of the TVET students. Component two represents the subjective social norm, while component one represents attitudes towards entrepreneurship with component three representing perceived behavioural control.

Diagnostic test

The following diagnostic test were carried out based on the assumptions of linear regression: linear relationship between parameters, no perfect collinearity, data is normally distributed and homoscedastic (Wooldridge, 2013). Both the graphical plots and any statistical tests (Shapiro-Wilk test) were used to assess the actual degree of departure from normality (Hair *et al.*, 2010) with the data being normally distributed. The test for homoscedasticity for two metric variables was examined through the use of a statistical test called Breusch-Pagan-Godfrey test. The test results was not significant indicating that homoscedasticity was assumed. Linearity was examined through the use of a correlation coefficient in that the coefficient represent only the linearity between the variables and excludes of non-linearity in the data. All the VIF values in the equation was less than 10 indicating that multicollinearity was not encountered.

Regression Analysis

Table 4 Regression analysis

	Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	-0.731	0.151		-4.855	0.000		
Attitudes toward entrepreneurship	0.361	0.031	0.441	11.481	0.000	0.871	1.148
Subjective social norm	0.109	0.039	0.104	2.802	0.005	0.929	1.076
Perceived behavioural control	0.635	0.056	0.448	11.35	0.000	0.827	1.209

R Square	0.583
F	151.24
Sig.	.000b

a Dependent Variable: entrepreneurial intention

The results in table 4 revealed that variation of entrepreneurial intention among students were explained by attitudes towards entrepreneurship, subjective social norm and perceived behavioural control as supported by adjusted $R^2 = 0.580$ which means that the suggested model predicted about 58% of the change in entrepreneurial intention.

Hypothesis Testing

As hypothesized in the TPB, the antecedents of the TPB were studied and explained 58.3% of the variation in entrepreneurial intention. Thus;

Students' Entrepreneurial intention = $(-0.731) + 0.441(\text{attitudes towards entrepreneurship}) + 0.104(\text{subjective social norm}) + 0.448(\text{perceived behavioural control})$. The beta coefficients: constant, $\beta_0 = -0.731$ ($t = 4.855$, $p < 0.05$); attitudes towards entrepreneurship, $\beta_1 = 0.441$ ($t = 11.481$, $p < 0.05$); subjective social norm, $\beta_2 = 0.104$ ($t = 2.802$, $p < 0.05$); and perceived behavioural control, $\beta_3 = 0.448$, ($t = 11.35$, $p < 0.05$). All the p – values < 0.05 indicating that all the coefficients were significant.

Hypothesis 1

H₀₁: The student's attitude toward entrepreneurship has no significant effect on entrepreneurial intention.

The results presented in Table 4 revealed that attitudes of students toward entrepreneurship has a significant effect on entrepreneurial intention, $\beta_1 = 0.441$ ($t = 11.481$, $p < 0.05$). These indicates that a unit increase in students' attitude towards entrepreneurship, will result in 0.441 unit increase in entrepreneurial intention. The study findings therefore reject the null hypothesis that the student's attitude toward entrepreneurship have no significant effect on entrepreneurial intention and concludes that attitudes towards entrepreneurship determines entrepreneurial intentions of the students in the TVET institutions.

Hypothesis 2

H₀₂: The student's subjective social norm has no significant effect on entrepreneurial intention.

The results as presented in table 4 revealed that subjective social norm has a significant positive effect, $\beta_2 = 0.104$ ($t = 2.802$, $p < 0.05$). This indicates that a unit increase in subjective social norm will results in 0.104 unit increases in entrepreneurial intention. The study findings therefore reject the null hypothesis that the student's subjective social norm has no significant effect on entrepreneurial intention and concludes that subjective social norm determines entrepreneurial intentions of the students in the TVET institutions.

Hypothesis 3

H₀₃: The student's perceived behavioural control has no significant effect on entrepreneurial intention.

The results as presented in Table 4 revealed that perceived behavioural control has a significant effect, $\beta_3 = 0.448$, ($t = 11.35$, $p < 0.05$). This indicates that a unit increase in perceived behavioural control results in 0.448 unit increase in entrepreneurial intention. The study findings therefore reject the null hypothesis that the student's perceived behavioural control has no significant effect on entrepreneurial intention and concludes that perceived behavioural determines entrepreneurial intentions of the students in the TVET institutions.

IX. Discussion

The results from the regression analysis showed that all the three elements of TPB were statistically significant, with perceived behavioural control ($\beta_3 = 0.448$) having a highest effect, followed by attitude ($\beta_1 = 0.441$) and lastly, subjective social norm, ($\beta_2 = 0.104$). This results affirms the theory of planned behaviour in an tertiary level of education where entrepreneurial education takes place. This indicates that the PBC had the highest effect which is consistent with findings by García-Rodríguez *et al.*, (2015) which indicate that in SSA, Senegal PBC had the highest effect while in Europe, Spain, personal attitude mattered more. Evidently, there are difference in the specific effects of the antecedents of PBC, for instance (Yousaf *et al.*, 2015) rated attitude towards entrepreneurship and subjective norm leads to the development entrepreneurial intentions in Pakistan, while Jagannathan *et al.*, (2017) assert that social capital /connections predict the pro-entrepreneurial attitudes and consequently has the highest effects. Joensuu-Salo *et al.*, (2015) also rated attitude highest followed by PBC while effects from entrepreneurial characteristics and Social norm were significant but quite small.

Attitude towards is the first component that and thus Mehari & Belay, (2017) affirmed it be vital in enhancing entrepreneurial intention of a student. The attitude towards entrepreneurship is primarily derived in two ways: either innately through social capital (Jagannathan *et al.*, 2017) or extrinsically through entrepreneurial education (Lo, 2011). According to Varamäkiet *al.*, (2015) changes in attitude has both direct

and indirect effect on the entrepreneurial intention. On one hand, it directly determines the entrepreneurial intention, while on the other, it mediates on the effect PBC on entrepreneurial intention by influence the change in PBC. Krueger, (2003) notes that entrepreneurial intentions are determined by attitudes whereas the attitudes are influenced by exogenous influences such as traits, education, demographics and situational variables. Subjective social norm seem to have a marginal effects, however, in other context, social factors such as the family background significantly influence the student' entrepreneurial intention (Egerová *et al.*, 2017). Mat *et al.*, (2015) assert that social networks forms an important avenue from which entrepreneurs gain access to resources, ideals, capital and information which would translate to significant effect on the entrepreneurial intention (Ferreira *et al.*, 2017). Social networks and PBC impacts directly on the students entrepreneurial intentions (Sesen, 2013), but in other context, it is a differentiating factor in that students with parents who have entrepreneurial experience have higher entrepreneurial intention when compared to their counterparts. (Yuan *et al.*, 2013). Intrinsically, the elements of social capital/norms seem to have direct and indirect effects on student's entrepreneurial intention. The social networks has two significant effect: it impacts on the entrepreneurial intentions and further it sustains the new business that has been created (Sesen, 2013) Perceived behavioural control has the highest effects in the study context, a finding that resonates with Kwong & Thompson, (2016) which indicated that perceived behavioural control has a significant effect in determining entrepreneurial intention in UK business students. In spite of the findings, Shneor *et al.*, (2013) indicated that change in attitudes and perceived behavioural control are related to the change in intentions. An educational system can act at the elementary and secondary levels to advance the positive attitudes towards entrepreneurship (Ferreira *et al.*, 2017), therefore, a great emphasis on entrepreneurial training programs at institutional environments may aid in harnessing enthusiasm (Kwong & Thompson, 2016).

X. Implications

The theory of planning behaviour predicts that planned behaviours are determined by behavioural intentions which are largely influenced by an individual's attitude toward a behaviour. This study provides support that the TPB antecedents can predict behaviour of a students to become entrepreneur (Attitudes toward entrepreneurial behaviour, subjective social norms, perceived behavioural control) that can trigger individual behaviour towards his/her intentions. Regarding the antecedent with the most effect, perceived behavioural control is the most significant factor in student's entrepreneurial intention of TVET institutions on Kenya. The TVET students seem to have the behaviour that suited towards the establishment of the business and thus it would be indirectly related to the learning environment which teaches them the practical aspects of establishing and running business ventures. To address the low levels of attitude towards entrepreneurship, the TVET institutions should design practical lessons that are both effective in achieving the objective of imparting the practical skills. Also, students need to be made aware of the benefits of being an entrepreneur and how they can work towards being entrepreneurs. Also, it is important that an entrepreneurship network is established to support entrepreneurship activities setting up. Experienced consultants need to assist the students in developing business plans. These way students will have an idea of business opportunities and how they can efficiently utilize resources as entrepreneurs. Furthermore, students need to be encouraged to associate themselves with reference groups that support entrepreneurship since social norms have a significant influence on entrepreneurial intention.

Limitations And Suggestion For Further Research

This study investigated the determinants of entrepreneurial intentions among students of technical and vocational training institutions in North Rift Region and was generalizability of findings to TVET institutions in North rift Region. Considering that there are approximately over 600 TVET institutions, the findings are only generalizable to the study area because of the differences in cultural aspects. The study cross section and thus it can be said to have captured the fleeting components of the entrepreneurial intentions at a time. There is need for a longitudinal study within the institutional set up in order to measure the entrepreneurial intentions over long term periods of learning. Furthermore, future researchers need to consider students' training for self-employment as an important factor to raise the productivity of the informal sector in Kenya.

References

- [1]. Adekiya, A. A., & Ibrahim, F. (2016). Entrepreneurship intention among students. The antecedent role of culture and entrepreneurship training and development. *The International Journal of Management Education*, 14(2), 116-132.
- [2]. Ajzen, I. (1991). The theory of planned behaviour. *Organizational behaviour and human decision processes*, 50(2), 179-211.
- [3]. Awogbenle, A.C. and Iwuamadi, K.C. (2010). Youth Unemployment: Entrepreneurship Development Programme as an Intervention Mechanism. *African Journal of Business Management* 4(6) 831 –835.
- [4]. Alakbarov, I. (2010) Azerbaijan's Success Story on Sustainable Entrepreneurship Development Through Adoption of Policies, Financing and Innovative Strategies, In International Conference on Policies to Address Financing and Entrepreneurial Challenges in High-growth Innovative Firms (2-4 June 2010), Helsinki.

- [5]. Ambad, S. N. A., &Dimit, D. H. D. A. (2016). Determinants of entrepreneurial intention among undergraduate students in malaysia. *Procedia Economics and Finance*, 37, 108-114.
- [6]. Armitage, C.J. and Conner, M. (2001): "Efficacy of the theory of planned behavior: a meta-analytic review", *British Journal of Social Psychology*, 40 (4), 471-499.
- [7]. Benchrifia, H., Asli, A., &Zerrad, J. (2017). Promoting student's entrepreneurial mindset: Moroccan case. *Transnational Corporations Review*, 9(1), 31-40.
- [8]. Bizri, R. M. (2017). Family Entrepreneurial Teams Under the TPB Lens. In *Leadership, Innovation and Entrepreneurship as Driving Forces of the Global Economy* (pp. 571-577). Springer International Publishing.
- [9]. Bosompem, M., Dadzie, S. K., &Tandoh, E. (2017). Undergraduate Students' Willingness to Start Own Agribusiness Venture after Graduation: A Ghanaian Case. In *Entrepreneurship Education: New Perspectives on Entrepreneurship Education* (pp. 75-105). Emerald Publishing Limited.
- [10]. Brijlal, P. (2011). Entrepreneurial perceptions knowledge: A survey of final year university students. *African Journal of Business Management*, 5(3), 818-825.
- [11]. Dasmani, A. (2011). Challenges facing technical institute graduates in practical skills acquisition in the Upper East Region of Ghana. *Asia-Pacific Journal of Cooperative Education*, 12(2), 67-77.
- [12]. Depoy, E. & Gitlin, L. N. (2011). *Introduction to research; understanding & applying multiple strategies* 4th Ed. Elsevier Mosby. Missouri.
- [13]. Egerová, D., Eger, L., &Mičík, M. (2017). Does entrepreneurship education matter? Business students' perspectives. *Tertiary Education and Management*, 1-15.
- [14]. Fatoki, O. O. (2010). Graduate entrepreneurial intention in South Africa: motivations and obstacles. *International Journal of Business and Management*, 5(9), 87.
- [15]. Ferreira, A. D. S. M., Loiola, E., &Gondim, S. M. G. (2017). Individual and contextual predictors of entrepreneurial intention among undergraduates: a literature review. *Cadernos EBAPE. BR*, 15(2), 292-308.
- [16]. Fini, R., Grimaldi, R., Marzocchi, G.L. and Sobrero, M.(2009) The foundation of entrepreneurial intention. Paper presented at the DRUID Summer Conference, 17-19 June 2009, Copenhagen, Denmark
- [17]. Fishbein, M. (1967). *Readings in Attitude Theory and Measurement*. Oxford: Wiley.
- [18]. Freitag, M. (2006). Bowling the state back in: Political institutions and the creation of social capital. *European Journal of Political Research*, 45(1), 123-152
- [19]. Garson, G. D.(2013) *Validity & reliability*. Statistical Associates publishing. NC.
- [20]. Gird, A. (2005). *The theory of planned behaviour as predictor of entrepreneurial intent* (Doctoral dissertation, University of Cape Town).
- [21]. García-Rodríguez, F. J., Gil-Soto, E., Ruiz-Rosa, I., &Sene, P. M. (2015). Entrepreneurial intentions in diverse development contexts: A cross-cultural comparison between Senegal and Spain. *International Entrepreneurship and Management Journal*, 11(3), 511-527.
- [22]. Gird, A., &Bagram, J. J. (2008). The theory of planned behaviour as predictor of entrepreneurial intent amongst final-year university students. *South African Journal of Psychology*, 38(4), 711-724.
- [23]. Hair, J.F., Black, B., Babin, B., Anderson, R.E., & Tatham, R.L. (2010). *Multivariate Data Analysis*.7thed . Harlow: Pearson Education
- [24]. Hope Sr, K. R. (2012). Engaging the youth in Kenya: empowerment, education, and employment. *International Journal of Adolescence and Youth*, 17(4), 221-236.
- [25]. Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education+ Training*, 53(5), 353-370.
- [26]. Jagannathan, R., Camasso, M. J., Das, B., Tosun, J., & Iyengar, S. (2017). Family, society and the individual: determinants of entrepreneurial attitudes among youth in Chennai, South India. *Journal of Global Entrepreneurship Research*, 7(1), 14.
- [27]. Jakopec, A., Krekar, I. M., &Susanj, Z. (2013). Predictors of entrepreneurial intentions of students of economics. *StudiaPsychologica*, 55(4), 289.
- [28]. Jamal, R. (2010). *Entrepreneurial Higher Education*. Advances in Management, Vol.3(8). Lincoln University, New Zealand.
- [29]. Jie, S., & Harms, R. (2017). Cross-Cultural Competences and International Entrepreneurial Intention: A Study on Entrepreneurship Education. *Education Research International*, 2017, 1-12
- [30]. Joensuu-Salo, S., Varamäki, E., & Viljamaa, A. (2015). Beyond intentions-what makes a student start a firm?. *Education+ Training*, 57(8/9), 853-873.
- [31]. Kolvereid, L. (1996). Predictions of employment status choice intentions. *Entrepreneurship Theory and Practice*, 21 (1): 47-57.
- [32]. Kuehn, K. W. (2008). Entrepreneurial intentions research: Implications for entrepreneurship education. *Journal of Entrepreneurship Education*, 11, 87.
- [33]. Krueger, N.F. (2003). The cognitive psychology of entrepreneurship. in Acs, Z. and Audretsch, D.B. (Eds), *Handbook of Entrepreneurial Research*, Kluwer Law International, London, pp. 105-40
- [34]. Krueger, N. F., Reilly, M. D., &Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, 15(5), 411-432.
- [35]. Krueger, N. F., &Carsrud, A. L., (1993). Entrepreneurial Intentions: Applying the Theory of Planned Behaviour. *Entrepreneurship and Regional Development* 5(4), 315-30.
- [36]. Kwong, C., & Thompson, P. (2016). The when and why: student entrepreneurial aspirations. *Journal of Small Business Management*, 54(1), 299-318.
- [37]. Kyro, P. and Carrier, C. (2005). Entrepreneurial learning in universities: Bridges across borders. In P. Kyro and C. Carrier (Eds.). *The dynamics of learning entrepreneurship in a cross-cultural university context*. Hammeenlinna: University of Tampere
- [38]. Lee, L., & Wong, P. K. (2003). Attitude towards entrepreneurship education and new venture creation. *Journal of Enterprising Culture*, 11(04), 339-357.
- [39]. Liñán, F. (2004). Intention-based models of entrepreneurship education. *Piccola Impresa/Small Business*, 3(1), 11-35.
- [40]. Liñán, F. and Chen, Y. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-
- [41]. Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: a role for education. *International entrepreneurship and management Journal*, 7(2), 195-218.
- [42]. Lo, C. T. (2011). *The impact of entrepreneurship education on entrepreneurial intention of engineering students* (Doctoral dissertation, City University of Hong Kong).

- [43]. Lüthje, C., & Franke, N. (2003). The 'making' of an entrepreneur: testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management*, 33(2), 135-147.
- [44]. Maloney, W. A., & Rossteutscher, S. (2007). Assessing the significance of associational concerns: Leisure, politics and markets, in W.A. Maloney and S. Rossteutscher (Eds.) *Social capital and associations in European democracies: A comparative analysis* (pp. 52-78). Abingdon: Routledge.
- [45]. Mat, S. C., Maat, S. M., & Mohd, N. (2015). Identifying factors that affecting the entrepreneurial intention among engineering technology students. *Procedia-Social and Behavioural Sciences*, 211, 1016-1022.
- [46]. Mehari, A. T., & Belay, C. F. (2017). Challenges and prospects of entrepreneurship development and job creation for youth unemployed: evidence from Addis Ababa and Dire Dawa city administrations, Ethiopia. *Journal of Innovation and Entrepreneurship*, 6(1), 11.
- [47]. Ngunjiri, S. W. (2013). Where to Vocational Education in Kenya? Is Analysing Training and Development Needs the Answer to the Challenges in this Sector?. *Journal of Education and Vocational Research*, 4(6), 193-204.
- [48]. Otuya, R., Kibas, P., & Otuya, J. (2013). A proposed approach for teaching entrepreneurship education in Kenya. *commitment*, 4(8).
- [49]. Pouratashi, M. (2015). Entrepreneurial intentions of agricultural students: Levels and determinants. *The Journal of Agricultural Education and Extension*, 21(5), 467-477.
- [50]. Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*, 5th Ed PrenticeHall, New York
- [51]. Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, 38(2), 291-332.
- [52]. Sekaran, U., & Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach*, 5th Edition. John Wiley & Sons, Hoboken.
- [53]. Sesen, H. (2013). Personality or environment? A comprehensive study on the entrepreneurial intentions of university students. *Education+ Training*, 55(7), 624-640.
- [54]. Shapero, A. & Sokol, L. (1982). The Social Dimensions of Entrepreneurship in C. Kent, D. Sexton, & K. Vesper (Eds.). *The Encyclopedia of Entrepreneurship*, 72-90.
- [55]. Shinnar, R. S., Hsu, D. K., Powell, B. C., & Zhou, H. (2017). Entrepreneurial intentions and start-ups: Are women or men more likely to enact their intentions?. *International Small Business Journal*, 0266242617704277.
- [56]. Shneor, R., MetinCamgöz, S., & BayhanKarapinar, P. (2013). The interaction between culture and sex in the formation of entrepreneurial intentions. *Entrepreneurship & Regional Development*, 25(9-10), 781-803.
- [57]. Shook, C. L., Priem, R. L., & McGee, J. E. (2003). Venture creation and the enterprising individual: A review and synthesis. *Journal of management*, 29(3), 379-399.
- [58]. Simiyu, J.W. (2010). Entrepreneurship education as a tool to support self-employment in Kenya (TVET Best Practice Clearinghouse Issue 2). Bonn: UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training.
- [59]. Souza, G. H. S. D., Santos, P. D. C. F. D., Lima, N. C., Cruz, N. J. T. D., Lezana, Á. G. R., & Coelho, J. A. P. D. M. (2017). Entrepreneurial Potential Scale: evidence on confirmatory factor validity, dimensional structure and predictive effectiveness. *Management & Production* 24: 2, 324-337
- [60]. Souitaris, V., Zerbini, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566-591.
- [61]. Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669-694.
- [62]. TVETA(2017). <http://www.tvetauthority.go.ke/background-information/> accessed on August 20th 2017
- [63]. Valliere, D. (2015). The comparative state of entrepreneurial intent in Cameroon. *Journal of Entrepreneurship in Emerging Economies*, 7(3), 241-255.
- [64]. Varamäki, E., Joensuu, S., Tornikoski, E., & Viljamaa, A. (2015). The development of entrepreneurial potential among higher education students. *Journal of Small Business and Enterprise Development*, 22(3), 563-589.
- [65]. Von Graevenitz, G., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic Behaviour & Organization*, 76(1), 90-112.
- [66]. Wicker, A. W. (1969). Attitudes versus Actions : The Relationship of Verbal and Overt Behavioral Responses to Attitude Objects, XXV(4).
- [67]. Wooldridge, J. M. (2013) *Introductory econometrics; Modern Approach* 5th Ed. South-Western, Cengage Learning, Mason
- [68]. Wright, L. A., & Plasterer, R. (2012). Beyond basic education: Exploring opportunities for higher learning in Kenyan refugee camps. *Refuge: Canada's Journal on Refugees*, 27(2).
- [69]. Yousaf, U., Shamim, A., Siddiqui, H., & Raina, M. (2015). Studying the influence of entrepreneurial attributes, subjective norms and perceived desirability on entrepreneurial intentions. *Journal of Entrepreneurship in Emerging Economies*, 7(1), 23-34.
- [70]. Yu-yan, W., Han-chuan, L., & Chun-lu, J. (2013). An empirical study on the relationship between background heterogeneity, entrepreneurial attitude and entrepreneurial intention—Based on questionnaire survey to postgraduates in China. In *Management Science and Engineering (ICMSE), 2013 International Conference on* (pp. 934-943). IEEE.
- [71]. Zhang, Y., Duysters, G., & Cloudt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International entrepreneurship and management journal*, 10(3), 623-641.

Jepchirchir, J. " Determinants of Entrepreneurial Intention among TVET students in North Rift Region, Kenya." IOSR Journal of Business and Management (IOSR-JBM), Vol. 21, No. 8, 2019, pp. -07-16